Botanical Results of the

Sessé & Mocíñó Expedition

(1787–1803)

VII. A Guide to Relevant Scientific Names of Plants

Rogers McVaugh
Botanical Results of the

Sessé & Mociño
Expedition (1787-1803)

VII. A Guide to Relevant Scientific Names of Plants

ROGERS McVAUGH

Hunt Institute for Botanical Documentation
Carnegie Mellon University
Pittsburgh
2000
New combinations published in this volume

*Dahlia cordifolia* (Sessé & Moc.) McVaugh, comb. nov. (p. 148)

*Bernardia dodecandra* (Sessé ex Cav.) McVaugh, comb. nov. (p. 222)

Lectotypes to which allusions are made in the text are newly designated there unless otherwise indicated.
Contents

Preface vi
Acknowledgments vi
Introduction to the Guide 1
How to use the Guide 2
The use of "ex" attributed to authors 5
Authors contemporary with Sessé & Mociño 7
Latin and other quotations 7
Relevant names defined 8
Unpublished names 9
Documentation from Icones 9
    The Icones Florae Mexicanae 9
    Numbering of the Icones 10
    The numbered series sent to Madrid in 1791; "Mociño's list" 11
    De Candolle's set of the paintings 12
    The Torner Collection 13
Authorship of names based on the Sessé & Mociño paintings 14
Unpublished names applied by de Candolle 18
Documentation from non-pictorial sources 19
    The names applied by Pavón 20
    Published names by Spanish authors 22
    Data from the published "Floras" of Sessé & Mociño 22
    Data from Mociño's "Flora de Guatemala" 25
    Data from western Mexico (McVaugh 1993) 26
    Data from the Sessé & Mociño herbarium 26
    Unpublished names used by Sessé & Mociño 28
    Standley and the Sessé & Mociño herbarium 29
Appendix: Mociño's list 31
Selected references 35
Annotated list of names 39
Index to scientific names 551
was quoted from “Anoenc. Acad. 5, p. 403.”. In the S. & M. herbarium no. 3646 (CNHM neg. 46432) was named by the collectors “Galega cinerea. (descr.)”, and the common name was reported by them as “Oia Sen.”. The specimen was determined by Standley as *Tephreria cathartica*, q.v. Nelson (1997) designated “Sessé 3646” as “material tipo” of *G. cinerea* and reported its name as *Tephreria cathartica*. The “typification” of “Galega cinerea Sessé & Moc.” is inappropriate, as no such name exists.


_Type-locality:_ Near Tequila, Jalisco, where said to flower in July. Not found in the S. & M. herbarium. Not identified. The description is of a procumbent shrub with ternate leaves, oval or elliptic obtuse leaflets tomentose on both sides, short erect racemes, two-lobed calyx, purplish-white flowers and narrow erect pods. This suggests a species of *Tephreria*, a few of which fit the above description reasonably well, but Wood (Rhodora 51: 382. 1949) says, “Apparently not a species of *Tephreria*.”

**Geoffroya inermis** Sessé & Moc. Fl. Mex. ed. 2. 175. 1894, not *Geoffraea inermis* Sw.

_Type-locality:_ Not stated. Long description. There is no internal evidence in the protologue of *Geoffroya inermis* Sessé & Moc., except for the coincidence of the specific epithets, that the name is based on *Geoffraea inermis* Sw., and the two names may be regarded as independently published. Perhaps the plant of the Fl. Mex. is represented by no. 1397 in the Torner Collection, without inscription except for the annotation by de Candolle, “Geoffraea violacea”. DC. plate 280 is a colored but incomplete copy of Torner 1397. The style and quality of execution of Torner 1397 indicate that this painting was one of those made by the artist Echeverría in Cuba or Puerto Rico.

In the S. & M. herbarium no. 2012 (CNHM negs. 44368-44370), labelled “Geoffroya inermis”, is according to Standley *Andira inermis* (Sw.) H. B. K., i.e., *Geoffraea inermis* Sw. Prodr. Veg. Ind. Occ. 106. 1788. The vernacular name is given on the original label as “yaba”, this suggesting that the specimens came originally from Cuba (cf. Standley in Contr. U. S. Nat. Herb. 23. 506. 1922, where the names “yabo” and “yaba” are reported from Yucatán and Cuba).


_Type-locality:_ Moist woodlands, Coahuayana, Michoacán ["in umbrosis Coahuayanae nemoribus. Floret Octobriti"] Not found under this name in the S. & M. herbarium. Described as a woody vine climbing almost to the tops of the higher trees, glabrous, the leaves alternate, ternate, the leaflets entire, the racemes drooping, the flowers purplish-blue, the legumes terete, glabrous, 9 inches long. According to Hermann (Techn. Bull.

U.S.D.A. 1268: 41. 1962), the plant may be excluded from the genus *Glycine* on the basis of the pendent racemes and terete pods. The description suggests one of the large species of *Vigna* that are common in the Pacific lowlands. Not otherwise identified.


This is treated as a new name, as the protologue includes no reference to Linnaeus, and the character differs from that of *Dolichos ensiformis* L. in the *Species Plantarum*, but it seems clear that Sessé & Moc. derived the epithet from Linnaeus. The *ton* is listed as “Dolichos ensiformis” among those painted in the vicinity of Mexico City, 1787-1788 (MA, ms.). The plant depicted is a species of *Canavalia*. In the S. & M. herbarium no. 3739 (CNHM neg. 44424), labelled “Glycine ensiformis Sp. N.”, is according to Standley *Canavalia villosa* Bentham. Ann. Wiener Mus. Naturgesch. 2: 135. 1837. Nelson (1997) designated “Sessé 3739” as “material tipo” of *G. ensiformis*.


Locality cited: Mountains of Tenampulco ["Tenampulci"], Puebla, where said to flower in October. Described at length. Surely not intended as a new species, but published without reference to the work of Linnaeus.


Locality cited [Pl. Nov. Hisp.]: “Habitat in calidis Novic Hispanicis regionibus. Floret Novembris.” Very short description; [Fl. Mex.]: No locality cited. The plant was described at great length. In the S. & M. herbarium no. 1043 (CNHM neg. 44404), labelled “Guilandina bonducilla”, was determined by Standley as *Caesalpinia bonduc* (L.) Roxb. Nelson (1997) designated “Sessé 1043” as “material tipo” of “Guilandina bonducilla Sessé & Moc.”, which is inappropriate as no such name exists. Nelson also stated that *Guilandina bonducilla* of Fl. Mex. is not the same as that of the Pl. Nov. Hisp. ed. 2, nor of Linnaeus Sp. Pl. ed. 2. 545. 1762, and gives a current name for “Sessé 1043”, as *Cassia bonduc* (L.) Roxb. I do not find that name and presume that *Caesalpinia bonduc* was meant.

Type-locality [DC.]: Mexico; [Pl. Nov. Hisp.]; Hot regions in New Spain; but see below. Lectotype [DC.]: DC. plate 249, as cited in Calques des Dessins (Field Mus. neg. 30617). This is an original painting bearing the number “227”. A near duplicate in the Torner Collection is no 0607, bearing the hand-printed name “Astragalus Formosus Sp. N.”, and an annotation by de Candolle, “Harpalyce formosa”. The *Icones* represent lc. Fl. Mex. 227, cited in Pl. Nov. Hisp. DC. plate XXV B, as cited in Calques des Dessins [sketches only; Field Mus. neg. 30332], drawn by the artist Node-Véran, appears to have been taken from Torner 0607.

The material on which the illustrations were based was probably collected in Guerrero in 1789, as according to a manuscript at MA, lc. Fl. Mex. 227 was painted during the “Second Excursion”. Standley (Contr. U. S. Natl. Herb. 23: 466. 1922) regarded *Harpalyce formosus* (the type-species of the genus) as impossible to identify. Arroyo (i.e.), writing before the recovery of the Torner Collection, inferred that the type material came from an area including the states of México, Puebla, and Oaxaca.


**Hedysarum acayucense** Sessé & Moc. Fl. Mex. ed. 2. 171. 1894.


**Hedysarum arborescens** Sessé & Moc. Fl. Mex. ed. 2. 170. 1894.

Type-locality: Santo Tomás, near Hostotipaquillo, Jalisco [“in Praedio S. Tomac, prope Hostotipaquillo. Floret Julio”]. No. 1890 in the Torner Collection, with name printed by Echeverría “Hedysarum Arborescente” and annotation by de Candolle “Abras arboresecens”, is one of the small elegant colored sketches made by Echeverría in western Mexico in 1790–91. In the S. & M. herbarium no. 2009 (CNHM neg. 44358), labelled in the hand of Casillo “Hedysarum arboresecens N.” and, on another ticket in the hand of Mocino, “Hedysarum fruticosum N.”, is according to Rudd *Aeschynomene amorphoides* (S. Wats.) Rose ex B. L. Rob. Proc. Amer. Acad. Arts, n.s. 29: 315. 1894. Rudd noted in the herbarium that this is “presumably the type of *Hedysarum arboresecens*”. The same conclusion as to the identity of *H. arboresecens* was reached by Schubert (Contr. Gray Herb. 161: 20. 1946). The name *Aeschynomene amorphoides* was based upon *Brya amorphoides* S. Wats., published seven years before the appearance of the *Flora Mexicana*. Nelson (1997) designated “Sessé 2009” as “material type” of *H. arboresecens*.


Locality cited: “cum praecedenti” [H. linifolium].

Jorullo, Michoacan; and in the East Indies. [“in montibus Xorullo vicinis et in India Orientali. Floret Augusto”]. No. 0572 in the Torner Collection bears the number “13” and the hand-printed name “Hedysarum diphylldium Linn.”. DC. plate 273* is an incomplete copy. Judging from the style and quality of the *Icones*, it was probably one of those obtained during the early years of the Expedition in the region of Mexico City. I suspect that the number “13” was assigned to it and then superseded as the concept of the *Icones Flora Mexicana*. developed.

In Fl. Mex. 130, *Hedysarum diphylldium*, was cited in Pl. Nov. Hisp. where the locality is given as Xorullo, but listed (MA, mss) among the paintings obtained in 1787–88 near Mexico City, before the Expedition visited Jorullo. The plant depicted is evidently a species of *Zornia*. In the S. & M. herbarium no. 1993 (CNHM neg. 46458), labelled “Hedysarum diphylldium”, is according to Standley *Zornia diphylldium* (L.) Pers. According to the monograph by Mohlenbrock, *Z. diphylldium* is not an American plant (cf. Webbha 16: 1–141. 1961).


Locality cited: Santa María [de TeteIa], Morelos [“in oppido Sanctae Mariae de Tetela et Virginla. Floret Octobri”]. Described at some length. In another reference the locality is cited as “ad torrentes fluminis Sanctae Mariae de TeteIa prope Quauhnahuacan”. See McVaugh (1977, p. 181) for discussion. In the S. & M. herbarium, according to determinations by Schubert, five different species of *Desmodium* were referred to *Hedysarum frutescens* by Sessé & Mocino.

Hedysarum longifolium Sessé & Moc. Fl. Mex. ed. 2. 171. 1894, not of Sprengel.

Type-locality: Acayucan, [southern] Veracruz, where said to flower in August. In the S. & M. herbarium no. 1991 (CNHM neg. 44528), labelled "Hedysarum longifolium", was cited by Schubert (Contr. Gray Herb. 161: 22. 1946) as Desmodium hirtwegianum Hemsl. Biol. Centr. Amer. Bot. 1: 179. 1880. Schubert in the same paper (i.e., p. 20) referred the name Hedysarum longifolium to the synonymy of Desmodium hirtwegianum. In an earlier paper (Contr. Gray Herb. 135: 113. 1941), Schubert cited under the same no. 1967, stating that this number also was labelled "Hedysarum longifolium".


Type-locality: Chilpancingo, Guerrero. No. 2002 of the S. & M. herbarium (CNHM neg. 44507), labelled "Hedysarum mexicanum N.", is according to Standley Desmodium angustifolium (H. B. K.) DC. in DC. Prodr. 2: 328. 1825. Schubert (Contr. Gray Herb. 161: 21. 1946) cited under the same name a duplicate of this number, deposited at F; and in the same paper (i.e., p. 20) referred Hedysarum mexicanum to the synonymy of Desmodium angustifolium. Nelson (1997) designated "Sessé 2002" as "material tipo" of Ill. mexicanum.


Type-locality: Mountains of Nicaragua ["in Nicaragua montibus. Floret Augusto]". The description published in the Fl. Mex. was a copy of that intended for eventual publication in Mocíno's flora of Guatemala. Not found in the S. & M. herbarium. Schubert (Contr. Gray Herb. 161: 20. 1946) said of this merely "=? (material unknown)". The description [in part] is of an herb with three-foilolate leaves, compound terminal racemes, the flowers red, spotted purplish, the banner yellow-lined, the fruit tiny, moniliform. The very long and detailed description perhaps would serve to identify the plant if one had a good field-knowledge of the Central American species of Desmodium.

"Hedysarum orizavicum N."

In the S. & M. herbarium no. 1988 (CNHM neg. 44514), labelled as above, was determined [by Schubert] as Desmodium caripense (H. B. K.) G. Don.


Type-locality: Coahuayana, Michoacan, where said to flower in Autumn. Type: No. 1985 of the S. & M. herbarium, cited by Schubert (Contr. Gray Herb. 161: 25. pl. 1. 1946) as at MA. The genus Pachecoa was described by Standley in 1943; it consisted of a single species, P. guatemalensis, which according to Standley and Schubert is a synonym of Pachecoa prismatica.

Hedysarum procumbens Sessé & Moc. Pl. Nov. Hisp. 123. 1889; ed. 2. 115. 1893, not of earlier authors.

Type-locality: Yecapixtla ["Ayacapixtla"], Morelos. The identity of this plant was unknown to Schubert (Contr. Gray Herb. 161: 20. 1946), who reported after examining the S. & M. herbarium that no material of "Hedysarum procumbens" was known. A pencil sketch of some species of Desmodium, labelled "Hedysarum procumbens", is DC. plate 272 (Field Mus. neg. 30629).


Type-locality: Hot regions, New Spain. As noted by Schubert (Contr. Gray Herb. 161: 23. 1946), nos. 2004 and 2006 in the S. & M. herbarium are labelled with the above epithet. No. 2004 and part of 2006 (CNHM negs. 44539, 44540), represent Desmodium painteri (Rose & Standl.) Standl., whereas the rest of no. 2006 (negs. 44544-44547) represents D. pringlei S. Wats. Schubert said further: "The description [of quinqueangulatum] is clearly based on both elements". Evidently Sessé and Mocíño confused at least these two species under this name.

Hedysarum reniforme Sessé & Moc. Fl. Mex. ed. 2. 171. 1894, not of Linnaeus.

Type-locality: Coahuayana, Michoacan ["in Coahuayana. Floriae September conjicium nam solo fructus cognovimus"]. This is evidently not Hedysarum reniforme L., as the character refers to "leguminibus reniformibus" and "foliis ternatis", not "foliis simplicibus reniformibus" as in Sp. Pl. ed. 2. 1051. 1763. Not found in the S. & M. herbarium. These authors presumably found the plant in fruit when they passed through Coahuayana in December 1790 or January 1791, as they stated: "Florae Septemberi conjicium nam solo fructus cognovimus". The plant is described as a spiny scandent herb with ovate acute ternate leaves scabrous above, smooth and whitish beneath; racemes compound, nodding; legume reniform, glabrous, membranaceous, one-seeded.


Type-locality: Puerto Rico, where said to flower in May. Probably to be regarded as a new name in spite of
the existence of the earlier *H. repens* L., as Sessé & Mociño made no reference to Linnaeus, and the character in the Fl. Mex. is quite unlike that in the *Species Plantarum*. Urban (Symb. Antill. 4: 292. 1905) referred this to the synonymy of *Desmodium axillare* var. *acutifolium* (Kuntze) Urban. In the S. & M. herbarium no. 1954 in part (CNHM neg. 44509A), labelled “Hedysarum repens” and “*Vulgo* Zazabacúa”, is according to Standley *Desmodium axillare* (Sw.) DC. On the other hand, no. 1960 (CNHM neg. 44551), labelled “Hedysarum repens”, is according to Standley *Desmodium triflorum* (L.) DC. in DC. Prodr. 2: 334. 1825, and a duplicate of this number (at Fl) was reported under the same name by Schubert (Contr. Gray Herb. 161: 24. 1946.).


Localities cited: Coahuayana, Michoacán, where said to flower in September. Even though Sessé & Mociño made no reference to any previous author, this is probably intended to be *Hedysarum scandens* Mill. Dict. ed. 8. *Hedysarum* no. 13. 1768, as the character seems to have been based, with some modification, on that of Miller’s species. Not found in the S. & M. herbarium; unknown to Schubert (Contr. Gray Herb. II. 161: 21. 1946). Described as a roughish angled scandent herb with ternate leaves, ovate-oblong leaflets, small purplish flowers, terete scabrous legumes with seven articles.

Localities cited: Chilpanzíng, Guerrero [“in Chilpantzángi montibus et Florida. Floret Julio”]. Described at some length. In the S. & M. herbarium no. 2007 (CNHM neg. 44526), labelled “Hedysarum viridiflorum”, was determined by Schubert as *Desmodium hartwegianum* var. *amans* (S. Wats.) Schubert.

Localities cited: Santo Tomás, near Hosiliotapiaquillo, Jalisco [the same words as for *H. arborescens*, q. v., except that the locality is spelled “Thoma”, not “Tomac”]. Long description (leaves ternate, the terminal leaflet largest; stipules linear-oblong, acute, membranous, deciduous; racemes axillary, in pairs, simple, flowers in pairs (or 3s with the third aborting), very short-pedicelled; twin bracts subtending the flower, covering the calyx, deciduous, oblique, ovate, acuminate, membranous, legume compressed, “retrò arcuata”, erect, villous. In the S. & M. herbarium no. 1963 (CNHM neg. 45307), labelled “Hedysarum volubile”, was determined by B. G. Schubert as *Galactia* sp., “probably in the C. striata complex”, with the note “Apparently first *Hedysarum volubile* on page”. Nelson (1997) designated “Sessé 1963” as “material type” of *Hedysarum volubile* Sessé & Moc. in the above sense, which is inappropriate because no such name exists.

Locality cited: Cuba. Described at length. In the S. & M. herbarium no. 1976 (CNHM neg. 46411), labelled “Hedysarum tomentosum N. d. volubile”, was determined by Schubert as *Rhynchosia* et. *reticulata* (Sw.) DC., with the note “This is apparently the second Hedysarum volubile ... of Fl. Mex. ed. 2. 170”. Nelson (1997) designated “Sessé 1976” as “material type” of *H. volubile* in the above sense; see the note under the first *H. volubile*, above.


Type-locality: Mexico. Type: Mocíño & Sessé in herb. Lambert. This is presumably a specimen seen at OXF in 1963, determined by David Don. A specimen apparently of the same gathering, marked by Pavón “Lotus angustifolius N E”, is in herb. Webb. (Fl). Apparently both specimens represent the same species, a narrow-leaved, strongly pubescent species of *Lotus*. In the S. & M. herbarium no. 3628 (CNHM negs. 44313, 44314), labelled “Lotus angustifolius”, is according to V. E. Rudd *Lotus oroboides* (H. B. K.) Otley, J. Wash. Acad. Sci. 29. 483. 1939. The name *Hosackia angustifolia* seems not to have been noticed by Otley in her revision of the American *Lotus*.


Type-locality: Mexico. Type: Mociño & Sessé in herb. Lambert, not found. Not located at BM or at OXF in 1963. In the S. & M. herbarium nos. 3630 (CNHM negs. 44315, 3631, and 3632 (negs. 44316–44318) all according to Rudd probably represent the species described by Don. No. 3630 is labelled “Lotus repens N [description]. Sp. August. Floret Aug.”. Presumably Standley and Steyermark made the combination *Lotus repens* after study of these specimens. “San Agustin” is a place now called Tlahtlapan, south of México, D.F.

Localities cited: Mazatlán, Guerrero [Pl. Nov. Hisp.; “in Mazatlani montibus alisiusque Novae Hispaniae locis”; Fl. Mex.; “in Mazatlani montibus: Floret Junio”]. Ic. Fl. Mex. 256, as cited in Pl. Nov. Hisp., represented in the Torner Collection by no. 0578, bearing the number “256” and the names carefully hand-written “[by Sessé],[‘Cynomera crossed out] Quapino[le [S. N. crossed out]]” and “Hymenae courbaril”. Evidently correctly identified by Sessé & Mociño, as material in their herbarium is correctly named (nos. 1080, 1099bis; CNHM negs. 46310, 46311). The vernacular name was reported in the Pl. Nov. Hisp. as “Quapinolli Mexicanorum”.


Type-locality: “Mexico” [Actually Guatemala, as cited under Indigofera anil in Fl. Mex., and in the published Guatemalensis Prima Flora, in both of which the locality is given as “frequentissima in cadidis ac temperatis Guatemalae regionibus, ubi vulgo cornezuelo nuncupatur. Floret Augustus”]. Type: Apparently at least three syntypes existed, as de Candolle wrote “v. s. specim. ex Cayennâ, Martinicâ, Sancto-Domingo”. DC. plate 264 (not seen), the basis for the report of I. cornezuelo, was cited in Calques des Dessins. Apparently this was copied from no. 0485 in the Torner Collection, annotated by de Candolle, “Indigofera cornezuelo”, but otherwise without inscription. This variety and its synonym (as “Cornezuelo”) were referred by Rydberg (N. Amer. Flora 24: 149. 1923) to the synonymy of Indigofera suffrutescens Mill. Gard. Dict. ed. 8. Indigofera no. 2. 1768. In the S. & M. herbarium nos. 2647 and 2649bis (CNHM negs. 46322-46324), labelled Indigofera anil (or anil), are according to Stanley I. suffrutescens Mill.


Type-locality: Mountains of Tixtla, Guerrero. Ic. Fl. Mex. 326, not cited in the Pl. Nov. Hisp. or in the manuscript of that work, but listed among the plates of the “Second Excursion”, that to Guerrero in 1789 (MA, mss). This is represented in the Torner Collection by no. 0580, numbered “326” and bearing the hand-printed name “Indigofera Atro-purpurea. Sp. N.”. A nearly identical copy is DC. plate 266 (Field Mus. neg. 30625), an original painting bearing the number “326” and annotated by de Candolle “Indigofera atropurpurea”. Apparently not noted by Rydberg in the North American Flora or by Standley in the Trees and Shrubs of Mexico. Described as a shrub 8 feet high; leaflets 9 pairs, oblong, glabrous, the older ones sesaceous-mucronate, dark-spotted; racemes axillary, very long, the flowers dark purple; calyx very small, the upper lip shorter, obuse, entire, the lower 3-toothed; fruit subulate, trigonous. This is evidently the plant depicted in the icones cited above. In the S. & M. herbarium no. 2642 (CNHM neg. 44293), labelled “Indigofera atropurpurea”, is according to Rudd Indigofera thibaudiana DC. in DC. Prodr. 2: 225. 1825. Nelson (1997) designated “Sessé 2642” as “material type” of I. atropurpurea.


Localities cited: Hills of Chilapa, Guerrero; and in the East Indies. Ic. Fl. Mex. 311, represented in the Torner Collection by no. 0020, which bears the number “377” [evidently in error for “311”] and the hand-printed name “Indigofera Humillis. Sp. N.”. Nearly identical is DC. plate 267, an original painting (Field Mus. neg. 30626), bearing the number “311” [apparently by Mociño] and the annotation by de Candolle, “Indigofera humillis”. Ic. Fl. Mex. 311 is listed under the name of “Indigofera humilis” among the paintings of the “Second Excursion”, that to Guerrero in 1789 (MA, mss). It is listed in another manuscript at MA (the enumeration of icones 1-416) first as humilis, then this epithet crossed out and encaphylla written in. In the S. & M. herbarium no. 2641 (CNHM neg. 46320), labelled “Indigofera humillis Sp. N.”, is according to Stanley Indigofera tintoriae Ort., q.v., below.


Type-locality [guatemalensis]: Presumably Guatemala. Type: “A single specimen from Herb. Thibaud of a plant figured by Moquin & Sessé as Indigofera guatemalensis, referred to on page 225 of Prodr. vol. ii. line 1”. This specimen, in G-DC, is shown in Intern. Doc. Cent. microfiche DC. 348. It is labelled “Indigofera Herb. Thibaud 1815”, and (by de Candolle) “Indigofera tintoria brachycarpa DC.”, and on the line below, “—— guatemalensis?”.

The name “Indigofera guatemalensis Moc. Sessé & Cerv. ex Prain & Baker” has been taken up by Rydberg (N. Amer. Flora 24: 151. 1923) and by Standley and Steyermark in the Flora of Guatemala (Fieldiana, Bot. 24, pt. 5: 268. 1946) for a species that was formerly much cultivated in tropical North and South America under the name of “Guatemala Indigo”. Standley and Steyermark (I.c.) stated “It is uncertain where this species is native”. In both the above works Indigofera micheliana Rose was referred to the synonymy of I. guatemalensis.

Unfortunately the epithet guatemalensis as originally published by Prain and Baker stands on a shaky basis. It was published essentially without description, and it was presented as a provisional name. The pertinent parts of the protologue are as follows:
The nearest ally of this plant is *I. densiflora* Mart. & Galeotti, which, however, may be distinct, as its pods have no stipe within the calyx, as is usual in this ... It is ... quite distinct specifically from *I. antidesma*, and must either be regarded as a variety of *I. densiflora* or as a distinct species, with the synonymy: *I. guatimalensis* Moqino; Sessé & Cercinone in Herb. De Candolle, l.c. indet.; Poeppl. MSS. in Herb. Brit. Mus.; MSS. et Herb. De Candolle.

There is nothing more; the assertion is that the proposed *I. guatimalensis* "may be distinct" from *I. densiflora*; and it is either a variety of *densiflora* or a distinct species. In my opinion, it was not accepted by those who published it and is therefore invalid under the provisions of Art. 34 (International Code of Botanical Nomenclature, Tokyo, 1994). Urban (Symb. Antill. 4: 282. 1905) took up the name *guatimalensis*, presumably in the sense of Prain and Baker, but provided no description. The earliest validly published name for the plant in question would appear to be *I. micheliana* Rose, assuming that Standley and Ryberg are correct in their disposition of the names.

Prain and Baker were surely in error in their conclusion that Thibaud's specimen was "a plant figured by Moqino & Sessé as Indigofera guatimalensis", and in error in the statement that this specimen was "referred to on page 225 of Prodr. vol. ii. line 7". The line in question reads "[I.] Guatimala Lun. hort. Jam. 1. p. 420. fl. mex. ic. ined. An species propria?". The reference was not to a specimen, but to DC. plate 265 [a sketch only], labelled (not by Sessé & Mocino) "Indigofera guatimalensis". The original of the sketch appears to have been no. 0691 in the Torner Collection, annotated by de Candolle "Indigofera guatimalensis". Probably de Candolle, as was often his practice, had provided this epithet; I do not find any evidence in the herbarium, among their manuscripts or in their published works that Sessé & Mocino used it; see below under *I. tinctoria* var. *brachycarpa*. De Candolle then indicated by his annotation of Thibaud's specimen of var. *brachycarpa*, that this might be the same species as that shown in the illustration he cited.

**Indigofera miniata** Ott. Dec. 98. 1798.

Type-locality: Cuba; grown in the Madrid Botanical Garden, "era seminibus missis per D. Sessé". Type: Not seen.

According to Ryberg (N. Amer. Flora 24: 144, 1923) and León and Alain (Fl. Cuba 1: 299 [reprint ed., 1974]), this species actually grows in Cuba, and in Florida, as well as in eastern Mexico and adjacent Texas. A majority of the species reported by Ortega as having been grown from seeds sent by Sessé from Cuba, prove to have been Mexican rather than Cuban in origin. For citation of herbarium material of this species, see above under *I. eneaphylla*.


Type-locality: Tuxila [presumably San Andrés Tuxila, Veracruz]; "in Tuxila", or "in Tuxilia collibus, Floret Octoberi". This binomial appears twice on the page cited, but the two descriptions are so closely similar that probably the same plant was being described in each. The plant is described as suffruticosus, "lanuginosus", leaves petiolate, with about 16 obovate or oval, mucronate, entire, sericeous leaves; racemes long, erect; pedicels filiform, the flowers very small, dark purple, nodding. In the S. & M. herbarium no. 2643 (CNHM neg. 44294), labelled "Indigofera mucronata", is accorded to Ruddle perhaps referable to *Indigofera sphinctasperma* Standl., Contr. U. S. Natl. Herb. 20: 216. 1919. Nelson (1997) designated "Sessé 2643" as "material type of *I. mucronata*.


Type-locality: Not stated; by inference Jamaica or Mexico. Type: DC. stated "v. v. cult. in Hort. Eur.", and presumably a lectotype may be chosen from among the cultivated specimens in his herbarium (cf. Intern. Doc. Cent. microfich DC. 348). The specimens themselves were listed by Prain and Baker (J. Bot. Brit. & For. 40: 67. 1902), with the statement that all are to be referred either to *Indigofera suffruticosus* Mill. (=*I. antidesma*) or to *I. truxilensis* H. B. K. Another specimen, not cited by de Candolle, was referred by Prain and Baker to "Indigofera guatimalensis Moc., Sessé & Cerci." q.v. The reference by de Candolle to "fl. mex. ic. ined." was presumably based on an *icon* only, not on a specimen. Apparently Sessé & Mocino did not use the name "Indigofera guatimalensis" on specimens or in publication; see the discussion under that name.

The plant depicted in Torner no. 0591 (annotated by de Candolle "Indigofera guatimalensis") and in DC. plate 265 (not seen) is probably the same as that described at great length in Fl. Mex. ed. 2: 173, and in Guat. Prima Flora 123. The description was of a plant cultivated in Guatemala (= "Habitat et cultura et sponte in toto fere Guatimalae Regno. Floret Septembri") well known to the authors; as they said, "Plantae hujus usus medicos et economicos scripsit prolixiores retulimos, a rei agrariae peritii non parvi habititos". Prain and Baker (l.c.) took up the epithet *guatimalensis* for a plant they understood to be that of Sessé & Mocino, but only in part of that of *I. tinctoria* [var.] *β* *brachycarpa* DC. Ryberg (N. Amer. Flora 24: 149, 151. 1923) followed Prain and Baker, relegating the [var.] *β* *brachycarpa", "in part" to the
synonymy of three different species, *I. suffruticosa*, *I. truxillensis* and *I. guatimalensis*.

**Inga alternifolia** G. Don, Gen. Hist. 2: 395. 1832. “Mimosa circinnatus, Sessé et Moc. in herb. Lamb[ert]”, cited by G. Don, I.c., as the basis for *Inga alternifolia*.

Type-locality: Mexico. Type: Sessé & Mociño in herb. Lambert, not seen; not found in 1963 at BM, G, or OXF. According to Bentham (Trans. Linn. Soc. London 30: 635. 1875), who likewise had not seen the type, it was “Doubtful … whether this is a *Pithecolobium* or a *Prosopsis*”. Not found in the S. & M. herbarium.


Type-locality [DC]: Mexico; [Pl. Nov. Hisp.]: San Angel, [south of Mexico]. D.F. Lectotype [DC]: In the Turner Collection, no. 0405, which bears the number “184’, the hand-printed names labelled “Mimosa [Peregrina Lin. crossed off]” and “Tecozintochiti! Hrz. 104”, and an annotation by de Candolle, “Acacia pedicellata”. DC. plate 207, an original painting, not listed in Calques des Dessins, bearing the number “184’ and labelled “Mimosa peregrina Lin.” and by de Candolle “Acacia pedicellata” (Field Mus. neg. 30591), is a near-duplicate of Turner 0405, but does not include the fruit. The *icones* represent Ic. Fl. Mex. 184. “Hern. mex. p. 104 f. 1. 2.,” was cited in the protologue by de Candolle. The same reference to Hernández (Thesaurus 104. 1651) was included in Pl. Nov. Hisp., under the name of *Tecozintochiti*. Nothing under the name of *Mimosa peregrina* has been found in the S. & M. herbarium.

The *icones* evidently represent a species of *Calliandra* of the group called by Britton and Rose *Houstonianae* (N. Amer. Flora 23: 49. 1928). Britton and Rose (I.c., p. 71) proposed a new species, *Anneslea striigillosa*, to which they referred (with “?”) the “Inga anomala pedicellata DC.”; the same authors cited (also with “?”) the same figures by Hernández and also “Calques Dess. pl. 206”, and Britton and Rose may have supposed that it was the basis for *Inga ? anomala β pedicellata*, but that was DC. 207 (not 206), which is clearly labelled as noted above. Plate 207 was not listed in Calques des Dessins, but plate 206 was cited there as the “type” of *Inga ? Houstoni* [DC.], which was an error because that name was based on *Mimosa houstonia* L’Hér. No. 206 is a colored copy, showing a single large bipinnate leaf at a node, and details of a flower with many long stamens. The plant depicted is probably a species of *Calliandra*, perhaps the same species as that shown in plate 207. No corresponding illustration has been found in the Turner Collection.

**Inga carnosa** G. Don, Gen. Hist. 2: 391. 1832. “Mimosa carnosa, Ruiz et Pav. in herb. Lamb[ert]”, cited by G. Don, I.c., as the basis for *Inga carnosa*.

Type-locality: "Peru". Type: Not seen; I could not locate this at BM, G, or OXF in 1963. Apparently not represented in the S. & M. herbarium. A specimen at G, ex herb. E. Boissier, annotated by Bentham as *Lysiloma tergeminia* (Bentham, Trans. Linn. Soc. London 30: 534. 1875), is marked by Pavón “Mimosa carnosa c.l.n. 62. d. del P. N. Peru”. This was evidently the specimen cited by Bentham (I.c.) as the plant in “Pavon’s herbarium” marked “Mimosa carnosa, del Peru”. Bentham suggested that an error had resulted from a misplaced label, and that the plant really had come from the Mexican collection of Sessé and Mociño. Moreover it seems unlikely that the specimen at G represents the same species as the *Inga carnosa* of Don, for the latter was described as having the “peduncles … clothed with rusty down as well as the young branches”, and the legumes lanceolate. In *Lysiloma tergeminia* the whole plant is quite glabrous, and the legume is notably broad-oblong. The identity of *Inga carnosa* remains uncertain.

**Inga coriacea** G. Don, Gen. Hist. 2: 390. 1832. “Mimosa coriacea, Sessé et Moc. in herb. Lamb[ert]”, cited by G. Don, I.c., as the basis for *Inga coriacea*.

Type-locality: Mexico. Type: Sessé & Mociño, in herb. Lambert, not seen. Bentham (Trans. Linn. Soc. London 30: 626. 1875) was uncertain of the identity of this species. A specimen at fl. ex herb. Webb, marked by Pavón “Mimosa coriacea N E”, is apparently referable to *Calliandra enarginata* (Humb. & Bonpl.) Bentham, q.v. for citation of specimens, and discussion.


Type-locality [Don]: New Spain. Type: [presumably from Sessé & Mociño, not Ruiz & Pavón], now at OXF (herb. Fielding, ex herb. Lambert), determined by Bentham, and marked by Pavón “Mimosa hirsuta de Nueva España”. Not found in the S. & M. herbarium, but see *Mimosa hirsuta* G. Don. According to Britton and Rose (I.c.), this is a valid species of western Mexico.

**Inga ? houstonii** (L’Hér.) DC. in DC. Prodr. 2: 442. 1825.

No mention is made in this place of the “fl. mex.”, but in the Calques des Dessins the above binomial is cited in connection with DC. plate 206. The plate in question represents a species of *Calliandra*. It is labeled “Acacia quadriflora” and by de Candolle “Inga ? Houstonii DC. Prodr. 2. p. 442”. I do not know why it should have been cited in the Calques des Dessins, as it was not cited by de Candolle and did not represent the type of any name. As noted above under *Inga ? anomala β pedicellata*, plate 206
was cited by Britton and Rose under a species proposed by them as new.

**Inga mociniana** G. Don, Gen. Hist. 2: 388. 1832.
Type-locality: Mexico. Type: “v. s. in herb. Lambr[ert]”, [presumably from Sessé & Mocino], not seen. Referred by Bentham (Trans. Linn. Soc. London 30: 627 [with ‘!‘], 1875) to the synonymy of *Inga vera* Willd., but that name is of doubtful application (cf. Woodson & Schery in Ann. Missouri Bot. Gard. 37: 225, 1950). Not identified; apparently no critical consideration has been given to the identity of *Inga mociniana* since the time of Bentham. Perhaps the same as *Mimosa inga* (L.) sensu Sessé & Moc., q.v.

Type-locality: Mexico. Type: *Sessé & Mocino*, in herb. Lamb, now at OXF, cited by Bentham. The specimen is labelled by Pavón “*Mimosa tetraphylla N E*”. In the S. & M. herbarium no. 3778 (CNHM neg. 44261), labelled “*Mimosa tetraphylla N*”, is according to Cowan *Calliandra canescens* (Schlecht. & Cham.) Benth. London J. Bot. 3: 96. 1844. *Inga tetraphylla* was regarded by Standley (Contr. U. S. Natl. Herb. 23: 388. 1922) as a doubtful species (of *Calliandra*), but Britton and Rose (i.c.) regarded it as a valid species of western Mexico.

Localities cited: “in Europae et Novae Hispaniae herbis. Floret tete fere anno”. Not described. In the S. & M. herbarium no. 1902 (CNHM neg. 46342), labelled “Lathyrus odoratus. 1364”, was correctly identified according to Standley. No. 1902bis, associated with no. 1902 in the herbarium, was *Pisum sativum* (q.v.), perhaps collected at the same time in the same garden. The number “1364” does not pertain to this particular specimen, but to the species. In an attempted rearrangement of the S. & M. herbarium, in Madrid after 1800, the numbers assigned to the papilionoid legumes ranged from at least 1332 to 1447 (McVaugh 1990, p. 209).

**Lathyrus speciosus** G. Don, Gen. Hist. 2: 333. 1832.

Type-locality: See under type. Type: Bentham cited specimens from Venezuela and Colombia, and also the “Pavon” specimens presumably from New Spain. The latter, originally in a single folder annotated by Bentham (G ex herb. E. Boissier), bear individual printed labels “Nueva España Herb. Pavon”. One is marked by Pavón “Cytisus atropurpureus” and the other “Cytisus parviflorus N E”.

**Lonchocarpus lanceolatus** Benth. J. Linn. Soc., Bot. 4: suppl. 92. 1860.

**Lonchocarpus macrocarpus** Benth. J. Linn. Soc., Bot. 4: suppl. 91. 1860.
Type-locality: See under type. Syntypes: Bentham cited specimens from Venezuela (*Fendler 1861*) and Bolivia (*Orbigny 578*), and also from “New Spain herb. Pavon”. A syntype at G ex herb. E. Boissier, the “Pavon” specimen annotated by Bentham, bears a printed label “Nueva España Herb. Pavon” and is marked by Pavón “Classis 17 N 204. dubia N E Securidaca?”. It is a fragment in fruit, with 2 detached leaflets. This species seems not to have been identified by Pittier in his treatment of the middle-American species of *Lonchocarpus* (Contr. U. S. Natl. Herb. 20: 37-93, 1917). Not found in the S. & M. herbarium.
Type-locality: "Central America". Syntypes: Jergensen 219; Oersted s.n.; and "New Spain, Herb. Pavon". The "Pavon" specimen at G, ex herb. Boissier, annotated by Bentham, bears a printed label, "Nueva España Herb. Pavon" and is marked by Pavón, "Astragalus ? N E".

Type-locality: Around San Angel, [south of México, D.F.]; and many cold places in New Spain. Said to flower in July and August. Not found in the S. & M. herbarium. Not certainly identified, but the description suggests a species of Cologania, several of which were referred in the S. & M. herbarium to the genus Lotus.

Type-locality: Santo Tomás near Hostotipaquillo, Jalisco ["in Praedio S. Thomae prope Hostotipaquillo, Floret Julio"]. Not found in the S. & M. herbarium; not identified, but evidently not a Lotus. Described as a tomentose suffruticose twiner with three ovate tomentose leaves (the terminal one elliptic, larger), slender axillary racemes, flowers in pairs, the banner violet, the wings and keel white; legume compressed, arculate-recurred.

Lotus racemosus Sessé & Moc. Fl. Mex. ed. 2. 175. 1894, not of Poiret.
Type-locality: Dry fields, Tequila, Jalisco, where said to flower in July. Not found in the S. & M. herbarium. Not identified, but perhaps a Tephrosia. Described as a tomentose, branching subshrub two feet high, with ternate tomentose leaves white beneath, axillary racemes and a terminal panicle of violet flowers, and erect hirsute compressed pods.

Type-locality: New Spain ["in temperatis Novae Hispaniae locis"]. Ic. Fl. Mex. 268, represented by no. 0612 in the Torner Collection, which bears the number "268", the hand-printed name ["Lupinus crossed out] Altitissimus. Sp. N."; and an annotation by de Candolle, "Dolichos ? macrostachys". A nearly identical copy is DC, plate 243, an original painting bearing the number "268" [apparently by Mocinio] and the annotation by de Candolle, "Dolichos ? macrostachys". The plant depicted is evidently a perennial species of Crotalaria.

The two names are equated as above because the treatments in the two florae, except for minor differences in arrangement and wording, are identical. According to a manuscript list at MA, Ic. Fl. Mex. 268 was one of the icenes obtained on the "Second Excursion", that of Guerrero in 1789, and the type-locality of this species may well have been somewhere in the mountains near Chilpancingo. In the S. & M. herbarium no. 1911 (CNHM neg. 44475), labelled "Lupinus altissimus N.", is according to H. A. Senn Crotalaria mollicula H. B. K. Nov. Gen. & Sp. 6: 403. 1824. No. 1911 was cited (as from "F") by Senn (Rhodora 41: 354. 1939) under C. mollicula, but in the same paper (p. 366) Crotalaria altissima was listed among the doubtful species. Nelson (1997) designated "Sessé 1911" as "material type" of L. altissimus.

Locality cited: Temascaltepec, Edo. de México ["in montibus Temascaltepec, Floret Julio"]. Published without any reference to earlier authors. Description. Not found in the S. & M. herbarium. Not identified; probably not a species of Lupinus, as the flowers were said to be yellow.

Lupinus humifusus G. Don. Gen. Hist. 2: 366. 1832, with citation of "Sesse et Moc. in herb. Lamb." as the basis for the name.
Type-locality: Mexico. Type: Sessé & Moccino, in herb. Lambert, this presumably a specimen now at BM, ex herb. Lambert, marked by Pavón "Lupinus humifusus Sp. N. de Mexico" and by C. P. Smith (in 1934), "L. geophillus Rose". Although Smith saw and annotated the plant I take to be the type of Lupinus humifusus, he seems not to have attached any importance to this, as on at least two occasions in later years (Sp. Lyp. 54. 1938; Lc., p. 517. 1945) he stated that he did not know the identity of Lupinus humifusus Sessé & Moc. In the S. & M. herbarium no. 1907 (CNHM neg. 44284), labelled "Lupinus humifusus", is according to Rudd a probable isotype of L. humifusus G. Don, and also conspecific with Lupinus geophillus Rose, Contr. U. S. Natl. Herb. 8: 307. 1905. As this confirms Smith's determination of the type of L. humifusus, it appears that Don's name is to be taken up in place of the much later name proposed by Rose.

Locality cited: Tixtla, Guerrero ["in Tixtlae montibus et Capitae (sic) Bonae Spei, Floret Junio"]). The moderately long description suggests a species of Crotalaria. Not found in the S. & M. herbarium under this name, but no. 1909 (CNHM neg. 44465), labelled "Lupinus simplicifolius", was determined by H. A. Senn as Crotalaria angulata Mill.

Type-locality: New Spain, grown in the Madrid Botanical Garden, "semina mis vit. D. Vincent. Cervantes". Type: Not seen. Unknown to C. P. Smith (Sp. Lyp. 54. 1938), who stated "L. mexicanus Cervantes (1816), altho the first lupine-name assigned to a Mexican
species, helps to swell our list of the “unknowns”. The name was taken up without comment by McVaugh (Fl. Novo-Gal. 5: 590. 1987) for a plant of the highlands of central Mexico. Not found in the S. & M. herbarium under this name.


Localities cited: Near México, D.F. [“in Virginia et Mexici circuitibus. Floret quolibet anni tempore”].

Briefly described. In the S. & M. herbarium no. 1912 (CNHM neg. 44285), named “Lupinus perennis”, was determined by V. E. Rudd as *Lupinus ehrherti* Schlcht., vel aff.


Type-locality: Metztitlán [“in anfractibus Mextitlani”], Hidalgo. A specimen at BM, ex herb. Lambert, marked by Pavón “Lupinus rotundifolius sp. nova de México”, has been determined as *Crotalaria incana* L. For citation of additional specimens in the S. & M. herbarium, see under *Crotalaria setifera* DC, also regarded as a synonym of *C. incana* L. Sp. Pl. 716. 1753.

*Lupinus trifoliatius* Cav. ic. 1: 43. pl. 59. 1791.

Type-locality: “Mexico”; grown at the Madrid Botanical Garden. Type: Not seen. Cavanilles seems to have erred in supposing this to be an American plant; he later (ic. 3: in corr. opp. p. 52, 1796) equated it with *Dolichos fabaefolius* L’Hér. Surp. Nov. pl. 78. Sept. 1791. De Candolle (in DC. Prodr. 2: 216. 1825) referred both names to the synonymy of *Cyanopsis pscraloides* (Lam.) DC.


Type-locality: Nova Hispania; grown at the Madrid Botanical Garden, “sæ semibus missis per D. Sessé”.

Type: A specimen at G-Del, ex herb. Ventenat, is marked “Mimosa aculeaticarpa Ortega”, and in another hand “Cavanilles misit”. The relationship to *Mismatch biuncifera* was suggested by Bentham in J. Bot. (Hooker) 4: 409. 1842. The leaves are 7-10-jugate, the stipular spines broad and somewhat curved, the immature fruit subpecten and spiny-margined. Plants of the same species are at G, ex herb. E. Boissier, with printed label “Herb. Pavon” and the name “Mimosa aculeaticarpa Ortega”.

Decad.”. This species has often passed as *Mimosa acanthocarpa* (Willd.) Benth., which was based on a plant of garden origin specified as “Mimosa aculeaticarpa Hortulan.” Very probably the material described by

Wildenow came originally from Madrid. *Mimosa aculeaticarpa* is a valid species of the Mexican plateau, divided by Barneby (1991, pp. 94-97) into two varieties and two further “variants”. Not found in the S. & M. herbarium.


Locality cited: Near Córdoba, Veracruz [“in oppido S. Laurentii, juxta Cordovam, Floret Julio et Augusto”]. Barneby (1991, p. 778) said of the name “This appears to be *M. asperata* Linnaeus, although the Linnaean authority is not given” [I concur: The diagnosis (character) in Fl. Mex. is exactly that quoted by Palau (7. 210. 1787) – RMev]. Description. In the S. & M. herbarium no. 3768 (CNHM neg. 44255), labelled *Mimosa asperata* 1919”, was determined by V. E. Rudd as *Mimosa tenuiflora* (Willd.) Poir. The number “1919” does not pertain to this particular specimen, but to the species. In an attempted rearrangement of the S. & M. herbarium, in Madrid after 1800, the numbers assigned to the mimosoid legumes ranged at least from 2006 to 2031 (McVaugh 1990, p. 209). Nelson (1997) designated “Sessé 3768” as “material tipo” of “Mimosa asperata Sessé & Moc.”, which is inappropriate as no such name exists.


Localities cited: Ayahualtempa, Guerrero [“in montibus Ayahualtempae alisique Americae locis. Floret Septembris”]. Rather fully described. In the S. & M. herbarium no. 3799 (CNHM neg. 44274), assigned to *M. ceratonia* with a question, was determined by V. E. Rudd as *Mimosa ceratonia* L., but that species is entirely Antillean and South American in its range (Barneby, Mem. New York Bot. Gard. 65: 261. 1991). Probably the record from Guerrero pertained to a different species.


*Acaecia distachya* “fl. mex. ic. ined.” cited in synonymy
by DC. in DC. Prodr. 2: 456. 1825. *Acacia prosopoides* DC. in DC. Prodr. 2: 460. 1825, with citation of “fl. mex. ic. ind.” as the basis for the name.

Type-locality [Cav.]: New Spain; flowered in the Madrid Botanical Garden in August and September 1795. Type: Not seen. Barneby (1991, p. 82) speculated that the plant of Cavanilles was raised from seeds provided by Sesse & Mocino. Not found in the S. & M. herbarium. De Candolle cited “fl. mex. ic. ind.”, but as pointed out above under *Acacia ? disticha*, no icon has been located. De Candolle’s description of *Acacia ? disticha*, however, is precisely applicable to the plant illustrated in plate 295 of Cavanilles’ *Icones*, and may well have been drawn from that plate, even though de Candolle failed to mention Cavanilles. Bennham (Trans. Linn. Soc. London 30: 417. 1875) equated the Candolean species with that of Cavanilles, as did Britton and Rose (N. Amer. Flora 23: 157. 1928). Standley (Contr. U. S. Nat. Herb. 23: 359. 1922) and Britton and Rose (1928) considered *Mimosa disticha* a valid species.

Type-locality [prosopoides]: Mexico. Lectotype: In the Torer Collection, no. 0108, annotated by de Candolle “Acacia prosopoides”. DC. plate 210, as cited in Calque des Dessins (Field Mus. neg. 3059), is a rather poor copy of Terner 0108. Doubtfully referred by Hemsley (Biol. Centr. Amer. Bot. 1: 343. 1880) to *Piptadenia patens* Bentham; by Standley (Contr. U. S. Nat. Herb. 23: 359. 1922) to *Mimosa laxiflora* Bentham; and by Britton and Rose (N. Amer. Flora 23: 161. 1928) to *M. polyantha* Bentham. Not found in the S. & M. herbarium. Barneby (1991, p. 82) referred the name to the synonymy of *Mimosa disticha*, saying of the lectotypic icon, “...the figure decisively portrays some form of *M. disticha* with solitary internodal prickles such as could have been encountered by Sessee only on the west coast of Mexico”.


Type-locality: Mexico; flowered in the Madrid Botanical Garden in October ?(1790). Type: Not seen.

This has often been regarded as a synonym of *Acacia angustissima* (Mill.) Kunze, but Wiggins (Contr. Dudley Herb. 3: 235. 1942), on the basis of an apparently authentic specimen collected in the Madrid Garden in 1800 (seen by him at F), regards this as a distinct species. Not found in the S. & M. herbarium.

*Mimosa foetida* Sessee & Moc. Pl. Nov. HISP. 177. 1890; ed. 2. 164. 1893; FL Mex. ed. 2. 234. 1894, not of Jacquin.

Type-locality [Pl. Nov. HISP.]: Near Apatzingán, Michoacán (“cum praecedentibus” *Mimosa huariachii*). Not found in the S. & M. herbarium. Described as an unarmored tree 20 feet high, the leaves pinnate, “trigibus, propris conjugatis… glandula subrotunda, excava intra singula paria”; leaflets obovate, glabrous. The plant is said to smell worse than *Mimosa huariachii*, with which it grows. Flowers and fruit are not described. Barneby (1991) said of it “presumably = *Gomphoecia foetida* (Jacquin) Standley, known in modern times from Apatzingan”. Not further identified.


The plant described in the Pl. Nov. HISP. as *Mimosa hirsuta* is *Calliandra hirsuta* (Inga hirsuta G. Don, q.v.).

*Mimosa huariachii* Sessee & Moc. Pl. Nov. HISP. 177. 1890; ed. 2. 164. 1893; FL Mex. ed. 2. 234. 1894.

Type-locality [Pl. Nov. HISP.]: Near Apatzingán; [Fl. Mex.]: San Juan de los Platanos [near Apatzingán], Michoacán. Not found in the S. & M. herbarium. Described as a small unarmed nearly glabrous tree; leaves pinnate and conjugate; leaflets 8, subovate, oblique, those of each pair equal, the terminal ones larger, petiolate; one pair with a depressed-truncate gland between them; legumes semi-lunate, reared, foetid like the whole plant. This suggests some species of *Inga*. Sessee & Mocina gave the common name as “Huariachii”, which conceivably might be a corruption of *cuajinicuil*, the most frequently-used name for members of this genus. Barneby (1991, p. 779) stated that the combination of characters included in the protologue formed “a syndrome incompatible with Mexican *Mimosa*”.

325

Locality cited: “In America temperate calida”. Ic. Fl. Mex. 205. cited in the Pl. Nov. Hisp., was obtained in the course of the “Second Excursion”, that to Guerrero in 1789 (MA, mss). This is represented by DC. plate 213, an original painting bearing the number “205”. the hand-printed names “Mimosa Inga Linn.” and “[quaxiniquili] crossed out”, and the annotation by de Candolle “Inga vera [wild].” A nearly identical copy is no. 1088 in the Torner Collection, numbered “205”, bearing the hand-printed names “Mimosa [Inga Linn. crossed out]” and “Mex. Quaxiniquili”, and the annotation by de Candolle, “Inga quaxiniquili”. According to the Pl. Nov. Hisp., this species is “Quaxiniquile Mexicanorum”. Apparently Sessé & Mocinó referred to this species more than one luga with winged leaf-rachis. In the S. & M. herbarium, according to determinations by Standley, two species were so named by the collectors, viz. Inga eriocarpa Benth. (no. 3784 bis; CNHM negs. 46325–46327) and Inga schiedeana Steud. (no. 3784ter; negs. 46333–46335). On one of the sheets of no. 3784 the vernacular name “Guamá” is given. DC. plate 213 represents a plant with 4 pairs of leaflets, winged rachis, glads at most nodes of the rachis, flowers in short clusters, the legume evidently bluntly 4-angled, the flowers rather large, the bractlets small. This suggests Inga vera Willd. or I. edulis Mart. as determined by Britton and Rose (N. Amer. Flora 23: 14. 1928). Cf. Inga mocinóiana.


Localities cited: Acahuizotla, Guerrero ["in Acahuizotlæe montibus et superiore Aegypto. Floret Julio"]. Not described except for an initial diagnosis. In the S. & M. herbarium no. 3788 (CNHM neg. 44345), labelled “Mimosa Lebeck”, was determined by Standley as Acacia tequiliana S. Wats.


Type-locality: San Juan de los Plátanos, near Apatzingán, Michoacan ["in oppido Sancti Joannis de los Plátanos, prope Apatzingán, Floret Decembris"]. Not found in the S. & M. herbarium. Said to be a glabrous unarmed tree 10 feet high; leaves bipinnate; pinnae 3 pairs, leaflets 7 pairs, ovate, revolute-margined; spikes globose; flowers white, polyandrous, complete; legume flat, membranaceous. Said to be much like “Mimosa Lebeck”; the latter, in the S. & M. herbarium, is Acacia tequiliana S. Wats. Proc. Amer. Acad. Arts. n.s. 22: 409. 1887. Plants of A. tequiliana are scarcely tree-like, and the leaflets are usually more numerous than described for Mimosa michoacanensis. A sheet at G, ex herb. E. Boissier, identified by Bentham as Callithamnium formosa (H.


Mimosa microphylla Sessé & Moc. Fl. Mex. ed. 2. 233. 1894, not of earlier authors.

Type-locality: Hot regions, New Spain, where said to flower in August. Not found in the S. & M. herbarium. A sheet at OXF, ex herb. Fielding ex herb. Lambert, marked by Pavón “Mimosa microphylla sp. nova de Mexico”, is according to a determination by Bentham Acacia villosa (Sw.) Willd. Sp. Pl. 4: 1067. 1806. The description of Mimosa microphylla in the Fl. Mex. suggests this last or a related species, perhaps Acacia angustissima (Mill.) Kunze, Rev. Gen. 3: pt. 2: 47. 1898, which is a common Mexican plant. A sheet at G, ex herb. E. Boissier, apparently of this last species, determined as Acacia filicina, bears an original Sessé & Mocinó label, “Mimosa microphylla”. Barneby (1991, p. 779) said, “The description answers to some form of Acacia angustissima”.


Type-locality: Near Chilpancingo, Guerrero. Ic. Fl. Mex. 338, not seen. Not found in the S. & M. herbarium. Described as an unarmed shrub with scabrous branches, half again as high as a man; leaves bipinnate; pinnae 10 pairs; leaflets 50 pairs, linear; petioles hisurate; spikes globose, subaxillary, as long as the leaves; flowers white, apetalous, polyandrous; stamens very long, connate at base. This somewhat suggests Lystisoma divaricatum (Jacq.) Maehr. Contr. Gray Herb. 59: 6. 1919. Barneby (1991, p. 779) said “Not recognized, but no Mimosa”.


Locality cited: Puerto Rico ["Habitat ubique in Insula de Porto Rico, ubi Guamá incolae appelant ... Floret fructificatque tuto anno"]. Description. The sweet, white, succulent pulp around the seeds is said to be eagerly devoured; that suggests Pithecellobium dulce, but in the S. & M. herbarium no. 3785 (CNHM neg. 46329), labelled “Mimosa nodosa. [descr.] V. [ulg.] Guamá”, was determined by Standley as Inga leuca (Sw.) Willd. Nelson (1997) designated “Sessé 3785” as “material tipo” of Mimosa nodosa Sessé & Moc., but that is inappropriate because no such name exists. See another reference to the vernacular name “Guamá” under Mimosa inga.


Type-locality: Mazatlán, Guerreró ["in Mazatlání montibus. Floret Maió"]. Not found in the S. & M. herbarium. Described as an unarmed shrub 8 feet high...
with leaves sericeous, conjugate, the leaflets 8 [on each of 2 pinnae], obliquely oblong, obtuse, the lowermost smaller, spikes globose; flowers polyandrous; stamens connate at base. Not identified; evidently not a Mimosa; perhaps a Calliandra, as suggested by Barneby (1991, p. 779).

**Mimosa parota** Sessé & Moc. Pl. Nov. Hisp. 177. 1890; ed. 2. 165. 1893; Fl. Mex. ed. 2. 234. 1894.

Type-locality: Hottest parts of New Spain. Not found in the S. & M. herbarium. From the description and the specific epithet evidently a synonym of *Enterolobium cyclocarpum* (Jacq.) Griseb. Fl. Brit. W. Ind. 226. 1860, which in western Mexico is usually known as "Parota". It was referred to the synonymy of *E. cyclocarpum* by Standley (Contr. U. S. Natl. Herb. 23: 391. 1922).


Localities cited: Cuernavaca, Morelos ["in Quauhnahuacensis agris et Zeylam. Floret Aprili"]. Moderately fully described. The plants under this name in the S. & M. herbarium (nos. 3789, 3797; CNHM negs. 44342, 44343) were determined by Standley as *Acacia pennatula* (Schlecht. & Cham.) Benth.


Type-locality: New Spain. Lectotype: At G. ex herb. E. Boissier. "The typical New-Spain specimens which I described from Pavon's collection in Boissier's herbarium." (A cultivated plant from Havana also cited). The "Pavon" specimens at G. annotated by Bentham, bear two printed labels, "Nueva España Herb. Pavon", and three tickets by Pavón, "Mimosa [sp. nova] [de] N.E [or M°]"). Not included by Standley in the Trees and Shrubs of Mexico; in his key it runs to *Mimosa malacophylla*, but the leaflets are 3-4.5 mm wide, and *malacophylla* is more pubescent. In the S. & M. herbarium no. 3798 (CNHM neg. 44273), labelled by Pavón "Mimosa N.E.", is determined by Rudd as *Mimosa polyantha*, with the suggestion that it may be an isotype. The name *Mimosa polyantha* was equated with *M. adenanthera* by R. Grether in 1987 (J. Arnold Arbor. 68: 310.).


Type-locality: "In Praedio P.P. Carmelitarum Asillero dicto", near Guadalajara. From the description clearly not the same plant as the other one described on the same page under the same name, which is *Mimosa garamina* DC., q.v. under *M. quadrivalvis* var. *diffusa*. The present species is described as suffruticose, procumbent, unarmed, hirsute; leaves bipinnate with 6 pairs of pinnae; leaflets 15 pairs, linear, tiny, ciliate; gland between one pair of pinnae; spikes subquaternate, axillary, globose; flowers white, polyandrous. This suggests a species of *Desmanthus*. In the S. & M. herbarium no. 3791 (CNHM neg. 44426), labelled "Mimosa procumbens" ["reps" crossed out], is according to Rudd *Desmanthus sp.* The same specimen was cited by Barneby (1991, p. 779) as *Desmanthus virgatus* var. *depressus* B. L. Turner.

**Mimosa purpurea** Sessé & Moc. Fl. Mex. ed. 2. 233. 1894, not of Linnaeus.

Localities cited: Veracruz ["in Praedio de la Punta. Floret Augusto"]. This locality is thought to have been San Juan de la Punta, some three leagues' ESE of Córdova (cf. McVaugh 1977, p. 175). Barneby (1991, p. 779) said of the taxon that was described, "Not recognized, but not *Mimosa*". Description. In the S. & M. herbarium no. 3776 (CNHM neg. 44259), labelled "Mimosa purpurea N. [description]. Habitat in Praedio de la Punta", was determined by R. S. Cowan as *Calliandra papillosa* (Britt. & Rose) Standl. The fact that the locality is cited both on the label and in the published text, makes it seem likely that the specimen is authentic. Nelson (1997) designated "Sessé 3776" as "material tipo" of *Mimosa purpurea Sessé & Moc.*.


Traditionally treated as a species of *Schrankaia*, which see for further comment. Barneby presented justification for combining *Schrankaia* with *Mimosa* and treated *M. quadrivalvis* as a widespread and multifarious taxon comprising 16 varieties in North and South America and the West Indies.


Type-locality [Fl. Mex. 1st on page]: Cerro de Colli [8 km west of Guadalajara]. Jalisco ["in clivo colli juxta Guadalaxaram. Floret Julio"]. Type-locality [DC.]: "In America borealis orá occidentali..." Lectotype [DC.], designated by Barneby (1991, p. 256); in the Torner Collection, no. 1884, labelled by de Candolle "Mimosa garamina". DC. plate 205, as cited in Calques des
Dessins (Field Mus. neg. 30590), is a fair to poor copy of Torner 1884.

*ic.* Fl. Mex. 455 was listed under the name of “Mimosa procumbens N.” (MA, mss) as having been obtained on the “Third Excursion”, that to Guadalajara in 1790–1791. It was not cited in the manuscript nor in the printed text of the Fl. Mex., but the description in that work is precisely applicable to the plant depicted in the illustrations. *Ic.* 455 is represented by an original painting at MA, not numbered, not listed by Mocnño, and bearing the hand-printed name “Mimosa Procumbens.” It was listed by name, with description, and identified as RJB Lám. 119 in the *Catálogo de las Laminas del Real Jardín Botánico* (RJB 1987, p. 345). It was well reproduced in color, reduced to ca. 6.6 by 4.5 cm, without further identification (RJB 1987, p. 251). It was number 48 of Ramírez (Anales Inst. Méd.-Nac. México 6, pt. 1: 78. 1903), who correctly noted that DC. 205 was a copy based on the same model. The identity of *Mimosa geminata* DC. has always been in doubt. Bentham (Trans. Linn. Soc. London 30: 634. 1875) suggested that it might be a species allied to *Mimosa fragrans* A. Gray; Standley (Contr. U. S. Natl. Herb. 23: 366. 1922) regarded it as “doubtful.” From the description in the Fl. Mex., and from the icon, it seems probable that it represents a species of *Schrankia*, not a *Mimosa*. Barneby (loc. cit.) doubleflied *Mimosa geminata* with *Schrankia diffusa* (the type of which came from the beach at Manzanillo, Colima), at the same time lectotypifying *M. geminata* by Torner 1884, which is an equivalent duplicate of DC. plate 205 and of the painting at MA that is labelled “Mimosa Procumbens.”

**Mimosa quadridivalvis var. distachya** (DC.)


Type-locality [DC.]: Mexico; [Pl. Nov. Hisp.]: Near Jorullo, Michoacán; and in India (“in Nova Hispania prope Xorulum et in India. Floret Septembri.”). Lectotype [DC., designated by Barneby as “holotype”]: In the Torner Collection, no. 0560, numbered “264”, bearing the hand-printed name “Mimosa [Intia. Linn. crossed out]”; and an annotation by de Candolle, “Schrankia distachya”. A near-perfect duplicate is DC. plate 211, as cited in Calques des Dessins (Field Mus. neg. 30595). This is an original painting also bearing the number “264”. The *icones* represent Ic. Fl. Mex. 264, which was listed (MA, mss.) among those obtained during the “Second Excursion”, that to Guerrero in 1789 (the Expedition did not visit Jorullo until the next year). In the S. & M. herbarium no. 3790 (CNSM neg. 44267), labelled “Mimosa Ynisia”, was determined by V. E. Ruud as a species of *Schrankia*. A specimen at G, ex herb. Moricand, marked by Pavón “Mimosa Intisia de Nueva España”, was referred by Moricand to *Schrankia distachya* after comparison between the plant and the type-plate. Britton and Rose, who referred it to the genus *Leptoglossis* (N. Amer. Flora 23: 141. 1928), treated this as a valid species of southern and western Mexico.


Type-locality: Hot regions, New Spain (“in calidis Novae Hispaniae regionibus ubi vulgo *Mezquite* adpellatur. Floret Octobri et Novembri”). A specimen at OFX, marked by Pavón “Mimosa rotundata sp. nova de Mexico”, is according to Bentham *Prosopis juliiflora*. Not found in the S. & M. herbarium. The description and commentary in the protologue of *Mimosa rotundata*, including the citation of the vernacular name “Mezquite”, confirm the supposition that this is a *Prosopis*. It was referred by Britton and Rose (N. Amer. Flora 23: 187. 1928) to the synonymy of *Nelutma* [Prosopis] *laevigata*, and by M. C. Johnston (Brittonia 14: 78. 1962) to the synonymy of *Prosopis laevigata* (Humb. & Bonpl. ex Willd.) M. C. Johnston. I.e. This is not “Mimosa rotundata Pav.”, which is *Acacia rotundata*, q.v.


Localities cited: Cuernavaca, Morelos ["in Quauhnahuacae agris et Brasilia. Floret Augusto"]. Moderately fully described. In the S. & M. herbarium no. 3795 (CNHM neg. 46363), labelled "Mimosa (unguis cati crossed out) sensitiva", is according to Standley Mimosa albida Humb. & Bonpl.


Type-locality: Mountains, ["[Apatlantán], Jalisco ["in montibus Amatitlani. Floret Julio"]]. Not found in the S. & M. herbarium. Described as a glabrous spiny shrub 10 feet high; spines solitary and also stipular, the latter spreading; leaves bipinnate; pinnae 4 pairs; leaflets 8 pairs. linear-oblong: spines axillary, often paired, globose; corollas white; flowers decandrous, stamens purplish. This suggests a Mimosa, perhaps of the affinity of Mimosa monacantha Benth. Pl. Hartw. 12. 1839, or M. biacutifera Benth., l.c. Barneby (1991, p. 780) said "...nothing in it [the protologue] excludes Mimosa, but no particular species is indicated".

There are several localities in Mexico called Amatitlán, but I think it likely that this species came from Amatitlán, Jalisco, because the Expedition passed by here, on the road from Guadalajara to Tequila, in mid-summer of 1791. This was too late to permit the inclusion of the plant in the Pl. Nov. Hisp. The epithet "septentrionalis" must have seemed appropriate in July 1791 to designate a plant from the northern limits of the country thus-far explored.


Localities cited [Pl. Nov. Hisp.]: Yecapixtla, Morelos ["in Ayacapixtla et Zeylal"]. Described at some length. Not found in the S. & M. herbarium. Barneby (1991, p. 780) said that the description in the protologue identifies this as one of the ant-acacias, not a mimosa. Not further identified.

Mimosa tomentosa Sessé & Moc. Fl. Mex. ed. 2. 233. 1894, not of earlier authors.

Type-locality: Hotter regions of New Spain, as at San Lorenzo near Córdoba, Veracruz, where said to flower in August. Not found in the S. & M. herbarium. Described as a weak ferrugineous-tomentose shrub, the stems 5-angled with subulate recurved spines on the angles; leaves bipinnate; pinnae 6–8 pairs. leaflets 10–15 pairs, oblong, oblunget acuminate, tomentose; petiolo and rachis aculeate; stipules setaceous, rachis aculeate; spikes paniculate, numerous, globose; flowers purplish, decandrous. This suggests Mimosa pilosa L. Cent. Pl. 1: 13. 1755, or something similar to that. Barneby (1991, p. 780) said "Nothing in the protologue excludes this from genus Mimosa, but the species eludes me".


Type-locality: Xochitepec [ca. 20 km south of Cuernavaca]. Morelos, where said to flower in September. Not found in the S. & M. herbarium. Described as a glabrous shrub 3 feet high; leaves bipinnate; pinnae 4 (rarely 5) pairs; leaflets 10 pairs ["denae"]; oblong, small; stipular spines in pairs, recurved, deciduous; legume flat, membranaceous. Barneby (1991, p. 780) said "Unidentified, but scarcely Mimosa".


Localities cited: New Spain and the Antilles. Fl. Mex. 232; this is represented in the Torner Collection by no. 1089, which bears the number "232", the hand-printed names "Mimosa [Unguis-cati, Linnaeus, crossed out]" and "Quamochitl Herms. F. 94", and an annotation by de Candolle, "Ina quamochitl". A nearly identical copy is DC, plate 212, an original painting bearing the number "232" ["in Mocinio's hand" and an annotation by de Candolle. The plant depicted is apparently Pithecellobium dulce (Roxb.) Benth. London J. Bot. 3: 199. 1844, a common plant in Mexico and everywhere known as "guamuchil". Not found in the S. & M. herbarium.

Mimosa sp. (—— Mimosa inermis foliis bipinnatis, partialibus trijugis; propriis septemjugis; foliolis ovatis) sensu Sessé & Moc. Fl. Mex. ed. 2. 235. 1894.

Locality cited: [near Apatzingán], Michoacán ["in oppido S. Juan de los Plátanos. Floret Decembri"]. Short description. Said to resemble Mimosa lebbeh.

Nissolia hirsuta DC. in DC. Prodr. 2: 257. 1825.

Type-locality: "in Mexico propé Guanazuato deexit cl. Neé". Holotype (according to V. E. Rudd, Phytologia 20: 324. 1970), at G, labelled (apparently by Pavón in Rudd's opinion) "Nissolia N E de Guanajuato". Rudd commented that she had seen several specimens that appeared to be duplicates of the holotype but that almost certainly had been collected by Sessé & Mocino. She speculated that de Candolle might have misread the letters "N E" as "Neé", or that Pavón might have distributed some of Neé's Mexican collections, in addition to those of Sessé & Mocino. The former seems more likely, as Pavón once explained (in a letter to Philip Barker Webb, now at FL) that he could not sell duplicates from the collection of Neé, or duplicates of Triana's collection from Nueva Granada, because they were securely under the control of the Botanical Garden (McVaugh 1987, p. 168).

After comparing the type of Nissolia hirsuta with that of Nissolia microptera Poiret, in Lam. Encycl. Suppl. 4: 98. 1816, Rudd considered the two names to be synonymous, and took up the older name for this rather common Mexican species.
Type-locality: Mexico. Type: "herb. Lamb[ert]", not seen [presumably from Sessé & Mocioño]. Not found at OXF or BM in 1963. Sessé and Mocioño, at one time or another, referred to the genus Ononis specimens of several other genera, including Cassia, Canavalia, and Lotus. See below.

Type-locality: Mexico. Type: Not specified; perhaps a specimen in the Lamberti herbarium. Shrubby ["3 to 6 feet"], smooth except the young leaves, which are silky: leaves abruptly pinnate, with 8-10 pairs of obovate-lanceolate, mucronate leaflets; racemes axillary, not so long as the leaves; calyx smooth, slightly 5-lobed; vexillum large; legumes stipitate, 3-jointed; joints tapering to both ends. Calyx permanent. Flowers "purple". Not identified. Referred doubtfully by Rydberg (N. Amer. Flora 24: 207. 1924) to the synonym of Daubentonia punicea (Cav.) DC. Mém. Lég. 286. 1823.

Type-locality: Apatzingón, Michoacán, where observed to flower in December. Described as a small glabrous tree; leaves pinnate, the leaflets 12-18, obovate-oblong, entire, very short-petiolulate; racemes axillary, compound, drooping, shorter than the leaves, viscid ("viscosi"); flowers yellow-white, varying to purplish ("purpureo-tanisper variantes"). This conceivably could apply to a species of Diphysa, but I do not recognize it. In the S. & M. herbarium no. 3732 (CNHM neg. 46412), labelled "Orobus arborescens", is according to Standley Robinia pingen Rose, Contr. U. S. Nat. Herb. 12: 274. 1909. If this is actually the plant described in the Pl. Nov. Hist., it represents a considerable range-extension; I suspect that some misidentification may be involved. Nelson (1997) designated "Sessé 3732" as "material tipo" of O. arborescens.

"Orobus falcatus N.
A name not published by Sessé & Mocioño, but applied in their herbarium to no. 3730 (CNHM neg. 46430), labelled "Orobus falcatus N. [description] Habit, Rosar.", which probably refers to Rosario, Sinaloa, visited by Sessé during the winter of 1791-1792. According to Standley, the specimen represents Tephrosia arcata (Ryd.) Standl. [=T. multiflora Rose, Contr. U. S. Nat. Herb. 1: 320. 1895]. An apparent duplicate of this specimen was seen at OXF in 1963.

Type-locality: Mountains of Coahuayana ["in Coahuayanæ montibus. Floret November"], Michoacán. Not found in the S. & M. herbarium. Described as an herb three feet high, pubescent above, the leaves pinnate with 8 pairs of more or less oval leaflets, these glabrous above and silky beneath; racemes axillary, simple, as long as the leaves; flowers pale yellow, the standard striped purplish; legume glabrous, linear, "depressed". This suggests a species of Tephrosia; some of which were indeed referred by Sessé & Mocioño to Orobus.

Type-locality: New Spain ["passim in temperatis Novae Hispaniae locis"] in the S. & M. herbarium no. 3736 (CNHM negs. 4638-4638), labelled "Orobus sericeus", are according to Standley Tephrosia toxicaria (Sw.) Pers. [T. sinapou (Buc’houz) A. Chev. Compt. Rend. Hebd. Séances Acad. Sci. 180: 1522. 1925]. Wood (Rhodora 51: 251. 1949) referred Orobus sericeus to the synonymy of T. sinapou on the basis of the original description of the former and some fragments of Sessé & Mocino's no. 3736, which he saw at F. Nelson (1997) designated "Sessé 3736" (at MA) as "material tipo of O. sericeus" but did not cite a negative number.


Type-locality: Tepalcatepec, Michoacán ["in oppido Tepalcatepec Provinciis Michoacanesis. Florid Octobri"]. Not found in the S. & M. herbarium. Described as a shrub 8 feet high with stipular spines, villous branches and leaves; leaves pinnate with about 30 oblong villous leaflets that are whitish beneath; racemes axillary, simple; flowers pale yellow, nodding, the vexillum purplish above; legume oblong, villous, subcompressed. This is pretty clearly a description of the plant currently passing as Coursetia mollis B. L. Rob. & Greenm. Proc. Amer. Acad. Arts, n.s. 29: 384. 1894, over which the name proposed by Sessé & Mocino has 5 years' priority. The name Orobus spinosus seems not to have been noted by Matt Lavin in his revision of Coursetia (Syst. Bot. Monogr. 21: 1-167. 1988).


Type-locality: Seashores, Puerto Rico ["in litore maris Insulae de Puerto Rico. Florid Julio et Augusto"]. Relegated by Urban (Symb. Antill. 4: 311. 1905) to the synonymy of Vigna repens (L.) Kuntze, Rev. Gen. Pl. 1: 212. 1891. In the S. & M. herbarium no. 3734 (CNHM neg. 46450), labelled "Orobus trifoliatus", is according to Standley Vigna repens. Presumably this is the plant described in the Fl. Mex., where the legume is said to be "tereti-subcompressa, declinata". This could hardly apply to Desmodium axillare (Sw. DC.), the other species found in the S. & M. herbarium under the name of Orobus trifoliatus (no. 3735; neg. 44510). Nelson (1997) designated "Sessé 3735" as "material tipo" of O. trifoliatus and identified the plant as Desmodium axillare.


Locality cited: Michoacán ["in montibus Tepalcatepec inter Coahuayanaque medii. Florid Decembr"). Described as an erect herb 3 feet high, with impari-pinnate leaves, 15 to 27 oblong setaceous-mucronate leaflets, simple axillary racemes, flowers "ex albo rosel", and legumes compressed, softly tomentose, subfalcate at apex.


Locality cited: New Spain. Ic. Fl. Mex. 273, listed among the plates obtained on the "Third Excursion", that to western Mexico in 1790-1791 (MA, mss.) is represented in the Torner Collection by no. 1457, annotated by de Candolle "Parkinsonia aculeata". Material under this name in the S. & M. herbarium, according to recent determinations by Standley, was correctly named by the collectors (nos. 998, 1060; CNHM negs. 46378-46380).


"Phaca Quaunahucensis N."

In the S. & M. herbarium no. 3642 (CNHM neg. 44562), labelled as above, was determined by Standley as Eriocephala grandiflorum (Schlecht. & Cham.) Seem. I saw an apparent duplicate of this specimen at OXF in 1963.

Phaca suberosa Sessé & Moc. Pl. Nov. Hisp. 120. 1889; ed. 2. 112. 1893.

Type-locality: Mazatlán, Guerrero ["in calidis Mazatlan montibus"]; and other similar places in New Spain. Not found in the S. & M. herbarium. Described as a glabrous tree 5 feet high, with trunk and branches corky-barked; leaves imparipinnate, the leaflets about 15, small, oval; racemes axillary and terminal, simple; flowers yellow; legumes inflated, quadrangular, glabrous, pendent. In the character the words "petiolis spinescentibus" occur, but this is not repeated in the body of the description. The plant described is pretty certainly Diphylla suberosa S. Wats. Proc. Amer. Acad. Arts, n.s. 22: 405. 1887, a species common in the mountains of Guerrero. Minute spinose processes sometimes occur on the petioles.


Locality cited: In Mexican gardens [i.e., in México, D.F.]. Ic. Fl. Mex. 128, represented by no. 1127 in the Torner Collection, bearing the number "128", the hand-printed name "Phaseolus [alatus Linn. crossed off]", and an annotation by de Candolle, "Phaseolus bulbocastanum". Nearly identical to DC. plate 246 (Field Mus. neg. 30615), an original painting bearing the number "128", the hand-printed name "Phaseolus alatus Linn.", and the annotation by de Candolle. The plant
depicted, as suggested by the combination of subglobose tuberous root, twining habit, three broadly ovate leaflets, small flowers on very short pedicels carried by the very broad bracts, and deflexed legumes, is probably *Phaseolus anisotrichos* Schlecht. Linnaea 12: 326. 1838. [*P. leptostachyus* Benth. Comm. Legum. Gen. 72. 1837].

The same species is represented in the S. & M. herbarium but was identified by the collectors to genus only (no. 3700, CNHM neg. 46381).


Type-locality [DC.]: Mountains of Chilapa, [Guerrero]; [Pl. Nov. Hisp. localities]: "in Chilapae montibus et Carolina. Floret Septembrie". Lectotype [DC.]: In the Torner Collection, no. 1139, bearing the number "367" [almost erased] and, in a later hand, "369" and the handwritten name "Phaseolus Atropurpureus. Sp. N."; DC. plate 244, as cited in Calques des Dessins (Field Mus. neg. 30614), is an original painting bearing the number "367" but much less complete than Torner 1139. The *icones* represent the Fl. Mex. 367 [cited in the manuscript of the Pl. Nov. Hisp. but not in the printed version]. In the S. & M. herbarium no. 3712bis (CNHM neg. 46382), labelled "Phaseolus atropurpureus N.", is according to Standley correctly named. A specimen at OXF, in herb. Fielding ex herb. Lambert, is marked by Pavón "Phaseolus atropurpureus N.E.". This is apparently one of the relatively few instances in which a name used by Sessé & Mocío was taken up and published by de Candolle.

"*Phaseolus auritus*"

This is a name never published by Sessé & Mocío but listed as Lc. Fl. Mex. 129 among the *icones* obtained during the First Excursion, i.e., in the vicinity of Mexico, D.F. during the early years of the Expedition, and also included in a list of *icones* 1–412 (MA, mss.). Also reported as an unpublished name by McVaug (1980, p. 120). No. 0642 in the Torner Collection, bearing the number "129" and the handwritten name "Phaseolus auritus. N.", represents Lc. Fl. Mex. 129. DC. plate 247 is a good partial copy of Torner 0642. In the S. & M. herbarium no. 3698 (CNHM neg. 46389), labelled "Phaseolus auritus", according to P. C. Standley represents *Phaseolus hederlyllus* Humb. & Bonpl. [=macroptilium gibbosifolium (Ort.) A. Delgado, Syst. Bot. 6: 295. 1981].

*Phaseolus coccineus* G. Don, Gen. Hist. 2: 350. 1832, with citation of "Sessé et Moc. in herb. Lamb." as the basis for the name. Not *Phaseolus coccineus* of Linnaeus.

Type-locality: Mexico. Type: Sessé & Mocío in herb. Lambert. A specimen at OXF, in herb. Fielding ex herb. Lambert, may be the type. It is marked by Pavón "Phaseolus coccineus alter de Mexico". A specimen at Fl (herb. Webb) is marked by Pavón "Phaseolus coccineus N E". In the S. & M. herbarium no. 3705 (CNHM negs. 46396, 46397), labelled "Phaseolus coccineus N.", is according to Standley *Phaseolus obvallatus* Schlecht. Linnaea 12: 328. 1838. Judging from citations by Piper (Contri. U. S. Nat. Herb. 22: 683–686. 1926), this is the common scarlet-flowered *Phaseolus* in the vicinity of Mexico City, and the one most likely to have been taken by Sessé & Mocío for *P. coccineus* L.


Type-locality: Cuba; grown in the Madrid Botanical Garden, "e seminis missis per D. Sessέ". Type: Not seen; lectotype, designated by Delgado (1981). At MA, presumably collected in Mexico, and labelled by Ortega. Described as a twining villous herb, the leaves ternate, long-petiolate, the middle leaflet deltoid, the lateral ones ovate, gibbous-lobed on the outer side; peduncles axillary, three times as long as the leaves; flowers spicate, small, cinnabar color with the claws yellowish; calyx provided with two subround colored bracts; legume linear, incurved, pendent; seeds smooth, olive green, mottled. Like so many of the species sent by Sessé to Ortega from "Cuba", this one may well have been Mexican in origin. The plant (cf. McVaug, Fl. Novo-Gal. 5: 606–607. 1987) is one of the common beanlike plants of open grassy place throughout the uplands of central Mexico.

"*Phaseolus hirsutus* N. [description] ... in montibus S. Angeli".

In the S. & M. herbarium no. 3709 (CNHM neg. 46398), labelled as above, was described by Standley as *Phaseolus obvallatus* Schlecht., a probable synonym of *Phaseolus coccineus* L.


Locality cited: In cultivation, Cuba and Puerto Rico ("Incolit culta Cuba et Porto Rico. Floret Autumno"). Description. In the S. & M. herbarium no. 3697 (CNHM negs. 46390–46392), originally labelled "Phaseolus lathyroides", was determined by Standley as *P. lathyroides* L.


Type-locality [Don]: Mexico; [Pl. Nov. Hisp.]: Mountains of Chilpancingo, Guerrero. Type: Sessé &
Phaseolus microspermus

Type-locality: Cuba; grown in the Madrid Botanical Garden, from seeds sent by Jos. Guio. Type: Not seen. Listed in the Index Kewensis as a valid species. Not otherwise identified.

Phaseolus pauciflorus


Type-locality [G. Don]: Mexico. Holotype: Sessé & Mocín in herb. Lamb. What appears to be the type, at OXF, in herb. Fielding ex herb. Lambert, is marked by Pavón “Phaseolus pauciflorus N E “, but the plant on the sheet is Phaseolus leptopus (P. linearis Sessé & Moc.), q.v. According to Sousa and Delgado (Isleya 2: 5. 1981), the labels for these two species had been interchanged. The true Phaseolus pauciflorus of G. Don is mounted with a label by Pavón, “Phaseolus linearis N E “. The plant, as clearly shown by the illustration published by Sousa and Delgado (i.e., p. 7) is Minkelsia galactoides, which =Phaseolus galactoides.

Type-locality [Pl. Nov. Hisp.]: Mountains of Tixtla, Guerrero. Described as “vulbilis”, the stem filiform, glabrous; lateral leaflets gibbous on the outer edge; stipules cordate, reflexed; peduncles very long, two-flowered, thicker than the stem; bracts quaternate, ovate, the alternate ones smaller; calyces “semiquinquefidi”, the lower teeth shorter; corolla purplish, the vexillum large, obcordate, oblong, straight; wings half as long; keel spiral, as long as the vexillum; legume terete. This may well apply to Minkelsia galactoides Mart. & Gal. i.e., Phaseolus galactoides, which is found in the S. M. herbarium under the name of “Phaseolus pauciflorus N.” (no. 3714; CNHM neg. 46361). Other specimens of the same species are labelled “Phaseolus hirsutus var. N.” (nos. 3701, 3716; negs. 46360, 46362).

Phaseolus tuberosus

G. Don, Gen. Hist. 2: 355. 1832, not of earlier authors. Don (I.e.) cited “Sessé et Mocín in herb. Lamb.” as the basis for his Phaseolus tuberosus.

Type-locality: Mexico. Type: “Sessé & Mociño”, in herb. Lambert, not seen. Described as canescent, the stems beset with retrograde villi; leaflets small, entire, elliptic, the lateral ones sometimes slightly two-lobed; peduncles longer than the leaves; stipules ovate-lanceolate; teeth of calyx setaceous; root tuberous. From this, and especially from the description of the calyx, I suspect that Don’s plant was Phaseolus heterophyllus Willd. Enum. Hort. Berol. 2: 753. 1809 [Macroptilium gibbosifolium (Ort.) A. Delgado, Syst. Bot. 6: 295. 1981], of which a single specimen (a mixed collection, with P. esperanzae

Phaseolus leptopus


Type-locality: New Spain; grown in the Madrid Botanical Garden, “semina missit D. Sessé”. Type: Not seen. Listed by contemporary authors (e.g., de Candolle, George Don) but apparently not seen by them; not noted by Hemsley. Not found in the S. M. herbarium. Described as a hairy (“hirta”) twiner; leaflets deltoid, entire, obtuse; spikes axillary and terminal, pedunculate, many-flowered. Not identified.

Phaseolus lunatus


Localities cited: On hedges of gardens, Cuernavaca, Morelos [in hortorum Quauhnauacensemusipubus et in Benghala. Floret Octobri]. Briefly described. A plant under this name in the S. M. herbarium (no. 3707; CNHM neg. 46394) was correctly named according to Standley. The Phaseolus lunatus of Sessé & Moc. Pl. Mex. ed. 2. 166. 1894 was described quite differently and in more detail, from a Cuban plant, not said to be cultivated there ["in Insula Cubae. Floret Julio"].

Mociño in herb. Lambert. What I take to be the type is a specimen at OXF, in herb. Fielding ex herb. Lambert, marked by Pavón “Phaseolus linearis sp. nova de Mexico”. Sousa and Delgado saw this specimen in 1978 and published a photographic copy of it (Isleya 2: 8. 1981). Another specimen of the same species, similarly illustrated (i.e., p. 6), bears the name “Phaseolus pauciflorus”, q.v. for further comment.

Another specimen, at Fl (herb. Webb), is marked by Pavón “Phaseolus linearis N E “. In the S. M. herbarium no. 3715 (CNHM neg. 46393), labelled “Phaseolus linearis N “, is determined by Standley as Phaseolus linearis Sessé & Moc. I infer from this that Standley recognized this as a valid species.

All the specimens cited above seem to represent the same species as that shown in Ic. Fl. Mex. 297, cited as Phaseolus linearis in the Pl. Nov. Hisp.; this is represented by DC. plate 248, an original painting bearing the number “297” [apparently written by Mociño] and marked by de Candolle “Phaseolus linearis” (Field Mus. neg. 30616). Another original copy is no. 1125 in the Torner Collection, numbered “297” and bearing the hand-printed name “Phaseolus Linearis. Sp. N “. This seems to be a distinctive species, marked by the very narrow, united, large flowers, two upper calyx-lobes apparently united, and hisrate narrow legumes. It may be the species treated in the Flora of Guatemala (Fieldiana, Bot. 24, pt. 5: 326. 1946) as Phaseolus linearis H. B. K. Nov. Gen. & Sp. 6: 445. 1824, but the legume in that species is said to be glabrous.
Seaton) exists in the S. & M. herbarium under the name of "Phaseolus tuberosus N." (no. 3713; CNHM neg. 46387). A sheet at FI (herb. Webb), apparently also referable to P. heterophyllus, is marked by Pavón "Phaseolus tuberosus N E". A sheet so marked at OXF, however, is Minkeleria galactoides and so can hardly be the type of Don's tuberosus. Presumably Pavón confused the two species because of the tuberous root common to both.

### Phaseolus vulgaris

[...]


Localities cited: "in Nova Hispania et Europa." Not described. Included is a long commentary on the seeds (which are said to be called "frijoles", and said to vary in color from black, red, plumbeus, pale, violaceous, blackish red, white, and black-lined). They are also said to constitute almost the only food of the poor people ("Semina haec praecipium, saepe unicum in Nova Hispania pauperibus praestant alimentum").

### Piscidia americana


Type-locality: Apatzingán, Michoacán ["in calidissimis Apatzinganis aequinis. Florio Julio"]. Said to be called "Tatzungo" or "Tatzumbo". Described as a glabrous tree 20 feet high, with imparipinnate leaves, the leaflets about 11, oblong, entire, pale beneath, the terminal one larger, obovate, racemes terminal. simple, short: legume about 4-seeded; seeds oblong, reniform. In the S. & M. herbarium there appears to be no specimen labelled "Piscidia americana", but no. 1913 (CNHM neg. 46400), labelled "Piscidia eritrichaeefolium, [descr.] Vulg. Polo Blanco", is according to Standley Piscidia americana. The discrepancy between the vernacular name on the label and that given in the published works, and the fact that an unpublished epithet is used on the label, suggest that this specimen does not represent part of the original collection from Apatzingán. The species was accepted by Standley (Contr. U. S. Natl. Herb. 23: 511. 1922) as a valid one. The name Piscidia (1759) is conserved over Ichthyometria (1756). Nelson (1997) designated "Sessé 1913" as "material tipo" of P. americana.

### Piscidia punicea


Type-locality [Cav.]: Tropical America; seeds brought back to Spain by Née [in 1794] were planted at the Madrid Botanical Garden in 1795 and proved to be the same species as a plant that had flowered in the Garden the preceding August. [Ort.]: "Nová Hispaniá", grown at the Madrid Botanical Garden, where it flowered in August, "è seminibus allatis per D. Ludovicum Née, Reg. circum orbem Expeditionis maritimae Botanicum ...". Types: Not seen. Not found in the S. & M. herbarium.


Localities cited: "in Europa et Mexicanis hortis, ubi Chichar ch vulgar adplentatur." Without description. Not found in the S. & M. herbarium under this name, but a specimen of Pison sativum L. (no. 1902bis, CNHM neg. 46401) was found with no. 1902 (neg. 46342), a specimen of the common sweet pea of temperate gardens, Lathyrus odoratus L., which was originally labelled "Lathurus odoratus. 1364." For explanation of the number "1364", see Lathyrus odoratus.

### Pitecellobium sichoricarpum


This Costa Rican species was reported by Bentham (Trans. Linn. Soc. London 30: 588. 1875) from "New Spain" on the basis of a specimen in "Herb. Pavon". The specimen, annotated by Bentham, is at G, ex herb. E. Boissier. It bears a printed label "Nueva España Herb Pavon", and Pavón's ticket "Meloc". with an epithet in Mimosa referring to the oblique ?[leaflets].

### Poinciana compressa

G. Don, Gen. Hist. 2: 433. 1832, with citation of "Sessé et Moc. in herb. Lamb." as the basis for the name.

Type-locality: "Mexico and Peru". Type: Sessé & Mocio, in herb. Lambert, not seen. Not found at OXF or at BM, 1963. If the same as Poinciana compressa of the S. & M. herbarium, this may be Caesalpinia exostemma DC., q.v. Described by Don as unarmed; leaves with 3 pairs of pinnae; leaflets 4–5 pairs, elliptic, obtuse, marginate, glaucous; 6 petals entire, about twice as long as the calyx; stamens much exserted; pedicels an inch long; petals yellow; stamens purplish.

### Poinciana elata


Localities cited [Pl. Nov. Hisp.]: Hotter parts of America, where said to flower in October; [Fl. Mex.]:
Apatzingán, Michoacán, flowering in October. Ic. Fl. Mex. 389, cited in Pl. Nov. Hisp., not seen; not found in the Torner Collection. Listed among the icones obtained on the "Third Excursion" (1790–1791) and so very possibly made at Apatzingán. In the S. & M. herbarium no. 1096 (CNHM neg. 44407), labelled "Poinciana elata", is according to Standley Caesalpinia coriaria (Jacq.) Wildl. Sp. Pl. 2: 532. 1799. The description in the Pl. Nov. Hisp. may well apply to that species, except that the pods are described as "oblungum, compressum", whereas those of C. coriaria are curved or coiled. The vernacular name is given in Pl. Nov. Hisp. as cascalote. See Poinciana pulcherrima.

There seems to have been some confusion as to the identity of Poinciana elata and P. pulcherrima. In the list of icones obtained during the "First Excursion", i.e., in the region of Mexico City, 1787–88, no. 79 appeared under the name of "Poinciana pulcherrima", and no. 80 as "Poinciana elata N". These numbers were carried over into the more complete list of nos. 1–416, except that no. 80 appeared as "Poinciana [elata crossed out] elata". No. 1441 in the Torner Collection, evidently a picture representing Poinciana (Caesalpinia) pulcherrima L., carries the number "80"; no. 0380 in the same collection, a more finished copy of the same drawing, is without number but bears the hand-printed name "Poinciana pulcherrima Linn.". I have not been able to locate any icon that was numbered either "79" or "389". See P. pulcherrima.


Type-locality: Hot springs of Atotonilco near San Miguel de Allende, Guanajuato [Pl. Nov. Hisp.; "ad thermas de Atotulco Michoacano vicinas. Floret Junio"]; [Fl. Mex.; "ad thermas Michoacanos, vulgo dictas Atotonilco. Floret Junio"]). Not found in the S. & M. herbarium under this name. Ic. Fl. Mex. 276, cited in Pl. Nov. Hisp., is represented by no. 1706 in the Torner Collection, labelled "276" and "24" and annotated (by de Candolle) as "Pomaria glandulosa Cav. ?". Presumably an original copy from the same model is no. 24, "Poinciana inermis", of Mocínó's list (MA, ms.) of paintings sent to Spain in 1791 but not found at MA and not noted by Ramírez, 1903. The description of an unarmed suffrutescent plant a little over a foot high, densely glandular-hirsute, having leaves with 5 pairs of pinnae, leaflets about 20, and flowers orange and showy, all suggest a species of Pomaria or Hoffmannseggia. This species and the next were carefully contrasted by Sessé & Mocínó. In P. hisruta the leaflets were said to be glabrous on both surfaces (as in Hoffmannseggia sensu stricto), and the flowers orange, whereas in P. punctata the leaflets were described as gland-dotted beneath ("subus fregugineo-punctatis") (as in Pomaria), and the flowers white, with the upper petal black externally and yellow-punctate ("croceto-punctato") internally. Apparently neither this species nor P. punctata was noticed by Rzedowski and Calderón in their treatment of the Caesalpinioideae in Fl. Bajío 51: 1–111. 1997, nor by B. B. Simpson in her revision of Pomaria (Lundellia 1: 46–71. 1998).


Type-locality: "Native of Mexico, Pavon". Type: "in herb. Lamb[ert], [presumably from Sessé & Mocínó]. What I take to be this specimen is at BM, ex herb. Lambert, marked by Pavón "Poinciana setigera N. E" and by someone else in pencil on Pavón's ticket, "hispida". The plant is apparently Caesalpinia pulcherrima (L.) Sw., Obs. Bot. 166. 1791. The same species, according to a determination by Standley, is in the S. & M. herbarium under the name of "Poinciana setigera N." (no. 1098; CNHM neg. 44412).


Localities cited: Hotter places ("regionibus") in New Spain, and in India. Ic. Fl. Mex. 79, cited in Pl. Nov. Hisp.; not seen. In the S. & M. herbarium no. 1095 (CNHM neg. 44411), labelled "Poinciana pulcherrima", is according to Standley Caesalpinia pulcherrima (L.) Sw., q.v. also under Poinciana elata, above.


Type-locality: San Damián, along the mountain road between San Miguel de Allende and Guanajuato [Pl. Nov. Hisp.; "in Sancti Damiáni agris prope iter montanum a Michaelopolis Guanaxautam versus ducens. Floret Junio"; Fl. Mex.; "in agris S. Damián, prope iter montanum quod a Michaelopolis, in Guanaxautam, duct. Floret Junio"]; Not found in the S. & M. herbarium. Described as suffrutescent, 2 feet high; branches hirsute with black gland-tipped hairs; leaves bipinnate, the pinnae about 5 pairs, the leaflets about 20, oblong, emarginate, rusty-dotted beneath; flowers white, the upper petal black without, orange-spotted within; legume compressed, "acianiform", an inch and a half long. The plant described was probably Pomaria glandulosa Cav., the only species of its genus known from this part of Guanajuato; see Rzedowski & Calderón, Fl. Bajío 51: 60. 1997.


Type-locality: Apatzingán, Michoacán, where said to flower in October. Not found in the S. & M. herbarium. Rydberg (N. Amer. Flora 24: 25. 1919) referred this with some doubt to the synonymy of Apopanthes paniculata Presl, Symb. Bot. 1: 64. 1831. Barneby (1977, p. 587) confirmed Rydberg's suggestion, noting that he has seen the plant common on dry hills near Apatzingán. I think there can be no question of the correctness of this


Type-locality: New Spain; flowered in the Madrid Botanical Garden in December 1793. Cavanilles later (Ic. 4: 71. 1798) stated that Née found this at Querétaro. Type: Not seen. For citation of herbarium material see Dalea diffusa; see also Dalea (Marina) nutans.


Type-locality: San Angel, [south of México, D.F.]; "in aridis et arenosis S. Angeli agris, Floret Julio.

Barneby (1977, p. 586) said, "The protologue paints a convincing portrait of a Dalea, but I am unable to recognize the species ... If native at San Angel, the choice of candidates is limited and none fills the bill."

Existing herbarium specimens bearing the name "Dalea purpurea" include no. 2664 in the S. & M. herbarium (CNHM neg. 44301), which is according to Barneby Dalea pulcherrella G. Don [i.e., Marina nutans], q.v. for additional citation.


Type-locality: Not stated. Not found in the S. & M. herbarium. Not identified, but probably not of this genus nor of Dalea. Rydberg (N. Amer. Flora 24: 35. 1919) referred it with doubt to the synonymy of Eysenhardtia polysystachya (Ort.) Sarg., Silva 5: 29. 1892. Barneby (1977, p. 588) said of it, "If of tribe Amorphaeae, can only be Eysenhardtia, but probably of another tribe."

Pterocarpus crispatus DC. in DC. Prodr. 2: 418. 1825, with citation of "fl. mex. ic. inc." as the basis for the name.

Type-locality: Mexico. Lectotype: In the Torner Collection, no. 1595, annotated by de Candolle, "Pterocarpus crispatus". DC. plate 282, as cited in Calques des Dessins (Field Mus. neg. 30635), is a rather good copy. Not found in the S. & M. herbarium. Standley (Contr. U. S. Natl. Herb. 23: 508. 1922) suggested that it might be the same as Pterocarpus orbiculatus, q.v.


Type-locality: "Cum praeecedentibus ad litora maris, Floret Augustus", i.e., Tuxtlal [probably San Andrés, Tuxtlal, Veracruz], and Ahalulco, [Tampico], on the seashore. The specimen marked "Pterocarpus ecastaphyllum" in the S. & M. herbarium (no. 3654; CNHM neg. 44486) is also labelled "Pterocarpus draco" and "V[kilgo Polo Pollo]". The latter is a Puerto Rican name for plants of this affinity, and it is probable that the
specimen, which according to Standley is correctly identified, i.e., *Dalbergia ecastophyllum* (L.) Taub., came from Puerto Rico, not from Mexico. The Mexican localities cited above are specifically mentioned in the Fl. Mex. under *Pterocarpus mexicanus*, q.v., which preceded *P. ecastophyllum* in the text, but the species before *P. mexicanus* is a Puerto Rican plant, *Pterocarpus latus*, and it may be that the texts of *P. latus* and *P. mexicanus* were transposed in printing.


Locality cited: Puerto Rico ["in maris de Puerto Rico litoribus, ubi vulgo Escambron appellant. Floret Maiô"]. Description. In the S. & M. herbarium nos. 3658 and 3659 (CNHM negs. 46352, 46353), both labelled "Pterocarpus latus.", were determined by Standley as *Maçaerium bioculatum* Micheli. Nelson (1997) designated "Sessé 3659" as "material tipo" of *P. latus* Sessé & Moc., but this is clearly inappropriate. The diagnosis (character) in Fl. Mex. was quoted directly from the Linnaean work, as cited by Palau (5: 383. 1786).

**Pterocarpus mexicanus** Sessé & Moc. Fl. Mex. ed. 2. 164. 1894.

Type-locality: Mountains of Tuxtla [i.e., probably San Andres Tuxtla, Veracruz], and Ahualulco, [Tabasco], where said to flower in October. In the S. & M. herbarium nos. 3655 and 3656 (CHM negs. 44485, 44487), labelled "Pterocarpus mexicanus", are according to Standley *Dalbergia brownii* (Jacq.) Urb. and *D. ecastophyllum* (L.) Taub., respectively. Both species are known from the Atlantic coast of Mexico. The leaves of *Pterocarpus mexicanus* are described as "glabra, nitidula", suggesting that the plant described was *Dalbergia brownii* rather than *D. ecastophyllum*, in which the leaves are rather densely striiglosa beneath. This appears to be one species for which the epithet "mexicanus" did not denote to Sessé & Mocíño an origin at México, D.F. Nelson (1997) designated "Sessé 3655" as "material tipo" of *P. mexicanus*; on that specimen the label includes a description and reads "Pterocarpus Mexicanus N. [Descr.] Fol. 132".

**Pterocarpus orbiculatus** DC. in DC. Prodr. 2: 418. 1825, with citation of "fl. mex. ic. ined." as the basis for the name.

Type-locality: Mexico. Lectotype: In the Torner Collection, no. 1817, annotated by de Candolle "Pterocarpus orbiculatus". DC. plate 283, as cited in Calças des Dessins (Field Mus. neg. 30636), is an adequate but very incomplete copy of Torner 1817. A valid species according to Standley (Contr. U. S. Natl. Herb. 23: 508. 1922), in the S. & M. herbarium no. 3652 (CNHM neg. 44320), labelled "Pterocarpus draco", is according to Rudd *Pterocarpus orbiculatus*.


A Puerto Rican specimen reported also from Mexico by de Candolle (in DC. Prodr. 2: 414. 1825) on the basis of "icon fl. mex.". This is a reference to two "icones" in the Torner Collection, both annotated by de Candolle "Rudolphia breviflora", but lacking any other inscription. Torner 1581 is the more complete, with vine, leaf, inflorescence and flowers, fruit, and floral details in color; Torner 1400 is a similar drawing but with only the unopened buds at the tip of the inflorescence copied and colored. DC. plate 257, marked by de Candolle "[Rudolphia] volubilis W.", and originally labelled "Rudolphia longiflora" in contrast to DC. plate 258, "Rudolphia breviflora", were partial copies made from Torner 1581 and Torner 1400, respectively. Evidently as in various other instances, the paintings of these plants were made in Puerto Rico, not in Mexico as supposed by de Candolle.

**Schrankia** spp.

As noted by Barneby (1991, pp. 291–293), this is a "group of Mimoseae that since Bentham's monograph (1875) has almost universally (but often apologetically) been maintained ... as generically distinct from *Mimosa*". Its claim to generic status is based on a fruit character that according to Barneby is widespread in *Mimosa* itself. He therefore treats the entire group of some 16 species as a part of *Mimosa*. See *Mimosa quadrivalvis*, above.


No. 1167 in the S. & M. herbarium (CNHM neg. 44241), labelled "Cassia virosa N.", was listed (as species no. 73) among the exsiccatae of the genus *Senna* by Irwin and Barneby (1982, p. 629). The specimen had previously been determined by Irwin as *Cassia vogeliana* Schlcht.

**Senna lindheimeriana** (Scheele) Irwin & Barneby, Phytologia 44: 500. 1979 *Cassia lindheimeriana* Scheele, Linnaea 21: 457. 1848.

No. 1199 in the S. & M. herbarium (CNHM neg. 44249), labelled "Cassia cerceae", was listed (as species no. 73) among the exsiccatae of the genus *Senna* by Irwin and Barneby (1982, p. 629). The specimen had previously been determined by Irwin as *Cassia lindheimeri*. The plant ranges from Texas (the type from New Braunfels) into northeast Mexico and may have been sent to Sessé by a correspondent who lived in Coahuila.


No. 1135 in the S. & M. herbarium (CNHM neg. 44229), originally unnamed, was listed (as species no. 149) among the exsiccatae of the genus *Senna* by Irwin.
and Barneby (1982, p. 629). The specimen had previously been determined by Irwin as *Cassia nicaraguensis*. Similarly listed was no. 1197 (neg. 44248), labelled as "Cassia variegata N." and determined by Irwin as *C. nicaraguensis*. The range of this species is from western Mexico (Jalisco) to Panama.


No. 1171 in the S. & M. herbarium (CNHM neg. 44448), originally named "Cassia obvata N.", was listed (as species no. 69) among the exsiccatce of the genus *Senna* by Irwin and Barneby (1982, p. 629). The specimen had previously been determined by Standley as *Cassia tora*. According to Irwin and Barneby, *C. tora* in the sense of Bentham and many other authors is *C. obtusifolia*.


No. 1161 (CNHM neg. 44238) in the S. & M. herbarium, originally labelled "Cassia quadrijuga N.", was listed (as species no. 126m) among the exsiccatce of the genus *Senna* by Irwin and Barneby (1982, p. 629). The specimen had previously been determined by Irwin as *Cassia bicapsularis* L. The holotype of var. *ovalifolia* was from Mirador, Veracruz (Galeotti 3260, BR).


No. 1148 (CNHM neg. 44445) in the S. & M. herbarium, originally labelled "Cassia pubescens N.", was listed (as species no. 147) among the exsiccatce of the genus *Senna* by Irwin and Barneby (1982, p. 629). The specimen had previously been determined by Standley as *Cassia reticulata*.


No. 1140 in the S. & M. herbarium (CNHM neg. 44449), named by Pavón "Cassia N E", was listed (as species no. 71) among the exsiccatce of the genus *Senna* by Irwin and Barneby (1982, p. 629). The specimen had previously been determined by Standley as *Cassia uniflora*. Similarly listed was no. 1164 (neg. 44450), labelled as "Cassia ferruginea N." and determined by Standley as *C. uniflora*. The species is widespread in Mexico, Central America and the Antilles.


Locality cited: Havana, Cuba [in litore maris Havanae prope ambulacrum Sancti Lazari. Floret Autumno et

Januario"). Described at some length. Not found in the S. & M. herbarium. The description of a shrubby plant with imparipinnate leaves, 27 or more leaflets, long terminal racemes, 10 free subulate unequal filaments, yellow flowers, and long, terete, nodose pods, suggests something like a species of *Caesalpinia*.


Localities cited: "in Europa ac hortis Mexicanis, ubi vulgo Sinensis Genista, nuncupatur. Floret Aprilli". Not described. Not found in the S. & M. herbarium. Not identified, but perhaps correctly reported under this name. *Spartium junceum* is still found in the vicinity of Mexico City, cultivated for ornament and to a limited extent for medicinal purposes (Rzedowski & Rzedowski, Fl. Fan. Valle Méx. 1: 347. 1979).

**Trifolium involucratum** Ort. Dec. 33. 1797.

**Trifolium ortegae** Greene, Pittonia 3: 186. 1897.

Type-locality: "Cuba" [i.e., probably Mexico]; grown at the Madrid Botanical Garden, "è seminibus missis per D. Sessé". Type: Not seen. Described as having lanceolate-linear leaflets, involucrate heads (the involucre monophyllous, with unequal subulate teeth), corolla purplish, three times as long as the calyx, nectariferous; legume obovate, gibbous, inclosed in the calyx, usually 2- to 3-seeded. The same features of the narrow leaflets and the strongly arista-toothed involucre were emphasized by Willdenow (Sp. Pl. 3: 337. 1802) in his independent proposal of a new species under the same name. The Mexican species has usually passed under the name of *Trifolium involucratum* Willd., presumably because Ortégas' plant was supposedly from Cuba. It is even likely that Willdenow's material (of which he did not know the source), came from the Madrid garden under the name "involucratum", and was thus a part of the same stock studied by Ortega. Several collections in the S. & M. herbarium, all under other names, are referred by Standley to "Trifolium involucratum Ortega" (nos. 3680-3682; CNHM negs. 46442-46444).

**Trifolium involucratum** Lam. (Fl. Française 2: 604. "1778"), often cited as an earlier homonym of *T. involucratum* Ortega, was illegitimate when published, as "T. cherleri Lin. Sp. 1081" was cited in synonymy. The *Index Kewensis* combined *T. involucratum* Ortega and *T. involucratum* Willd. into a single entry as if the two were identical, or were published simultaneously, but in fact Ortega's name has several years' priority.


Localities cited: México, D.F. ["Habitat Mexici et in plurimis Europae locis"). Not described but its medicinal uses enumerated. Not found in the S. & M. herbarium. Not identified.

Type-locality: Córdoba, Veracruz. Described as diffuse, villous; stipules adnate to the petioles, amplexicaul, bifid; outer bracts imbricate, trifid, very villous; upper flowers aborting, sterile; corolla small, yellow, the vexillum reflexed, obcordate; legume oblong, l-seeded. This suggests some species of Stylosanthes. In the S. & M. herbarium no. 3676 (CNHM negs. 46424–46426), determined by Standley as Stylosanthes guayanensis (Aubl.) Sw. Kongl. Vetensk. Acad. Nya Handl. 296. 1789, was originally labelled "Trifolium stipulare".

Trigonella mexicana G. Don, Gen. Hist. 2: 469. 1832.

Type-locality: Mexico. Type: Source not stated, and perhaps not based on material of Sessé & Mocíño. Scarcely of this genus if an American plant. Not identified.


Type-locality: Nova Hispania; grown at the Madrid Botanical Garden, "e seminibus missis per D. Sessé". Type: Not seen. This is a well known Mexican plant, of which the identity seems sufficiently established. It was apparently known to Sessé & Mocíño as Psoralea fruticosa, q.v.


Locality cited: Santa Rosa, Guanajuato ["cum praecedenti" = Vicia sylvatica]. Inadequately described. Not found in the S. & M. herbarium. Not identified.

"Vicia sativa. [description], in agris Mexici Sattis [?satis, i.e., here and there]." In the S. & M. herbarium no. 3634 (CNHM neg. 46445), labelled as above by Sessé, was determined by Standley as Vicia angustifolia (L.) Reich.

Vicia sessei G. Don, Gen. Hist. 2: 318. 1832. "V. polyphylla, Moc. et Sesse in herb. Lamb." cited in synonymy by G. Don, i.e., as the basis for Vicia sessei.

Type-locality: Mexico. Type: Sessé & Mocíño, in herb. Lambert, not seen. Not found at OXF in 1963. In the S. & M. herbarium no. 3636 (CNHM neg. 46452), labelled "Vicia polyphylla N.", is according to Standley Vicia mexicana Hems. Diagn. Pl. Nov. 47. 1880. Don's description of Vicia sessei, as far as it goes, agrees exactly with Hemsley's characterization of V. mexicana in Biol. Centr. Amer. Bot. 1: 292. 1880, and the two plants may well be the same. If so, Don's name enjoys many years' priority.

Vicia subulata G. Don, Gen. Hist. 2: 318. 1832, with citation of "Sesse et Moc. mss. in herb. Lamb." as the basis for the name.

Type-locality: Mexico. Type: Sessé & Mocíño, in herb. Lambert. What I take to be this specimen at OXF (herb. Fielding, ex herb. Lambert) represents a small-leaved Vicia with short pods. It is labelled by Pavón "Lathrus linearis N E" and bears the words "Vicia subulata" scratched [1] on Pavón's ticket. In the S. & M. herbarium the collectors made no clear distinction between Vicia and Lathyrus. No. 3641 (CNHM neg. 46488), labelled "Vicia linearis", is according to Standley Vicia hirsuta (L.) Koch. Syn. Fl. Germ. 191. 1837. No. 3635, on the other hand (neg. 46453), labelled "Vicia subulata N.", is according to Standley Vicia pulpella H. B. K. Nov. Gen. & Sp. 6: 499. pl. 583. 1824. At Fl. (herb. Webb) is a specimen of a very narrow-leaved Vicia labelled by Pavón "Vicia subulata N E", this perhaps a form of V. pulpella, or what was reported as the Mexican form of Vicia setifolia H. B. K. (cf. H. B. K. Nov. Gen. & Sp. 6: 500. 1824, where this plant is said to occur both in Mexico and in South America). Until Don's type can be re-examined by someone competent to name it, the question of its identity remains unsettled; it is probably Vicia pulpella.


Localities cited: in Oppido Sanctae Rosae prope Guanaxatam et in Europa. Floret Julio". In the S. & M. herbarium no. 3639 (CNHM neg. 46344), so labelled, was determined by Standley as Lathyrus vitifolius S. Wats.


Type-locality: "In anfractus" near Guadalajara, Jalisco, where said to flower in June. Not found in the S. & M. herbarium under this name, but evidently not of this genus. Described as a subshrub three feet high, with whitish branches, the leaves alternate, ternate, the leaflets oblong, hoary, petioles ferruginous-tomentose, shorter than the leaflets; peduncles axillary, about 6-flowered, much shorter than the petioles; stipules and bracts subulate; flowers violet. It is not clear to me why the branches are described as "glabris" and also as "albicantibus"; and the leaflets as "glabris" and also "incantis". Allowing for this discrepancy, the plant described above may well have been Galactia multiflora B. L. Rob. Proc. Amer. Acad. Arts, n.s. 29: 315. 23 May 1894, a plant that is found in the S. & M. herbarium under the name of Hedysarum.
Lemnaceae

Lemna cordata Sessé & Moc. Pl. Nov. Hisp. 159. 1890; ed. 2. 147. 1893.

Localities cited: México, D.F. ["in stagnantibus Mexici et Europae aqua", Localities cited: México, D.F. ['in stagnantibus Mexici et Europae aqua']]. Not described except for a diagnosis from "Hort. Cliff. 412" that mentions the "foliis ... subtus hemisphericis". Not found in the S. & M. herbarium. Presumably the plant was a species of Lemna, and if so perhaps L. gibba L.

Lennoaceae

No. 0063 in the Torner Collection, without inscription except for an annotation by de Candolle, "Myopodium cyrtoides", surely represents this species. Apparently the genus is not represented in the S. & M. herbarium.

Lentibulariaceae

Type-locality [A. DC.]: Mexico; [Pl. Nov. Hisp.]: About Chilapa, Guerrero, and in Europe. Syntypes [A. DC.]: No. 0015 (3) in the Torner Collection, with printed legend "F. 3. Pinguicula Villosa", the epithet crossed out and "crenatioba" added by de Candolle; DC. plate 1071, no. 3, as cited in Calques des Dessins (Field Mus. neg. 30844) is a nearly identical original painting. The icones represent Ic. Fl. Mex. 290; each of the two icones is so numbered and includes illustrations of this and the other two species published by de Candolle. This figure was cited in Pl. Nov. Hisp. as Ic. 11, f. 3; the number "11" appears also in the manuscript of that work. It is listed as Ic. Fl. Mex. 290 in Mocino's enumeration of icones 1–416 (MA, mss). The number "41" (not 11) is faintly written on the de Candolle plate at upper right. The species is not represented in the S. & M. herbarium.

"Pinguicula Mexicana N. ic. No. 73".
In the S. & M. herbarium this label, in the hand of Mocino, was misplaced in mounting and associated with no. 245 (CNHM neg. 48043), a species of Calceolaria (Scrophulariaceae). At Chicago (F), the same label is associated with a duplicate specimen of Pinguicula oblongifolia DC., as determined by Stanley (the original is at MA, no. 244; CNHM neg. 46472). The number "73" was assigned to the species called Pinguicula Mexicana, during an attempted enumeration of the entire herbarium after the Expedition returned to Spain. The numbers 73–78 were assigned to the six species of Lentibulariaceae named by the botanists and represented in the herbarium (cf. McVaugh 1909, p. 209, for a synopsis of the numbering system).

Type-locality [A. DC.]: Mexico; [Pl. Nov. Hisp.]: About Chilapa, Guerrero, and in Europe. Syntypes [A. DC.]: No. 0015 (2) in the Torner Collection, with hand-printed legend "F. 2. Pinguicula Comunis", the epithet crossed out and "oblongifolia" added by de Candolle (for floral details belonging here, see under Pinguicula oblongifolia); DC. plate 1071, no. 2 (Field Mus. neg. 30843), as cited in Calques de Dessins [cited as 1071 by A. DC., I.]: and as "Ic. 11 f. 2." in the Pl. Nov. Hisp.], is nearly equivalent to Torner 0015. Nos. 00216 and 1773 are original duplicate copies of Torner 0015 (2), including floral details; no. 0216 is annotated by de Candolle "Pinguicula oblongifolia".

Type-locality [A. DC.]: Mexico; localities in Pl. Nov. Hisp.]: About Chilapa, Guerrero, and in Europe. Syntypes [A. DC.]: No. 0015 (1) in the Torner Collection, with hand-printed text "F. 1. Pinguiicula Lusitana", the epithet crossed out, and "obtusiloba" added by de Candolle; DC. plate 1071, no. 1, as cited in Calques des Dessins (Field Mus. neg. 30842), is nearly equivalent to Torner 0015 (1). This figure was cited in Pl. Nov. Hisp. as "Ic. 11, f. 3" [an error for "Ic. 11, f. 1"; see under Pinguicula crenatioba, above]. In the S. & M. herbarium no. 243 (CNHM neg. 46471), labelled with an unpublished epithet in Pinguicula, is accorded to Stanley Pinguicula obtusiloba.

The details shown in neg. 30842 belong to Pinguicula oblongifolia, q.v.
Liliaceae sens. lat.


Localities cited: New Spain; and Europe. In Pl. Mex. 71, represented by no. 1091 in the Torner Collection, bearing the number “71”; the hand-printed names “Agave [americana Linn. crossed out]” and “Mctl seu Maguei Hrz. 270”, and an annotation by de Candolle, “Agave viniifera”, with hand-printed note “Vix ulla planta nec in medicina in oeconomia utilior”. Not located in the S. & M. herbarium; presumably the species described is the true *Agave americana* L. or something closely related to it.

**Agave brachystachya** Cav. Descr. 453. 1802. 

Type-locality: Mexico; cultivated in the Madrid Botanical Garden, where it flowered in June [1802]. Type: Not seen. Cavannilles cites “F[ort.] [Reg.] M[ngr.] cum Iocne edenda”, and Lagasca (Elench. Hort. Bot. Matr. 1815: 1816), in equating this species with *Agave scabra* Ortt. (q.v.), cites “F.R.M. t. 27”. As explained by Lagasca in the introductory note to his *Elenchus*, this plate is part of an unpublished work, consisting of 10 plates with descriptions, based on the plants in the Royal Botanical Garden. The name *Agave brachystachya* has been in general use for a Mexican and Central American species, but apparently this name is a later synonym of *Agave scabra*. Lagasca (i.e.) equated the two names without any question, and the published descriptions of the two species agree in all essential details. McVaugh (1893) related the two under the name of *Manfreda scabra* (Ortt.) McVaugh. See *Polianthes tuberosa* in the sense of Sessé & Mociño in *Fl. Mex.*

**Agave campanulata** Sessé & Moc. Pl. Mex. 2. 1894.

Type-locality: San Germán, Puerto Rico. Not found in the S. & M. herbarium. According to Urban (Symb. Antill. 4: 152. 1903), the plant is described as *Fourcroya hexapetala* (Jacq.) Urban, i.e.

**Agave monostachya** Sessé & Moc. Pl. Mex. 2. 1894.

Type-locality: Not stated. Described as having the habit of a *Yucca*: stem 5 feet high, thick, simple, roughened by the leaf-scar; leaves (usually radical) at the summit of the stem, crowded, terete, quadrangular, erect, cuspidate, two ells long; scape 12 feet high, naked in the lower third, spicate the rest of its length. If Mexican, this is one of the few species of *Agave* having leaves like those described above. Not found in the S. & M. herbarium. Not identified.


Type-locality: Mexico, grown in the Madrid Botanical Garden, “ex radiebus missis per D. Vincentium Cervantes...”. Not located in the S. & M. herbarium. This species, well described by Ortega, seems to have been almost unnoticed thereafter. It is not noted in the Index Kewensis, nor by Berger (Die Agaven 1915), Hemsley (Biol. Centr. Amer. Bot. 4: 338, index. 1887) or Trelease (in Standley, Trees and Shrubs of Mexico, 1920). From the description it appears that *Agave scabra* is an older name for the plant that long passed as *Agave brachystachya* Cav. Descr. 453. 1802, as already suggested by Lagasca (Elench. Hort. Bot. Matr. 1815: 1816). See *Agave brachystachya*.


Type-locality: Cuba, between Havana and Guanabacoa ["Quanabacoa"]; said to flower in February. Described at length. This may have been intended as a new name, as the character bears little resemblance to that in the Species Plantarum, but the Linnaean name was available to Sessé & Mociño (in Palau 3: 176. 1785). A specimen in the S. & M. herbarium (no. 914, CNHM neg. 41161) was labelled *Agave havanensis*, changed to *Agave vivipara*; the plant is apparently *Fourcroya hexapetala* (Jacq.) Urb. Symb. Antill. 4: 152. 1903, as reported by Nelson (1997), who designated *Sessé* 914 as “material tipo” of *A. vivipara*.


Localities cited: Estado de México and México, D.F. ["in montibus Temascaltepec et in horto P.P. Carmelitarum S. Angeli. Floret Julio"]. Hardly intended as a new name, but no previous author is cited. The text does not mention Limaeus, but the character is merely enlarged from the Sp. Pl. ed. 2. 462. Long description (apparently of a species of *Bomarea*), with the observation "Obs. Salsillae omnes folia habent". In the S. & M. herbarium no. 934 (CNHM neg. 41169), labelled "Alstroemeria salsilla", was determined by E. P. Kilip as *Bomarea hirtella* (H. B. K.) Herb. See also "Lilium variegatum", which perhaps represents the same species.

Amaryllis biflora Sessé & Moc. Fl. Mex. ed. 2. 87. 1894.

Type-locality: Toa Alta, Puerto Rico ["prope Oppidum de Toa Alta, ubi vulgo Amapola nominatur. Floret Aprili"]. In the S. & M. herbarium (no. 915; CNHM neg. 41163), labelled "Amaryllis biflora. i.e.," and no. 5205 bis (neg. 41167), labelled "Amaryllis biflora", both apparently represent *Hippeastrum pumicium* (Lam.) Urb. Symb. Antill. 4: 151. 1903. The same identification for *Amaryllis biflora* was reported by Urban, c.s. Nelson (1997) designated "Sesse 5205 bis" as "material tipo" of *A. biflora*.

Another specimen of no. 5205 (neg. 41174), labelled "Amaryllis formosissima [descr.]", was determined by McVaugh as *Sprekelia formosissima* (L.) Herb.


Locality cited: in anfractibus Guadalaxarae vicinis. No description except a character from Hort. Cliff. ["Amaryllis sphaera uniflora ... etc." and "Corolla rubropurpurascenscte"]. Not found in the S. & M. herbarium. Not identified. Perhaps not included as questionably the same species, but immediately following, with no name, but "— Amaryllis sphaera multiflora ..." [Roy. Lugdo. 72. 36 cited, with note]: Flores tres ad sex saturate coccineae ex singuli spatha egredientur Aprili mense", and "in Aetheo[ia [sic], colliturque pro deliciis in corymbis Guadalaxarae."


Type-locality: "in summis montium Sancti Heremi cacuminibus. Floret Julio" [on the highest peaks near the Desierto de los Leones, southwest of Mexico City]. D.F. The description suggests *Stenanthilla frigida* (Cham. & Schlcht.) Gates, J. Linn. Soc., Bot. 44: 152. 1918, a specimen of which is in the S. & M. herbarium under the name of "Amaryllis? nutans" (no. 5119; CNHM neg. 41165).


Cited localities: México [City] and Europe. IC. Pl. Mex. 63, represented by no. 0609 in the Tower Collection, which bears the number "63" and the hand-printed name "Amarilis Formosissima. Lin." The plant depicted is *Sprekelia formosissima* (L.) Herb. App. 35. 1821, as is a specimen in the S. & M. herbarium (no. 5205; CNHM neg. 41174). See also under *Amaryllis biflora*, above.


Locality cited: México, D.F. ["in México. Floret toto vere"]. Very briefly described. Not found in the S. & M. herbarium. Not identified. This was probably not intended as a new name, though there was no reference to earlier literature. The name *Amaryllis reginae* was available to Sessé & Mociño (in Palau 3: 57. 1785), and it seems unlikely that they would suggest such an epithet *de novo*.


Anthericum minimum N.  
See the last paragraph in the treatment of Ornithogalum graminifolium, below.

Localities cited: México, D.F. ["in Mexici circuitibus et humidis Europae Borealis locis"]; Ic. Fl. Mex. 58, cited in the manuscript of Fl. Mex. but not in the published versions, and listed among the icones obtained in the region of México, D.F. during the early years of the Expedition, and again in the enumeration of nos. 1-412 (MA, mss.). See also a reference by McVaugh (1980, p. 118). This is represented by no. 0220 in the Torner Collection, which bears the number "58", the hand-printed name "Anthericum? Ossifragum. Linn.", and an annotation by de Candolle, "Echeandia terniflora Ort.". A copy based on the same model (but not a precise duplicate) is no. 0786 in the Torner Collection, numbered "18" (which I cannot explain), and annotated as above by de Candolle. The icones and specimens in the S. & M. herbarium (nos. 913, CNHM neg. 46476; and 5124, neg. 46488), originally identified as "Anthericum Ossifragum" (or "Oxifragum"?), are all referable to the genus Echeandia (Anthericum in the sense of many authors).


Type-locality [Cav.]: Unknown to Cavanilles; grown at the Madrid Botanical Garden, where it flourished in September 1793; [Ort.]: "Cuba"; grown at the Madrid Botanical Garden, "& seminibus missis per praefaldaum D. Espinosa". Ortega (l.c.) and Cavanilles (l.c.: 5. 70. 1799) agreed that the two names were synonymous. Weatherby (Proc. Amer. Acad. Arts, n.s. 45: 392. 1910) confirmed Rose's supposition that the plant of Cavanilles (and of Ortega) was Mexican in origin. Not found in the S. & M. herbarium. Presumably Ortega erred in this as in various other instances in supposing his seed to have come from Cuba, although Mariano Espinosa, a correspondent of the Botanical Garden, was resident in Havana when Sessé was in Cuba (cf. I. H. W. Engstrand, Spanish Botanists in the New World, pp. 163-164. 1981).

Type-locality: Gardens at San Angel, D.F., and in the Royal Mexican Botanical Garden ["in Hortis S. Angelii jueta Mexicum et laete viget in Horto Regio Mexicano. Floret Augusto"]; Not located in the S. & M. herbarium. The description of a bulbous plant with leaves a foot and a half long, a simple spike the same length, yellow petals connivent after flowering, and the filaments with scales above the middle, may well refer to some Liliaceous plant but perhaps not of this genus.

Localities cited: Córdoba, Veracruz ["Habitat Cordovaec. Floret Julio"]; Described. In the S. & M. herbarium no. 5195 (CNHM neg. 41171), labelled "Crinum americanum", has been determined as Crinum esculosum Solander.


Type-locality: Gardens at Talpam ["S. Augustinii"; [south of Mexican City], D.F. where said to flower in May. Not found in the S. & M. herbarium. Not identified. The description of a small ["doreanalis"] bulbous plant with linear leaves, inferior ovary, one-flowered scape, and white or rose-colored flowers, suggests the genus Zephyranthes. It may be that this is the plant depicted in no. 0440 of the Torner Collection, an elegant drawing without an inscription except for an annotation by de Candolle, "Amaryllis linearifolia".

Echeandia, see under Anthericum and Ornithogalum.

Fritillaria biflora Sessé & Moc. Fl. Mex. ed. 2. 89. 1894; not of Lindley.
Type-locality: Mountains of San Angel, [south of México, D.F., where said to flower in August and September. Ic. Fl. Mex. 70, never cited in print by Sessé & Mocino, but included under the name of "Fritillaria meleagris" among the icones painted near Mexico City in 1787-1788, and also in a manuscript list of icones 1-416 (MA, mss.). This is presumably the species represented by no. 0201 in the Torner Collection, which bears the number "70", the hand-printed name "Fritillaria meleagris. Linn.", and an annotation by de Candolle, "Tydea hypoxina". Nearly identical is DC. plate 1269, an original painting (Field Mus. neg. 3034) bearing the number "70", the hand-printed name "Fritillaria [?lineata
crossed out] meleagris Linn., and the inscription by de Candolle, "Tydea hypoxina". It shows a plant (as described under Fritillaria biflora) with fibrous bulb coats, very long lower leaves, short opposite upper leaves, twin peduncles, nodding flowers with "fovea nectarifera, ferruginoc-barbata". The plant is a Calochortus, probably some member of the subsection Barbatae (cf. Ownbey, Ann. Missouri Bot. Gard. 27: 525-531. 1940). See F. meleagris, below.


Locality cited: New Spain, and Europe. See Fl. Mex. 315, represented by no. 0249 in the Torner Collection, which bears the number "315", the hand-printed name "Fritillaria Meleagris. Linn. crossed out!", and an annotation by de Candolle, "Tydea meleagrina". Almost identical (but wanting the drawings of mature fruit) is DC. plate 1268, an original painting bearing the number "315"?[by Mocino], and the name carelessly inscribed?[by Sesse], "Fritillaria Meleagris. Linn." (photograph McVaugh). The same species is represented in DC. plate XXXV [sketches derived from Torner 0249; Field Mus. neg. 30428]. The plant shown is also a Calochortus, but quite a different species from that described as Fritillaria biflora, perhaps C. hartwegii Benth. It seems clear that Sessé & Mocino confused more than one species under the name of Fritillaria meleagris. In their herbarium nos. 921 and 5128 are so labelled; the former (CNHM neg. 46478) is according to Ownbey Calochortus barbatus (H. B. K.) Painter, Contr. U. S. Natl. Herb. 13: 348. 1911; the latter (neg. 46491), according to Ownbey ?[about 1945], represented an undescribed species.

**"Lilium Kamskatkense"**

In the S. & M. herbarium no. 5127 (CNHM neg. 46490), labelled as above, apparently represents Fritillaria camoschatensis (L.) Ker-Gawler, Bot. Mag. 30. pl. 1216. 1809 (Lilium camoschatense L.). No. 1967 in the Torner Collection, an elegant sketch apparently by the artist Echeverria, is annotated by de Candolle "Medeola notkana". The plant depicted is surely F. camoschatensis, a species that ranges from southern Alaska to Vancouver Island, and may well have been found during Mocino's stay at Nutka. The sketch was found in the Torner Collection in a folder with other paintings all supposedly from Nutka.

**"Lilium variegatum"**

A name not published by Sessé & Mociño, but included under lc. Fl. Mex. 66 (as "Lilium variegatum") among the images obtained in the region of México, D.F. during the early years of the Expedition, and listed again as "Lilium (variegatum crossed out) superbum" in the enumeration of nos. 1-416 (MA, mss.). See also a reference by McVaugh (1980, p. 118). The icon in question is represented by three paintings in the Torner Collection. Two of these, nos. 0226 (a specimen in full flower) and 1118 (a drawing including 12 fruit-bearing peduncles) are very similar. Each drawing bears the number "66" and additionally "28" (which latter I cannot explain), and the hand-printed names "Lilium ? variegatum N." and "Coyoloxochitl. Hern. F. 267". De Candolle annotated the drawing with flowers only, "Alstroemeria enneantha", and the other one "Alstroemeria polyantha".


**Milla biflora** Cav. ic. 2: 76. pl. 195. 1793.

Type-locality: Mexico; flowered and fruited at the Madrid Botanical Garden in October [1793 or earlier].

Type: Not seen. This is the type-species of the genus, a beautiful plant fittingly named for Julián Milla, the head gardener ["primarius Hortulanus"] at Madrid in Cavanilles' time. This plant was known to Sessé & Mociño as "Bulbocodium ? sielatum", a name never published by them but listed as lc. Fl. Mex. 67 among the icons obtained in the region of México, D.F. during the early years of the Expedition, and listed again in the enumeration of nos. 1-412 (MA, mss.).

The icon is represented by DC. plate 1265, an original painting bearing the number "67", the hand-printed name ["Hipoxis crossed out!"] and "Bulbocodium Stelatum. Sp. N." written in [by Sessé]; almost identical, but with additional drawings of mature capsules, is no. 0180 in the Torner Collection, unnumbered, bearing the hand-printed name "Bulbocodium Stelatum Sp. N." and an annotation by de Candolle, "Gauleria minor"?A more skillfully drawn picture of the same species, with more floral detail, is no. 0960 in the Torner Collection, annotated by de Candolle, "Gauleria elegans", and bearing the number "86", which I cannot explain. Not found in the S. & M. herbarium.


Type-locality [Trel.]: "Mexico"?Type: Brongniart, in reference to his newly described genus *Roulinia*, said only "Hulce quoque genere pertinet Anatis rigida (Sessé et Moçino, Fl. mex. ined. Icon. n. 1267, in Biblioth. eel. De Candolle)". This was a reference to DC. plate 1267, a partially colored copy of no. 0762 in the Torner Collection, which bears the number "246" [which I cannot
Ornithogalum graminifolium Sessé & Moc. Pl. Nov. Hist. 54. 1888; ed. 2. 51. 1893; Fl. Mex. ed. 2. 86. 1894. not of Thunberg.

Type-locality: San Angel [“in Sancti Angeli montibus prope Mexico”], [south of Mexico], D.F. Said to flower in July. Apparently the plant described is the same in Pl. Nov. Hist. and Fl. Mex. The diagnosis (character) is the same in both, there is a reference to “Xoxonacatic. Hern. Mex. 168” in both, but in Fl. Mex. “Lc. 59” is cited and there is a note, “Obs. An Hypoxis?” The observation is an intelligent one, but the painting should have been cited as “Lc. 60”.

“Lc. [Fl. Mex.] 60”, which is included under the name of “Anthericum graminifolium N.” among the icons obtained in the region of Mexico City in 1787-1788 (MA, mss.), is represented by no. 0215 in the Torner Collection. It bears the number “60”, the hand-printed names “Anthericum graminifolium N.” and “Xoxonacatic. Hrz. 168”, and an annotation by de Candolle, “Hypoxis uniflora”. The plant depicted is evidently a species of Hypoxis, a hairy plant with bulbous fibroillose stem-base and slender-pedicellate yellow flower. Almost identical is DC. plate 1259, an original painting bearing the number “60” and similar annotations (Field Mus. neg. 30874). Not found in the S. & M. herbarium.

In the list of icons cited above, in which Lc. Fl. Mex. 60 is included as “Anthericum graminifolium N.”, no. 59 is under the name of “Anthericum minimum N.”, a name never published by Sessé & Mocició. The icon is represented by no. 1085 in the Torner Collection, which bears the number “59” (and “127”, which I cannot explain), the hand-printed name “Anthericum minimum N.”, and an annotation by de Candolle, “Phalangium minimum”. Almost identical is DC. plate 1258, an original painting bearing the numbers “59” and “127” and the name “Anthericum minimum”. The plant depicted is a small species of Echeandra, not found under this name in the S. & M. herbarium.

Pancratium caribaeum ("caribaeum") Sessé & Moc. Fl. Mex. ed. 2. 85. 1894


Locality cited [Pl. Nov. Hist.]: “Mexici et in Europa”; [Fl. Mex.]: San Angel, D.F. [“in hortis Sancti Angeli unde Arañia vulgo nuncupatur”]. This is Lc. Fl. Mex. 61, cited in Pl. Nov. Hist., listed among the icons obtained in the region of Mexico, D.F., during the early years of the Expedition, and listed again in the enumeration of nos. 1-412 (MA, mss.). This is represented by no. 0214 in the Torner Collection, which bears the number “61”, the hand-printed name “Pancratium [Illyricum, Linn. crossed out]”, and an annotation by de Candolle, “Pancratium illyricum Sessé”. An almost identical copy, without number or printed name, but annotated by de Candolle, is no. 0710 in the Torner Collection. The plant depicted is a species of Hymenocallis, a genus now generally recognized as distinct from Pancratium. In the S. & M. herbarium no. 5121 (CNHM neg. 41172), labelled “Pancratium illyricum. ic.”, is apparently referable to Crinum erectebium Ait. Hort. Kew. 1: 415. 1789.


Localities cited [Fl. Mex.]: Tacubaya, [now a part of Mexico City], D.F.; and many places in Europe. Not identified. The character given for Pancratium tazetta, except for the addition of two words, is that of Narcissus Tazetta L. Sp. Pl. ed. 2. 416. 1762, and P. tazetta may be regarded as a new combination based on N. tazetta L. The reference in the Fl. Mex. to “plurimus Europae locis” is evidently based on “in G. Narbonensi, Lusitaniae, Hispaniae…” in the Species Plantarum.


Type-locality [Pl. Nov. Hist.]: México, D.F. [“in Sancti Angeli hortis, prope Mexico”]. The two names are equated as above because both floras refer to “Anonyma VII” of Hernández, and the descriptions are so similar that they could hardly have been based on different species. No locality is cited for P. tubulata. Lc. Fl. Mex. 69 is cited in the Pl. Nov. Hist. only; this is represented by no. 0603 in the Torner Collection, which bears the number “69”, the hand-printed name “[Convolvallaria multiflora? Linn. crossed out]”, “Hyacinthus?” added [by Sessé], the reference “Anonima VII. Hrz. 352”, and an annotation by de Candolle, “Evadne geminiflora”. Nearly identical is DC. plate 1266, an original painting similarly inscribed (Field Mus. neg. 30876). The same plant is shown in DC. plate XXXV [sketches only; Field Mus. neg. 30430]. The species illustrated is apparently Polianthes geminiflora (L. & L.) Rose, Contr. U. S. Natl. Herb. 8: 12. 1903, flowers of which occur in the S. & M. herbarium under the name of “Poliantes americana"
N." (no. 1075; CNHM neg. 41164). The specimen was cited by Nelson (1997) as "material tipo" of P. americana.

**Polianthes tuberosa** [L.] sensu Sessé & Moc N. Nov. Hisp. 54. 1888; ed. 2. 50. 1893, not *Polianthes tuberosa* of Fl. Mex.

It is clear that Sessé & Mocino applied this name, at different times, to two quite different plants. The name "*Polianthes tuberosa*" is listed as lc. Fl. Mex. 68, among the paintings obtained in the region of Mexico City, 1787–88. The same plant is probably the one described in Pl. Nov. Hisp., where the diagnosis (character) consists of three words quoted from Hort. Cliff. ["Polianthes floribus alternis"]; there is a reference to "Onmiochitl. Hern. Mex. 277", and lc. Fl. Mex. 323 is cited, I believe erroneously. I take it that the true lc. Fl. Mex. 68 is represented by no. 1159 in the Torner collection, although it is unnumbered. It bears the hand-printed names "*Polianthes Tuberosa* Linn." and "*Onmiochitl. Hrz. 277" and two printed lines extolling its medicinal virtues. In all respects including a heavy inked frame around the drawing, it appears to be one of the *icones* that were made during the early years of the Expedition. The plant depicted appears in fact to have been the true *Polianthes tuberosa*, with about ten sessile and slenderly tubular white flowers in a crowded terminal spike.


Locality cited [Fl. Mex.]: Mountains of Chilapa, Guerrero. Two paintings of lc. Fl. Mex. 68 are listed under this name. As noted above, no. 68 is cited among the plates obtained in the vicinity of Mexico City in 1787–1788 (MA, mss.). It is also cited in Mocino's list of plates 1–416 (MA, mss.). The former probably depicts the plant cited (but scarcely described) in the Pl. Nov. Hisp., where lc. Fl. Mex. 323 (but not 68) was cited. Evidently another painting was made in the course of the "Second Excursion", that to Guerrero in 1789, and a description made from the plant found at Chilapa; the second painting was presumably lc. Fl. Mex. 323, which is listed among those made on the "Second Excursion" (MA, mss.), and cited erroneously in Pl. Nov. Hisp. This is the *icon* represented by no. 0247 in the Torner Collection, which bears the number "323" (evidently assigned by Mocino), the hand-printed name "*Polianthes Tuberosa* Linn.", and an annotation by de Candolle, "*Agave ? fibrosa*". Nearly identical is DC. plate 1251, an original painting bearing the number "323" and annotated by de Candolle "*Agave ? fibrosa*". The plant depicted, and the one described in the Fl. Mex., is *Manfredia [Agave] scabra* (which see under *Agave brachystachya*). The species is represented in the S. & M. herbarium by nos. 911 and 5126 (CNHM negs. 41162, 41166). Both are labelled "*Polianthes tuberosa*", and no. 5126 bears the vernacular name "Amole" (reported in the Pl. Nov. Hisp. and the Fl. Mex. as "Amole" and "Amolli").


Reported from Mexico by A. de Candolle, i.e., on the basis of a collection by Pavón in the Boisier herbarium, not seen. A sheet at Fl. (herb. Webb), named by A. de Candolle, is labelled by Pavón "*Smilax excelsa flos masculus N E*". In the S. & M. herbarium no. 4732 (CNHM neg. 46528), labelled "*Smilax excelsa*", is described by C. V. Morton (Brittonia 14: 308. 1962) as "poor and not definitely identifiable. If it came from Guatemala rather than Mexico it is probably *S. regelii* Killip & Morton [Pbbl. Carnegie Inst. Wash. 461: 272. 1936]."

This is one of the relatively few instances in the literature of this period when the category of "subspecies" was used, and the subspecies divided into varieties designated by Greek letters.

**Smilax caduca** [L.] sensu Sessé & Moc. Pl. Nov. Hisp. 171. 1890; ed. 2. 159. 1893.

Localities cited: Mazatlán, Guerrero ("in Mazatlam montibus et Canada. Floret Julii"). Not described. In the S. & M. herbarium no. 4747 (CNHM neg. 46486), labelled "*Smilax caduca*" is an immature sterile specimen of some species of *Smilax*.

**Smilax glauca** Walt. Fl. Carol. 245. 1788.

Reported from Mexico by A. de Candolle (in DC. Monogr. Phan. 1: 82. 1878) on the basis of a collection by "Pavón" at St. Petersburg (L.E.) ("in h. p. Petr.") not seen. In the S. & M. herbarium no. 4738 (CNHM neg. 46494) is reported by Morton as *Smilax glauca var. discolor* (Schlecht.) Morton, Brittonia 14: 305. 1962. The specimen was reported by Morton (i.e., p. 308) as "*Smilax jalapa* Sessé & Moc. In Herb. ined." but from the punctation on the original ticket I suppose the collectors wrote "Smilax," and then "Jalapa" (in reference to the place of collection).

**Smilax havanensis** Jacq. Enum. Pl. Carib. 33. 1760.

Morton (Brittonia 14: 308. 1962) reported "*Smilax spinifolia* Sessé & Moc. in herb. ined." (no. 4735 of the S. & M. herbarium; CNHM neg. 46497) as *Smilax havanensis*. A specimen at Fl. (herb. Webb), determined as *S. havanensis* by A. de Candolle, is marked by Pavón "*Smilax spinifolia* N E." Presumably the specimens were collected in Cuba.

Localities cited: Acahuizotla, Guerrero ["in Acahuizotlaz montibus et in Virginia"]. Not described. In the S. & M. herbarium no. 4742 (CNHM neg. 46495), labelled "Smilax lanceolata", was determined by C. V. Morton as Smilax gymnopeda Apt.


Type-locality: Mountains of Mazatlán, Guerrero. Killip and Morton (Publ. Carnegie Inst. Wash. 461: 262. 1936) confidently referred this to the synonymy of Smilax spinosa Mill. Gard. Dict. ed. 8. Smilax no. 8. 1768. Morton later (Brittonia 14: 308. 1962), having examined a specimen labelled "Smilax mazatlanensis N." in the S. & M. herbarium (no. 4737; CNHM neg. 46522), reported that this plant was referable to Smilax moranensis var. mexiae Killip & Morton, but at the same time implied that he would still refer S. mazatlanensis to S. spinosa on the basis of the original description calling for tetragonal stems and aculeate leaves. Nelson (1997) reported Morton's determination of the plant and designated "Sessé 4737" as "material tipo" of S. mazatlanensis.

Smilax mexicana [var.] β costacae (Vatke) A. DC. in DC. Monogr. Phan. 1: 117. 1878.


Reported from Mexico by Alphonse de Candolle (in DC. Monogr. Phan. 1: 68. 1878) on the basis of collections by "Pav in h. Boiss. et h. Webb. nunc florent..." I have seen the sheet at FL (herb. Webb), which is named by A. de Candolle and marked by Pavón "Smilax ovata flos masculus N E". Killip and Morton (Publ. Carnegie Inst. Wash. 461: 286. 1936) reported a "typical" specimen of Smilax mollis that they had examined in the Boisier Herbarium, which they considered to be "presumably type material" of Smilax ovata Sessé & Moc., q.v. Morton later (Brittonia 14: 308. 1962), after examining a specimen under the name of "Smilax ovata" in the S. & M. herbarium (no. 4744; CNHM neg. 46496), referred S. ovata to the synonymy of Smilax gymnopeda Apt. Repert. Spec. Nov. Regni Veg. 18: 401. 1922. The latter, according to Killip and Morton (l.c.), is "a critical species, perhaps not sufficiently different from S. mollis". Morton noted on no. 4744, "Type of S. ovata Sessé & Moc.". Nelson (1997) designated "Sessé 4744" as "material tipo" of S. ovata.


Type-locality: Mexico. Type: "Pavon in h. Boiss., not seen." Killip and Morton (Publ. Carnegie Inst. Wash. 461: 290. 1936) stated that from a photograph of the type they were not able to place this taxon definitely.


Type-locality: Mountains of Tuxtla [presumably San Andrés Tuxtla, Veracruz], where said to flower in September. Description. See above under Smilax mollis, where is cited the specimen considered by Morton (Brittonia 14: 308. 1962) to be the type of Smilax ovata.


Type-locality [Fl. Mex.]: San Juan de los Plátanos, near Apatzingán, Michoacán. The epithet “parvifolia” is not validly published, being merely a substitute for laurifolia [L.]. The character of Smilax laurifolia from the Species Plantarum is copied in the Pl. Nov. Hisp., and then taken over verbatim et literatim for S. parvifolia in the Fl. Mex., without any additional description. Killip and Morton (Publ. Carnegie Inst. Wash. 461: 290. 1936) tentatively suggested that Smilax parvifolia might be a synonym of S. spinosa Mill., but Morton later (Brittonia 14: 308. 1962) pointed out that specimens labelled Smilax laurifolia in the S. & M. herbarium (nos. 4739, 4741; CNHM negs. 46524, 46525) and Smilax domingensis Willd. Sp. Pl. 4: 783. 1806 are referable to Smilax mollis Humb. & Bonpl.


Localities cited [Pl. Nov. Hisp.]: The cataract Tzararaca near Uruapan, Michoacán ["prope Uruapec cataractum Tzararacum dictum, in Sina et Jamicaca."] [Fl. Mex.]: "prope descensum cataractae speciabilis in oppido Uruapam dicta Sararacae, id est Aquae collaborati".

Short description. The flowers not seen. In the S. & M. herbarium nos. 4743-4745 (CNHM negs. 46524, 46525) labelled as above, were determined by C. V. Morton as Smilax mollis Humb. & Bonpl.

Smilax rotundifolia L. Sp. Pl. 1030. 1753.

 Reported from Mexico by A. de Candolle (in DC. Monogr. Phan. 1: 75. 1878) on the basis of collections by "Pav[on] in h. Boiss. et h. Webb." I have seen the specimen at FL (herb. Webb), which is labelled by Pavón "Smilax tainmoldies N E". Killip and Morton (Publ. Carnegie Inst. Wash. 461: 291. 1936) stated that they had examined a photograph of the specimen [in the Boisier Herbarium] but were unable to identify it with any known Mexican or Central American species. In the S. & M. herbarium nos. 4748, 4750, and 4753 (CNHM negs.
LILIACEAE

46506–46508, 46510), labelled “Smilax tamnoides”, are all, according to Morton (in herb. and in Brittonia 14: 308. 1962), Smilax jalapensis Schlecht. Linnéae 18: 451. 1844.

The name “Smilax rotundifolia” was not used in publication by Sessé & Mocñito, but it is included as Ic. Fl. Mex. 181 in the list of icones 1–416 and also (as “Smilax rotundifolia”) among those obtained during the “First Excursion”, i.e., in the region of México, D.F., in 1787–1788, and it was listed under the same number by McVaugh (1980, p. 122). Ic. Fl. Mex. 181 is represented by DC. plate 1276, an original painting that bears the number “181” and the printed names “Meccapati paratla. Hern. F. 288” and “Smilax [the epigraph hand-written ?by Sessé], rotundifolia”. Nearly identical is no. 0202 in the Torner Collection, with the number “181”, the hand-printed name “Smilax rotundifolia. Linn. [the L replaced by N. but the “in” not crossed off]”, a short note on medicinal uses, and an annotation by de Candolle, “Smilax mcipatli”. The plant depicted is a species of Smilax. In the S. & M. herbarium a specimen originally named “Smilax rotundifolia” (no. 4756; neg. 46520) is according to Morton (i.e.) Smilax moranensis Mart. & Gal. Bull. Acad. Roy. Sci. Bruxelles. 9, pt. 2: 389. 1842.


Locality cited: Near Apatzingán, Michoacán [“cum praeecedentis (S. laurifolia) ; prope Apatzingam, alisque Novae Hispaniae locis, Virginia et Carolina. Floret Autismo”]. Not described. In the S. & M. herbarium, nos. 4748, 4750, and 4753 (CNHM negs. 46506–46508, 46510), labelled as above, were determined by Morton as Smilax jalapensis Schlecht.


Type-locality: Uruapan, Michoacán. Doubtfully referred by Killip and Morton (Publ. Carnegie Inst. Wash. 461: 277. 1936) to the synonymy of Smilax moranensis Mart. & Gal. Nothing was found under the name “uruapensis” in the S. & M. herbarium. In a second study of Mexican Smilax Morton reconsidered as follows (Brittonia 14: 309. 1962): “There is another species growing near Uruapan also, S. pringlei [Greenm. Proc. Amer. Acad. Arts. n.s. 34: 567. 1899], and I am inclined now to think that S. uruapensis is more likely that, since Sessé & Mocñito compare their species with their S. pseudochiona, which is S. [mollis], a species having pubescent leaves as does S. pringlei but not S. moranensis”.


Floret Augusto”). Ic. Fl. Mex. 324, represented by DC. plate 1281, an original painting bearing the number “324” and annotated by de Candolle as a species of Melanthium. Almost identical is no. 0248 in the Torner Collection, which bears the number “324” [written by Mocñito, partly trimmed off, and replaced in another hand], the hand-printed names “Veratrum Luteum. Linn.” and “Ytzcumpitli. Hern. Mex. 307”, and an annotation by de Candolle, “Melanthium borealenum”. The plant depicted is a species of Schoenoautnon. In the S. & M. herbarium no. 3813 (CNHM negs. 46479–46481), determined by H. Itlis as Schoenoautnon officinale (Schlecht. & Cham.) Benth., was originally labelled “Veratrum luteum” and “Zebadilla” or “Sabalilla”, the latter a vernacular name reported in the Pl. Nov. Hosp.

Yucca mexicana Sessé & Moc. Fl. Mex. ed. 2. 89. 1894, not Hort. ex Baker.

Locality cited: Type-locality: Not stated. Said to be a large tree-like plant with crepe, drooping ["nutansibus"] leaves, called “izutle”. Identified, but no. 0168 in the Torner Collection, a painting on two pages annotated “Yucca mexicana”, is an elegant sketch of a flowering Yucca with the base of the inflorescence colored in. It was reproduced in full color under the name of Yucca mexicana by Grobért (1982, 11th plate following p. 64). It appears to be one of the paintings executed by Echeverría in Puerto Rico or possibly Cuba.

Linaceae


Loasaceae


Locality cited [Pl. Nov. Hosp.]: Chilpancingo, Guerrero; Veracruz; and other hot places in New Spain; [Fl. Mex.]: “in Chilpanzingi hortis. ubi Chichicaztli
Loasaceae


A South American species doubtfully reported by de Candolle from Mexico as follows: "Iconem habeo florae Mexicanae ined. Huic. deser. sat similum, sed petalis apice bifiidis distinctum. An species altera?" (DC. Prodr. 3: 342. 1828). This report seems to have been based on DC. plate 359, or on no. 0072 in the Torner Collection, without inscription except for an annotation de Candolle, "Loasa lyrata". The plant depicted is presumably Loasa triphylla var. rudis (Benth.) Urb. & Gilg, Nova Acta Acad. Caes. Leop.-Carol. German. Nat. Cur. 86: 239. 1900, well known in southern Mexico and Central America. Very possibly the illustration represents the plant described by Sessé & Mocino as Loasa urens, q.v.


Locality cited: Hueytlaapan, Puebla, where said to flower in September. No reference is made to the work of any earlier author, but Sessé & Mocino seem to have taken the epithet from Pallau (4: 337. 1786), where the only species listed was "Loasa hispida", without mention of the author [Linnaeus] but with the citation of L. urens Jacq. as a principal synonym. In the S. & M. herbarium no. 2237 (CNHM neg. 46543), labelled "Loasa urens", is apparently referable to L. triphylla Juss., var. rudis (Benth.) Urb. & Gilg. In the description of L. urens in the Fl. Mex., the petals are described as "apice biseroco-reflexo"; cf. de Candolle's comment on DC. plate 359 as quoted above under L. papaverifolia. Nelson (1997) designated "Sessé 222" [sic] as "material tipo" of "Loasa urens Sessé & Moc.", which is inappropriate under the circumstances.

Mentzelia hirta G. Don, Gen. Hist. 3: 66. 1834, with citation of "Pav. in herb. Lamb." as the basis for the name.

Type-locality: Mexico. Type: "Pavon" in herb. Lambert; this is presumably a sheet at BM, ex herb. Lambert, labelled by Pavón "Mentzelia hirta N E". The same specimen has been taken as the type by Thompson and Ernst, who made the combination Euclidide hirta (G. Don) Thompson & Ernst, J. Ann. Arbor. 48: 83. 1967. A sheet at Fl (herb. Webb), also marked by Pavón "Mentzelia hirta sp. n. N E", is apparently the same species. In the S. & M. herbarium, no. 2236, three sheets of which are labelled "Mentzelia hirta N", apparently represents a mixed collection. The specimen shown by CNHM neg. 46541, according to H. J. Thompson, represents Euclidide hirta (= E. simuta S. Watts), whereas negs. 46540 and 46542 represent E. lobata (Hook.) A. Gray.


Localities cited [Pl. Nov. Hisp.]: Tepelpa and Coyacae, D.F., and other places in America ["Habitat Tepelpa et Cuyuacan prope Mexico, aliquis Americae locis."] (DC. Prodr. 3: 343. 1828) in the words: "Ex icones fl. mex. ined. apud Mexicanos dictur zazale". The vernacular name zazale ["vel Hispanis Pegaropis"] is reported for Mentzelia aspera in the Pl. Nov. Hisp. In the S. & M. herbarium nos. 2231 and 2232 (CNHM negs. 46532-46538), labelled "Mentzelia aspera", are all in our opinion referable to M. hispida.

Mentzelia stipitata DC. in DC. Prodr. 3: 343. 1828, with citation of "fl. mex. icon. ined." as the basis for the name.

Type-locality: Mexico. Lectotype: No. 0492 in the Torner Collection, labelled by de Candolle "Mentzelia petalata". DC. plate 358, as cited in Caliques des Dessins (Field Mus. neg. 30663), is a fair copy of Torner 492. It is not labelled "stipitata" but seems from the original description to represent that species; it is annotated by Alphonse de Candolle as follows: "Doit étre le M. stipitata DC. prodr." According to Darlington (Ann. Missouri Bot. Gard. 21: 118. 1934), who accepted the opinion of Urban and Gilg (Monog. Loas. 64. 1900), M. stipitata is a synonym of M. hispida Wild., q.v.

Loganiaceae


Localities cited [Pl. Nov. Hisp.]: Near México, D.F. Ic. Fl. Mex. 31, not surely identified, but presumably the same as an original painting at MA that bears the number "67" and the hand-printed name "Buddleia Americana." It was listed by name, with description, and identified as

Locality cited: Tulancingo, Hidalgo ["in aridis Tulancingii circuitibus"]. The common name is given as Salvia real. From the description in the Pl. Mex., I should refer to Buddleja perfoliata H. B. K. Nov. Gen. & Sp. 2 [quarto]: 346. 1817; a plant also called salvia real according to Standley (Contr. U. S. Natl. Herb. 23: 1145. 1924). In the S. & M. herbarium no. 510 (CNHM negs. 46580-46583) belongs to B. perfoliata according to Standley; the specimens were originally labelled as an unpublished species of Buddleja, and the common name given as salvia real.


Locality cited: México, D.F. ["in Mexici circuitibus. Floret Septembrì"]. Described. In Pl. Mex. the name is published without mentioning Linnaeus, but with citation (taken from Palau, vol. 1: 686. 1784) of "Mill. Dict. n. 2" and of Plukenet, and additional citation "Cayolizam, Hernz. Mex. 66. Vulgo Tepozan". No. 1099 in the Torner Collection, which bears the number "22", the hand-printed names "Buddleia Occidentalis. Linn." and "Cayolizam seu Tepozan. Hern. F. 66", plus an annotation by de Candolle, "Buddleia cayolizan", is probably the plant described in Pl. Mex. According to a determination by Eliane Norman (1998), it represents Buddleja cordata H. B. K. Ic. 22 was included under the name of "Buddleia occidentalis" in the list of icones that were obtained during the "First Excursion", from the region of Mexico City in 1787-88, but that number was assigned to another species in the final organization of the icones Flora Mexicana. The plant depicted in no. 22 is apparently a stout shrub or tree with a pedunculate deltoid terminal panicle and long-petiolate narrowly ovoid and attenuate crenate leaf-blades.

In the S. & M. herbarium nos. 515 and 638 (CNHM negs. 46572, 46573); both labelled "Buddleia occidentalis", were determined by Standley as Buddleia cordata H. B. K. DC. plate 941 (photograph McVaugh), an original painting bearing the inscription "No. 3" in small inked letters and enlarged drawings of floral details designated in ink with the letters a to f, is annotated by de Candolle, "Buddleia" and "cayolizan". The painting, though perhaps representing the same species as Torner no. 1099, was drawn from a different model, showing a flowering branch with short-pediculate panicle, drooping rather than spreading leaves at three rather than two leafy nodes, and the flowering twig arising from a rooting branch. The numbering indicates that the icon was executed during the very early months of the Expedition, presumably in 1787 or 1788. There is nothing to match it in the Torner Collection.


Type-locality: New Spain or (in Pl. Mex.), "ad margines rivulorum. Floret Septembrì". Described. This is represented by no. 1787 in the Torner Collection, without indication except for the annotation by de Candolle, "Buddleia verticillaris". According to a determination by Eliane Norman (1998), the plant depicted is Buddleja sessiliflora H. B. K. DC. field plate 940 (Field Mus. neg. 30806) is an outline sketch [a tracing] from Torner 1787. In the S. & M. herbarium nos. 511, labelled "Buddleia verticillata N. ic. [descr.]" (CNHM neg. 46585), and 637, labelled "Buddleia verticillata N." (neg. 46586), are according to Standley B. sessiliflora H. B. K. Nov. Gen. & Sp. 2 [quarto]: 345. pl. 183. 1817. Nelson (1997) designated "Sessé 511" as "material type" of "Buddleja verticillata Sessé & Moc."


Type-locality [Pl. Nov. Hisp.]: Huango, Michoacán ["in temperatis Huango montibus. Floret Julio"]. Type-locality [Pl. Mex.]: Mountains of Temascaltepec [Edo. de México] and Pátzcuaro [Michoacán]. Said to flower in July. Ic. Pl. Mex. 33, cited in Pl. Nov. Hisp. and listed among the icones obtained during the "Third Excursion", that to western Mexico in 1790-91, is represented by no. 1679 in the Torner Collection, labelled "33" and "73 but not otherwise annotated; another copy of the same is an original painting at MA, which bears the number "73" and the hand-printed name "Lisianthus Pauciflorus." It was listed by name, with description, and identified as RJB Lám. 52 in the Catálogo de las Láminas del Real Jardín Botánico (RJB 1987, p. 330). It is no. 73 of a list by Mocío (MA, mss.) no. 44 of Ramírez (Anales Inst. Méd.-Nac. México 6, pt. 1: 78. 1903), who correctly equated this plate with DC. plate 812, a copy, also
numbered “73”. As noted by Ramírez, the plant depicted is *Spigelia scabrella* Benth. (Loganiaceae).

In the S. & M. herbarium nos. 1698 and 5100 (CNHM negs. 46600, 46601), labelled “Spigelia pauciflora N.” by Mociño in the final enumeration of the herbarium, are according to Standley *Spigelia scabrella* Benth. (Pl. Hartw. 45. 1840). Specimens perhaps of the same gathering are at BM and at G (the latter determined by A. de Candolle). They are annotated by Pavón with the name "Spigelia pauciflora [or "parviflora"] N.E.". Nelson (1997) designated "Sessé 1698" as "material tipo" of *S. pauciflora*.

**Ophiorrhiza mungos** [L.] sensu Sessé & Moc. Fl. Mex. 34. 1893; ed. 2. 32. 1894.

Locality cited: Toa Alta, Puerto Rico ("ad margines rivulorum per antrum quod convenit dicunt in montibus de Toa Alta. Floret Martio et Aprili").

Described at length as a glabrous simple herb more than a foot high ("susceptodantialis"), with opposite entire leaves, very small stipules; spikes "terminales, umbellatae, bipilae, corymboseae, secundae"; flowers white, small, the perianth 5-parted, the corolla tubular; stamens 5, inserted at the base of the corolla; ovary subglobose, depressed, emarginate; style filiform, short; capsules 2, united at base, dehiscent on the inner side; seeds many, ovate. This evidently does not apply to any member of the Rubiaceae, though *Ophiorrhiza* is a member of that family. In the S. & M. herbarium nos. 1701 and 5466 (CNHM negs. 46588, 46589), both labelled "Ophiorrhiza Mungos", were determined by Standley as *Cynochnon mireola* (L.) Britton. No. 1583 in the Torner Collection, a painting without any inscription, shows an annual plant with flowers, fruit, and inflorescence that seem to fit the description above. Judging from the format and quality of the work, the picture was made in the West Indies by the artist Echeverría. I have not located any equivalent copy in the Candollean collection at G.

**Spigelia anthelmia** L. Sp. Pl. 149. 1753.

"Forsan in Mexico (ex. ic. ined. rudi)" according to A. de Candolle in DC. Prodr. 9: 7. 1845. This is presumably a reference to one of the Mociño plates, but I have not located it. See *Spigelia mexicana*, which is *Spigelia anthelmia* sensu Sessé & Mocc.

**Spigelia hedyotidea** A. DC. in DC. Prodr. 9: 7. 1845.

Type-locality: Mexico. Type: DC, plate 813, a colored copy, as cited in Calques des Dessins (Field Mus. neg. 30766; photograph McVaugh). The comparable painting has not been found in the Torner Collection. In the S. & M. herbarium nos. 1699 and 5103 (CNHM negs. 46594, 46595), labelled with an unpublished epithet in this genus, are according to Standley *Spigelia hedyotidea*. The type-drawing shows a plant very similar to, and perhaps conspecific with, *Spigelia lindheimeri* A. Gray, Syn. Fl. 2, pt. 1: 108. 1878.

**Spigelia longiflora** Sessé & Mocc. Fl. Mex. 34. 1893; ed. 2. 31. 1894, not of Martens & Galeotti.


Type-locality: [A. DC.]: Mexico. Localities cited [Pl. Nov. Hisp.]: Chilpancingo, Guerrero, and Cayenne, Brazil, and Jamaica. Lectotype [A. DC.]: "Pavón" in "h. Boiss.". This is a specimen at G, ex herb. E. Boissier, marked by Pavón "Spigelia anthelmia N.E." A. de Candolle has annotated this with a reference to "t. 811". DC. plate 811, labelled "Spigelia mexicana Alph. DC." (Field Mus. neg. 30765), shows a species with semi-spike of middle-sized red flowers, shorter than those of *Spigelia longiflora* Mart. & Gal. The DC. copy was apparently derived from no. 0372 in the Torner Collection, which bears the hand-printed name "Spigelia [Anthelmia] crossed out] Linn." and an annotation by A. P. de Candolle, "Spigelia marginata". An essentially identical copy in the Torner Collection, no. 1616, bears the number "327" but no other inscription. Doubtless this refers to Ec. Fl. Mex. 327, cited in the Pl. Nov. Hisp.

In the S. & M. herbarium nos. 932 and 1433 (CNHM negs. 46591, 46592), labelled "Spigelia anthelmia", are apparently referable to *Spigelia mexicana*.

**Loranthaceae**


Type-locality [DC.]: Cuernava ("Cuarcavara"). Morelos. Lectotype: *Berlandier* 1150, in G-DC (cf. Intern. Doc. Cent. microfiche DC 671). The illustration representing this species, drawn for de Candolle by the artist Heyland and reproduced as plate 10 of the *Mémoire*, may have been based on the specimens collected by Berlandier, but it was not the same as DC. plate 449, the basis for the reference to "Loranthus quaquahilit". The latter is an original painting numbered "65" (i.e., Ec. Fl.
some misidentification is involved, as *P. macrantherus* is described as a species with very long anthers and tereete branchlets, whereas *Loranthus ramiflorus* is described by Sessé & Mocíno as having the young branchlets acutely triangular; the same feature is shown in the plate, which also shows the anthers as very short in comparison with the filaments. The plant shown in DC. plate 448 is a lively representation of the rather delicate-flowered cauliflorous species of *Psittacanthus* that is common especially on oaks, in many places in western Mexico. It seems not to have been treated by Standley in the *Trees and Shrubs of Mexico* but is very probably a valid species. Nelson (1997) designated "Sessé 925" as "material tipo" of *L. ramiflorus* Sessé & Mocíno.


Type-locality: Cuernavaca, Morelos ["in Quahunahuacae arboribus"]. In the S. & M. herbarium no. 924 (CNHM neg. 46623), labelled "Loranthus volubilis N.", is according to Standley *Struthanthus haenkeanus* (Presl) Standl. Contr. U. S. Natl. Herb. 20: 212. 1919. From the description in the Pl. Nov. Hisp., this would appear to be a satisfactory disposition of the name. Nelson (1997) designated "Sessé 924" as "material tipo" of *L. volubilis*. 

*Loranthus sp. (-----Loranthus spicis quadangularibus, solitarius, folio brevioribus; foliis subcordatis; caule ramisque pendulis. F. M.)" Sessé & Moc. Fl. Mex. ed. 2. 83. 1894.
Locality cited: Near Tepalcatepec, Michoacán ["in montibus Tepalcatepec versus occidentis non disitiis"]. Described as having the leaves opposite, "subcordata, subamplexicaula. avena, tomento albicante, brevissimo utrinque obtecta". Flowers unknown. Fruit small, globose, reddish ("rubentes"). Not found in the S. & M. herbarium. Not identified.

**Lythraceae**

Locality cited: Havana, Cuba ["Habitat in data Habanae vicinia. Floret Martio et Aprili"]. Description. In the S. & M. herbarium no. 600 (CNHM neg. 46627),
LYTHRACEAE

Cuphea apanaxaloa DC. in DC. Prodr. 3: 88, nomen. 1828.

The protologue of this species is given here in full: “In Mexico. Apanaxaloa Hern. Mex. 353. f. 2. hue pertinet ex mss. fl. mex. ined.”. The Hernández figure cited by de Candolle (Thesaurus 353, 1651) apparently represents a small upright annual species of Cuphea, shown as having three petals in each flower. The reference by de Candolle to “fl. mex.” seems to have been based on no. 0394 of the Torner Collection, which bears the hand-printed names “Lithrum palustre. N.” and “Apanaxaloa Hrz. 353” and the hand-printed notation, “Vuln.erialium et adstringens, Yerba del Cancer a nonnullis appellata.” DC. plate 323, as cited in Calques des Dessins, is a partial copy taken from Torner 0394. It may be inferred that this is the plant called by Sessé & Mocinó Lithrum vulnarium, q.v., which is Cuphea aequipetalá Cav. loc. cit. 4: 47, 1798. It is probably that the icones also represent the latter species, to which Cuphea apanaxaloa was referred by Koehne (Pflanzenreich IV. 216 [Heft 17]: 167. 1903).


Type-locality [Lag.]: New Spain; grown in the Madrid Botanical Garden, “semina missit D.Sessé.” Type: seen at MA; photograph identified by S. A. Graham, 1963, as Cuphea aequipetalá Cav. loc. cit. 4: 57. pl. 382. f. 2. 1798.

De Candolle’s reference to “Lithrum tuxtleense” was based on no. 1985 in the Torner Collection, which is annotated by de Candolle “Cuphea tuxtleensis” and bears the notes “Tab. 18” and “fol. 78”, neither of which I can explain. DC. plate 315 is a copy based on Torner 1985. Not found under this name in the S. & M. herbarium. Koehne (Pflanzenreich IV. 216 [Heft 17]: 167. 1903) referred Cuphea bracteata to the synonymy of C. aequipetalá Cav.

Appareantly Lithrum tuxtleense of Fl. Mex., q.v., was thought to be equivalent to L. tuxtlaense of Mocino (1993, p. 83) and of Maldonado Polo (1996, p. 241), where the locality was given as El Salvador (“in Servatoropolis rivulis. Florid Deccembris”).


Type-locality [Pl. Nov. Hisp.]: Tuxtlá, Guerreró; evidently “montibus Tuxtlae” as cited by de Candolle was an error, as the Expedition did not visit Tuxtlá [neither the one in Chiapas nor the one in Veracruz] until after the compilation of the Pl. Nov. Hisp. and the numbering of the icones Florae Mexicanae. Lectotype: In the Torner Collection, no. 0037, which bears the number “341” [or “347”], the hand-printed name “Lithrum Cordifolium. Sp. N.”, and an annotation by de Candolle, “Cuphea cordifolia.” DC. plate 320, an original painting not listed in the Calques des Dessins (Field Mus. neg. 30651), is an equivalent copy of Torner 0037. It bears the number “341” [by Mocino] and the name “Cuphea cordifolia”. The icones represent fl. Mex. 341, cited under Lithrum cardifolium in Pl. Nov. Hisp.

In the S. & M. herbarium no. 1852 (CNHM neg. 46631), labelled “Lithrum cordifolium”, is according to S. A. Graham dubiously referable to Cuphea heterophylla Bentth. Pl. Hartw. 37. 1840 (it is “unusually long spurred”). According to Koehne (Pflanzenreich IV. 216 [Heft 17]: 172. 1903), Cuphea coccinea is a synonym of Cuphea cyanacea DC., but this seems unlikely, as the icones on which these two species are based differ in many details of pubescence, petal-shape and flower-color.

Cuphea cyanacea [sic] DC. in DC. Prodr. 3: 85. 1828, with citation of “fl. mex. ined.” as the basis for the name.

Type-locality: Mexico. Lectotype: In the Torner Collection, no. 0767, labelled “Cuphea cyanacea” by de Candolle. The specific epithet was given because of the violet-blue anthers and petals as shown in the plate. DC. plate 321, as cited in Calques des Dessins (Field Mus. neg. 30652), is a fair copy of the original. According to determinations by Graham, nos. 1850 and 1859 of the S. & M. herbarium (CNHM negs. 46629, 46638) are referable to this species; the former was labelled by the collectors as an unpublished species of Lithrum, the latter was unnamed.


Mexico, “fl. mex. ined.”, as cited in synonymy of C. lanceolata by DC. in DC. Prodr. 3: 85. 1828. The basis for this report was no. 1008 in the Torner Collection, without inscription except for an annotation by de Candolle, “Cuphea lepantina”. DC. plate 317 is a colored copy. Not found in the S. & M. herbarium.


The basis for this report was no. 0703 of the Torner Collection, without inscription except for the number “144” (which I cannot explain), and an annotation by de Candolle “Cuphea strumosa”. DC. plate 318, a colored copy of Torner 0703, is annotated “Cuphea strumosa Moc.”, and additionally by de Candolle “micropetala”. The illustration is a good representation of Cuphea micropetala. The same species, according to determinations by Graham, occurs in the S. & M. herbarium under three different names: No. 1954 (CNHM neg. 46633) as a Lithrum; no. 1876 (neg. 46660) as
Cuphea micropetala; and no. 1888 (neg. 46678) as an unpublished species of Cuphea.


Type-locality [Ortt.]: “Cuba”; grown in the Madrid Botanical Garden, “...” seminum missis per D. Sessé. Type: Not seen. It seems likely that the Cuphea procumbens of Cavanilles was based on the same material as that of Ortega, as Cavanilles did not cite any Mexican locality or collector, saying merely “Vivam vidi in Regio h. Matrit. mense Julio 1797”; in the same work, moreover, Cavanilles (Ic. 4: 72) confirmed the identity of his species with that of Ortega. The species now understood to be Cuphea procumbens (cf. Koehne, Pflanzenreich IV. 216 [Heft 17]: 154. 1903) is widely distributed in Mexico but does not occur in Cuba; it is probable that this as in many other instances Ortega erred in reporting the source of his seed. In the S. & M. herbarium, according to determinations by Graham, Cuphea procumbens is represented by nos. 1890 and 1891 (CNHM negs. 46680, 46681), referred by the collectors to unpublished species of Cuphea.

Cuphea secundiflora DC. in DC. Prodr. 3: 84. 1828, with citation of “fl. mex. ic. ined.” as the basis for the name.

Type-locality: Mexico. Lectotype: In the Torner Collection, no. 0872, annotated by de Candolle “Cuphea secundiflora”, designated as “type” by S. A. Graham, Syst. Bot. Monogr. 20: 153. 1988. Graham stated (Ic., p. 154), “The description is inadequate, and no known specimens of Cuphea have the combination of characters represented on the original drawing. The plate appears to be an artist’s inaccurate representation of either C. paucipetala or C. koehneana, both of which are present in the Sessé & Mocíño herbarium”. DC. plate 322, as cited in Calques des Dessins (Field Mus. neg. 30655), is a fair copy of the Torner 0872. Koehne (Bot. Jahrb. Syst. 7: 40. 1885) misinterpreted Cuphea secundiflora, taking up the name for an assembly of several species as now understood by Graham.


Type-locality [DC.]: Mexico; [Pl. Nov. Hisp.]: Yecapixtla (“Ayacapixtla”), Morelos. Lectotype: In the Torner Collection, no. 0573, which bears the hand-printed name “Lirum album N.” and an annotation, “Cuphea tricolor”, by de Candolle. DC. plate 319 (Field Mus. neg. 30650), as cited in Calques des Dessins, bearing the number “88”, is a good copy of Torner 0573. The icones represent Ic. Fl. Mex. 88, cited in Pl. Nov. Hisp. and included as “Lirum album N.” among the icones obtained during the “First Excursion”, near Mexico City in 1787-88. Not found in the S. & M. herbarium. Relegated by Koehne (Pflanzenreich IV. 216 [Heft 17]: 166. 1903) to the synonymy of Cuphea jorullensis H. B. K. Gen. & Sp. 6: 208. 1823.

Cuphea virginata Cav. Ic. 4: 56, pl. 382, fig. 1. 1798. “Cuphea ascendens fl. mex. icon. ined.” cited in synonymy by DC. in DC. Prodr. 3: 86. 1828.

This record is based on no. 0071 in the Torner collection, without inscription except for the number “109” (which I cannot explain) and an annotation by de Candolle, “Cuphea ascendens”. DC. plate 316, a partial copy of Torner 0071, is also annotated “Cuphea ascendens”. Not found under this name in the S. & M. herbarium. According to Koehne (Pflanzenreich IV. 216 [Heft 17]: 167. 1903), Cuphea virginata is a synonym of C. aequipetala Cav. Ic. 4: 57. 1798.


Type-locality: Apatzingán, Michoacán, where said to flower in October. Ic. Fl. Mex. 306, represented by no. 0852 in the Torner collection, without inscription except for an annotation by de Candolle, “Grislea? sessifolia”. An almost identical copy is an original painting at MA that bears the number “28” and the hand-printed name “Grislea Herbacea”. It was listed by name, with description, and identified as RJL Lám. 68 in the Catálogo de las Laminas del Real Jardín Botánico (RJB 1987, p. 333). It is no. 28 of a manuscript list by Mocín, no. 38 of Ramírez (Anales Inst. Méd. Nac. México 6, pt. 1: 77. 1903). As stated by Ramírez, this is the same as DC. plate 329, an uncolored copy. The plant depicted is a procumbent annual rooting at the base, apparently Ammania auriculata Willd. Hort. Berol. 1: 7. pl. 7. 1803, a species not found in the S. & M. herbarium. The original description of Grislea herbacea, referring as it does to sessile leaves auriculate at base, and some of the inflorescences subumbellate and about 5-flowered, seems to fit Ammania auriculata well enough. In the S. & M. herbarium no. 5006 (CNHM neg. 46683), bears a label “Grislea umbellata N.” and on another ticket “Grislea herbacea L. t. 1. f. 158. [full description]. Habitat in Oppido Apatzingano. Floret Octobri”. The plant was determined by Standley as Adenaria floribunda H. B. K. Perhaps both labels and identities of species have been confused here.


Type-locality: Acahuizotla, Guerrero. Ic. Fl. Mex. 283, represented by two essentially identical paintings in the Torner collection, nos. 0565 and 0566. Each bears the number “283”. Torner no. 0565 bears the hand-printed name “[Grislea crossed out] Umbellata. Sp. N.”, and no. 0566 (in which fewer floral details are shown), has the name in careful script [by Sessé], “Grislea Vnbellata. Sp. N.”. DC. plate 328 is listed in the index to his
collection (G-DC, mss) under the name of *Grislea umbellata*, but the plate itself is missing. The description of *G. umbellata*, though short, probably applies to *Adenanthera floribunda*.

Nelson (1997) designated "Sessé 5006" as "material tipo" of *G. umbellata*. In the S. & M. herbarium, 5006 (CNHBM neg. 46683), determined by Standley as *Adenanthera floribunda* H. B. K. [Nov. Gen. & Sp. 6: 188. pl. 549. 1823], bears an original label "Grislea umbellata N.", also associated with this specimen, probably by inadvertence, is a full-length treatment, with description of *Grislea herbacea*, q.v. for further comment.


Type-locality: Mexico. Type: Based on a Humboldt specimen in Willdenow's herbarium, and on garden specimens grown from seed sent by Alamán. De Candolle's report was based on DC. plate 327, an original painting annotated by de Candolle "Ginoria flavæ?". The painting apparently represents the specimen shown in no. 0526, which is annotated "Ginoria flavæ" by de Candolle, but the two *icones* are not based on the same model. This common Mexican plant is represented in the S. & M. herbarium, but unnamed by the collectors. The name of the species has often been incorrectly cited as "Heimia salicifolia" (H. B. K.) Link.

**Heimia syphilitica** DC. in DC. Prodr. 3: 89. 1828. "Ginoria syphilitica fl. mex. ic. ined.", cited by DC., i.e., as the basis for *Heimia syphilitica*. *Ginoria americana* [Jacq.] sensu Sessé & Moc. Pl. Nov. Hisp. 78. 1888; ed. 2. 73. 1893.

Type-locality [DC.]: "In Mexico ad Yechipixla" [i.e., Yecapixla, Morelos, cited as "Ayacapixla et alios Novae Hispaniae locis, nec non in Cuba" in the Pl. Nov. Hisp.]. The vernacular name was given by de Candolle as "Hanchinol" and by Sessé & Mocín as "Tlachinolli". Lectotype [DC.]: DC. plate 326, an original painting as cited in Calvines des Dessins (Field Mus. neg. 30654), bearing the number "90" and annotated by de Candolle "Ginoria syphilitca". An equivalent copy is no. 0567 in the Torner Collection, which bears the number "90", the hand-painted name "Ginora Americana Linn." and de Candolle's annotations, "Ginoria syphilitca" and "Hanchinol", in addition to a carefully hand-painted note on the supposed ventre of the plant on the cure of syphilis. The *icones* represent ic. Fl. Mex. 90, which is listed among those obtained near México during the "First Excursion", 1787-88. This name is now usually referred to *Heimia salicifolia*, q.v.


Type-locality: Santa Marta, (?Colombia). Lectotype: *Bertero*, in G-DC, not seen, but illustrated by de Candolle in his plate 1, figure 1. Figures 2-4 of the same plate were "copiées d'une planche inédite de la Flore du Mexique". The latter was no. 1827 in the Torner Collection, without inscription except for de Candolle's annotation "Lafoensea mexicana". DC. plate 314 (Field Mus. neg. 30649) is a partially colored copy of Torner 1827. Floral details of the same species are represented in DC. plate XXX [sketches only; neg. 30353]. The plant is apparently not represented in the S. & M. herbarium.


Type-locality: Mexico. Type: DC. plate 324, a copy derived from no. 1403 in the Torner Collection, each annotated by de Candolle "Lythrums acinifolium" and referred by de Candolle (without citation of number) to *Lythrums alatum* Pursh, q.v. Koehne took the name directly from the *Prodr. mexicanum*, where, as he stated, it was cited as a synonym of *L. alatum*. As there is nothing in the S. & M. herbarium under the name of "Lythrums acinifolium", the epithet rests technically upon the *icon*. It was Koehne's intention, however, to provide a new name for the plant known as *Lythrums maritimum* Schlecht. & Cham. (Linnaea 5: 568. 1830, not of H. B. K.), and it was this plant that he described under the name of *acinifolium*. I cannot comment upon the propriety of associating thus the plant of Schlechtendal and Chamisso with the de Candolle plate. According to Koehne's treatment in the *Pflanzenreich* (IV. 216 [Heft 17]: 70. 1903), *Lythrums acinifolium* is related to *L. gracile* Benth., which it resembles in having a very short hypogynous disk and mostly opposite leaves; *L. alatum* is said to have mostly alternate leaves and the disk almost as high as wide.


The references by de Candolle and by Don are based on DC. plate 324, labelled "Lythrums acinifolium", and referred by de Candolle to *L. alatum*. The plate is a copy of the original in the Torner Collection, no. 1403, marked "Lythrums acinifolium" by de Candolle. In the S. & M. herbarium there is nothing under the name "acin[ac]ifolium"; no. 1862 (CNHBM neg. 46641), determined by S. A. Graham as *Lythrums alatum* Pursh, was labelled by the collectors as "Lythrums lineare" [description]: in Mexico".

**Lythrums coccineum** Sessé & Moc. Pl. Nov. Hisp. 78. 1888; ed. 2. 73. 1893. Not *Cuphea coccinea* DC., 1828.
Type-locality: Tixtla, Guerrero. In the S. & M. herbarium nos. 1844 and 1869 (CNHM negs. 46686 and 46697, respectively), labelled “Lythrum coccineum N.”, are according to S. A. Graham Cuphea boissieriana Kochne (Bot. Jahrb. Syst. 7: 42. 1885), or a nearly related species. The plant is described in the Pl. Nov. Hisp. as a glabrous shrub 3 feet high with lanceolate, entire, short-petioled leaves, terminal racemes, scarlet flowers with 12 stamens, and two very short linear reflexed petals. Without doubt this is a species of Cuphea, and very probably of the boissieriana alliance. Nelson (1997) designated "Sessé 1844" as "material tipo" of L. coccineum. In addition to the binomial, and the letter "N.", the label includes the number 931; the number does not apply especially to that specimen, but is the one given to that species after 1800, when an attempt was made to number the whole herbarium; the numbers assigned to the Lythraceae included 931–944 (McVaugh 1990, p. 209).

Lythrum cuphea [L.f.] sensu Sessé & Moc. Pl. Nov. Hisp. 78. 1888; ed. 2. 73. 1893.
Localities cited: México, D.F. ("Habitat Mexici et in Brasilia"). The name Cuphea viscosissima Jacq. was cited in synonymy. Not described. In the S. & M. herbarium no. 1851 (CNHM neg. 46630), labelled "Lythrum cuphea", was determined by S. A. Graham as Cuphea aequipedata Cav.

This report was based on no. 0911 in the Turner Collection, without inscription except for an annotation by de Candolle, "Lythrum satiareafolium". DC. plate 325 is a copy. George Don (Gen. Hist. 2: 712. 1832) followed de Candolle but spelled the name "satureafolium". Not found under this name in the S. & M. herbarium. A specimen in herb. Webb (FL) is marked by Pavón "Cuphea laterifolia"; perhaps this was a corruption of "satureafolium". In the S. & M. herbarium no. 1868 (CNHM neg. 46646, 46647), determined by Graham as Lythrum lanceolatum Ell., was named by the collectors as a species of Lythrum, with an epithet not published by them.

"Lythrum [virgatum crossed out] longifolium. [description]. No. 71. Lythrum virgatum le llamó Mociflo, y pienso q9, no es el."
In the S. & M. herbarium no. 1889 (CNHM neg. 46679), labelled as above (apparently by Ignacio León beginning with "No. 71.") was determined by Graham as Cuphea angustifolia Kochne. Presumably the specimen was collected in the State of Puebla.

Lythrum parviflorum Sessé & Moc. Pl. Nov. Hisp. 78. 1888; ed. 2. 73. 1893, not of Reichenbach.


Lythrum pemphis [L.f.] sensu Sessé & Moc. Pl. Nov. Hisp. 78. 1888; ed. 2. 73. 1893; Fl. Mex. ed. 2. 121. 1894.

Lythrum purpureum Sessé & Moc. Fl. Mex. ed. 2. 121. 1894.
Type-locality: Mountains, Temascaltepec, Edo. de México, where said to flower in July. In the S. & M. herbarium no. 1871 (CNHM neg. 46654), labelled "Lythrum purpureum N.", is according to Graham Lythrum vulneraria Schrank, Pl. Rar. Hort. Monac. pl. 27. 1819. The original description states that L. purpureum has 12 stamens, but "variat floribus hexandris": L. vulneraria is hexandro. Kochne apparently did not notice this name in his treatment of the Lythraceae in Das Pflanzenreich.

Localities cited: Malacatepec, Estado de México ("in montibus de Malacatepec. Floret Augusto"). Described at some length. In the S. & M. herbarium no. 1843 (CNHM neg. 46688), labelled "Lythrum racemosum N. Melaniun", and another sheet of the same number (neg. 46687), labelled "Lythrum scabrum. 937", were determined by S. A. Graham as Cuphea pauciflora S. A. Graham, Syst. Monogr. 20: 118. 1988; she cited the number in publication (l.c., p. 165). She also cited as C. pauciflora nos. 1880 and 1883, which were not called "Lythrum racemosum" on the original labels. Malacatepec was visited by Sessé, with Castillo, probably in August 1792 (cf. McVaugh 1977, page 168). It was ca. 20 km N of Valle de Bravo and 35 km E of Zitácuaro in eastern Michoacán. Nelson (1997) designated "Sessé 1843" as "material tipo" of "Lythrum racemosum Sessé & Moc.", which is inappropriate as no such name exists.
Lythrum repens Sessé & Moc. Fl. Mex. ed. 2. 121. 1894.

Type-locality: Fields, Puerto Rico, where said to flower in July. Referred by Urban (Symb. Antill. 4: 436. 1910) to the synonymy of Cuphea parsonsi (L.) R. Br. In the S. & M. herbarium no. 1849, labelled “Lythrum repens N.”, is so badly pulverized as to be unrecognizable. The plant was said by Sessé & Mociño to be “Affinis Lythro parsonsiæ”. The description was of a small creeping scabrous herb with opposite ovate entire leaves, short terminal spikes, violet 6-androceous and 6-petalous flowers and ovate subrounded bracts. Nelson (1997) designated “Sessé 1849” as “material type” of Lythrum repens, reporting Graham’s notation, “Material insufficient for identification.”

Lythrum tuxtlense Sessé & Moc. Fl. Mex. ed. 2. 121. 1894.

Type-locality: “in Tuxtlae rivis. Floret Novembri” [i.e., probably San Andrés Tuxtla, Veracruz]. Supposed by de Candolle (in DC. Prodr. 3: 88. 1828) to be a synonym of Cuphea bracteata Lag., q.v. (that is, Cuphea aequippetala Cav.). Not found in the S. & M. herbarium. Described as suffrutescous, 3 to 4 feet long, diffuse; leaves opposite, oblong-lanceolate, entire, glabrous, subacute; peduncles axillary, 1-flowered; flowers hexapetalous, dodecandrous, purple, “Cupheae similimii”. De Candolle’s reference was based on no. 1985 in the Torner Collection, or on DC. plate 315; see Cuphea bracteata.

Evidently Mociño later found what he supposed to be the same species in Central America. He recorded Lythrum tuxtlense, with the same character as that in Fl. Mex. but no accompanying description, with locality “in Servatoropis rivulis. Floret Decembris” (cf. Mociño 1993, p. 83, and Maldonado Polo 1996, p. 241).


Localities cited: Acachuiotzla, Guerrero [“in Europa et Acachuiotzla. Floret Julio”]. Not described. In the S. & M. herbarium no. 1864 (CENM neg. 46634), labelled “Lythrum virgatum N.”, was described by S. A. Graham as Lythrum vulnerarium Schrank.

Lythrum vulnerarium Sessé & Moc. PL Nov. Hisp. 78. 1888; ed. 2. 73. 1893. Not Lythrum vulnerarium Aiton ex Schrank, 1819.

Type-locality: México, D.F. Lc. Fl. Mex. 89, not seen. In the S. & M. herbarium nos. 1885 and 1886 (CENM negs. 46672, 46673), labelled “Lythrum vulnerarium. Yerba del Cancre” and “Cuphea” with the same epithet, are according to Graham Cuphea aequippetala Cav. Lc. 4: 47. 1798. The description of Lythrum vulnerarium, however, is of a subshrub 3 feet high, roughish, with opposite, elliptic, acute, serrate, glabrous leaves, few-flowered axillary peduncles, purple dodecandrous sub-papilionaceous flowers. This might be a species of Cuphea, but with the plant and the flowers larger than those of C. aequippetala. Specimens marked by Pavón “Cuphea vulneraria N.E. exist at G (ex herb. Lambert) and at Fl (herb. Webb) and may be studied to see if perhaps they represent another species. Nelson (1997) designated “Sessé 1842” as “material type” of Lythrum vulnerarium and reported its identity as Fuchsia microphylla H. B. K. No. 1842 (neg. 47269) is indeed labelled “Lythrum Vulnerarium N.” and was determined by Standley as Fuchsia microphylla Hemsl. (which is a synonym of F. microphylla). It is possible that this is the “true” Lythrum vulnerarium of the description as cited above, but in any event it seems that some error (either in identification or in labelling) is involved here.

Magnoliaceae


Type-locality [DC.]: “in Chapultepec et Quauhnahuaca (fl. mex.).” [Pl. Nov. Hisp.]: “in oppido Chapultepepe prope Quauhnahuacami”. The locality seems to have been slightly misstated by de Candolle; Chapultepec, [Morelos], is a small place just east of Cuernavaca. Lectotype [DC.]: DC. plate 6; an original painting, as cited in Calques des Dessins (Field Mus. neg. 30445). An almost exact duplicate is in the Torner Collection, no. 0599, which bears the number “216” [apparently by Mociño, almost erased and “256” added in another hand], the hand-printed name “[Magnolia Glauca. Linn. crossed out]”, and “Magnolia mexicana” added by de Candolle. The icons represent Ic. Fl. Mex. 216, cited in Pl. Nov. Hisp. A specimen at BM ex herb. Lambert, marked by Lambert “Mexico. Herb. Pavon”, and by Pavón “Magnolia glauca de Nueva España”, is according to J. E. Dandy Talauma mexicana. In the S. & M. herbarium no. 2327 (CNHM neg. 46693), labelled “Magnolia glauca”, is according to Fausisto Miranda Talauma mexicana, no. 2326 (negs. 46695, 46696), the same species according to Standley, was named “Magnolia grandiflora” by the collectors.


Although the name Magnolia tripetala was included by Palau (4: 420. 1786), there is no indication in their text that Sessé & Mociño were following him. In the S. & M. herbarium no. 2327bis (CNHM neg. 46694), labelled “Magnolia tripetala. 1078.”, was determined by Standley as Magnolia dealbata Zucc. Nelson (1997) designated “Sessé 2327bis” as “material type” of “Magnolia tripetala Sessé & Moc.”.

The numbers “1078” and “1077” (with S. & M. no. 2326, neg. 46695, named “Magnolia grandiflora. 1077”)
Magnoliaceae

Malpighiaceae


Type-locality [Rich.]: Jardin des Plantes, Paris. Richard noted in the protologue that the plant had flowered in the Paris garden in 1810 from seeds sent from Vienna under the name of Aspicarpa urens.

An original painting at MA, without significant contemporary inscription, was reproduced in 1887, reduced to ca. 14 by 10.5 cm (RJB 1887, p. 230), and identified as "[Cyphocarpus] RJB Lámina 8." It appears to be the same as that catalogued as "Lám. 8" and described in the same publication (i.e., p. 319). As far as I have ascertainment, the painting was not copied by Altamirano in 1898. The plant depicted was identified as H.R. Anderson (1998) as Aspicarpa hirtella. Presumably the painting is one of those sent to Madrid from Guadalajara in 1791. The artist's technique, judging from the published illustration, is like that seen in many of the icones that were executed in the region of Mexico City (where Aspicarpa hirtella is well known) during the early years of the Expedition.

Type-locality [Lag.]: New Spain; grown in the Madrid Botanical Garden, the source not stated, but surely from Mexico. Lectotype: sheet no. 265330 at MA, labelled as Aspicarpa urens Lag. in Lagasca's hand, designated by H.R. Anderson (Contr. Univ. Mich. Herb. 22: 1. 1999). The name Aspicarpa urens was referred by Niedenzu (Pflanzenreich IV. 141 [Heft 93]: 560. 1928) to the synonymy of Aspicarpa hirtella L. C. Rich., and this was confirmed by W. R. Anderson (in litt. 1998, and i.e. 1999). A sheet at G, ex herb. Barbey-Boisset, apparently correctly named as A. hirtella, is marked by Lagasca "Hab. in Nov. Hispan. Colit. in RHM".

Banisteria.

Sessé & Mocíñó used the name Banisteria in a very inclusive sense, as was only natural at the time they were working. They referred to that genus plants that are treated now as members of Aspicapa, Callaeeum, Gaudichaudia, Heteropteris, Sigmaphyllon, or Triopteris. The disposition of their names is not always easy because differences between genera are not always evident from the published descriptions or from the pertinent illustrations.


Type-locality [DC.]: "In Mexico", Lectotype: In the Torner Collection, no. 0951, without inscription except for annotations by de Candolle, "Banisteria ? Triopteris? brevipes". DC. plate 129, as cited in Calques des Dessins (Field Mus. neg. 30540), is an indifferent copy of Torner 0951. W. R. Anderson (i.e. 1987) referred Banisteria virgata to the synonymy of Banisteria (Aspicarpa) brevipes. Type-locality [Fl. Mex.]: Near [west of] Guadalajara, Jalisco, at a place called Astillero ("in Praedio PP. Belemitarum" [i.e., Carmelitarum]; Astillero dicto hauz procul a Guadalaxara. Floret Julio). Not located under any name in the S. & M. herbarium. A specimen at G, ex herb. Barbey-Boisset, determined by Mueller Arguwenis as "Gaudichaudia brevipes, Juss.", is a very good match for DC. plate 129, as noted by Mueller, and for Torner 0951, as noted by Anderson (1987, p. 55). This sheet bears a printed label "Nueva España Herb. Pavon" and an original S. & M. label "10-3 Banisteria microphylla". Niedenzu (Pflanzenreich IV. 141 [Heft 91]: 245. 1928) did not know the identity of Banisteria brevipes DC.; Standley (Contr. U.S. Nat. Herb. 23: 570. 1923) referred it doubtfully (and erroneously) to the synonymy of Rosanchus subverticillatus (Rose) Small.


Type-locality: Dry fields near Havana, Cuba, where said to flower in August. Not located in the S. & M. herbarium. Described as twining, glabrous, the leaves obovate, entire, veiny-reeticulate, the lower sometimes ovate, acuminate; racemes axillary and terminal: pedicels filiform, jointed; petals small, concave, rosy; "seeds" 3-winged [in the description, "semina 3, alata", but in the character "semimis triatlas", cf. the epithet "ineaperta"]. The authors added a note, "Obs. An Hiriea reclinata?". According to W. R. Anderson (in litt. 1998), "this is definitely Triopteris rigida Sw.".


Localities cited: Cuernavaca, Morelos ["in Quauhnahuacae agris alisique calidioris Americae locis. Floret Julio"]. Inadequately described. Not found in the S. & M. herbarium. Not identified.


The name Banisteria hispida appears under i.e. Fl. Mex. 451, in a manuscript list of the icones made on the "Third Excursion" [i.e., between Mexico City and Guadalajara, 1790-1791]. This is presumably the same icon as the one known to Ramírez, an original painting at MA (one
of those forwarded to the King from Guadalajara in 1791), cited by Ramírez as no. 6. It bears the hand-printed name "Banisteria Hispida." It was listed by name, with description, and identified as RJB Lám. 78 in the Catálogo de las Láminas del Real Jardín Botánico (RJB 1987, p. 336). It was well reproduced in color, nearly full size at 28 by 18.3 cm, and identified as RJB Lám. 78 (RJB 1987, p. 279). It was not included in Mociño's list, but it may be surmised that it represents no. 36 of that list, "Banisteria scandens". According to W. R. Anderson (in litt. 1999), the drawing probably represents an individual plant of Callaeum macropterus (DC.) D. M. Johnson in which the fruits are not fully developed. The drawing also shows a complement of anthers 'much closer to the usual 10 than to the 5 of Banisteria pentandra [and other 'Banisterias' described by Sessé & Mociño as pentandrous, which are referable to Gauchichaudia'].

No exact copy of Ic. Fl. Mex. 451 exists in the Torner Collection. No. 0690 in the Torner Collection, representing a species of Gauchichaudia and bearing the annotation by de Candolle, "Tripteras podocarpa", was surely based on the same model, but as discussed below under Hiera podocarpa, the artist seems to have confused two species in different genera; see Hiera macroptera and Hiera podocarpa.

Banisteria laurifolia (L.) sensu Sessé & Moc. Pl. Nov. Hisp. 73. 1888; ed. 2. 68. 1893; Fl. Mex. ed. 2. 117. 1894.

Localities cited: Apatzingán, Michoacán, where said to flower in October; also Jamaica [a locality taken from Linnaeus]. Ic. Fl. Mex. 284; this is presumably represented by an original painting at MA that bears the pencilled number "37" and the hand-printed name "Banisteria Laurifolia." It was listed by name, with description, and identified as RJB Lám. 79 in the Catálogo de las Láminas del Real Jardín Botánico (RJB 1987, p. 336). It was well reproduced in color, reduced to ca. 15.7 by 10.5 cm, and identified as RJB Lám. 79 (RJB 1987, p. 257). It is no. 37 of a manuscript list by Mociño (at MA) and no. 7 of Ramírez, Anales Inst. Méd.-Nac. México 6, pt. 1: 73, 1903). As noted by Ramírez, this original corresponds to DC. plate 130, which is a copy of no. 0759 in the Torner Collection, the type of Hiera ? macroptera DC., q.v. [Callaeum macropterus (DC.) D. M. Johnson].

In the S. & M. herbarium (no. 1104; CNHM neg. 46720), the name Banisteria laurifolia is applied to another species, which was determined by Standley as the true B. laurifolia L. [Heteropterys laurifolia (L.) Adr. Juss.]. That species is common in Puerto Rico, and may be the one described under the name of B. laurifolia [L.] sensu Sessé & Moc. Fl. Mex. ed. 2. 116. 1894, with locality given as "Mountains of Tumaco" [i.e., Humacao, according to Urban], Puerto Rico, and the flowering season said to be July.


Type-locality: [from Pl. Nov. Hisp.]; "cum praecedenti", i.e., B. judgens, cited from Cuernavaca, Morelos, and other hot regions in America. There is an apparent discrepancy here, as it is unlikely that Sessé & Mociño would have given the name "michoacensis" to a plant from Cuernavaca. The correct locality is evidently that given in the Fl. Mex., there "cum praecedenti" refers to Apatzingán, Michoacán, which is cited under B. laurifolia on the same page. Not located in the S. & M. herbarium. Described as scabent, glabrous, the leaves opposite, lanceolate, lustrous, very short-petiolate; glands subround, paired at the summit of the petiole; racemes terminal and from the upper axils, compound, subspicate; flowers yellow; bracts two in the middle of the pedicel; capsules spreading, united at base, narrower on the inner side. Not identified.


Type-locality: Puerto Rico, where said to flower in August and September. Referred by Urban (Symb. Antill. 4: 328. 1905) to the synonymy of Heteropterys ("Heteropteris") purpurea (L.) H. B. K. Nov. Gen. & Sp. 5: 163. 1821. This synonymy was confirmed by W. R. Anderson (in litt. 1998). A sheet in the S. & M. herbarium, no. 1105 (CNHM neg. 46722), labelled "Banisteria microphylla N.", was determined by Standley as Heteropteris purpurea. See also under Banisteria brevipes, above. Nelson (1997) designated "Sessé 1105" as "material tipo" of B. microphylla.

Banisteria mucronata DC. in DC. Prodr. 1: 589. 1824.


Banisteria ? paniculata DC. in DC. Prodr. 1: 591. 1824, with citation of "fl. mex. ic. ined." as the basis for the name.

Type-locality: "in Mexico". Lectotype: In the Torner Collection, no. 0680, without inscription except for the annotation by de Candolle, "Banisteria paniculata". DC. plate 131, as cited in Calques des Dessins (Field Mus. neg. 30542), is a colored copy of Torner 0680. Not found in the S. & M. herbarium. Niedenzu (Fl. Planzenreich IV. 141 [Heft 93]: 452. 1928) treated this species provisionally as a Banisteria but also (i.e., p. 371) cited it as a synonym of Heteropterys ("Heteropteris") laurifolia (L.) Adr. Juss. Arch. Mus. Hist. Nat. 3: 458. 1843.
Among specimens cited as *H. laurifolia* subvar. *floribunda* (H. B. K.) Nied., Niedenzu (i.c., p. 372) included "Pavon no. 925", said to have come from Mexico. This was a reference to a specimen in G-Del, determined by Niedenzu about 1925, with printed label "Mexique Pavon" and marked by Pavon "925. Banisteria nitida sp. n.". It is possible or even likely that de Candolle erred in supposing the original painting (Torner 0680) to have come from Mexico. According to W. R. Anderson (in litt. 1998), the painting surely represents a species of *Heteropterys*: "The leaves and inflorescence are a good match for those of *H. laurifolia* (L.) Adr. Juss., but ... the petals of *H. laurifolia* are yellow, and in 680 they are clearly pink. None of the pink-flowered species of *Heteropterys* in Mexico have leaves like that, so if the petal-color is right I don't know what species this can be".

Type-locality: "In calidioribus Mectepacii montibus", where said to flower in October; (and other similar places in New Spain). [Locality not positively identified; predominantly Mexican, and near to or west or southwest of México, D.F. See notes in Contr. Univ. Michigan Herb. 11: 169. 1977]. Not located in the S. & M. herbarium. W. R. Anderson (in litt. 1998) comments that this was certainly a species of *Gaudichaudia*, not surely identifiable, but perhaps *G. cycloptera* (DC.) W. R. Anderson.

**Banisteria procumbens** Sessé & Moc. Fl. Mex. ed. 2. 117. 1894.
Type-locality: "In anfractibus" near Guadalajara, Jalisco, where said to flower in June and July. Described as suffruticos, procumbent, villous; leaves glabrous, opposite, ovate, entire, subsessile; flowers yellow, subumbellate, terminal, pentandrous; peduncles jointed near the apex; pedicellus bracts opposite, tiny. Not in the S. & M. herbarium. Not identified, but from the description (and if in fact a Malpighiaceae plant) it must be either a species of *Gaudichaudia* or *Aspicarpa*, according to W. R. Anderson (in litt. 1997).

Type-locality: In the island of Puerto Rico, where said to flower in August and September. Urban (Symb. Antill. 4: 330. 1905) treated this as a synonym of *Stigmaphyllon* ["Stigmaphyllum"] *tomentosum* (Desf.) Nied., a species chiefly Puerto Rican in distribution, now correctly known as *Stigmaphyllon floribundum* (DC.) C. Anderson, Syst. Bot. 11: 128. 1986. In the S. & M. herbarium no. 1102 (CNHM neg. 46722), labelled "Banisteria rotundifolia", is *S. floribundum* according to Anderson. Another sheet of no. 1102 (neg. 46718), labelled "Banisteria rotundifolia" and on another ticket "Malpighia rotundifolia", was determined by Standley as a predominantly Mexican species long known as *Heteropteris beecheyana* Adr. Juss., but now correctly known as *Heteropterys brachiata* (L.) DC. (cf. W. R. Anderson, Contr. Univ. Michigan Herb. 19: 370–371. 1993). The determination of no. 1102 of the S. & M. herbarium as *H. brachiata* was confirmed by Anderson (1998). Presumably that species and the *Stigmaphyllon* were confused by Sessó & Mocino. See *Malpighia rotundifolia*.


**Banisteria umbellata** Sessé & Moc. Fl. Mex. ed. 2. 117. 1894.
Type-locality: Not stated. Not found in the S. & M. herbarium. The name is quite unidentifiable. The plant is described in general terms in 10 words only.

**Banisteria varifolia** DC. in DC. Prodr. 1: 588. 1824. "B. vitifolia fl. mex. ic. ined. forsan eadem", cited in synonymy by DC., i.e.
Type: Colombia, Santa Marta. Bertero (G-DC, the holotype cited by C. Anderson 1987, p. 26, and 1997, p. 199). In 1987 the same author assigned *B. varifolia* to the synonymy of *Stigmaphyllon humboldtianum* (DC.) Adr. Juss., and in 1997 she included both *B. varifolia* and *S. humboldtianum* in the synonymy of *Stigmaphyllon dichotomum* (L.) Griseb.

The basis for de Candolle's report of *Banisteria vitifolia* is no. 0698 in the Torner Collection, without inscription except for an annotation by de Candolle, "Banisteria vitifolia". DC. plate 132 (Field Mus. neg. 30543) is a partial copy of Torner 0698. According to C. Anderson (in litt. 1998), the *icon* cannot be positively identified to species, but represents either *Stigmaphyllon dichotomum* (L.) Griseb., or *S. lindeni* (Adr. Juss. As noted by the same author (Contr. Univ. Michigan Herb. 16: 28. 1987), reports of *Stigmaphyllon humboldtianum* (=*dichotomum*) from Mexico and most of Central America are based on misidentified collections of *Stigmaphyllon*]
**Malpighiaceae**

*lindeanum.* It is probable that the plant depicted in Torner 0698 is *S. linderanum* Adr. Juss.

The name "*Banisteria viitfolia*" was never published by Sessè & Mocinò, nor have I been able to locate it in their herbarium. It was credited to "Sessè & Mocinò ex DC." by C. Anderson (1997, p. 265), but the fact hardly justifies this. What de Candolle actually wrote ("B. viitfolia fl. mex. ic. ined. forsan cadem") was in essence merely that *B. viitfolia* of the unpublished *icon* representing the flora of Mexico (the name he himself had written on the drawing) was perhaps the same as his own *B. varitfolia*.

**Banisteria volubilis** Sessè & Moc. Pl. Nov. Hisp. 74. 1888; ed. 2. 69. 1893.

Type-locality: San Angel ["in montibus Sancti Angeli. Floret Augusto"], near Mexico, D. F. Not found in the S. & M. herbarium. Said to be 5-androus, and very similar to *Banisteria pentandra*, which is probably a *Gaudichaudia*; see *Hiraea?* podocarpa. W. R. Anderson (in litt. 1998) informs me that on the basis of the original description and the cited locality, he is treating *Banisteria volubilis* as a synonym of *Gaudichaudia cyanchoides* H. B. K., which is common in the vicinity of San Angel.


"Mexico", "Pavon n. 859 [Malpighia nitida]. n. 926 [Banisteria acuminata] und a. 1827 [Malpighia nitida]", cited by Niedenzu, Pflanzenreich IV. 141 [Heft 94]: 662. 1928. The specimens cited above are all in G-Del, all marked "Peru". It is at least doubtful whether or not they came from Mexico as Niedenzu supposed. In the S. & M. herbarium a specimen named *Malpighia nitida* belongs to the genus *Byronima*.

W. R. Anderson kindly informs me (in litt. 1998) that the syntypes of var. *mexicana* (Galeotti 4340, Kerber 153a, and Kerber 193) were in fact Mexican in origin. The "Pavon" specimens that Niedenzu cited 30 years later are still of doubtful origin, and should be re-examined by a competent specialist.

**Bunchosia? sessilifolia** DC. in DC. Prodr. 1: 582. 1824.

Type-locality: "in Mexico". Type: Not cited; de Candolle gave no information as to the source of his material. The description is apparently based on no. 1318 in the Torner Collection, a painting without inscription except for the annotation by de Candolle, "Malpighia? sessilifolia". DC. plate 138, an outline sketch annotated by de Candolle "Malpighia? sessilifolia", is a copy of Torner 1318. The plant depicted appears to be a *Bunchosia*. Not found in the S. & M. herbarium. Unknown to Niedenzu (1928, p. 673). "Definitely a *Bunchosia*", but unidentifiable as to species, according to W. R. Anderson (in litt. 1998).


Type-locality [DC.]: "In Mexici montibus"; [Fl. Mex.]: Mazatlan, Guerrerro, where said to flower in May. Lectotype [DC.]: DC. plate 134, as cited in Calques des Dessins (Field Mus. neg. 30543), an original painting numbered "260" (apparently by Mociño), and bearing the hand-printed name "Malpighia" and the name handwritten [by Sessè] "crassifolia Linn.". A very nearly identical duplicate in the Torner Collection is no. 0597, numbered "260", bearing the hand-printed name "Malpighia [Pulchra. Sp. N. crossed out]", the hand-written name [by Sessè] "[crassifolia Linn. crossed out]", and the annotation by de Candolle, "pulchra". The *icones* both represent Ic. Fl. Mex. 260. The names *Malpighia pulchra* and *M. crassifolia* are equated as above because the treatments in the two floras differ only in details of arrangement and wording and clearly are based on the same plant. The description of *M. crassifolia* [sic] in both editions of *Flora Mexicana*, though perhaps based on the same species as that described in *Plantae Novae Hispaniae*, was evidently prepared independently.

Ic. Fl. Mex. 260 is cited in Pl. Nov. Hisp. under the name of *Malpighia crassifolia*, confirming the supposition that *M. crassifolia* (sensu Sessè & Mocinò) was the same as *Byronima pulchra* DC. as well as *Malpighia pulchra* Sessè & Moc. According to Niedenzu (Pflanzenreich IV. 141 [Heft 94]: 724--725. 1928), *Byronima pulchra* is the common Mexican and Central American species that has passed as *B. crassifolia* (L.) H. B. K. In the S. & M. herbarium nos. 1107, 1112, and 1113bis (CNHM negs. 46711--46713), originally determined as three different species of *Malpighia* (including *M. crassifolia*, no. 1107), are all according to Standley *B. crassifolia*.

**Galaphimia glandulosa** [var.] oblongifolia DC. in DC. Prodr. 1: 582. 1824.

Type-locality: Mexico. Lectotype: In the Torner Collection, no. 0148, numbered "104" (which I cannot explain) but otherwise without inscription except for the annotations by de Candolle, "Galaphimia lanceolata Cav.", and "oblongifolia". DC. plate 139, as cited in Calques des Dessins (Field Mus. neg. 30547), is a partial copy of Torner 0148. In the S. & M. herbarium no. 4902 (CNHM neg. 46716), apparently the only representative of the genus *Galaphimia* in the herbarium, is named by Standley as *Galaphimia glauca* Cav. By the collectors it was labelled "[Genus . . . . . . . . . . . ic. Tiacochochitl. Ante Banisterianum]"; see below under *Galaphimia gracilis*. Niedenzu (Pflanzenreich IV. 141 [Heft 94]: 599. 1928) did not comment upon the identities of this and the following variety except to exclude them from the synonymy of *G. glandulosa*. According to W. R. Anderson (in litt. 1998), the genus *Galaphimia* is currently under revision, but at the
present time neither the above specimen nor the icones
have been satisfactorily named, but represent either
*Galphimia glandulosa* Cav., or *G. glauca* Cav.

**Galphimia glandulosa** [var.] α *ovalifolia* DC.
in DC. Prodr. 1: 582. 1824.

Type-locality: Mexico. Lectotype: DC. plate 140, an
original painting as cited in Caules des Dessins (Field
Mus. neg. 30548). No. 0269 in the Torner Collection,
which bears the numbers “225” [nearly erased] and “53”,
the hand-printed name “Tlitlaxocochitl. Mex.”, and the
annotation by de Candolle, “Galphimia ovatifolia”, is a
good copy of DC. 140. It is probable that another copy
of the same is the icon included as no. 53, “Tryallis
Tryallis”, in Mocino’s list of paintings forwarded to
Madrid in 1791 (McVaugh 1977, p. 112). I have not
located this copy. For discussion, see above under the
preceding variety.

**Galphimia gracilis** Bartling, Linn.aea 13: 552.
1839.

This primarily Mexican species is reported by Niedenzu
(Pflanzenreich IV. 141 [Heft 94]: 596. 1928) from “Peru”
on the basis of a collection by “Pavon”. Although the
species, according to Niedenzu (I.e.) is widely distributed
throughout the tropics as an ornamental, it may be
doubted that the above record is authentic, even though it
seems to have been based on a specimen at G-Del,
determined by Niedenzu in 1925, marked by Pavón
“Clasis 10. Genus novum. Peru”. This seems to
represent one of Pavón’s occasional lapses in recording
localities on specimens. Another sheet in G-Del, ex herb.
Lambert, is marked by Lambert, “Mexico Herb. Sesse &
M[jacino] Genus novum de Mexico. Class. 10 Galphimia
Cav.”, and a third sheet, evidently also from the S. & M.
herbarium, annotated by Niedenzu but not cited by him.
marked “Cl.10. Tlatlaxocochitl de Mexico. Ante
Banisterian”. Perhaps this last, and the preceding sheet,
represent a part of the same gathering as that cited above
under *Galphimia glandulosa* [var.] β *oblongifolia*.


Mus. Hist. Nat. 3: 595. 1843]: “v.s. herb. Webb. a
Pavonio missam”; not seen. Hemsley (Biol. Centr.
Amer. Bot. 1: 157. 1879) knew the species only from the
original diagnosis. Niedenzu, apparently without having
seen the type, referred it doubtful (Pflanzenreich IV. 141
[Heft 91]: 243. 1928) to the synonymy of *Gaudichaudia
albida* Schlecht. & Cham., var. *subrotundata* Nied.
W. R. Anderson (in litt. 1998), having studied a
photograph of the type (at FI), concluded that it was extremely
likely that *G. webbiana* is a synonym of *Aspicarpa brevipes*; cf.
*Banisteria? brevipes*.

**Hiraea? acuminata** DC. in DC. Prodr. 1: 586.
1824, with citation of “fl. mex. ic. ined.” as the basis for

Type-locality: “in Mexico”. Lectotype: In the Torner Collection, no. 0819, bearing the number “223” (which I
cannot explain) but otherwise without inscription except for
an annotation by de Candolle, “Trioepis acuminata”.
According to W. R. Anderson (in litt. 1998), Torner 0819
represents *Gaudichaudia cyanoides* H. B. K. DC. plate
128, as cited in Caules des Dessins (Field Mus. neg.
30539), is a copy of Torner 0819. The name *Hiraea?
acuminata* was referred by Niedenzu (Pflanzenreich IV. 141
[Heft 91]: 245. 1928) to “Species incerta, mihi invisae”.
Standley (Contr. U. S. Natl. Herb. 23: 571. 1923) referred
it doubtfully to the synonymy of *Gaudichaudia macronata*,
q.v. below under *Hiraeta*.

In the S. & M. herbarium no. 4678 (CNHM neg.
46707), not identified by the collectors, was determined by
José Cuatrecasas as *Gaudichaudia acuminata*, but according
to Anderson (1998) it represents a different species from
the one depicted in Torner 0819, namely one of the
complex involving *Gaudichaudia albida* Schlecht. &
Cham.

**Hiraea? cycloptera** DC. in DC. Prodr. 1: 586.
1824, with citation of “fl. mex. ic. ined.” as the basis for
the name. *Gaudichaudia cycloptera* (DC.) W. R.
1897.

Type-locality: Mexico. Lectotype: In the Torner Collection, no. 0888, without inscription except for the
annotation by de Candolle, “Trioepis oblongifolia”.
The painting was reproduced in full color by Grobet (1982,
12th plate following p. 64) under the name of “Trioepis
[sic] oblongifolia”, and it was reproduced under the same
name in black-and-white (half-tone), reduced to ca. 9.4 by
5.8 cm. by Lozoya (1984, p. 177). DC. plate 125, cited in
Caules des Dessins (Field Mus. neg. 30536), is a copy of
Torner 0888. Referred by Niedenzu (Pflanzenreich IV.
141 [Heft 91]: 146. 237. 1928) to the synonymy of
Hosianum Braunsberg 4: 26. 1912. Not found in the S.
& M. herbarium. Anderson (1987), in making the new
combination in *Gaudichaudia*, pointed out that de
Candolle’s name was the oldest for the species long
ser. 2. 13: 252. 1840.

**Hiraea? macroptera** DC. in DC. Prodr. 1: 586.
1824, with citation of “fl. mex. ic. ined.” as the basis for
the name. *Mascagnia macroptera* (DC.) Nied. Arbeien
1908. *Calicuea macroptera* (DC.) D. M. Johnson,
Sessè ex Ramírez, quoad iconem martirensen.

Type-locality: Mexico. Lectotype: In the Torner Collection, no. 0759, bearing the number “284” but
otherwise without inscription except for the annotation by
de Candolle, "Hiraea maoptera". DC. plate 130, as cited in Calques des Dessins (Field Mus. neg. 30541), is a colored copy of Torner 0759. A better copy, showing a flowering and fruited branch only, is an original painting at MA, no. 37 of a list by Mocino (MA, mss), which bears the hand-printed name "Banisteria Laurifolia". All these icons represent IC. Fl. Mex. 284, cited in the Pl. Nov. Hisp. as Banisteria laurifolia, q.v. for discussion and citation of specimens. The type-locality of Hiraea? maoptera is presumably near Apatzingán, Michoacán, as cited under B. laurifolia.

The drawing of Banisteria hispida, q.v., is known only from the copy at MA. The name was also applied by Sessé & Mocino to herbarium specimens representing the genus Gaudichaudia, but the drawing seems to represent a vining species with the habit of Gaudichaudia but with very different fruits. My colleague W. R. Anderson (in litt. 1999), after study of the illustration, comments as follows: "The samaras, which are shown very well and consistently in the drawing, are all wrong for Gaudichaudia. The samara has two lateral wings, divided to the nut at both apex and base, which does occur [in Malpighiaceae] but never in Gaudichaudia. [The only other possibility in that part of Mexico would seem to be the genus Callaena, of which two species occur in that region]. Dr. Anderson goes on to say that one species, C. maoptera, is much commoner than the other, and therefore much more likely to have been picked up. "The samaras in the drawing are too small for C. maoptera, of course, but they start small and enlarge, and I suppose the drawing was made when they were quite immature."

See further comment under Hiraea podocarpa.


Type-locality: "in Mexico". Lectotype: In the Torner Collection, no. 0145, annotated by de Candolle, "Tripterus maaconata", but without other inscription. DC. plate 124, as cited in Calques des Dessins (Field Mus. neg. 30535), is a copy of Torner 0145. This species was referred by Niedenzu (Pflanzenreich IV. 141 [Heft 91]: 240. 1928) to the synonymy of Gaudichaudia cyanachoaides H. B. K. Nov. Gen. & Sp. 5: 121. 1821. This synonymy was confirmed by W. R. Anderson (in litt.) in 1998.

A specimen at G, ex herb. Barbey-Boissier, with printed label "Nueva España Herb. Pavon", was compared by Mueller Argovicensis with the type plate of Hiraea? maaconata and referred by him to Gaudichaudia maaconata.


Type-locality: Mexico. Lectotype: In the Torner Collection, no. 0957, annotated by de Candolle, "Tripterus oxyota", but without other inscription. DC. plate 126, as cited in Calques des Dessins (Field Mus. neg. 30537), is a copy of Torner 0957. This species was unknown to Niedenzu (Pflanzenreich IV. 141 [Heft 91]: 245. 1928); it was referred doubtfully by Standley (Contr. U. S. Natl. Herb. 23: 571. 1923) to the synonymy of Gaudichaudia cyanachoaides; see Hiraea? maaconata, above. W. R. Anderson (in litt. 1998) believes that Gaudichaudia [Hiraea] oxyota is "certainly not the same species as G. cyanachoaides".


Type-locality: "in Mexico". Lectotype: DC. plate 127, as cited in Calques des Dessins (Field Mus. neg. 30538), an original painting, bearing the number "132" (which I cannot explain), the annotation by de Candolle "Tripterus podocarpa", and in an earlier hand, "volubilis". A somewhat more complete copy of the same is no. 0690 in the Torner Collection, labelled by de Candolle, "Tripterus podocarpa". According to W. R. Anderson (in litt. 1999), "The drawing of [Hiraea] podocarpa must represent Gaudichaudia cyanachoaides [H. B. K.] or something close to that. I say this entirely on the basis of the fruits; nothing else in the drawing is diagnostic".

The Madrid plate of Banisteria hispida, q.v., was made from the same model as DC. plate 127, and Torner no. 0690. It differs from them in many details but there can be no doubt of a connection between them.

Unfortunately, as Dr. Anderson points out, they do not represent the same species or even the same genus. As he says, "The samaras drawn are totally different. Those of B. [=Hiraea] podocarpa are the samaras of Gaudichaudia. Those of B. hispida could not possibly be Gaudichaudia, but those of a Callaena or something else with butterfly samaras". He says further, "All I can guess is that the artist cheated. He probably had to draw a vine that looked nearly the same to him as one he had drawn before, but he took the easy way of starting with the earlier drawing as a model and changing the one thing that was different, the samaras."


Locality cited: Mountains of Toa Alta, Puerto Rico. Although no reference is made to the work of Linnaeus, this is surely not intended as a new name, as the character is taken directly from that of M. coccigera of the Species Plantarum. The Puerto Rican vernacular name is given as "Azota Caballos de Monte". In the S. & M. herbarium a specimen under this name, and also labelled "Malpighia coccifera", is according to Standley Malpighia coccigera (no. 1115; CNHM neg. 46723). Two specimens at G, ex herb. Barbey-Boissier, are both labelled by Pavón with the above vernacular name, and with the epithets "cocifera" and "coccigera", respectively. No. 1390 in the Torner
Collection, annotated by de Candolle "Malpighia coccigera", represents *M. coccigera* L., according to W. R. Anderson (in litt. 1998). The drawing is typical of the careful sketches of West Indian plants made by Echeverría, with exquisitely colored details of inflorescence, flowers, and fruit.

**Malpighia emarginata** DC. in DC. Prodr. 1: 578. 1824, with citation of "fl. mex. ic. ined." as the basis for the name.

Type-locality: "in Mexico". Lectotype: In the Torner Collection, no. 1406, labelled by de Candolle, "Malpighia emarginata", but without other inscription. Like the drawing of *Malpighia coccigera* cited above, this one is a good example of Echeverría's drawings made in the West Indies, and it seems highly probable that the subject was West Indian, not Mexican. DC. plate 135, as cited in Calques des Dessins (Field Mus. neg. 30546), is a good-colored copy of Torner 1406. According to W. R. Anderson (in litt. 1998), the *icones* represent the cultivated *Malpighia* ("Barbados cherry"), which Niedenzu (Pflanzenreich IV. 141 [Heft 94]: 622, 1928) referred to *Malpighia punicifolia* L. Sp. Pl. ed. 2. 609. 1762. The latter name is now known to be a synonym of the earlier *Malpighia glabra* L., and *M. emarginata* is to be accepted as the correct name of the cultivated species.

The epithet "emarginata" seems to have been invented by de Candolle; specimens in the S. & M. herbarium, referred to *Malpighia punicifolia* by Standley, bear the epithet "eliptica" (no. 1116; CNHM neg. 46727); a sheet at G, ex herb. Barbey-Boissier, bears a printed label "Nueva España Herb. Pavon", and is labelled by Pavón "Malpighia elliptica N E", the plant is *M. punicifolia* according to a determination by Mueller Argoenvis, and matches the *icones* well enough, even to the emarginate leaves.


Localities cited [Pl. Nov. Hisp.]: Cuernavaca, Morelos, etc. ("in Quauhnahuacae montibus, Jamaica, Curassavie, Surinamia et Brasilia. Floret April"). The text in Fl. Mex. includes the words "ic. h." or "ic. herb.". The reference is to Ic. Fl. Mex. 223, cited in the manuscripts of Pl. Nov. Hisp. and Fl. Mex. but not in the published versions. This is represented by no. 0251 in the Torner Collection, which bears the number "223", the printed name "Malpighia [glabra. Linn. crossed out]", and the annotation by de Candolle, "corymbifera"; almost identical is DC. plate 137, an original painting also annotated "Malpighia corymbifera." According to W. R. Anderson (in litt. 1998), Torner 0251 represents *Malpighia mexicana* Adr. Juss.

Specimens of *Malpighia* "glabra" in the S. & M. herbarium (nos. 1099, 1118; CNHM negs. 46724-46726) were originally labelled as an unpublished species of *Malpighia*.

In Fl. Mex. ed. 2, the second *Malpighia glabra* is described at length, independently of the first species of that name, and without citation of locality.


Reported by Niedenzu (Pflanzenreich IV. 141 [Heft 94]; 618, 1928) from Peru on the basis of a specimen collected by "Pavon"; the plant is at G, ex herb. Moricand, determined by Niedenzu as "var. lancifolia" [=var. acuminata] and marked by Pavón "Malpighia lucida Peru". Another specimen at G, similarly determined by Niedenzu, is labelled "Mexique Herb. Ruiz & Pavon", and by Pavón "Malpighia glabra Cav.". It is possible that both the above specimens were Peruvian in origin, but in view of the history of the majority of the "Pavon" collections in Moricand's herbarium, it is possible that the plants were collected in Mexico or in the West Indies by Sessé or Mociño; cf. *Malpighia peruviana*.


Type-locality: "Peruvia". Type: Not seen, presumably the same species as the type of *M. lucida* Adr. Juss., which was cited "v.s. typ. herb. Moricand". To be sought for at G, among the Moricand specimens received in 1827 from Pavón. Moricand stated in the protologue that he received the plant from Pavón under the name of *Malpighia lucida*, but as he knows it is not the same as *M. lucida* Schwitz, he is providing a new name. The name was referred by Niedenzu (Pflanzenreich IV. 141 [Heft 94]: 617. 1928) to the synonymy of *Malpighia glabra* L., and it was so treated in the *Flora of Peru* (Publ. Field Mus. Nat. Hist., Bot. Ser. 13, pt. 3: 853. 1950). According to W. R. Anderson (in litt. 1998), it was also so treated by the late José Vivaldi, who had studied the holotype at G.

**Malpighia rotundifolia** Sessè & Moc. Pl. Nov. Hisp. 73. 1888; ed. 2. 68. 1893; Fl. Mex. ed. 2. 115. 1894.

Type-locality: Mazatlán, Guerro, where said to flower in July. Herbarium material under this name has been identified as a primarily Mexican species, *Heteropterys brachiauta*, and partly as a Puerto Rican species of *Stigmaphilon*, see *Banisteria rotundifolia* for discussion. The plant is described as a shrub 8 feet high, ferruginous-tomentose, the leaves subrotund-ovate, rarely elliptic, rugose, tomentose beneath; racemes terminal, leafy, the pedicels umbellate, joined; flowers red. This seems to apply to *Heteropterys brachiauta* well enough. Nelson (1997) designated "Sessé 1102bis" as "material tipo" of *M. rotundifolia".
Malpighiaceae


Type-locality [Fl. Mex.]: Cuernavaca, Morelos, where said to flower in May. The two names are equated as above because the treatments in the two floras, except for minor differences in arrangement and wording, are identical. The character of *Malpighia nitida* Jacq. (Enum. Syst. Pl. 21. 1760, Sel. Stirp. Amer. 136. 1763) was quoted verbatim under *M. spicata* as well as under *M. nitida* of the Pl. Nov. Hisp. *Malpighia spicata* is here treated as a substitute for *Malpighia nitida* Jacq. and its type by definition is the same as that of *M. nitida*.

According to W. R. Anderson (in litt. 1998), no such type is known, but from the original description of *M. nitida* Jacq., it is clear that the plant described was a species of *Bunchosia*. Two specimens at G, both labelled by Pavón as "Malpighia nitida", are referred by Niedenzu (Pfaffnzenten IV. 141 [Heft 94]: 662. 1928) to *Bunchosia lindeniana var. mexicana*, q.v.

In the S. & M. herbarium, however, no. 1106 (CENHM neg. 46714), labelled "Malpighia nitida", was determined by Standley as *Byronima spicata* (Cav.) DC. Standley's determination should be verified by someone with full knowledge of the Malpighiaceae.


Type-locality [Moric.]: "Perú" [Pl. Nov. Hisp.]: Cuernavaca, Morelos. Type: [Moric.]: A sheet at G, ex herb. Moricand, labelled by Moricand, "Peru Mr. Pavon" (Field Mus. neg. 24216). I am informed (1998) by W. R. Anderson that the late José Vivaldi, who knew the genus *Malpighia* well, studied the type and cited it in his unpublished work as *M. mexicana* Adr. Juss. Ann. Sci. Nat., Bot., ser. 2. 13: 337. 1840. A specimen that seems to be that of the same gathering is at G, ex herb. Barbe-Boissier, bearing a printed label "Nueva España Herb. Pavón". These two specimens are very similar to, but have somewhat broader leaves than, a third specimen at G, this from the Barbe-Boissier herbarium, with printed label "Nueva España Herb. Pavón" and annotations. "Malpighia mexicana! Juss." and by Pavón, "Malpighia tomentosa sp. nova de Nueva España".

*Malpighia tomentosa* Moric. was unknown except from the type to Niedenzu (Pfaffnzenten IV. 141 [Heft 94]: 617. 1928) and to Machride (Publ. Field Mus. Nat. Hist., Bot. Ser. 13, pl. 3: 855. 1950) and, as suggested long ago by Jussieu and more recently by Machride, that it may be Mexican rather than Peruvian in origin, it seems likely that all the material distributed by Pavón under this name was collected by Sessé & Mocó. The distinctions between *Malpighia mexicana* and *M. tomentosa*, as set down by Niedenzu in the *Pfaffnzenten*, seem to be minor ones and may disappear completely upon restudy of the material.


In the Pl. Nov. Hisp. *Malpighia tomentosa* is said to resemble *Malpighia nitida*, which represented an as yet unidentified species of *Bunchosia* (see above under *Malpighia spicata*). Probably the comparison was a superficial one, as the plant described in the Pl. Nov. Hisp. was clearly a species of *Malpighia*, as evidenced by the references to axillary umbels and pink petals (Anderson, in litt.).


Type-locality: Humacao ["Turnacao"], Puerto Rico, where the vernacular name was reported as *Maricaco*, and the plant was said to flower in July. Referred by Urban (Symb. Antill. 4: 334. 1905) to the synonymy of *Byronima spicata* (Cav.) DC. In the S. & M. herbarium no. 1113 (CENHM neg. 46713), determined by Standley as *Byronima spicata*, was originally labelled "Malpighia undulata N. d[escr.] V[ulg. p] Maricaco". Another specimen at MA, no. 1113 bis (neg. 46713), labelled "Malpighia undulata.", was identified by J. Cuatrecasas as "Byronima cunningiaga Adr. Juss. ?'. A specimen at G, ex herb. Barbe-Boissier, bears an original label apparently in the hand of Sessé, labelled as "Malpighia undulata", with the vernacular name *Maricaco* and the locality "Pto. Rico".

Another sheet at G, ex herb. Moricand, is labelled by Pavón "Malpighia undulata Perú"; this is presumably the specimen cited by Niedenzu (Pfaffnzenten IV. 141 [Heft 94]: 700. 1928) as *Byronima coriacea var. spicata* (Cav.) Nied., i.e., with the notation "Peru (Pavon)". W. R. Anderson (1998) informs me that still another sheet at G, ex herb. Barbe-Boissier, annotated "Malpighia undulata N. E" in Pavón's hand, "is most likely a hybrid between *Byronima crassaflora* (L.) H. B. K., and *B. vexascifolia* (L.) DC.", two species that occur together in Cuba and probably in Puerto Rico, but not in Mexico. Probably all the specimens cited above came from Puerto Rico. The evidence suggests that Sessé & Mocó confused at least two species of *Byronima* under the name of *Malpighia undulata*. Nelson (1997) designated "Sessé-1113 bis" as "material tipo" of *M. undulata*.


Localities cited [Fl. Mex.]: Chilapa, Guerrero ["in America calidiore et montibus Chilapae ... Florentem Junio conscijimus"]; [note in Pl. Nov. Hisp.]: "in America calidiore ... Chilapenses baccas edunt; Mexicani Ahuatlazonic adelplant". Ic. Fl. Mex. 353; this is represented by no. 1111 in the Torner Collection, which bears the number "353"; the hand-printed name "Malpighia [Ureis. Linn. crossed out]", and the epithet...
“decipiens” added by de Candolle. Nearly identical is DC. plate 136, an original painting bearing the number “353”, marked by de Candolle “M. urens mss.”, and with an unpublished binomial. The plant depicted is evidently a species of Malpighia, glabrous or essentially so, with acute or acuminate leaves and apparently about 8 glands on the calyx. Not found in the S. & M. herbarium. The true Malpighia urens is a plant of the West Indies and does not occur in Mexico.

According to W. R. Anderson (in litt. 1998), Torner 1111 apparently represents Malpighia ovata Rose (Contr. U. S. Nat. Herb. 1: 310. 1893), which is common in coastal areas near Acapulco, but unexpected as far inland as Chilapa, where perhaps introduced for its fruit.

The note quoted above under Pl. Nov. Hisp. is an interesting example of what the word “Mexico” meant to Sessé & Mociño: The “Chilapenses” (the natives of Chilapa) eat the fruits; the “Mexican” (the natives of Mexico City, or Mexico, or perhaps only the indigenous peoples) call the plant Ahatnocacto.


Type-locality: Near Guadalajara, Jalisco [“in anfractibus Guadalaxarae vicinis. Flore Martii”]. Not found in the S. & M. herbarium. Described in considerable detail as a shrub about 10 feet high, with the aspect of a Banisteria; branches and leaves glabrous; leaves alternate, ovate, entire, setaceous-mucronate; petioles short, filiform, subvillous; racemes terminal, simple, lax; pedicels filiform, alternate, long, jointed; bracts setaceous, a pair at the base of each pedicel and at the joint; sepals 5, oblong, closed-connivent and persistent; petals yellow, obicular, long-clawed; stamens 10; ovary hirsute; style filiform, stigma simple; capsule pyramidal, 6-angled, 2-locular; locules dehiscing on the exterior angles; capsule hirsute “radix pinnatis sexfariam.” This is apparently a description of Echinopitys eglandulosa (Adr. Juss.) Small, N. Amer. Flora 25: 148. 1910, though not agreeing with that species in all characters.

Malvaceae


Type-locality [Cav.]: Described from plants grown at the Madrid Botanical Garden “de semillas enviadas del de Florencia con el mencionado nombre por el Señor Attilio Zuccagni”. Zuccagni later published the name independently as Sida acerifolia, and de Candolle transferred this to Anoda. The citation of “fl. mex. ined.” was based on DC. plate 63; an original painting bearing the number “202” and the name “Sida Quinquelaflora Sp. N.” (Field Mus. neg. 30489); an almost identical copy is no. 0278 in the Torner Collection, which is numbered “202” and bears the hand-printed name “Sida [hasiata. crossed out] Sp. N.” and “quinquelaflora (written in ?by Sessé)”. These icones represent Ic. Fl. Mex. 202, cited in the Pl. Nov. Hisp. as Sida quinquelaflora Sessé & Moc., the type-locality for which was Apatzingán, Michoacán, where it was said to flower in October. Not found in the S. & M. herbarium. The painting does indeed suggest a species of Anodia, but I cannot comment upon de Candolle’s identification of it with Anoda acerifolia.


Type-locality [Or.]: Not stated; grown at the Madrid Botanical Garden. [Cav.]: Querétaro, Querétaro; flowered in the Madrid Botanical Garden in September, the year not stated. Cavanilles equated his plant with that of Ortega, and it is probable that the two men studied the same garden-grown material. Née is not mentioned in the protologue of Anoda parviflora, but the locality Querétaro was one often cited by Cavanilles for Née’s collections. Types: Not seen. Hochreutiner (Annuaire Conserv. Jard. Bot. Genève 20: 52. 1916) also equated the two species and cited a “Mexican” collection by “Pavón.” said to have been annotated by Cavanilles as Anoda parviflora. The specimen, in G-Del ex herb. Moricand, is marked by Pavón “Cav. Perú.” and by Cavanilles “Anoda parviflora.” Not found in the S. & M. herbarium under either name.


Type-locality: Mexico. Syntypes: Galeott. 4108, Berlandier 814, and “Pavón” s. n. “The Pavón” specimen, in G-Del ex herb. Moricand, is marked by Pavón “Anoda Dillenii Cav ñ° Perú.”


Type-locality: Nova Hispânia. Type: “Pavón” in herb. Delessert, the date cited as 1827. The specimen, in G-Del ex herb. Moricand, is annotated by Moricand “Nouvelle Esp. M’ Pavon 1827”, and by Pavón “Sida heterophylla N E.”

Malvaceae

malaviscus fl. mex. ic. ined.,” cited in synonymy by DC., ll.c.


Gossypium lanceforme ("lanceaeforme") Miers, in Britten, J. Bot. Brit.-For. 31: 331. 1893.

Type-locality: “Mexico”. Holotype: Atributted to Pavón by Miers, now at BM. According to Britten (l.c.), the specimen came originally from Herb. Lambert and is labelled in Pavón’s hand “Gossypium N E". An earlier mention of this specimen is cited from Gard. Chron. p. 710. 28 Jul. 1866. Harland and Atteck (Amer. Naturalist 65: 380-382. 1931) supposed Gossypium lanceforme to be identical with Thuberia thesipesiones A. Gray (q.v. under Ingenhouszia triloba), but T. H. Kearney (Amer. J. Bot. 24: 299. 1937) questioned this, although without having seen the type of G. lanceaeforme. It seems likely that the type of that name, the “Favori” specimen, was collected by Sessé & Mocíño, and may have formed a part of the same gathering as the original specimens of Ingenhouszia triloba. Fryxell (Malv. Mex. 176) formally designated the specimen as "type", “Sessé & Mocíño s.n. (BM)!”.


Type-locality: Veracruz, near Catemaco, P. Fryxell 526. US, the holotype. The range of this species extends from the lowlands of northern Veracruz and adjacent Puebla to Tabasco and northeasternmost Chiapas. Fryxell (l.c., p. 373) cited “Sessé, Moçño, Castillo, & Maldonado 4902 (F)”. From the S. & M. herbarium the same author (Malv. Mex. 184. 1988) reported “Sessé 4902” from an unspecified locality in Veracruz; on p. 497 of the same work he cited that number as “[species] 149”, which is Hampea nutricia. I have not been able to locate such a specimen in the collection at MA, nor have I seen the specimen at F, and so cannot comment on the reports.

Hibiscus acetasofolius DC. in DC. Prodr. 1: 455. 1824, with citation of “fl. mex. ic. ined.” as the basis for the name.

Type-locality: Mexico. "Type" (designated by Fryxell, Malv. Mex. 456): In the Torner Collection, no. 0996, labelled by de Candolle, “Hibiscus acetasofolius”. DC. plate 79, as cited in Calques des Dessins (Field Mus. neg. 30501), is an incomplete copy of Torner 0996. The species was unknown to Hochreutiner (Annuaire Conserv.


Hibiscus azanzae DC. in DC. Prodr. 1: 454. 1824. “Azanza insignis fl. mex. ic. ined.”, cited in synonymy of H. azanzae by DC., i.e. as the basis for that name.


Type-locality: Mexico. Lectotype: DC. plate 75, cited in Calques des Dessins (Field Mus. neg. 30498). This is a good colored copy of the original in the Torner Collection, no. 1423, which is annotated “Azanza insignis” by de Candolle. DC. plate II.A [sketches only; Field Mus. neg. 30282], probably copied from Torner 1423. Known to Hochreutiner (Annuaire Conserv. Jard. Bot. Genêve 4: 66. 1900) from the plate only, but Standley (Contr. U. S. Natl. Herb. 23: 779. 1923) referred it to the synonymy of Hibiscus tiliaeceus L. Sp. Pl. 694. 1753. In the S. & M. herbarium no. 3561 (CNHM neg. 46831), labelled "Hibiscus tiliaeceus i.c. V. MAjagu". is according to Standley H. tiliaeceus L. From the common name it is likely that these specimens came from the West Indies rather than from Mexico. The technique of the artist who executed DC. plate 75 also suggests that the work was done in the West Indies, as the style is finer and less formal than that of the early plates done in Mexico. Fryxell (Malv. Mex. 195) excluded Hibiscus azanzae from the Mexican flora, saying merely that the name is the type of sect. Azanzae, which includes two Mexican species, H. tiliaeceus and H. pernambucensis.

Hibiscus bracteatus DC. in DC. Prodr. 1: 455. 1824, with citation of “fl. mex. ic. ined.” as the basis for the name.


Hibiscus cyanogynus DC. in DC. Prodr. 1: 455. 1824, with citation of “fl. mex. ic. ined.” as the basis for the name.

Type-locality: “in Mexico”. “Type” [designated by Fryxell, Malv. Mex. 332]: In the Torner Collection, no. 0844, without inscription except the annotation by de Candolle, “Hibiscus cyanogynus”. The stigmas as shown in the plate are blue, hence the specific epithet. DC. plate 77, as cited in Calques des Dessins (Field Mus. neg. 30499), is a copy of Torner 0844. The plant was

Type-locality [DC.]: “in Mexico”; [Pl. Nov. Insip.]: San Juan de los Plátanos, near Apatzingán, Michoacán (“in oppido Sancti Ioannis vulgo de los Plátanos prope Apatzingan et in Sina. Flor. Octobr. i.”). “Type” [DC.], designated by Fryxell, Malv. Mex. 456. In the Torner Collection, no. 1701, which bears the numbers “87” and “422” and an annotation by de Candolle, “Hibiscus fasciculatus”. DC. plate 85, as cited in Calques des Dessins (Field Mus. neg. 30505), is a copy of Torner 1701. A nearly identical duplicate of Torner 1701 is an original painting at MA, which is unnumbered but bears the hand-printed name “Vrena Lobata”. It was listed by name, with description, and identified as RJB Lám. 98 in the Cátalogo de las Láminas del Real Jardin Botánico (RJB 1987, p. 340). It was reproduced in full color by Maldonado Polo (1996, p. 329). It is no. 87 of a manuscript list by Mocino, and no. 78 of Ramírez (Anales Inst. Méd.-Nac. México 6, pl. 1: 82. 1903), who first noted its identity with DC. plate 85. It evidently represents Ic. Fl. Mex. 422 as cited in Pl. Nov. Insip.

Lagasca, in a series of memorandums written before 1820 (MA, ms.), noted that the plant depicted was not Urena lobata (“es diversa”), but did not identify it otherwise. Hochreutiner (Annuaire Conserv. Jard. Bot. Geneve 4: 175. 1900) did not know the identity of Hibiscus fasciculatus. The plant was described in the Pl. Nov. Insip. as a subshrub 3 feet high; at least the larger leaves 5-lobed, covered with sharp and sometimes forked hairs (“pilis nonnullis bidentis, cuspidatis obisita”); exterior calyx of about 8 subulate lobes, shorter than the inner; corolla white to reddish, yellowish in the tube. The fruit was not described, but as shown in the icones it appears to be depressed and 5-angular, as in some Mexican species of Kosteletzya. Fryxell (l.c.) identified it only as “Kosteletzya sp.”


Locality cited: “in Insulae Cubae, ubi vulgo Abayagua audit”. Long description. The published epithet was clearly intended to be “tiliacus”; as the diagnosis (character) was almost identical with that of H. tiliacus L. ["Roy. lulg. p. 532"] cited by Palau (5: 304. 1786). In the S. & M. herbarium no. 3561 (CNHM neg. 46831), determined by Standley as H. tiliacus L., was originally labelled “Hibiscus Tiliaceus. ic. V[ulg]o Majagua”.


Although no previous author was cited in the protologue, it is highly unlikely that Sessé & Mocio would have intended to propose such an unusual epithet as new. When the same epithet was available to them in Palau (5: 309. 1786), nor would they have questioned the identity of their plant if they intended to describe a new species. No locality cited; a long description. In the S. & M. herbarium no. 3527 (CNHM neg. 46812), labelled “Hibiscus ficulneus”, was determined by Standley as Hibiscus bifurcatus Cav. Fryxell (1988, p. 497) cited no. 3527 as Hibiscus tenuicellus DC. Nelson (1997) reported this last determination and designated “Sessé 3527” as “material tipo” of “Hibiscus ficulneus Sessé & Moc.”, which is inappropriate as no such name exists.


Type-locality: Mazatlán and Acaciuizotla, Guerrero [“in calidis Mazatlan et Acaciuizotiae montibus”]. Ic. Fl. Mex. 421, cited in the manuscript of the Pl. Nov. Insip. but the reference omitted in the printed version. I have not seen this plate nor any herbarium material labelled with the above name. The plant is described as a tree 15 or more feet high, the leaves very short-petiolate, subcordate-ovate, acuminate, subobtuse, tomentose beneath; flowers large and yellow, the outer calyx “monophyllus”, 14-parted, the inner 5-parted. The name was referred by Kearney (Leaff. W. Bot. 7: 281. 1955) to the synonymy of Hibiscus tiliacus L., and by Fryxell (Malv. Mex. 217) to that of Hibiscus perrambucensis Arruda, Diss. Pl. Brazil 44. 1810. The latter is known from as far north as Nayarit on the Pacific coast of Mexico, but the Mazatlán of Sessé & Mocio was the place in Guerrero, not that in Sinaloa as reported by Fryxell, l.c.


Locality cited: Puerto Rico [“in agris de Toa Alta. Flor. Aprili et Maio”]. Although Linnaeus was not cited in the protologue, the diagnosis (character) was taken directly from that in Palau (5: 322. 1786) with modification of two adjectives. Description. Not found in the S. & M. herbarium. Not identified.


Locality cited: Many places in New Spain. Ic. Fl. Mex. 124, represented by two essentially identical paintings in the Torner Collection, each bearing the number “124” and an annotation by de Candolle, Malaviscus pentacarpus. For further discussion see M. pentacarpus. In Torner no. 1093 the 5-carpellate fruit is well shown, and the names shown are [hand-printed] “[Hibiscus brasiliensis. Linn. crosssed out]” and “Atlat
Hibiscus mexicanus N. [description]. 1304).

In the S. & M. herbarium no. 3555 (CNHM neg. 46878), labelled as above, was determined by Standley as Pavonia melanomnata B. L. Rob. In the attempt to enumerate the herbarium after the Expedition returned to Spain, the species of Malvaceae were assigned numbers from about 1250-1315 (cf. McVaugh 1990, p. 209).


Locality cited: Córdoba, Veracruz ["Cordoba, ubi Amistad de estos tiempos a floris est variatio, vulgo auditis. Floret Octobri"]. "Ic. 805" is cited in the Fl. Mex., and no. 1704 in the Torner Collection bears the number "805" and the annotation by de Candolle, "Hibiscus mutabilis Linn." I cannot explain the use of "805", as none of the Ic. Fl. Mex. was assigned a serial number larger than 460. Neither is 805 an herbarium serial number, as the numbers assigned finally to the species of Malvaceae were larger than this by several hundred.

The plant shown in the illustration appears to have been a cultivated plant, copiously double-flowered. In Fl. Mex. the description read, in part, "Corollae congenerae maximae, elegantissimae, polystelae, raro plena, nubiles et erumpentes candidae, pauci ab hine horis, roseae, deine saturae rubiae, ipso die marescentes". [Corollas very large for the genus, very choice, many-petalled, rarely double ("raro plena"), the [opening buds] white, roseate after a few hours, finally deep red, withering the same day]. The name "Hibiscus Mutabilis" was also used provisionally for quite a different species, for which see Malvaceae flavidas.

In the S. & M. herbarium no. 3545 (CNHM negs. 46828-46830), labelled "Hibiscus mutabilis", is according to Standley H. mutabilis L. This can hardly be regarded as a new name published by Sessé & Mocíño, but in the Fl. Mex. no reference is made to the work of Linnaeus, and the character, if derived at all from that in the Species Plantarum, is greatly modified.


Type-locality: "in Mexici montibus Xochipicii" [i.e., presumably Xochitepec, Morelos]. "Type" [designated by Fryxell, Malv. Mex. 331]: In the Torner Collection, no. 0008, which bears the number "392", the hand-printed name "Hibiscus [brasiliensis. Linn. crossed out]", then the epithet "oxyphyllus" added by de Candolle. The epithet "brasiliensis" was not published by Sessé & Mocíño under Hibiscus, but the name appears opposite Ic. Fl. Mex. 392 on the list of icones obtained on the "Second Excursion", that to Guerrero in 1789 (MA, mss). DC. plate 86, as cited in Calques des Dessins (Field Mus. neg. 30506), an original painting numbered "392" and labelled "Hibiscus brasiliensis Linn.", is very similar to Torner 0008. It was explicitly said by Fryxell (1988) to be "not the type", although he had so designated it in 1977 before the recovery of the Torner Collection.

Hochreutiner (Annuaire Conserv. Jard. Bot. Genève 4: 87. 1900) referred Hibiscus oxyphyllus to the synonymy of H. brasiliensis L. Sp. Pl. ed. 2. 977. 1763, and in this he was followed by Standley (Contr. U. S. Natl. Herb. 23: 781. 1923), but in the S. & M. herbarium no. 3564 (CNHM neg. 46880), labelled "Hibiscus brasiliensis", is according to Standley Pavonia melanomnata Rob. & Seat. Proc. Amer. Acad. Arts, n.s. 28. 104. 1893 [a taxon now treated as P. oxyphylla var. melanomnata (Rob. & Seat.) Fryxell, Sida 7: 223. 1977]. The original painting, DC. 86 (cf. neg. 30506) may well represent the same taxon as an isotype of P. melanomnata (Pringle 4343, at G), and the same as Pringle 8718, from Yauatepec, Morelos, also identified as Pavonia melanomnata. In these specimens, however, the exterior bracts of the calyx are linear, not narrowed to the base as shown in the illustrations.


Localities cited: San Miguel Allende ["Michaelpolpi"]. Guanajuato, where said to flower in June; and the Cape of Good Hope. Ic. Fl. Mex. 409, represented by no. 0760 in the Torner Collection, which bears the numbers "409" and "60" and an annotation by de Candolle, "Malvaviscus candidus"; it is the lectotype of Malvaviscus candidus. q.v. It is also represented by an original painting at MA that bears the pencilled number "60" and the hand-printed name "Hibiscus Pedunculatus". It was listed by name, with description, and identified as RB Lám. 95 in the Catálogo de las Láminas del Real Jardín Botánico (RJB 1987, p. 339). It was well reproduced in color, reduced to ca. 15.7 by 10.2 cm, and identified as RJB Lám. 95 (RJB 1987, p. 154). It is no. 60 of a manuscript list by Mocíño (MA, mss), and no. 41 of Ramírez (Anales Inst. Méd.-Nac. México 6, pt. 1: 78. 1903).

In the S. & M. herbarium no. 3540 (CNHM neg. 46871), labelled "Hibiscus peduncularis", is according to
Standley *Malaviscus candidus* DC. [i.e., *Pavonia candida* (DC.) Fryxell]. It was cited by Fryxell (Malv. Mex. 497) as "[species] 253", which is *Pavonia candida*.


Locality cited: Mexico, D.F. ["in Mexici circuitibus. Floret Septembri ad Januariam"]. Although no previous author was mentioned, it is clear from the diagnosis (character) that it was derived from that of *H. phoeniceus* L.f. as set forth by Palau (5: 322. 1786). Description. In the S. & M. herbarium no. 3530 (CNHM neg. 46833), labelled "Hibiscus phoeniceus. ic. 1314", was determined by Standley as *Hibiscus tubiflorus* DC. [Kosteletzkya tubiflora (DC.) O. Blanchard & McVaugh. Nelson (1970) reported "Sessé 3530" under the name of *Hibiscus spiralis* Cav. and designated the specimen as "material type" of "Hibiscus phoeniceus* Sessé & Moc.", which is inapposite because no such name exists. The number "1314" does not apply especially to that specimen but is the one given to that species after 1800, when an attempt was made to number the whole herbarium; the numbers assigned to the Malvaceae included 1250-1315 (see also McVaugh 1990, p. 209).

**Hibiscus racemosus** Sessé & Moc. Fl. Mex. ed. 2. 161. 1894, not of Lindley.

Type locality: Seashore near Luquillo ("Loquillo"), Puerto Rico. Urban (Symb. Antill. 4: 397. 1910) referred this with doubt to the synonymy of *Pavonia spicata* Cav. Monad. Diss. 3: 136. pl. 46, fig. 1. 1787, a species of the Caribbean basin. In the S. & M. herbarium no. 3538 (CNHM neg. 46885), labelled [by Pavón] "Hibiscus racemosus* N.E.", is according to Standley *Pavonia spicata* Cav. Another specimen in the herbarium, no. 3548 (neg. 46747), labelled "Hibiscus racemosus ic.", was cited by Fryxell [Malv. Mex. 321] in the synonymy of *Pavonia chlorantha* (Kunth) Fryxell (a seldom collected species of Guerrero and Edo. de México), and cited again on p. 497 as "[species] 254", which is *Pavonia chlorantha*. A sheet at BM, ex herb. Lambert, apparently representing a species of *Pavonia*, is labelled "Hibiscus racemosus de México". Another sheet at BM, similarly labelled by Pavón, seems to represent the Mexican species *Pavonia palmeri* (= *P. pleuranthera*). Presumably this was a misidentification on the part of Pavón and has nothing to do with the Puerto Rican species described by Sessé & Mocino.


Localities cited: The hill of Ixtapalapa, D.F. ["in Zeylan et collae Ixtapalapae, ubi Atlasonpinus luteum Mexicana lingua adpellatur. Floret Novembri"].

The locality is now well within the urban area of Mexico City, ca. 10 km southeast of the center. It was visited in the autumn of 1788, during the "First Excursion". Ic. Fl. Mex. 125, cited in the manuscript of Pl. Nov. Hisp. and that of Fl. Mex. but not in the published versions, was listed under the name of "Hibiscus rosa chinensis" among the *icones* obtained in 1787-1788 in the vicinity of Mexico City. This is DC. plate 76, an original painting [photograph McVaugh], with hand-printed name, "[Hibiscus Rosa Sinensis L. crossed out]"; an almost identical copy is no. 0606 in the Torner Collection, which bears the numbers "125" and "171" (which I cannot interpret), the hand-printed name "Hibiscus [rosa sinensis. crossed out] Linn.", the epithet written in (?by Sessé) "Phoenicis", and an annotation by de Candolle, "Hibiscus cylindriflorus". The *icones* appear to represent the same species as, or one very similar to that depicted in Cavanilles' picture of his *Hibiscus spiralis*, q.v.

**Hibiscus spiralis** Cav. Ic. 2: 47. pl. 162. 1793.

Type-locality: Mexico; introduced into the Madrid Botanical Garden under the name of "Rosa sinensis", and flowered in November [1792 or earlier]. Type: Not seen. In the S. & M. herbarium no. 3546 (CNHM neg. 46834), labelled with the epithet "Rosa Sinensis", apparently includes a mixture of two narrow-flowered species [in this respect like the plant in Cavanilles' plate], namely *Malaviscus arboresus* and Kosteletzkya tubiflora (paniculata).


Type locality [DC.]: Mexico ("in Mexico montibus Sancti-Hieronimi"), near Chilapa, Guerrero. "Type" [designated by Blanchard and McVaugh]: DC. plate 83, as cited in Calqes des Dessins (Field Mus. neg. 30504). This is an original painting, which bears the number "316". Nearly identical, but with more details in some respects and fewer in others, is no. 0007 of the Torner Collection, which bears the number "316", the hand-printed name "Hibiscus [Vitifolius ? crossed out]", and an annotation by de Candolle, "tubiflorus".

The *icones* represent Ic. Fl. Mex. 316, cited in the Pl. Nov. Hisp. under *H. vitifolius*, where the localities were cited as "many places in New Spain, and in India". Ic. Fl. Mex. 316 is listed (MA, mss) among the *icones* obtained on the "Second Excursion", namely that to Guerrero in 1789; two other species are listed in the Pl. Nov. Hisp. as having come from "Sancti Hyeronymi", and probably the locality as cited by de Candolle is the correct one. Fryxell (1968, p. 252) cited the "type" as no. 0007 of the Torner Collection, saying of the copy at G, "not the type". This
MALVACEAE

is the plant long known as Kosteletzya paniculata Benth. Pl. Hartw. 285. 1848.


Type-locality: Mountains of Tuxila [i.e., probably San Andrés Tuxtla, Veracruz]. Not found in the S. & M. herbarium. Described as an herb, sparingly branched, villous above; leaves ovate, subtriangular, obtusely toothed, tomentose beneath; peduncles racemose, suberect, longer than the leaves; pedicels filiform, nodding; flowers yellow. Not identified by Fryxell (Malv. Mex. 456).

Apparently this plant was thought to be equivalent to that treated under the same name by Mocino (1993, p. 112) and by Maldonado Polo (1996, p. 283), where the locality was given as Nicaragua (“in Managua montibus. Floret Septembris”).


Type-locality: Mountains of the “Totonací”, [i.e., in northern Puebla or adjacent Veracruz]. Not found in the S. & M. herbarium. Supposed by Hochreutiner (Annuaire Conserv. Jard. Bot. Genève 4: 174. 1900) to represent some species of Pavonia. Described as a shrub with rather scabrid and tomentose branchlets and leaves, the latter ovate-lanceolate, serrate, acuminate, the peduncles axillary and very long; corolla small for the genus, white or red; fruit subglobose, with 10 recurved-uncinate awns. Fryxell (Malv. Mex. 337) provisionally assigned Hibiscus umbellatus to the synonymy of Pavonia schiedeana Steud. Nom. Bot. ed. 2. 2: 279. 1841.

Hibiscus uncinellus DC. in DC. Prodr. 1: 449. 1824, with citation of “fl. mex. ic. ined.” as the basis for the name.

Type-locality: Mexico. Lectotype [designated by Fryxell and Wilson, Brittonia 38: 107–110. 1986]. In the Torner Collection, no. 1422 [excluding the corolla of the plant depicted], the painting marked “Hibiscus uncinellus” by de Candolle, but without other inscription. DC. plate 82, as cited in Calques des Dessins (Field Mus. neg. 30503), is a fair copy of Torner 1422. Referred by Hochreutiner (Annuaire Conserv. Jard. Bot. Genève 4: 109. 1900) and by Standley (Contr. U. S. Nat. Herb. 23: 778. 1923) to the synonymy of Hibiscus biflorus Cav. Monad. Diss. 3: 146. 1877, but Fryxell and Wilson (i.e.) treat H. uncinellus as a primarily Mexican species, and H. biflorus as a plant of Central and South America and the West Indies.

The corolla depicted in Torner 1422 seems to have been copied faithfully, in color and in all details, from a sketch of an isolated flower (no. 1975 in the Torner Collection), which is annotated, apparently by Sessé, “Hibiscus virginicus”, which see below. The sketch was one of four on the same paper, all illustrating species and genera that might be found in the tropical lowlands of Veracruz (a Miconia (“Melastoma”), a Xyris (“Cephalis cyanocarpa”), and “Hibiscus virginicus”.


Hibiscus sp. (“——Hibiscus folis 5-lobis, minoribus angulatis, serratis, hispidis. [followed by description]” sensu Sessé & Moc. Fl. Mex. ed. 2. 162. 1894.

Locality cited: Near Apatzingán, Michoacán [“in agris ab Apatzingan non multum remotis. Floret Octobri”]. Not identified.


Type-locality: “in Mexico”. “Type” [designated by Fryxell, Malv. Mex. 175]. In the Torner Collection, no. 1747, which is without any inscription except the annotation “Ingenhouzia triloba” by de Candolle. DC. plate 101, as cited in Calques des Dessins (Field Mus. neg. 30517), is a copy of Torner 1747. DC. plate 180 [sketches only; Field Mus. neg. 30289] consists of line-drawings of details copied from Torner 1747. DC. 101 was equated in the Calques des Dessins, on the authority of Asa Gray, with Thurbertiasthespestioides A. Gray. No
tracing of the plate was distributed with the text, on the
ground that another plate, already published by Gray, was
available. Gray saw and annotated the Sessé & Mocío
painting (DC. 101).

Recent authors have not united Ingenhouszia and
Thurberia under the same specific epithet, but the
consensus is that both are members of the genus
Gossypium, as shown by correspondence in chromosome
number, by ploidy tests and by general morphological
agreement (cf. Skovsted, l.c.; Kearney, in Amer. J. Bot.
24: 298-300. 1937; Fryxell, Malv. Mex. 175). T. H.
Kearney, after examination of nos. 3299 and 3300 of the
S. & M. herbarium (CNHM negs. 46806, 46807),
concluded that the specimens and the Candollean plate
represented the same species. He also supposed that
Gossypium lanceaeflorae Miers, q.v., differed from G.
thurberi, but he did not compare G. lanceaeflorae with G.
tribolum, as was done by Fryxell (q.v. under Gossypium
lanceaeflorae). Fryxell and Parks (Madroño 19: 122. 1967)
gave the range of G. tribolum as extending from southern
Sinaloa to western Morelos and suggested that the original
specimens may have been collected by Sessé & Mocío in
central Michoacán in 1790.

Mex. ed. 2. 157. 1894.

Locality cited: Cuba ['in Havanae circuitibus. Floret
Maio et Junio']. Long description. In the S. & M.
herbarium no. 3297 (CNHM neg. 46843), labelled
"Malachra capitata. V[ulg]o Malva cimarrona. 16-5", was
identified by Standley as Malvastrum spicatum (L.) A.
Gray.

110. 1889; ed. 2. 103. 1893; Fl. Mex. ed. 2. 157. 1894,
nor of Guillemin and Perrottet.

Type-locality: San Juan de los Plátanos, near
Apazitgán, Michoacán ['In Sancti Ioannis vulgo de los
Plátanos prope Apazitgán. Floret Octobri']. "Type"
[designated by Fryxell, Malv. Mex. 265]: In the Torner
Collection, no. 0469, which bears the numbers "403" and
"89" but no other inscription. Almost identical is an
original painting at MA, which bears the number "89"
and the hand-printed name "Malachra Hispida." It was
listed by name, with description, and identified as RJB Lám.
96 in the Catálogo de las Laminas del Real Jardín Botánico
(RJB 1987, p. 340). It was reproduced in full color by
Maldonado Polo (1996, p. [328]). It was no. 89 of a
manuscript list by Mocío, and no. 47 of Ramírez
(Anales Inst. Méd.-Nac. México 6, pt. 1: 78. 1903). The
images represent Ic. Fl. Mex. 403, which is cited in Pl.
Nov. Hisp. and in the list of images obtained during the
"Third Excursion," that to western Mexico, 1790-91.
The plant shown is a hirsute mallow with large
reiculate-veiny bracts and pale yellow flowers,
variably Malachra alceifolia Jacq., as indicated by
Fryxell (Malv. Mex., l.c.). That species is represented by
several collections in the S. & M. herbarium, but none
under the name of Malachra hispida.

Hisp. 111 (Malua). 1889; ed. 2. 104. 1893; Fl. Mex.
ed. 2. 158. 1894.

Locality cited [Pl. Nov. Hisp.] "in Mexicanis hortis,
plurimisque Europae locis. Floret Augusto" [Fl. Mex.]
San Miguel de Allende, Guanajuato ["Habitat
Michoacopoly et in tuta Europa"]. Very brief
description (without description in Pl. Nov. Hisp.). Not
found in the S. & M. herbarium.

Hisp. 111. 1889; ed. 2. 103. 1893.

Localties cited: Chilapa, Guerrero ["in Chilapae agris,
allisque Americae locis. Floret Septembris"]. Described.
In the S. & M. herbarium nos. 3263 and 3276 (CNHM
negs. 46858, 46859), labelled "Malva americana", were
determined by Standley as Malvastrum spicatum (L.) A.
Gray.

Malva angustifolia Cav. Monad. Diss. 1: 64. pl.
21. 1786; l.c. 1: 48. pl. 68. 1791. Sphaerela angustifolia
(Cav.) G. Don, Gen. Hist. 1: 465. 1831.

Type-locality: Mexico; first known to Cavanilles in
1786, when Antonio Palau sent him specimens from
Madrid. This antedates the Botanical Expedition to New
Spain but is included here because of its possible
connection with Malva longifolia Sessé & Moc., q.v.

ed. 2. 158. 1894.

Localties cited: [México, D.F.], at the fortress of
Chapultepec, and in the Royal Mexican [Botanical] Garden
["in Arce de Chapultepec et Horto Regio Mexicano. Floret
Octobri"]. In the S. & M. herbarium no. 3279, in part
(CNHM negs. 46945, 46946), labelled "Malva capensis",
is according to Standley Sphaeralcea rosea (D.C.) G. Don
[Pymosia rosea (DC.) Kearney], these names based on
Malva rosea DC., q.v. The description in the Fl. Mex.
appears to apply to this same species. In a note
following the description of Malva capensis is one of the
few references in the Flora Mexicana to the work of
Cavanilles: "Obs. Illustrius Botanicus, Antonius
Cavanilles Malvan [sic] hane, umbellatum dixit, et
corellam monopetalam campanulatam describit. Nos
autem capensem esse ex omnium Plantae partium
characteribus judicamus." This observation reflects the
conservatism of the authors and their reluctance to accept
the concept of new species in the New World.

Pl. Nov. Hisp. 111. 1889; ed. 2. 103. 1893.
Localities cited: Ayahuatempa, Guerrero ["in Ayahuatempae agris. Floret Augusto"]). Described. In the S. & M. herbarium no. 3259 (CNHM neg. 46847), labelled as above, was referred by Standley to *Malvavastrum coronandelianum* (L.) Garcke.


**Malva havanensis** Sessé & Moc. Fl. Mex. ed. 2. 158. 1894.

Type-locality: La Salud, near Havana, Cuba ["in Havaneae suburbis de la Salud dictis"]). In the S. & M. herbarium no. 3274 (CNHM neg. 46849), labelled "*Malva havanensis*. N.", is according to Standley *Malvavastrum coronandelianum* (L.) Garcke, Bonplandia 5: 295. 1857. The plant is described in the Fl. Mex. as having "pilis incipientibus", which is presumably a reference to the peculiarly aligned hairs of *Malvavastrum coronandelianum*.


Localities cited: México, D.F. ["in plurimis Hispaniae provinciis et agris omnibus Mexico vicinis. Floret Augusto"). Not described except for an initial diagnosis somewhat modified from the one in the *Species Plantarum*. Not found in the S. & M. herbarium. Not identified.


Type-locality: Cuba; grown at the Madrid Botanical Garden from seeds sent by Espinosa. Type: Not seen. According to Clement (Contr. Gray Herb. 180: 56. 1957), he saw a photograph of the type at US. As interpreted by Clement (i.e., pp. 50–60), this is a widespread species including several varieties in continental North and South America but not in the West Indies. The type may have been Mexican or, as supposed by Clement, South American. For further discussion of type and geographical range, see Fryxell (Malv. Mex. 300).


In the S. & M. herbarium no. 3281 (CNHM neg. 46839), labelled as above, was determined by Standley as *Malacaxa alceifolia* lacq.

**Malva longifolia** Sessé & Moc. Fl. Mex. ed. 2. 158. 1894.

Type-locality: Fields, México, D.F. From a note following the description of *Malva capensis* in Fl. Mex., it appears that Sessé & Mociño held their *Malva longifolia* to be the same as *M. angustifolia* Cav. *Sphaeralcea angustifolia* (Cav.) G. Don, Gen. Hist. 1: 465. 1831. If this was their opinion, then the name *Malva longifolia* is illegitimate because it was superfluous when published. The note in question reads: "... de omnibus Malvis et de Nostra longifolia, sive angustifolia illius [that is, of Cavanilles, whose *Malva umbellata* has been mentioned in the preceding paragraph], decidere deberet ... ". The description of *M. longifolia* in the Fl. Mex. probably applies to the plant now known as *Sphaeralcea angustifolia*, and no. 3270 of the S. & M. herbarium (CNHM neg. 46944), labelled "*Malva longifolia*. N.", is according to T. H. Kearney *Sphaeralcea angustifolia*.

**Malva mexicana** Sessé & Moc. Pl. Nov. Hisp. 111. 1889; ed. 2. 104. 1893, not of Schauer.

Type-locality: Fields, México, D.F. Not found in the S. & M. herbarium. Not identified. Described as a tomentose herb 3 feet high, with alternate crenate lanceolate rugose tomentose leaves, and axillary violet sessile glomerate flowers. Perhaps not of this family; cf. *Melochia, Turnera*, etc. Fryxell (Malv. Mex. 457), not having seen a specimen, assigned the name with question to the synonymy of *Sphaeralcea angustifolia*.


Type-locality: Unknown to Cavanilles; cultivated in the Madrid Botanical Garden, where it flowered in July 1795. Cavanilles later (ic. 4: 71. 1798) stated that it had been found by Néé "in Talcahuano urbe Regni Chileniensis", but apparently overlooking this he wrote still later (Descr. 168. 1802), "Se cria en Queretaro y otras partes de la Nueva España". The species is now generally considered to be South American (cf. Krápopikias in Lilloa 17: 205. 1949). The name *Malva miniata* was equated with *Malva cocinea* Ort. by Lagasca, Elench. 10. 1816.


Type-locality: "in Mexico". "Type" [designated by Fryxell, Malv. Mex. 355]: In the Torner Collection, no. 0745, labelled "*Malva rosea*" by de Candolle but otherwise without inscription. DC. plate 58, as cited in Calques des Dessins (Field Mus. neg. 30485), is a copy of the Torner no. 0745. The plant described was presumably the same as *Malva capensis* [L.] sensu Sessé & Moc., q.v., as indicated by Fryxell (i.c., p. 56), but the epithet "rosea" seems to have originated with de Candolle. According to Standley and Steyermark (Fieldiana, Bot. 24, pt. 6: 381–382. 1949) and to Fryxell (i.c.), *Sphaeralcea [Pemysosia] rosea* is a valid species of Guatemala and
southern Mexico, distinguished from *S. umbellata* (Cav.) G. Don by the larger flowers and by characters of the bractlets.


Type-locality: New Spain; grown at the Madrid Botanical Garden, "ex seminibus per D. Ses[é] adsportatibus". Kearney (Leaff. W. Bot. 7: 239. 1955) accepted *Malvastrum subtriflorum* as the earliest valid name for the Mexican species that had been known as *Malvastrum ribifolium* (Schlecht.) Hemsl.; cf. Standley in Contr. U. S. Natl. Herb. 23: 770. 1923. In the S. & M. herbarium nos. 3266 and 3268 (CNHM negs. 46855, 46856), referring originally to two unpublished species of *Malva*, are according to Standley *Malvastrum ribifolium*.

Fryxell (Malv. Mex. 245) includes both names as synonyms of *Kearnemalva subtriflora*, a species ranging from northern Mexico to Central America.

**Malva suffruticosa** Sessé & Moc. Pl. Nov. Hisp. 111. 1889; ed. 2. 104. 1893.

Type-locality: Fields, Yecapixtla ["Ayacapixtla"], Morelos. Not found in the S. & M. herbarium. Described as a villous subshrub 2 feet high, the leaves very short-petiolate, ovate, serrate, rugose; flowers subsessile in the axils, yellow, subsessile. Not identified. Fryxell (Malv. Mex. 457) could suggest no more than "=*Malvastrum* sp. ?".


**Malva vitifolia** Cav. Ic. 1: 13. pl. 20. 1791.


**Malva vitifolia** Sessé & Moc. Fl. Mex. ed. 2. 158. 1894, ?not of Cavanilles.

Type-locality: México, D.F. Neither the description nor the character in the Fl. Mex. seems to have been taken over from those of Cavanilles (Ic. 1: 13–14. 1791), but similarities in wording suggest that Sessé & Mocíno compared their plant with Cavanilles' description before writing their own account, and probably did not intend to propose a new name. As noted above under *Malva capitensis* and *M. longifolia*, Sessé & Mocíno had consulted at least the first part of Cavanilles' *Icones*, and surely knew of his description of *M. vitifolia*. In the S. & M. herbarium no. 3265 (CNHM neg. 46852), labelled "Malva vitifolia N. [and in another hand: "Cavanill.""] is according to Standley *Malvastrum lacteum* (Aiton) Standl. Contr. U. S. Natl. Herb. 23: 770. 1923 [= *Malva vitifolia* Cav.], = *Kearnemalva lacteum* (Aiton) Bates.


Type-locality: Mexico. This species is thought to be the same as *Hibiscus pedunculatus* Sessé & Moc., q.v., of which the type-locality is San Miguel Allende, Guanajuato. "Type" [designated by Fryxell, Malv. Mex. 320]: In the Torner Collection, no. 0760, which is labelled "Malvaviscus candidus" by de Candolle. DC. plate 90, as cited in Calques des Dessins (Field Mus. neg. 30508), is a copy of Torner 0760, designated as "tipo" by Fryxell in 1897 (before the recovery of the Torner Collection), but in 1988 specifically repudiated ("not the type"). In his revision of *Malvaviscus*, Schery (Ann. Missouri Bot. Gard. 29: 206–208. 1942) accepted this as a valid species of central Mexico, stating his opinion that although DC. plate 90 did not accurately portray *Malvaviscus candidus*, the "illustration could scarcely fit any other plant". The paintings represent I.c. Fl. Mex. 409; for discussion and citation of specimens see under *Hibiscus pedunculatus*.


Type-locality: Mexico. "Type" [designated by Fryxell, Malv. Mex. 106]: In the Torner Collection, no. 0389, which bears the hand-printed name "Hibiscus Mutabilis \(??\)" (epithet crossed out and "flavidus" added by de Candolle. DC. plate 87, an original painting bearing the number "376" [by Mocíno], not cited in Calques des Dessins, labelled by de Candolle "Hibiscus flavidus" (Field Mus. neg. 30525), is very nearly identical with Torner 0389, but Fryxell (I.c.) specifically repudiated it, saying "not the type". Both represent I.c. Fl. Mex. 376,
which is listed under the name of “Hibiscus mutabilis” among the icones obtained on the “Second Excursion”, that to Guerrero in 1789 (MA, ms), but is not the species listed under the name of H. mutabilis in the Fl. Mex. q.v., nor the species that was assigned this name in the S. & M. herbarium. The identity of Malaviscus? flavida was long in question. Schery (Ann. Missouri Bot. Gard. 29: 231. 1942) excluded it from Malaviscus, with the words: “Genus and species doubtful, probably Pavonia sp.” Fryxell (Brittonia 20: 334–335. 1968) reported its re-discovery in central Guerrero and its relationship to the previously little-known genus Anotea.


Type-locality [DC.]: “in Mexico”. “Type” [designated by Fryxell, Malv. Mex. 297]: In the Torner Collection, no. 1712, which is marked “Malaviscus penduliflorus” by de Candolle. DC. plate 91 [not “100” as reported by Fryxell], cited in Calques des Dussins (Field Mus. neg. 30509), is a partial copy of the Torner 1712, specifically repudiated by Fryxell (l.c.), who wrote, “not the type.” It may be supposed that the epithet *penduliflorus* was coined by de Candolle, as it seems not to appear on any specimen in the S. & M. herbarium. In that collection, however, as noted below, a specimen of *Malaviscus arbores* bears the epithet “nutans”. Schery (l.c., pp. 223–226) treated what he called var. *penduliflorus* as a widely distributed taxon marked by its unlobed leaves and rather large flowers. Fryxell (l.c.) says that it is almost never or never found outside of cultivation, and that it is “the premier ornamental of the genus.”

It seems plausible that “Hibiscus nutans” of Sessé & Mocchio represents the same plant, in spite of the difference in epithet. The Type-locality [Fl. Mex.] was in gardens at Cuernavaca, Morelos (“in calidis Quauhnahuacae horitis unde Botanicum translatus non emitit”). In the S. & M. herbarium no. 3544 (CNHM neg. 46963), labelled “Hibiscus nutans”, is according to Standley *Malaviscus arbores* Cav. Monad. Diss. 131. pl. 48, fig. 1. 1780. The description could apply to this species; the fruit is not mentioned. It is possible that the epithet “nutans” pertains to the plant depicted in no. 1712 of the Torner Collection, which is without insertion except for an annotation by de Candolle, “Malaviscus penduliflorus”. The two open flowers are strongly pendulous, and apparently unusually large, as would be appropriate in a cultivated plant. This binomial seems not to have been noted by Hochreutiner in his revision of Hibiscus; by Standley in the Trees and Shrubs of Mexico; or by Schery in his monograph of Malaviscus. Fryxell (1988 [Malv. Mex.] p. 456) said of it, “=Malaviscus arbores var. ?", and added “Type: Mexico, Sessé et al. [3544] (Fl!)”. Nelson (1997) referred “Sessé 3544” to Malaviscus arbores var. mexicanus Schlecht. and designated that specimen as “material tipo” of H. nutans.


Type-locality [DC.]: “in Mexico”. “Type” [designated by Fryxell, Malv. Mex. 292]: In the Torner Collection, no. 1093, which bears the number “124”, the name hand-printed “[Hibiscus brasiliensis. Linn. crossed out]”, the epithet “[by Sessé]” “[malaviscus crossed out]” added, and “Malaviscus pentacarpus” added by de Candolle. A duplicate in the Torner Collection, no. 0018, also numbered “124” and annotated “Malaviscus pentacarpus” by de Candolle, is not an exact copy. DC. plate 88, as cited in Calques des Dussins (Field Mus. neg. 30507), is a copy of Torner 1093; it was specifically repudiated by Fryxell (l.c.), who wrote “not the type”. The name was referred by Schery (Ann. Missouri Bot. Gard. 29: 219. 1942) and by Fryxell (l.c.) to the synonymy of *Malaviscus arbores* Cav., var. *mexicanus* Schlecht. Linnaea 11: 359. 1837. Not identified in the S. & M. herbarium.

Localities cited [Pl. Nov. Hosp.]: Many places in New Spain. I.e. Fl. Mex. 124, cited in Pl. Nov. Hosp. and included under the name of “Hibiscus malacous” among the icones obtained in the region of Mexico City in 1787–88 (MA, ms), was represented by the two paintings in the Torner Collection as cited above, each bearing the number “124” and an annotation by de Candolle, “Malaviscus pentacarpus”. In Torner no. 1093 the 5-carpellate fruit is well shown, and the names shown are [hand-printed] “[Hibiscus brasiliensis. Linn. crossed out]” and “Atlat zopollin. Herr. F. 117”, plus [hand-written] “[malaviscus crossed out]”. In no. 0018 the hand-printed names are “[Hibiscus malacous. Linn. crossed out]” and “Atlat zopollinichol. Hrz. 117”, and there is a hand-printed note on medicinal uses. In the S. & M. herbarium nos. 3559 and 3560 (CNHM negs. 46966–46968), labelled “Hibiscus malacous”, are according to Standley *Malaviscus arbores* Cav. Monad. Diss. 131. pl. 48, fig. 1. 1780, which is *Hibiscus malacous* L. It is probable that the descriptions of *Hibiscus malacous* [L.] sensu Sessé & Moc. Fl. Mex. ed. 2. 160. 1894, said to have come from Orizaba, [Veracruz], and another species by the same name (Fl. Mex. ed. 2. 162. 1894), but of unstated origin, apply to forms of *Malaviscus arbores* also.


Type-locality: “in Mexico”. “Type” [designated by Fryxell, Malv. Mex. 333]: In the Torner Collection, no. 0823, which is labelled “Hibiscus pleuranthera” by de.
Candolle. DC. plate 84, not cited in Calques des Dessins, is an unfinished copy of the icon in the Torner Collection. DC. 84 was designated as "tipo" by Fryxell (1979) before the recovery of the Torner Collection, but not mentioned in 1988. Schery (Ann. Missouri Bot. Gard. 29: 231. 1942) excluded M. ? pleuranthera from Malaviscus, with the words "Genus and species doubtful".

Malaviscus ? pleuragonus DC. in DC. Prodr. 1: 446. 1824, with citation of "fl. mex. ic. ined." as the basis for the name.

Type-locality: Mexico. "Type" (designated by Fryxell, Malv. Mex. 320): In the Torner Collection, no. 0980, labelled by de Candolle, "Hibiscus pleuragonus". DC. plate 81 is a copy after Torner 0980, not noted in Calques des Dessins, annotated as type by B. P. G. Hochreutiner in 1931, labelled "Hibiscus pleuragonus", and marked by Hochreutiner "C'est le M. Pringle Baker f.". The plant depicted is very similar in appearance to that of DC. plate 90, the type of Malaviscus candicans DC., q.v., but fruit is shown in one plate only. Not located in the S. & M. herbarium. Schery (Ann. Missouri Bot. Gard. 29: 231. 1942) excluded the name from Malaviscus, with the words: "Genus and species doubtful". Fryxell (Bot. Soc. Bot. México 38: 17. 1979) relegated it to the synonymy of Malaviscus [Pavonia] candida, and (this before the recovery of the Torner Collection) designated DC. 81 as "tipo", but did not mention it in 1988 (Malv. Mex. 320).

Montezuma speciosissima DC. in DC. Prodr. 1: 477. 1824, with citation of "fl. mex. ic. ined." as the basis for the name.

Type-locality: "in Mexico" [i.e., presumably Puerto Rico]. Type: DC. plate 1 as cited in Calques des Dessins [sketches only; Field Mus. neg. 30257]. According to a note by Alphonse de Candolle on plate 1, "La [tabula], 100 vue par DC. manque en 1873"; this latter was presumably the colored plate from which the original description and the sketches were drawn. No corresponding icon has been found in the Torner Collection. The plant described and depicted is a Puerto Rican endemic, which has been cultivated for shade and ornament elsewhere in the tropics. It was treated at length by Little and Wadsworth in Common Trees of Puerto Rico and the Virgin Islands (U.S.D.A., Agric. Handb. 249: 328–329, 1964).

The systematic position of this plant was long in doubt. Standley (Conr. U. S. Natl. Herb. 23: 794. 1923) stated that it was probably not Mexican in origin, and suggested that "Montezuma is the Porto Rican plant, Thespesia grandiflora DC., which was made the type of a new genus, Megah, by Urban." Kearney (Amer. Midl. Naturalist 46: 111, 1951) stated definitely that Montezuma is a monotypic genus, "represented by M. speciosissima [sic] Séssé & Moc., (Thespesia grandiflora DC., ?megah] grandiflora (DC.) Urb., known only from Puerto Rico". Fryxell (Malv. Mex. 440) treated the genus Montezuma DC., with type M. speciosissima DC., as a synonym of Thespesia Solander ex Correa, but apparently excluded the species from the flora of Mexico. Not found in the S. & M. herbarium.

Pavonia spinifex [var.] à grandiflora DC. in DC. Prodr. 1: 443. 1824, with citation of "fl. mex. ic. ined." as the basis for the name.

Type-locality: Not stated. Lectotype: In the Torner Collection, no. 0592, annotated "Pavonia acanthocarpa" by de Candolle but without other inscription. Judging from the format of the painting and the technique with which it was executed, this is one of the drawings made by Echeverria in the West Indies, ca. 1795 to 1797. DC. plate 60, as cited in Calques des Dessins (Field Mus. neg. 30487), is a fair copy of Torner 1592. Not identified. Apparently not noted by Fryxell (Malv. Mex., 1988).


Type-locality: Mexico. "Type" (designated by Fryxell, Malv. Mex. 341): In the Torner Collection, no. 0818, which is annotated "Pavonia oblongifolia" by de Candolle but bears no other inscription. DC. plate 59, as cited in Calques des Dessins (Field Mus. neg. 30486), is a copy of Torner 0818. It was cited as "tipo" by Fryxell (1980, before the recovery of the Torner Collection), but repudiated by him in 1988, where he said of it, "(not the type)". According to the same author (Fryxell Malv. Mex. 341), Pavonia oblongifolia is a synonym of Urena uniflora (Séssé & Moc.) Fryxell, q.v.


Localities cited: Cuemavaca, Morelos ["in Quahuahualceae agris, India, Siberia et Helvetia. Floret Septembri"]. Described at length. In the S. & M. herbarium no. 3459 (CNHM neg. 66750), labeled "Sida abutilon", was determined by Standley as Abutilon andriexii Hemsl. The latter species (Fryxell, Malv. Mex. 32. 1988) is known in Mexico from Oaxaca and Chiapas only.


Type-locality: [Lag.]: New Spain; grown at the Madrid Botanical Garden, "Semina Communicavit D. Séssé"; [Pl. Nov. Hisp.]: Gardens of Xochitlán ["in Xochitlán hortis"], Morelos. Type [Lag.]: Not seen. According to Lagasca, this plant was listed by the Madrid Garden as
early as 1805. A specimen from that Garden was received by de Candolle from Dumeril in 1806 (G-DC). It was presumably on comparison with this specimen, and after consideration of Lagasca’s description [viz. “capsulis inflatis, basi bistrostratis”], that de Candolle referred two of Mocino’s icones to this species. Both show the inflated multicellular capsules and the retorse spines at the bases of the carpels.

No. 1090 in the Torner Collection bears the number “123” and the hand-printed name “Sida palmata N.”. It was designated by Fryxell (Malv. Mex. 309. 1988) as the “type” of Sida palmata. DC. plate 64 (Field Mus. neg. 30490), a copy based on Torner 1090, is unfinished but clearly shows the inflated capsules and the basal spines. Presumably the icones represent Ic. Fl. Mex. 123, which was cited in Pl. Nov. Hosp. and included under the name of “Sida palmata N.” among the icones obtained in the region of Mexico City during the “First Excursion”, 1787–88. In the account of Sida palmata in Pl. Nov. Hosp., there is no reference to the carpellar spines, but in other respects the description seems to fit. No. 0548 in the Torner Collection is without any inscription except for an annotation by de Candolle. “Sida Spinifex”.

DC. plate 74 (Field Mus. neg. 30497) is a copy based on Torner 0548, labelled “Sida spinifex”, and also showing the carpels as above. In the S. & M. herbarium no. 3513 (CNHM neg. 46875), labelled “Sida palmata N.”, is according to Standley Neobrittonia acerifolia.


Localities cited: Chilapa, Guerrero (“in Chilapae circuitibus et in India. Floret Augusto et Septembris”). Described as suffruticoso, 4 feet high; leaves cordate-acute, undivided, subdenticulate, villous; petioles hirsute; flowers the largest in the genus, solitary, axillary, yellow; peduncles hirsute, shorter than the petiole; capsule 10-locular, erect, very hirsute, as long as the calyx. Not identified. Fryxell (Malv. Mex. 457) included it among “Doubtful and Excluded Names” and said of it “(specimen unknown) [sp. dub.]”.


Type-locality: Santa Ana Amatlan, Michoacán (“in umbrosis Sanctae Anammatam circuitibus in Provinciae Michoacanensis. Floret Decembris”). Not found in the S. & M. herbarium. Described as suffruticoso, 4 feet high; leaves cordate-acute, undivided, subdenticulate, villous; petioles hirsute; flowers the largest in the genus, solitary, axillary, yellow; peduncles hirsute, shorter than the petiole; capsule 10-locular, erect, very hirsute, as long as the calyx. Not identified. Fryxell (Malv. Mex. 457) included it among “Doubtful and Excluded Names” and said of it “(specimen unknown) [sp. dub.]”.


Type-locality: “in Mexico”. “Type” [designated by Fryxell, Malv. Mex. 234]. In the Torner Collection, no. 1731, which is labelled “Sida acuminata” by de Candolle. DC. plate 73, as cited in Calques des Dessins (Field Mus. neg. 30496), is a copy (labelled “Sida acuminata”) of Torner 1731; it was designated as “type” by Fryxell in 1976 (before the recovery of the Torner Collection); but in 1988 (Malv. Mex., l.c.) he specifically repudiated it, saying of it “(not the type)”. In the S. & M. herbarium no. 3548 (CNHM neg. 46750), labelled “Sida acuminata N.”, was named by Standley Abutilon amplexifolium (DC.) G. Don.


Type-locality: México, D.F. (“Mexici, ubi Viola ducitur”). Neither the generic name Anoda Cav., nor the specific names published at the same time (1785) were treated by Palau, whose account of the Malvaceae in his Vol. 5 appeared in 1786. Probably the plant known to Sessé and Mocioño as “Sida anoda” was the one they supposed to be the same as Anoda triloba Cav. The latter was published in the first volume of Cavanilles’ Dissertaciones, which was among the volumes in the library of the Expedición Botánica. Ic. Fl. Mex. 120, cited in Pl. Nov. Hosp. under the name of Sida anoda, was included under the name of “Anoda triloba” among the icones obtained in the region of Mexico City in 1787–88 (MA. mss.), but in the list of Ic. Fl. Mex. 141, no. 120 was included under the name of “Sida anoda”. I have not seen any icon identified as no. 120, but no. 0250 in the Torner Collection, evidently one of the paintings dating from the early years of the Expedition, bears the number “68” (which I cannot explain), the hand-printed name “Sida”, the epithet hand-written [by Sessé], “hastata”, the name written [by Sessé], “(Anoda triloba Cabanilles crossed out)”, and an annotation by de Candolle, “Anoda hastata Cav.”

As shown by the following quotation from a letter by Sessé, he was slow to accept the genus Anoda (Sessé to Ortega, 26 Feb. 1789, quoted by Alvarez López in Anales Inst. Bot. Cavanilles 10, pt. 2: 46. 1951): “Aqui hemos hallado la Anoda triloba y sin ser io [yo] mas que un pobre principiante no pudo en colocarla en el género Syda, hasta que se Cervantes la pasó al de Anoda, por haber visto el carácter natural de esta en Cavanilles. Si la discombenencia en una, o más partes de la fructificación fuera suficiente motivo para separar y crear nuevos géneros se podrían suprimir la mayor parte de las especies por ser mui rara la que carece de alguna anomalía”. As Anoda does not appear in the Pl. Nov. Hosp. or in the Fl. Mex., it may be supposed that it was finally decided to include Cavanilles’ species, but under the new name of Sida anoda. Not found in the S. & M. herbarium under this name. The description suggests the common Anoda cristata (L.) Schlécht. Linnaea 11: 210. 1837. Fryxell (Malv. Mex. 457) included it among “Doubtful and
Excluded Names" and said of it "(specimen unknown).
=Anoda acerifolia" Cavanielles?".


- **Type-locality:** New Spain; flowered in the Madrid Botanical Garden in October 1795. **Type:** Not seen. Not found in the S. M. herbarium. De Candolle's report of "Sida obliqua" from New Spain was based on DC. plate 66, an original painting bearing the number "121" and the name "Sida obliqua" (Field Mus. neg. 30492).
- Essentially identical is no. 114 of the Torner Collection, bearing the number "121", the hand-printed name "Sida (capensis. Linn. crossed out), and an annotation by de Candolle, "Sida obliqua."

The name "Sida obliqua" was not published by Sessé & Mocino and is not found on specimens in their herbarium. Ic. Fl. Mex. 121; however, is listed under the name of "Sida capensis" among the icons obtained near Mexico City in 1787-1788 (MA, mss). Specimens under that name in the herbarium (no. 3508: CNHM neg. 46933) are according to Standley *Sida rhombifolia* L. Sp. Pl. 684. 1753. Ic. Fl. Mex. 121 may well represent a form of *Sida rhombifolia*, but *Sida bicolor* Cav. is superficially quite different; Kearney (Leaff. W. Bot. 7: 148. 1954) did not know its identity. Fryxell (1988, 407) relegated it to the synonymy of *Sida spinosa* L. Sp. Pl. 683. 1753.

**Sida brachystemon** DC. in DC. Prodr. 1: 459. 1824, with citation of "fl. mex. ic. ined." as the basis for the name.

- **Type-locality:** "in Mexico". "Type" [more properly lectotype, designated by Fryxell, Malv. Mex. 385]. In the Torner Collection, no. 1803, without inscription except for the annotation "Sida brachystemon" by de Candolle. DC. plate 72, as cited in Calques des Dessins (Field Mus. neg. 30495), is an original painting, nearly identical with Torner 1803, without added number or name. It was specifically repudiated ["(not the type)"] by Fryxell (l.c.). The drawings show a young plant just beginning to flower; the leaves are linear, entire, the stems hirsute, the pedicles free from the subending bracts, and the styles 6 in number. The species is recognized by Fryxell (l.c.) as one growing at scattered localities from Oaxaca to Costa Rica.

**Sida carne DC. in DC. Prodr. 1: 473. 1824, with citation of "fl. mex. ic. ined." as the basis for the name. Sida mociniana** D. Dietr. Syn. Pl. 4: 858. 1847. nom. superfl.

- **Type-locality:** "in Mexico". "Type" [designated by Fryxell (Malv. Mex. 247): DC. plate 71, a colored copy, as cited in Calques des Dessins (Field Mus. neg. 30494)]. No copy has been found in the Torner Collection. Fryxell treated the name as a synonym of Kosteletzkya depressa (L.) O. Blanchard et al. Gentes Herb. 11: 357. 1978.


- **Locality cited:** Temascal, Guanajuato ["in Temascal, prop. Guanaxatunm. Floret Julio."
- Moderately fully described. In the S. M. herbarium no. 3516 (CNHM neg. 46901), named "Sida ciliaris", was according to Standley correctly identified.

**Sida coereula** Sessé & Moc. Fl. Mex. ed. 2. 155. 1894.

- **Type-locality:** Near Santa Mónica ["in elivo S. Monicæ jurisdictionis Meztitlan"]. Hidalgo. Described as a shrub 3 feet high, the branches submentose at tips, the leaves cordate-oblong, crenate, short-rotate, thickened by a short tomentum; peduncles axillary, twice as long as the pediole, solitary, l-flowered, jointed, and thickened above the joint; corolla blue, much longer than the calyx; capsule depressed, 10-locular, as long as the calyx. In the S. M. herbarium no. 3462 (CNHM neg. 46740), originally labelled "Sida coereula N.", was designated as "type" by Fryxell (Malv. Mex. 305). And the name was treated as a synonym of *Maximalva venusta* (Schlecht.) Fryxell, Bol. Soc. Bot. México 35: 31. 1976 ["1975"]. *Maximalva* is a genus comprising two Mexican species, of which the present one is found in arid habitats from San Luis Potosi to central Hidalgo and northeastern Michoacan.

**Sida conferta** Sessé & Moc. Fl. Mex. ed. 2. 156. 1894, not of earlier authors.

- **Type-locality:** Puerto Rico, where said to flower in October. Referred by Urban (Symb. Antill. 4: 391. 1910) to the synonymy of *Sida cordifolia* L. Sp. Pl. 684. 1753. In the S. M. herbarium no. 3590 (CNHM neg. 46902), labelled "Sida conferta N.", is according to Standley *Sida cordifolia*. According to Urban (l.c.), *Sida conferta* Link. Enum. Hort. Berol. 2: 207. 1822, is also a synonym of *S. cordifolia*. The coincidence in the use of the epithet *conferta* apparently has no significance, as *Sida conferta* Link was described from Brazil.


- **Locality cited:** Cuernavaca, Morelos ["in Quauhnahuacae agris et Jamaica. Floret Septembris"].
- Rather briefly described. According to determinations by Standley, Sessé and Mocino applied this name in their herbarium to species of three different genera, *Abutilon*, *Goyoides* [=Herissanta], and *Sida*. 

---

This text is a fragment of a larger work, discussing the classification and taxonomy of the genus *Sida* within the family Malvaceae. It includes detailed descriptions of various species, their Type-localities, and notes on their classification, including synonyms and differences from other species. The text also references earlier authors and their works, indicating the historical context of these studies. The focus is on the taxonomic details of different species, highlighting their characteristics and the changes in their classification over time.

Localities cited: Near Chilapa, Guerrero, etc. ["in Chilapa circuitus, Providentiae Insula, Carolina et Bahama. Floret Augusto"]). Ic. Fl. Mex. 348, cited in the manuscript of Pl. Nov. Hisp. but not in the printed version, and included among the icons obtained during the "Second Excursion", that to Guerrero in 1789. This is represented by two essentially identical paintings in the Torner Collection, each bearing the number "348". No. 00360 also bears the hand-printed name, "Sida Crispa N.", No. 00535 has been annotated by de Candolle "Sida crispa" and "conf. mss. p. 251". The plant depicted, according to a determination by P. A. Fryxell (1984) is Herissantia crispa (L.) Britzicky. I have not seen any equivalent painting that may be in the Candollean collection at G.

The name Sida crispa, according to determinations by Standley, is applied in the S. & M. herbarium to species of at least three different genera, Bostardia, Herissantia, and Sida.


Locality cited: Havana, Cuba ["in agris suburbii de la Salud, prope Puellarum Hospitium. Floret toto anno"]'). A moderately long description indicates that this is a very different plant from the one described in Pl. Nov. Hisp. See a note on the application of the name under the previous item.

Sida disticha Cav. le. 5: 12. pl. 432. 1799. Gaya disticha (Cav.) Sweet. Hort. Brit. ed. 2. 64. 1830.


Type-locality: Gardens in Orizaba, Veracruz. In the S. & M. herbarium no. 3497 (CNHM neg. 46896), labelled "Sida disticha N.", is according to Standley Sida acuta Burm.f. Fl. Ind. 147. 1768. Fryxell (Malv. Mex. 381) concurred, naming Sessé & Moc.ño 3497 as "type" of S. disticha Sessé & Moc. This is a common tropical weed.

"Sida exilis" N. Communicaeata à D. Cal.

In the S. & M. herbarium no. 3489 (CNHM neg. 46837), labelled as above, was determined by Standley as Kosteletzkya pentasperma (Benth.) Griseb. This is one of the very few specimens attributed to Antonio Cal y Bracho (cf. McVaugh 1977, p. 110).


In the S. & M. herbarium no. 3525 (CNHM neg. 46904), labelled as above, was determined by Standley as Sida cordifolia L.

Sida hastata Sessé & Moc. Pl. Nov. Hisp. 110. 1889; ed. 2. 103. 1893, not of earlier authors.


Type-locality: Near Metztitlán, Hidalgo. Described as a much-branched herb a foot and a half high, subvilloius, with corolate-hastate, crenate, long-petiolar leaves, peduncles solitary in the upper axes (or at the terminal ones in 3's), as long as the petioles; corolla yellow; capsule 10-locular, depressed, as long as the calyx. In the S. & M. herbarium no. 3480 (CNHM neg. 46789), labelled "Sida hastilolia N.", is according to Standley Anoda pedunculosa Hochr. Annuaire Cons. Jard. Bot. Genève 20: 60. 1916. Also found under the name "Sida hastifolia" in the herbarium, but surely not the plant described in the Fl. Mex., is no. 3478 (neg. 46743), which appears to be referable to Sphaeralcea couteiri (S. Wats.) A. Gray, a plant of extreme northwestern Mexico. Fryxell (Malv. Mex. 458) did not know the identity of Sida hastifolia.


Type-locality: In fields, Guanabacoa, Cuba ["in agris de Guanabacoa. Decembris floretem coniugio fructificatum quippe et bracteis stipulis destitutum Februario inveni"]'). In the S. & M. herbarium no. 3486 (CNHM neg. 46953), labelled "Sida integrifolia N.", is according to an annotation by Fryxell and Fuertes (1990) Wissadula periplocifolia (L.) P. ex Thwaites. This species occurs in Cuba and also in Mexico and Central and South America. Fryxell (Malv. Mex. 99, in the synonymy of Anoda pentasperma A. Gray) designated as "type" the
following: "Mexico, Guanabacoa, Sessé et al. "3498" [sic]; "Sida integerrima" (holotype: location unknown; isotype?: Fl!)."; at the same time he cited the place of publication as "Fl. Mex. 171. ed. ii. 1894".


Type-locality: "In Praedio de la Punta", [Veracruz] [its exact whereabouts unknown; perhaps near Córdoba; see McVaugh 1977, p. 175]. Briefly described, in much the same terms as *Sida integrifolia* of Fl. Mex. ed. 2. 156, but with fewer details. Possibly the same species was involved. Not identified.


*Sida linearis* Cav. Lc. 4. 6. pl. 312, fig. 1. 1797.

Type-locality: New Spain; flowering in the Madrid Botanical Garden in October 1795. Type: Not seen. According to Standley (Contr. U. S. Natl. Herb. 23: 766. 1923), this is a synonym of *Sida angustifolia* Lam.; this in its turn is a synonym of *Sida spinosa* L. Sp. Pl. 683. 1753. Not in the S. & M. herbarium under the name *linearis*. The name seems not to have been noticed by Fryxell (Malv. Mex., 1888).

*Sida malvaeflora* DC. in DC. Prodr. 1: 474. 1824, with citation of "fl. mex. ic. ined." as the basis for the name. *Sida leuca malvaeflora* (DC.) Benth. Pl. Hartw. 300. 1848.

Type-locality: "in Mexico" [i.e., probably California]. "Type" [designated by Fryxell, Malv. Mex. 413]: In the Torner Collection, no. 1754, without inscription except for an annotation "Sida malvaeflora" by de Candolle. DC. plate 70, as cited in Calques des Dessins (Field Mus. neg. 30493), is a less satisfactory copy of Torner 1754. This species, according to a determination by F. A. Barkley, is represented in the S. & M. herbarium by no. 3514 (CNHM neg. 46943), originally labelled "Sida palmata N."; this is not the *Sida palmata* of the Pl. Nov. Hisp.; see *Sida acerifolia* Lag. According to C. L. Hitchcock (Univ. Wash. Publ. Biol. 18: 20. 1957), "The plant in Calques des Dessins is a very good match for much of the material from Monterey to San Francisco". Presumably the type-plate was painted from California material, perhaps in the autumn of 1792, during Mociño's voyage to the Pacific Northwest.

*Sida ovata* Sessé & Moc. Fl. Mex. ed. 2. 155. 1894, not of earlier authors.

Type-locality: Near Havana ["in suburbis de la Salud"], Cuba. Not found in the S. & M. herbarium. The vernacular name is given as "malva mulata". Described as a shrub 3 feet high, glabrous; leaves ovate, serrate, very short-petiolate; peduncles axillary, solitary, one-flowered, jointed at the middle, thrice as long as the pedicels; petals gibbous, reddish-yellow, connate into a tube at base; carpels 10, bispinoase at apex. Not identified.

*Sida oxyphylla* DC. in DC. Prodr. 1: 465. 1824, with citation of "fl. mex. ic. ined." as the basis for the name. *Sida triloba* Sessé & Moc. Pl. Nov. Hisp. 110. 1889; ed. 2. 103. 1893; Fl. Mex. ed. 2. 156. 1894, not of earlier authors.

Type-locality: [DC.]: Mexico; [Pl. Nov. Hisp.]: San Miguel de Allende, Guanajuato ["in Michaelopolis. Floret Maió"]. "Type" [DC., designated by Fryxell, Malv. Mex. 82]: In the Torner Collection, no. 995, which bears the number "412" and the annotation "Sida oxyphylla" by de Candolle. A nearly identical original painting at MA, which bears the pencilled number "15" and the hand-printed name "Sida Triola", was listed by name, with description, and identified as RJB Lám. 97 in the *Catálogo de las Láminas del Real Jardín Botánico* (RJB 1987, p. 340). It was well reproduced in color, much reduced to ca. 6.7 by 4.5 cm, and identified as RJB Lám. 97 (RJB 1987, p. 204). It is no. 15 of a manuscript list by Mociño, and no. 72 of Ramírez (Anales Inst. Méd.-Nac. México 6, pt. 1: 81. 1903). DC. plate 65, as cited in Calques des Dessins (Field Mus. neg. 30491), is an unfinished copy of Torner 995. The paintings represent Lc. Fl. Mex. 412, cited in the Pl. Nov. Hisp. The description of *Sida triloba* in the Pl. Nov. Hisp. and the Fl. Mex. evidently applies to the same plant as the one illustrated.

The identity of *Sida oxyphylla* was long in doubt. It was not noted by Standley in the *Trees and Shrubs of Mexico*, or by Kearney in his key to North American Sida. Fryxell (i.c.) treated it as a member of *Allowissadula*, a primarily Mexican genus of nine species, and assigned *Sida oxyphylla* and *Sida triloba* to the synonymy of *Sida sessaei* Lag. *Allowissadula sessaei* (Lag.) Bates, Gentes Herb. 1: 343. 1978. In the S. & M. herbarium no. 3471 (CNHM neg. 46958), labelled [on one of two labels] "Sida triloba N. [descr.] 1280", was cited by Fryxell (1988 [Malv. Mex.] p. 82) under *Allowissadula sessaei*. Nelson (1997) designated another specimen in the S. & M. herbarium ("Sessé 3504") as "material tipo" of *S. triola* and reported its identity as *Abution mollicom* (Willd.) Sweet. That specimen (neg. 46765) is labelled "Sida (cordifolia crossed out) quinqueangularis N. [descr.] 16-5" and (on another ticket) "Sida triola ? 16-6". Whatever its identity may be, it seems an unlikely choice as type-material of *S. triloba*.

*Sida Paramitae N.*

A name not published by Sessé & Mociño, but used in their herbarium (no. 3465; CNHM neg. 46892). The epithet refers to Paramita, Nayarit, southeast of Acapulco, visited by the Expedition in 1791 or early in
1792. According to Standley, the specimen represents *Sida acuta* Burm. Fl. Ind. 147. 1768.

Locality cited: Near Sinaloa, Sinaloa, Mexico, where said to flower in October. The status of this name is uncertain. It is not clear from the text whether the word "(pedunculata?)" was inserted by the original authors or by an editor. The epithet "paniculata" evidently does not pertain to the same species as the "pedunculata" mentioned under *Sida parviflora*, q.v. The epithet "pedunculata" seems appropriate because the very long filiform peduncles are stressed in the character of this species. In the S. & M. herbarium no. 3481 (CNHM neg. 46954), labelled "Sida pedunculata N.", is according to Standley *Wissadula excelsior* (Cav.) Presl, but that species has entire leaves, and the plant described in the Fl. Mex. is said to have serrate leaves. The plant is not recognizable from the description, and neither name is validly published.

*Sida parviflora* Sessé & Moc. Fl. Mex. ed. 2. 156. 1894, not of Willdenow.
Type-locality: Dry fields, Guanabacoa, Cuba, where said to flower in December. In the S. & M. herbarium no. 3512 (CNHM neg. 46912), labelled "Sida parviflora", is according to Standley *Sida glutinosa* Commers, ex Cav. Monad. Diss. 1: 16. 1785. In the Fl. Mex., the authors say of *Sida parviflora*, "An paniculata?"; the species known to them as *Sida paniculata*, according to the labels in the herbarium, is also *Sida glutinosa* (nos. 3495, 3502: negs. 46910, 46911). The plant described as *Sida parviflora* in the Fl. Mex. also seems to work out to *Sida glutinosa* in Kearney's key to North American *Sida* (Leafl. W. Bot. 7: 141. 1954).

*Sida repens* Sessé & Moc. Fl. Mex. ed. 2. 156. 1894, not of Cavanilles.
Type-locality: Near Havana, Cuba, where said to be known as "Yedra terrestre." In the S. & M. herbarium no. 3463 (CNHM neg. 46906), labelled "Sida repens N. Yedra terrestre. Haven[a]", is according to Standley *Sida decumbens* St. Hil. & Naud. Ann. Sci. Nat., Bot., ser. 2. 18: 51. 1842.

Locality cited: Mountains of Chilapa, Guerrero. 1c. Fl. Mex. 351, cited in Pl. Nov. Hisp. and included among the *icones* obtained during the Second Excursion, that to Guerrero in 1789 (MA, mss.). It is represented by no. 0010 in the Torner Collection, which bears the number "351." Almost erased, the hand-printed name "Sida [Rhombifolia: Linna. crossed out]." and an annotation by de Candolle, "Sida rhomboidea." Essentially identical is DC. plate 62, an original painting labelled by de Candolle "Sida rhomboidea" and bearing the number "351." In the S. & M. herbarium no. 3522 (CNHM neg. 46935), labelled "Sida rhomboidea," is according to Standley correctly identified.

*Sida rostrata* Sessé & Moc. Pl. Nov. Hisp. 110. 1889; ed. 2. 103. 1893, not of Schumacher and Thonnin.
Type-locality: Around Coahuayana, Michoacán ("in Coahuayanæ circuitibus, Floræ Septembris"). Not found in the S. & M. herbarium. Described as a shrub 2 feet high, glabrous, the leaves sublanceolate, serrate, short-petiolate; peduncles axillary, twice as long as the petioles; flowers yellow; capsules 10-locular, depressed, the calyces closed, carpels ["Semina"] 2awned at apex. This suggests *Sida acuta* Burm.f. Fl. Ind. 147. 1768, a species common in western Mexico and represented in the S. & M. herbarium under several names. Fryxell (Malv. Mex. 458), however, did not identify *Sida rostrata* except as "Sida sp."

Type-locality: New Spain: grown at the Madrid Botanical Garden, where cultivated "ex seminibus à perill. D. Sessi [sicl adsportatis]." Type: Seen at MA, a well-preserved leafy branch with flower and fruit, showing the features described by Lagasca: "folis cordato-ovatis subtrilobis acuminatis dentatis subpræcapit tomentosis; pedunculis axillaris solitariis gynemise; petiolo longioribus subfluoris. Capsulis quinque." The five carpels are moderately pubescent, and shortly bi-aristate. The specimen is quite sufficient for identification by some competent person (cf. A. Krapovickas, Bonplandia 3, pt. 2: 20–22. 1969). Neither Standley, in the *Trees and Shrubs of Mexico*, nor Kearney, in his key to North American *Sida*, seems to have noticed *Sida sessei*, but Fryxell (Malv. Mex. 82) treated it under the name of *Allowissadula sessei*; a synonym is *Sida oxyphylla* DC., q.v.

Locality cited: Ayahualtempa, Guerrero ["in India ac agris Ayahualtempeae, Floræ Augusto"]. Described. In the S. & M. herbarium no. 3493 (CNHM neg. 46894), labelled "Sida spinosa", was determined by Standley as *Sida acuta* Burm.

Locality cited: Cuernavaca, Morelos ["Habitat Quahuhanuae et Jamaicia, Floræ Novembri"]. Described at some length. In the S. & M. herbarium no. 3452 (CNHM neg. 46794), labelled "Sida viscosa", was determined by Standley as *Bastardia viscosa* (L.) H. B. K.

*Urena americana* [L.f.] sensu Sessé & Moc. Fl. Mex. ed. 2. 159. 1894.
MALVACEAE

Locality cited: Puerto Rico ["in agris de Toa Alta allisque vicinias, ubi vulgo Cadito nominatur"].
Description. In the S. & M. herbarium no. 3294 (CNHM neg. 46950) was determined by Standley as *Urena trifolobata* Vell. Not further identified.

*Urena grandiflora* DC. in DC. Prodr. 1: 442. 1824, with citation of "fl. mex. ic. ined." as the basis for the name.
Type-locality: Mexico. "Type" [designated by Fryxell, Malv. Mex. 443]: In the Torner Collection, no. 1547, without inscription except for an annotation by de Candolle "Urena grandiflora". DC. plate 61, as cited in Calques des Dessins (Field Mus. neg. 30488), is a fair copy of Torner 1547; of this Fryxell (i.e.) stated, "not the type".
According to Hochreutiner (Annaire Conserv. Jard. Bot. Genève 5: 136, 1901) and Fryxell (i.e.), *Urena grandiflora* is a synonym of *Urena lobata* L. Sp. Pl. 692. 1753 [var. *lobata*]. The format and technique used by the artist indicate that the icon was one of those painted by Echeverria in the West Indies, 1795-96.

Locality cited: Toa Alta, Puerto Rico ["Habitat cum praecedenti (=Urena americana). sub eodem nomine vulgari, a qua tantum different folius sinuatis et floribus dimidio minoribus"]). No other description except the diagnosis. *Urena folios sinuato-palmatis. lobis obtusis*. In the S. & M. herbarium no. 3295 (CNHM neg. 46951), labelled "Urena sinuata. ic.", was correctly determined according to Standley.

Type-locality: Orizaba, Veracruz ["in subbusque Irizavae. Floret Mai. et Junio"]. The two names are equated as above because their protologues are identical except for the change in name. The fruit is described as a 3-locular capsule, each carpel dehiscent, one-seeded, with 3 retrose barbed spines at the apex, and the style branches are said to be 10. Presumably this refers to a species of *Pavonia*. In the S. & M. herbarium no. 3352 (CNHM neg. 46886), labelled "Hibiscus longifolius N.", is according to Standley *Pavonia spinifex* (L.) Cav. Monad. Diss. 133. 1787. See also *Pavonia spinifex* [var.] β *oblungifolia*. Fryxell (1988, p. 341) was unable to locate the type of *Urena uniflora*, but treated the taxon as a valid species of *Pavonia*.

Marantaceae

*Amomum bimaculatum* Sessé & Moc. Fl. Mex. 2. 1891; ed. 2. 2. 1894.
Locality cited: Acayucan, Ver., and Ahualulco, [Tabasco] ["in Acayucan et Ahualulci montibus. Floret Septembris"]. Long description, preceded by "ic. 3. Herb. 3.". For the meaning of these numbers see a note under *Alpinia racemosa* (Zingiberales). In the S. & M. herbarium no. 70 (CNHM neg. 46962), labelled "Canna bimaculata. Ic. d. 8. [describ]" and on another ticket in the hand of Mocino, "Amomum bimaculatum N. ic. No. 3", is hereby designated as neotype of *A. bimaculatum*. It was tentatively determined by McVaugh as *Calathea allomia* (Aubl.) Lindl. (Marantaceae). Nelson (1997) designated the same species (as "Sessé 70") as "material tipo of *A. bimaculatum*.

*Amomum latifolium* Sessé & Moc. Fl. Mex. 1. 1891; ed. 2. 1. 1894, not of earlier authors.
Type-locality: Near Córdoba, Veracruz ["in praedio 'Ojo de Agua' prope Corduvam. Floret Septembris"]. From the long and detailed description this is apparently a species of *Calathea*; not identified further. Not found in the S. & M. herbarium.

*Amomum trispicatum* Sessé & Moc. Fl. Mex. 1. 1891; ed. 2. 1. 1894.
Type-locality: Ahualulco, [Tabasco] ["in umbrosis humidisq. Ahualulci sylvis. Floret Novembri"]. Long description, with "ic. 2. Herb. 2.". For the meaning of these numbers, see *Alpinia racemosa* (Zingiberales). In the S. & M. herbarium no. 69 (CNHM neg. 46961), labelled by Mocino "Amomum trispicatum. Ic. N. N'", 2. 1–1", is hereby named as nectype of *A. trispicatum*. It was tentatively determined by McVaugh as *Calathea lutea* (Aubl.) G. F. W. Mey. Nelson (1997) designated "Sessé 69" as "material tipo" of *A. trispicatum*.

Locality cited [Pl. Nov. Hisp.]: Nejapa, Oaxaca ["in calcidioribus industria Orientalis, et in umbrosis praeedi de Nexapa montibus proprie Acapulcense. Floret Julio"]. Briefly described, with citation "Herb. 5.". For an explanation of this series of numbers, see *Alpinia racemosa* (Zingiberales). The other numbers in the same series (1–7) are cited also under the Zingiberales. The plant is correctly named in the S. & M. herbarium. The locality is about 20 km east-northeast of Tlapa, Guerrero; for discussion see McVaugh (1977, p. 171).

Locality cited (galanga): Puerto Rico and Tlacotalpan, Veracruz ["in paludosis Puerto Rico et Tlacotalpae locis. Floret Augusto"]. Long description, suggesting the genus *Thalia*. Also cited, "Herb[.] b.". For an explanation of this last number, see *Alpinia racemosa* (Zingiberales). In the S. & M. herbarium no. 80
(CNHM neg. 46969), labelled by Sessé “Marantha Galanga?” and by Mocíño, “No. 6”, in my view represents Thalia gemiculata L. That name (in Fl. Mex.) is accompanied by a description (including one of the fruit), but is without indication of locality. The plant is well represented in the S. & M. herbarium (nos. 76-81; negs. 46965-46970), but none of the specimens bears an identifying label except no. 80. Nelson (1997) designated “Sessé 80” as “material tipo” of M. galanga.

Marcgraviaeace


Locality cited: None. No author was cited for the name, but the Linnaean version was falsely treated by Palau (4: 284-285.1786), and it may be assumed that Sessé & Mocíño were aware of it. In the S. & M. herbarium no. 2266 (CNHM neg. 46977, labelled “Maragravia umbellata. [descr.]”, and neg. 46978, labelled “Maragravia umbellata.” [on two tickets, one in the hand of Castillo]), were all identified by A. C. de Roon as Maragravia mexicana Gilg. Nelson (1997) designated “Sessé 2266”, without citation of negative number, as “material tipo” of M. umbellata.

Martyniaeace


Localities cited: Temperate and hot regions in New Spain. i.e. Fl. Mex. 117, cited in Pl. Nov. Hesp, and included among the icons that were obtained in the region of Mexico City, 1787-88 (MA, ms). This is represented by no. 0027 in the Torner Collection, which bears the number “117”, the hand-printed name “Martinia [anna Linn. crossed out]”, and the annotation de Candolle, “Martinia uqualis”. In the S. & M. herbarium no. 2427 (CNHM negs. 46987, 46988), labelled “Martin[n]ia annua”, are according to Standley Martynia [Proboscidea] triloba Schlecht. & Cham. It may be that the plant depicted in Torner 0027 is a species of Proboscidea.


“In Guatimala et Ayacapatae regionibus (Moc. mss. et ic. ined.)”, according to de Candolle in DC. Prodr. 9: 253. 1845. “Ayacapatae” is evidently a corruption of “Ayacapixi”, that is Yecapixtl. Morelos. The icon cited by de Candolle is DC. plate 832, labelled “Martinia annua Linn.” and by de Candolle, “Martinya triloba”. This is a partial copy, after Torner 0027, i.e., representing ic. Fl. Mex. 117. and most probably painted in the vicinity of Yecapixtl, Morelos.

Melastomataceae


This is probably the plant depicted in no. 1962 of the Torner Collection, a sketch apparently by the artist Echeverría, annotated by de Candolle “Notka” and “Martynia racemosa”. The plant is a native of arid and desert regions from southern California south into Sonla, this is one of a series of drawings that were supposed by de Candolle to have been made at Nutka, but in fact depict plants of western and northwestern Mexico: for comment see Jatropha cordata (Euphorbiaceae).

Melastomataceae

In the Torner Collection there are 13 icons that are referable to this family. All except two (Torner 0766 and the Mouriria) have been named to species in a hand unknown to me. Only one (Mouriria mexicana) has been annotated by de Candolle in his usual hand. Only two have the name of the species hand-printed at the base of the drawing (Melastoma aspera and Melastoma scabra). Only five bear the numbers of class and order (10–1 or 12–1) that the botanists customarily wrote at the top of each picture when it was identified. Eight of the icons have been given names in the genus Melastoma, none of which is the same as any of the names proposed in the same genus in Fl. Mex.


Type-locality: Mexico. Type: Presumably a specimen at BM, ex herb. Lam. labelled "Blakea laevigata". Locality cited in Fl. Mex.: Huehuetla, Puebla ["in calidis Huehuetae allisise (sic) vicinis montibus, Flotre Octbrn"]). In the S. & M. herbarium no. 1812 (CNHM negs. 47043-47046), labelled "Blakea trinervis" (or variant spellings of this), is according to Louis Williams Topoea laevigata.

In the protologue Don did not mention any herbarium, but this is presumably one of the species of which he wrote (D. Don. op. cit. 4: 280), "... in the Lambrertan Herbarium are several unpublished species, from Don Jose Pavon, ... which agree with Topoea in every essential point; and these, also, accord well with Blakea, except in having four, instead of six scales, surrounding the calyx, ... and, therefore, I think myself justified in uniting these two genera". It is also noteworthy that in the course of a long article (op. cit. 276–329), among scores of citations of herbarium, the only one cited is "Herb. Lamb." except
that some of Sello's Brazilian collections are cited as from "Herb. Sims".


Type locality: Mexico. Type: "Pavon", "(v.s. in Herb. Lamb[ert]s.)". The specimen is in BM, ex herb. Lambert, marked by Pavon, "Geus novum de Mexico, Blakcae accedens". Not found in the S. & M. herbarium.


Type locality: Mexico. Type: "Pavon", "(v.s. in Herb. Lamb[ert])". In BM, ex herb. Lambert, marked by Pavon, "Gen. nov. de Mexico Blakcae accedens". Not found in the S. & M. herbarium. According to Triana (Trans. Linn. Soc. London 28: 148. 1871), this is a synonym of *Blakea repens* (Ruiz & Pavon) D. Don, l.c. The latter is a Peruvian species not known from Mexico. The identity of the type of *B. mexicana* should be checked.

**Chithionia macrophylla** D. Don, Mem. Wern. Nat. Hist. Soc. 4: 319. 4 Mar. 1823, with citation of "Melastoma macrophylla. Pavon MSS."

Type locality: Mexico. Type: "Pavon", "(v.s. in herb. Lamb[ert])", not seen. Not found in 1963 at BM, G, or OXF. Triana apparently saw the specimen, as in making the combination *Miconia macrophylla* he cited in synonymy "Chithia macrophylla, Don, ... fide spec. auth."


**Conostegia xalapensis** (Bonpl.) D. Don ex DC. in DC. Prodr. 3: 175. 1828. "[Melastoma] holosericea Pavon MSS."

Type locality: Peru. Reported by de Cardolle from "Mexico ex icona florae Mexicanae iconi Bonpl. simillima". DC. plate 334, cited by de Cardolle (Field Mus. neg. 30656) is a reasonably good representation of a melastomataceous plant with capsular fruit, apparently *Arctostaphylos ciliata* Ruiz & Pavon, Fl. Peruv. 4; pl. 326. 1802. My identification of the plate was confirmed by Louis O. Williams. DC. plate 334 is an unfinished copy of no. 0760 in the Torner Collection, a painting without any inscription.


Melastoma acuminata [sic] Sessé & Moc.: Fl. Mex. ed. 2. 105. 1894; not of earlier authors.

Type-locality: Tenamaltecpe, Edn. de México (in montibus Tenamaltecpe. Florentem Maior judicamus). Described at some length. In the S. & M. herbarium no. 1198 (CNHM neg. 47028), labelled "Melastoma acuminata N.", is according to J. J. Wurdack Miconia pravina (Sw.) DC., a species of the lowland tropics that probably does not occur near the type-locality of M. acuminata Sessé & Moc. The original specimens of Sessé & Mocíño were probably collected in the late summer, when only fruiting material was available. Perhaps when the Melastomataceae of the State of Mexico are well inventoried it may be possible to guess at the identity of this species.


Type-locality: "Cum praeecedenti" (that is, presumably, Quaxinipilapa, Guerrero; the preceding species, "malabatrica" [L.], was also said to grow in "India Oriental"). It seems pointless to guess at the identity of this species. Part of the material under the name of Melastoma angustifolia in the S. & M. represents a West Indian species (see below), and part of it a common Mexican plant, Cosmaria xalapensis (Bonpl.) D. Don. The latter, however, could hardly be the glabrous plant with entire leaves that is so briefly described in the Pl. Nov. Hist.


Type-locality: Seashores, Puerto Rico. Referred by Urban (Symb. Antill. 4: 454. 1910) to the synonymy of Tetrazygia angustifolia (Sw.) DC. in DC. Prodr. 3: 172. 1828, a species reported earlier from Puerto Rico by Cogniaux (in DC. Monogr. Phan. 7: 720. 1891) on the basis of a collection by "Pavon". In the S. & M. herbarium no. 1226 (CNHM neg. 47019), labelled "Melastoma angustifolia N.", is according to Wurdack Tetrazygia angustifolia. There is little evidence that Sessé & Mocíño, even though they knew of the work of Swartz, took up any of his names for West Indian plants, and apparently in this instance as in some others, the identity of the two specific epithets is a coincidence, and nomenclaturally, at least, the name of Sessé & Mocíño is not based upon that of Swartz.


Localities cited: Yecapixtla ("ad torrentes fluminis Ayacapitzlazae"), Morelos, and in the East Indies. Ic. Fl. Mex. 81, cited in Pl. Nov. Hist., and included under the name of "Melastoma aspera N." among the icones that were obtained in the region of Mexico City during the "First Excursion", 1787–88. This is represented by DC. plate 341, an original painting bearing the number "81" and labelled "Melastoma epilobinides (DC. mss)" (Field Mus. neg. 30659). An equivalent copy is no. 0364 in the Tower Collection, not numbered, bearing the hand-printed name "Melastoma aspera. Linn." and the annotation in an unknown hand, "Melastoma epiloboia". According to Wurdack (in litt. 1967), the icones represent a species of Tibouchina, perhaps T. rufipila (Schlecht.) Cogn., but not definitely identifiable to species. To be compared with the species described by David Don as Melastoma mexicana, q.v. Not found in the Sessé & Mocíño herbarium.


Locality cited: Mountains, Ahualulco, [?]Tabasco], where said to flower in November. The description is not very distinctive, but probably does not apply to the species of Tibouchina described under the same name in the Pl. Nov. Hist. In the Pl. Mex., the leaves are said to be whitish and tomentose beneath, and the flowers rarely ovoidaceous. See Melastoma mexicana.


Type-locality: Mountains, Ahualulco, [?]Tabasco], ["cum praeecedenti", i.e., M. glabra]. Not found in the S. & M. herbarium. Not identified.


Type-locality: Mountains, Ahualulco, [?]Tabasco], where said to flower in November. Described at some length. Not found in the S. & M. herbarium. Not identified.


Type-locality: "ad Portum Rico dictum". Type: "Pavon", the herbarium not stated but presumably that of Lambert, not seen; see a note under Blakesia kaevigata, above. Not known to Urban (Symb. Antill. 4: 466. 1910). In the S. & M. herbarium no. 1221 (CNHM neg. 47003), labelled "Melastoma diffusa N.", is according to L. O. Williams Axianthera quadrata Pers. Syn. Pl. 1: 477. 1805, a plant well known in Puerto Rico.


Type-locality: Near Tonila, Jalisco ("prope Tonilam in affractus ac asperis locis. Floret Februario"). Not found in the S. & M. herbarium. Described as a shrub 5 feet high with 4-angled stem and branches; leaves nerveless, ovate-lanceolate, entire, strongly striate-veined beneath, tomentose; panicles terminal, dichotomous;
flowers white, octandrous. This suggests a species of *Heterocentron*.

**Melastoma ferruginea** [sic] Sessé & Moc. Fl. Mex. ed. 2. 105. 1894, not of earlier authors.

Type-locality: Not located ["in Tettitani montibus. Floret Junio"], but probably Tettitlán, in Nayarit ca. 15 km from Ahuacatlán on the road to Tepic. See Contr. Univ. Michigan Herb. 11: 185. 1977. In the S. & M. herbarium no. 1195 (CNHM neg. 47017), labelled "Melastoma ferruginea N.", is according to Standley *Conostegia xalapensis* (Bonpl.) D. Don ex DC. in DC. Prodr. 3: 175. 1828. This is a common species in Mexico, and may well be the plant described in the Fl. Mex. Nelson (1997) designated the same specimen (as "Sessé 1195") as "material tipo" of *M. ferruginea*.

**Melastoma glabra** [sic] Sessé & Moc. Fl. Mex. ed. 2. 107. 1894, not of earlier authors.

Type-locality: Mountains, Ahualulco, [Tabasco], where said to flower in October. In the S. & M. herbarium no. 1215 (CNHM neg. 47029), labelled "Melastoma glabra", is according to G. J. Wurdack *Miconia prasina* (Sw.) DC. in DC. Prodr. 3: 188. 1828. This plant is known from the lowlands of southern Mexico and conceivably may have been the one described in the Fl. Mex. as *Melastoma glabra*. Nelson (1997) designated "Sessé 1215" as "material tipo" of *M. glabra*.

**Melastoma grandiflora** [sic] Sessé & Moc. Fl. Mex. ed. 2. 108. 1894, not of earlier authors.

Localities cited: Low and wet lands, Acayucan, [Veracruz] and Ahualulco, [Tabasco], where said to flower in August, September, and October. In the S. & M. herbarium no. 1211 (CNHM neg. 47040), labelled "Melastoma grandiflora N.", is according to L. Williams *Rhynchanthera mexicana* DC. in DC. Prodr. 3: 108. 1828. The plant of the Fl. Mex. may be some other species or of another genus, as the flowers are described as dodecandrous, the leaves alternate, and the "berries" dark purple. Nelson (1997) designated "Sessé 1211" as "material tipo" of *M. grandiflora*.

**Melastoma hirsuta** [sic] Sessé & Moc. Fl. Mex. ed. 2. 107. 1894, not of earlier authors.

Type-locality: Mountains, Ahualulco, [Tabasco]; ["cum praecedenti", i.e., *M. canaliculata, M. glabra*]. In the S. & M. herbarium no. 1187 (CNHM neg. 46990), labelled "Melastoma hirsuta N.", is according to Wurdack an undescribed species of *Miconia*. The plant is described as a shrub, hirsute throughout with very stiff hairs.


Localities cited: Acachizola, Guerrero ["cum praecedenti", which is *Melastoma scabrosa*]; and Jamaica. In the S. & M. herbarium no. 1188 (CNHM neg. 47010), labelled "Melastoma hirta", is according to Standley

**Clidemia hirta** (L.) D. Don, Mem. Wern. Nat. Hist. Soc. 4: 309. 1823. In the treatment in the Fl. Nov. Hisp. the fourth line reads "Plum. Sp. 18. 16. 149". This is not a reference to Fl. Mex. 149, which represents a plant of another family, but to a plate (actually no. 141, not 149) in Plumier (Plum. Pl. Amer. ed. Burm. 131. pl. 141. 1755).


Locality cited: Ahualulco, [Tabasco]; ["cum praecedenti", i.e., *M. aspera*]. The account of *M. hirta* in Fl. Mex. begins with the same diagnosis as that in Fl. Nov. Hisp., but except for that the two accounts are quite independent of one another. Evidently two different plants were described.


Type-locality: Mountains, Ahualulco, [Tabasco]; ["cum praecedenti", i.e., *M. pilosa*]. Said to flower in November. Description. In the S. & M. herbarium no. 1191 (CNHM neg. 47027), labelled (perhaps by Mariano Lagasca) "Melastoma laevigata", was determined by J. J. Wurdack as *Miconia mexicana* (Bonpl.) Naudin.


Type-locality: Mountains, Ahualulco, [Tabasco]; ["cum praecedenti", i.e., *M. laevigata, M. pilosa*]. In the S. & M. herbarium no. 1184 (CNHM neg. 47015), labelled "Melastoma lancifolia", is according to Standley *Conostegia xalapensis*. The description in the Fl. Mex. conceivably could apply to this species, but the stem is said to be herbaceous, and the flowers in a congested head.


Type-locality: Not stated. In the S. & M. herbarium no. 1222 (CNHM neg. 47030), labelled "Melastoma leucanthra N.", is according to Wurdack *Miconia prasina* (Sw.) DC. The very brief description in the Fl. Mex. conceivably could apply to this species. Nelson (1997) designated "Sessé 1222" as "material tipo" of *M. leucanthra*.

**Melastoma linearis** [sic] Sessé & Moc. Fl. Mex. ed. 2. 105. 1894, not of Reinw. ex Blume.

Type-locality: Island of Puerto Rico, where said to flower in August. Referred by Urban (Symb. Antill. 4: 454. 1910) to the synonymy of *Rhexia marianna* L., but Britton and Wilson (Sci. Surv. Porto Rico & Virgin Islands 6: 3. 1923) treated *M. linearis* as a synonym of *Rhexia cubensis* Griseb. Cat. Pl. Cub. 104. 1866. Not found in the S. & M herbarium. Described as an herb 9 inches high, sparsely pilose; branches 4-angled; leaves linear, ciliate-subserate, sessile, nerveless; flowers violet, 4-merous; "berry" oblong, dry.
Melastoma macrophylla [sic] Sessé & Moc. Fl. Mex. ed. 2. 108. 1894, not of earlier authors.

Localities cited: Low and wet lands, Acayucan, [Veracruz], and Ahualulco, [Tabasco]; "cum praecedit festa", i.e., M. grandiflora. Not found in the S. & M. herbarium. Described as a small tree with cordate, dentate, 7-nerved, tormentose, venose-reticulate leaves, violet flowers, and ovate, tormentose, 10-striate berries. Possibly this is the plant distributed by Pavón as *Melastoma macrophylla* and described by David Dons as *Chitonia macrophylla*, q.v. The latter has been referred to the synonymy of *Miconia leucocephala* (DC.) Naud.


Not identified. The place cited was a station on the mountain road between Chilpancingo and Acapulco, probably about five leagues below Acayucan; for discussion see McVaugh (1977, p. 176).


Type-locality: Low and wet lands, Acayucan, [Veracruz], and Ahualulco, [Tabasco]; "Habitat cum supradictis", i.e., *M. macrophylla* and *M. grandiflora*. Not found in the S. & M. herbarium. Not identified, but from the description probably a species of *Miconia*.


Type-locality: Mexico ["in Imperio Mexicanum"]. Type: "Pavon", "(v.s. in Herb. Lambert)"; a specimen at OXF, labelled by Pavón "Melastoma aspera de Mexico" but not annotated by D. Don, is presumably the original specimen from Lambert's herbarium. It was regarded by J. J. Wurdack (1973) as type-material of *Tibouchina mexicana*. It is perhaps the same plant as *Melastoma aspera* [L.] sensu Sessé & Moc. q.v. According to Cogniaux (i.e.) and to Standley (Contr. U.S. Natl. Herb. 23: 1054. 1924), *Tibouchina mexicana* and *Rhixia tortuosa* Humb. & Bonpl. Monogr. Melast. 2: 27. pl. 7. 1807, are synonymous names. If so, the earlier name should be taken up for this plant.


Type-locality: Córdoba, Veracruz; and other hot places in New Spain. Not found in the S. & M. herbarium. Described as herbaceous, woody at base, nearly glabrous, with red-purple 4-merous flowers, and a cylindrical capsule opening apically. Not identified.


Type-locality: Mountains, Ahualulco, [Tabasco], where said to flower in November. In the S. & M. herbarium no. 1190 (CNHM neg. 46991), labelled "Melastoma pilosa N.", is according to Wurdack *Miconia ibagueensis* (Bonpl.) Triana, Trans. Linn. Soc. London 28: 110. 1871. This is a widely distributed species and may have been the one described by Sessé & Mocino. Nelson (1997) designated "Sessé 1190" as "material tipi" of *M. pilosa*.


Localities cited: Acayucan, Guerrero, and Jamaica. Ic. Fl. Mex. 365, cited in Pl. Nov. Hisp, and included among the specimens obtained during the "Second Excursion" to Guerrero in 1789; this is represented by DC, plate 332 (Field Mus. neg. 30655), an original painting bearing the number "365", [by Mocino], and the hand-written name [by Sessé], "Melastoma Scabrosa". An equivalent copy is no. 1071 in the Torner Collection, which bears the number "365", the hand-printed name "Melastoma [Scabra converted to Scabrosa] Linne."; and the annotation in a hand unknown to me, "Miconia melastomoides S. N.". According to Wurdack (in litt. Jan. 1967), the DC plate probably represents a species of *Miconia*, sect. *Octoneres*, but probably not *Heterotrichium octonum* (Humb. Bong.) DC. in DC. Prodr. 3: 173. 1828, to which it was referred by Standley on the basis of no. 1178 in the S. & M. herbarium, a plant labelled "Melastoma scabrosa" (CNHM neg. 47023). *Heterotrichium octonum* has mostly 7-8-merous flowers and conspicuous long spreading hairs (not convincingly shown in the illustration) on the branchlets.


Type-locality: Mountains, Acayucan, Veracruz ["in Acayucae montibus. Flor. Decembris"]. No reference is made to the work of Linnaeus, but there is no reason to suppose that Sessé & Mocino were coining a new name; presumably they intended merely to describe a plant from the Atlantic lowlands and later to compare it with others already identified with *M. scabrosa*. This plant of the Fl. Mex. may be the same as *M. scabrosa* of the Pl. Nov. Hisp., q.v.; the stems and petioles are described as "pilosissimi".


Type-locality: Mountains, Ahualulco, [Tabasco]; "cum praecedentibus. Flor. Novembris", i.e., *M. hirta* and *M. aspera*. In the S. & M. herbarium no. 1186 (CNHM neg. 47025), labelled (on one of two tickets).
"Melastoma setigera N.", is according to Standley *Leandra mexicana* (Naud.) Cogn. in Mart. Fl. Bras. 14, pt. 4: 77, 1886. Neither the original description of *M. setigera* nor its type-locality throws any doubt on this disposition of the species. Nelson (1997) designated "Sessé 1186" as "material tipo" of *M. setigera*.


Type-locality: Caguas, Puerto Rico. Referred by Urban (Symb. Antill. 4: 453. 1910) to the synonymy of *Acisanthella quadricula* Pers. Syn. Pl. 1: 477. 1805, but material of that species in the S. & M. herbarium is not under the name of "Melastoma uniflora"; cf. *M. diffusa*, above. A Mexican species, *Monochaetum pringlei* Rose, as determined by L. O. Williams, was labelled "Melastoma uniflora N." by the collectors (no. 1203; CNHM neg. 47033), but presumably this was not the plant described in Fl. Mex.

**Melastrum venosa** [sic] Sessé & Moc. Fl. Mex. ed. 2. 106. 1894, not of Blume.

Type-locality: Xoxocotlan ("Xoxocotlan"), Veracruz. I cannot explain the notation "H. 809" that immediately follows the printed character of this species, unless this is a serial number assigned to the species in one of the several listings of the herbarium. No serial numbers accompany any of the specimens of this family in the S. & M. herbarium as now labelled. There is no reason to doubt that *Melastrum venosa* of the Fl. Mex. was a Mexican species, but in the herbarium no. 1193 (CNHM neg. 46993), labelled with this epithet, is according to Wurdack *Miconia racemosa* (Aubl.) DC., and is probably from Puerto Rico. The plant described in the Fl. Mex. was presumably a species of *Miconia* or *Conostegia*.

It was said to have ovate-lanceolate, serrate-ciliate, 5-nerved leaves that are glabrous above, tomentose and whitish beneath; corolla small, rosy; berries dark purple, pisiform, edible, called "Maxochiquitl" by the Tonotani.


Reported from Mexico by Cogniaux (in DC. Monogr. Phan. 7: 763. 1891) on the basis of a collection by "Pavon". I have not seen the specimen. In the S. & M. herbarium no. 1191 (CNHM neg. 47027), originally named "Melastrum laevigata", is according to Wurdack *Miconia mexicana*.


Reported from Mexico by Cogniaux (in DC. Monogr. Phan. 7: 396. 1891) on the basis of a specimen collected by "Pavon". I have not seen this plant. Several species of this genus are represented in the S. & M. herbarium but apparently not *M. calcaratum*.

**Mouriria [sic] mexicana** DC. in DC. Prodr. 3: 8. 1828, with citation of "fl. mex. ic. ined." as the basis for the name.

Type-locality: "in Mexico" [i.e., presumably Puerto Rico]. "Type" [Lectotype, designated by Thomas Morley, Fl. Neotrop. Monogr. 15: 174. 1976; DC. plate 361, as cited in Calques des Dessins, and by Cogniaux in DC. Monogr. Phan. 7: 1130. 1891 (Field Mus. neg. 30664). This is a good colored copy of no. 1405 in the Torr. Collection, which bears the number "97" (which I cannot explain) and the annotation "Mouriria mexicana" by de Candolle. In the S. & M. herbarium nos. 1076, 2048 and 2049 (CNHM negs. 47151, 47149 and 47150, respectively) apparently represent the same species as that shown in the plate. The plants, according to Morley, represent the Puerto Rican *Mournia domingensis* (Tussac) Spach. Hist. Nat. Veg. 4: 276. 1835, and are not of Mexican origin. The original icon, judging from the arrangement and technique, was one of Echeverria’s West Indian paintings executed in 1795–96, and may well have come from Puerto Rico. One of the specimens in the herbarium (no. 1076) is assigned the vernacular name "Caymitillo de Puerto" (or "de Costa"), with the implication that the plant came from Puerto Rico, where according to Britton and Wilson (Sci. Surv. Porto Rico & Virgin Islands 6, pt. 1: 17. 1925), *Mournia domingensis* is still known as *Caimitillo*. Evidently *Mouriria mexicana* does not belong to the Mexican flora.

**Rhexia glabella** Michx. Fl. Bor.-Am. 1: 222. 1803.

Reported from Mexico by Cogniaux (in DC. Monogr. Phan. 7: 389. 1891) on the basis of a collection by "Pavon" in the Boisier Herbarium. I have not seen the specimen and do not know what it may be.

**Rhynchachthera mexicana** DC. in DC. Prodr. 3: 108. 1828. "Thenardia rosea fl. mex. ic. ined.", cited by DC., i.e., as the basis for *Rhynchachthera mexicana*.

Type-locality: Mexico. Lectotype: In the Torr. Collection, no. 0750, which is annotated "THENARDIA rosea" in a hand unknown to me, but bears no other inscription. DC. plate 342, as cited in Calques des Dessins (Field Mus. neg. 30660), annotated [by de Candolle] "Thenardia rosea fl. mex. ic. ined.", is an incomplete copy of Torr. 0750. DC. plate XXVI [sketches only; Field Mus. neg. 30336] shows floral details copied from Torr. 0750. In the S. & M. herbarium no. 1211 (CNHM neg. 47040), labelled "Melastoma grandiflora N.", is according to Williams the same species as that represented by DC. plate 342. This is probably not the *Melastoma grandiflora* of Fl. Mex., q.v. According to Williams' revision of this genus (cf. Fieldiana, Bot. 29: 579. 1963), Cogniaux and other earlier workers on the Melastomataceae misinterpreted de Candolle's species.
Tibouchina galeottiana (Naud.) Cogn. in DC. Monogr. Phan. 7: 258. 1891.

Reported from Mexico by Cogniaux (l.c.) on the basis of a specimen by "Pavon". I have not seen this and do not know its whereabouts. The species is apparently not represented in the S. & M. herbarium.

Tibouchina rufipilis (Schlecht.) Cogn. in DC. Monogr. Phan. 7: 259. 1891.

Reported from Mexico by Cogniaux (l.c.) on the basis of a collection by "Pavon". I have not seen this and do not know its whereabouts. The species is apparently not represented in the S. & M. herbarium.


Type-locality: Mexico. Lectotype: In the Torre Collection, no. 820, which is labelled "Melastoma vesiculosa" in a hand unknown to me, but is otherwise without inscription. DC. plate 336, as cited in Calques des Dessins (Field Mus. neg. 30567), is an incomplete copy of Torre 820. Apparently not represented in the S. & M. herbarium. Standley (Contr. U. S. Natl. Herb. 23: 1070–1071. 1924) stated "There is little doubt that Tococa vesiculosa DC. is the same plant [as Maeta setosa (Triana Cogn.), and the proper name for this species is Maeta vesiculosa]." Standley took up the name Maeta setosa, however, because of the difficulty of identifying de Candolle's plant from the illustration alone.

Meliaceae

Cedrela angustifolia DC. in DC. Prodr. 1: 624. 1824, with citation of "fl. mex. ic. ined." as the basis for the name.

Type-locality: "in Nova Hispaniâ." Holotype, designated by Pennington (Fl. Neotrop. Monogr. 28: 384. 1981): In G-DC, from Lagasca, ann. 1807, marked by Lagasca "Cedrela odorata L. ex Nov. Hispania n. 79." This specimen is more properly designated as Lectotype, as one of the bases for Cedrela angustifolia was clearly the painting that was cited. The reference to "fl. mex. ic. ined." was based on no. 1899 in the Torre Collection, which was inscribed "[by Sesée] Cedrela odorata fol. 22" and "Tab. 23" and annotated by de Candolle "Cedrela angustifolia." The icon is one of those made in the West Indies (in Cuba or Puerto Rico) by Echeverria in 1795–96.

DC. plate 153 (Field Mus. neg. 30558) was cited in Calques des Dessins and by inference was thought by Alphonse de Candolle to represent the type of the new name. DC. 153 is a copy of Torre no. 1899. The Lagasca specimen, though not specifically mentioned in the protologue, was evidently studied by de Candolle (he says ("v.s."), and should be taken as the lectotype (Intern. Doc. Cent. microfiche DC. 243), as shown by Pennington (1981).

The species has been poorly understood, and students of the genus have not agreed on its disposition. C. de Candolle (in DC. Monogr. Phan. 1: 739. 1878) supposed that it occurred both in New Spain and in Peru. Rose (Contr. U. S. Natl. Herb. 5: 191. 1889) considered C. angustifolia a "doubtful species," in his monograph on Cedrela, C. E. Smith, Jr. took up the name angustifolia for one of the two common Mexican species, but apparently based his identification upon the Sessé & Mociño plate and not upon the Lagasca specimen (Fieldiana, Bot. 29: 322. 1960). Pennington, not having seen the painting from the Torre Collection, treated C. angustifolia as "imperfectly known," but probably not Mexican. Now that the West Indian origin of Torre 1899 seems evident, it may be supposed that it represents Cedrela odorata L., which is known from both Cuba and Puerto Rico.

Guarea brachystachya DC. in DC. Prodr. 1: 624. 1824, with citation of "fl. mex. ic. ined." as the basis for the name.

Type-locality: "in Nova Hispaniâ." "Type:" DC. plate 155, as cited in Calques des Dessins (Field Mus. neg. 30559) and designated by Pennington (Fl. Neotrop. Monogr. 28: 268. 1981). The better choice, as lectotype, might have been no. 1478 in the Torre Collection (which was not available to Pennington), from which DC. 155 was copied. Pennington (in litt. 1978) stated that the type was probably, although not certainly, referable to Guarea glabra Vahl, and in 1981 he relegated the name to the synonymy of G. glabra. Torre 1478, which is annotated "Guarea brachystachia" by A. P. de Candolle, is one of the elegant drawings made by Echeverria in the West Indies in 1795–96. Presumably this particular drawing was made in Puerto Rico, as Guarea glabra does not occur in Cuba.

Guarea brachystachya was accepted by C. de Candolle (in DC. Monogr. Phan. 1: 566. 1878) as a valid species, but known to him from the type-illustration only. Standley (Contr. U. S. Natl. Herb. 23: 558. 1923) seems also to have known it from this plate only. From the S. & M. herbarium nos. 937, 5117, and 5118 were cited by Pennington (1981, p. 444) as Guarea glabra Vahl. (see Guarea paniculata and G. trichiloides, below).

Guarea hirsuta C. DC. in DC. Monogr. Phan. 1: 578. 1878.

Type-locality: "Nova Hispaniâ." Type: "Pavon in herb. Boiss." This specimen is at G. ex herb. Barbeau-Boissier, with printed label "Nueva España Herb. Pavon" and marked by Pavón "Guarea hirsuta." The species was included by Hemsley (Biol. Centr. Amer. Bot. 1: 181. 1879) as Central American, but it was shown by C. de Candolle on the basis of new material to be South American in origin (cf. Annairey Conserv. Jard. Bot.

**Guarea pauciflora** Sessé & Moc. Fl. Mex. ed. 2. 92. 1894.

Type-locality: Mountains of Toa Alta, Puerto Rico ("in cismid locis [i.e. the same as *G. trichiloideis* sub codem nomine *Guarea guanaguana*]"). "Holotype": Designated by Pennington (Fl. Neotrop. Monogr. 28: 268. 1981) as "Sessé s.n. 5117 in MA"). The name was referred by Urban (Symb. Antill. 4: 325. 1905) to the synonymy of *Guarea trichiloideis* L. [= *G. guara* (Jacq.) P. Wilson], and by Pennington to the synonymy of *G. glabra* Vahl. In the S. & M. herbarium no. 5117 (CNHM neg. 47054), labelled "Guarea pauciflora", was determined by Faustino Miranda as *Guarea swartzii* DC. Another sheet of *G. swartzii* (no. 5118; neg. 47055) was originally labelled "Guarea trichiloideis" and "*V*[ulgo] Guaraaguana". The vernacular name *Guarea guanaguana* was reported in the Fl. Mex. for *Guarea pauciflora*, and Guaraaguana for *G. trichiloideis*, q.v. According to Pennington (in litt. 1973), both numbers (5117, 5118) are referable to *Guarea glabra* Vahl, which includes *G. swartzii* DC.


Locality cited: Mountains of Toa Alta, Puerto Rico. Described at length. Because of the coincidence in specific epithets, it seems very unlikely that this was intended as a new name for a species distinct from *G. trichiloideis* L., but no reference is made to the work of Linnaeus. Probably Sessé & Mocino confused more than one species under this name; in their herbarium it is applied not only to *G. swartzii*, q.v. under *G. pauciflora*, but as follows: No. 945 (CNHM neg. 47049), also labelled by the collectors "*V*[ulgo] Gayaro", was determined by Miranda *Guarea guara* (Jacq.) P. Wilson, N. Amer. Flora 25: 272. 1924, [which = *G. guanaguana* (L.) Sleumer, according to Pennington, 1981, p. 261]). No. 937 (neg. 47056) is according to Pennington (1981, p. 444) *Guarea glabra* Vahl. A sheet at G, ex herb. Barbe-Bossier, determined by C. de Candolle as *G. trichiloideis* L., is marked [by Sessé] "Arbor 40 pedalis Guarea trichiloideis vulgo Gayaro". It may be supposed that this last specimen, and no. 945 of the S. & M. herbarium, are from the same gathering, and collected in Puerto Rico.

**Guarea** sp. ("*Guarea folis pinnatis, triguis, foliosis ...*") Sessé & Moc. Fl. Mex. ed. 2. 92. 1894.

Locality cited: Cuernavaca, Morelos ["in torrentes fluminis Quauhnahuacae. Floret Augusto"] Described briefly. Not identified.


**Trichilia americana** (Sessé & Moc.) Pennington, Fl. Neotrop. Monogr. 28: 47. 1981.

Type-locality: Hot regions in New Spain [i.e., probably somewhere in Guerrero]. Holotype [designated by Pennington (1981, p. 49): "Sessé s.n." (1081 in herb. MA)]. Ic. Fl. Mex. 239 represents this species. It was wrongly cited in Fl. Nov. Hisp. and in the manuscript of that work as "339", and no. 239 was omitted from the list of icones obtained on the "Second Excursion" (that to Guerrero in 1789), but as nos. 241, 242, 243, and 245-248 were all images of plants that were reported from Mazatlan, Guerrero, it reasonably may be supposed that no. 239 was from the same area. Two almost identical copies of the same painting are in the Torner Collection, each bearing the number "239" (apparently written in by Mocinó and partially erased), and an annotation by de Candolle, "Evelynia melicidées". No. 0607 bears the hand-printed name "[Melia Americana. cross out] Sp. N.", the number "239" written in additionally in another hand, and three small floral drawings; no. 0442 includes 2 additional drawings of flowers and fruits.

The type-locality of *Trichilia pavoniana* was cited as "Mexico (Pavon in h. Boiss.; Mocinoa et Sessé in h. Deless.)". The specimen in the Delessert collection, now at G, ex herb. Lambert, was annotated by C. de Candolle in 1906; it is marked by Lambert "Mexico Herb. Mocinó & Sessé" and by Pavón "Melia americana" (Field Mus. neg. 26512). According to C. de Candolle, this species differs from the widespread *Trichilia hirta* in having glabrous anthers, and from *T. pringlei* Rose in its hisurate filaments and relatively longer panicles. According to Percy Wilson (N. Amer. Flora 25: 286. 1924), both *T. pringlei* and *T. pavoniana* are to be referred [the latter with ""] to the synonymy of *T. hirta* L. Syst. ed. 10. 1020. 1759. In the S. & M. herbarium no. 1081 (CNHM neg. 47065), labelled "Melia americana N.", is according to Standley *Trichilia hirta* L. If *Trichilia pavoniana* is to be maintained as a distinct species, it is to be noted that the name of Sessé & Mocino antedates that of de Candolle. Pennington (1981) took up the Sessé & Mocino name, relegating *T. pavoniana* and *T. pringlei* to synonymy.


Locality cited: None. Described at length. In the S. & M. herbarium no. 1040 (CNHM neg. 47057), labelled "Melia Acederae", was determined by Standley as *Melia azedarach* L. No. 0836 in the Torner Collection is without inscription except an annotation by de Candolle, "Melia azedarach". The name is included here as of historical interest. The inclusion of the specimen in the herbarium, coupled with the description in Fl. Mex. and the illustration, indicate that this Asiatic species had been introduced to tropical America before 1800.

**Melia **? **simplicifolia** Sessé & Moc. Fl. Mex. ed. 2. 104. 1894. See Styracaceae.

Localities cited [Pl. Nov. Hosp.]: Hot places in America ["in utrueque Americae calidioribus locis"]; [Fl. Mex.]: Cuernavaca, Morelos. The vernacular name is given as "cobano". IC. Fl. Mex. 224, cited in Pl. Nov. Hosp. and included among the *icones* obtained during the "Second Excursion", that to Guerrero in 1789; IC. 224 is represented by no. 1728 in the Torner Collection, which bears the number "224" (written in by Mocñno, then nearly erased, and re-entered in another hand) and the annotation by de Candolle, "Swietenia mexicana". The illustration includes a flowering branch, floral details, and lively drawings of the opening fruit, the included assemblage of seeds, and a single separate seed. Torner 0212 is an essentially identical drawing of the flowering branch but lacks the fruit and seeds, and bears the hand-printed name "Swietenia [Mahagoni. crossed out] Linn.", and the epithet added by de Candolle, "mexicana".

De Candolle in DC. Prodr. 1: 625. 1824), under Swietenia mahagoni, mentioned having seen that "in icon... fl. mex. capsulae ab alpe diecentes indicatur...". This was a reference to Torner 1728 or to DC. plate 152, which is an incomplete copy of Torner 1728. In the S. & M. herbarium nos. 1045 and 1082 (CNHM negs. 47059, 47060), labelled "Swietenia mahagoni", are according to Standley Swietenia humilis Zucc. Abh. Math.-Phys. Cl. Königr. Bayer. Akad. Wiss. 2: 355. 1835-36. Presumably the *icones* represent the same species.


**Trichilia laevis** Sessé & Moc. Fl. Mex. ed. 2. 104. 1894.

Type-locality: Zoocolco, Veracruz ["Xoxocolco, ubi Totonaci *Tzexaquihui* vocant. Augusto flore coniectarum, quippe fructus fere maturos Octobri observabimus"]. Not found in the S. & M. herbarium. Not noticed by Wilson in the *North American Flora*, nor by Standley in the *Trees and Shrubs of Mexico*. Described as a small tree with seven leaves, these glabrous, the lower obovate and smaller, the upper cuneate-lanceolate; rachis winged above the first pair of leaves; racemes axillary, very short, crowded, about 4-flowered; bracts ovate, minute. According to Pennington in litt. 1978), the description suggests strongly that this name is referable to *Trichilia havanensis* Jacq., this being the only species of the genus with a winged leaf-rachis, glabrous obovate leaves, and a small, contracted, few-flowered axillary inflorescence; it is also frequent in Veracruz. In publication the same author (Pennington 1981, p. 112) provisionally relegated the name *Trichilia laevis* to the synonym of *T. havanensis*.


**Menispermaceae**


Localities cited: Mountains of Mazatlán, (Guerrero), fields of Colima, (Colima); and in "America meridionali", IC. Fl. Mex. 438, cited in Pl. Nov. Hosp., is represented by no. 1753 in the Torner Collection, which bears the number "438" and an annotation by de Candolle, "Cissampelos pareira". In the S. & M. herbarium no. 4773 (CNHM negs. 44455-44458), identified by Standley, were originally designated by the same name.

**Coelococcus diversifolius** DC. Syst. 1: 523. 1817.

Menispernum sp. nov. Moc. et Sessé fl. mex. ic. ined., cited in synonymy by DC., i.e., as the basis for *Coelococcus diversifolius*.

Type-locality: Mexico. Lectotype: DC. plate 10, as cited in Calques des Dessins (plate 10 actually includes two dessins, numbered 10 and 10*; no. 10 shows a pistillate plant (Field Mus. neg. 30447), and no. 10* a staminate plant (neg. 30446). No. 10 is an incomplete copy of Torner no. 1490, annotated "Coelococcus diversifolium Q" by de Candolle. No. 10* is a fair copy of Torner 1519, labelled "Coelococcus diversifolium S" by de Candolle. In the S. & M. herbarium no. 4668 represents this species according to Standley (CNHM negs. 47066-47068). One sheet (neg. 47067) is labelled "Mas no. 93 ic." and another (neg. 47068) "Femina no. 93." Recognized by Standley [Contr. U. S. Natl. Herb.23: 274. 1922, under the name of *Cebathia diversifolia* (DC.) Kunth] as a valid species. The name *Coelococcus DC.* is conserved over *Cebathia Forssk.*

**Coelococcus oblongifolius** DC. Syst. 1: 529. 1817.

Menispernum sp. nov. Moc. et Sessé fl. mex. ic. ined.,
cited in synonymy by DC., i.e., as the basis for *Cocusus oblongifolius*.

Type-locality: Mexico. Lectotype: DC. plate 11, as cited in Calques des Dessins (Field Mus. neg. 30448), a copy of the original in the Torner Collection, no. 0991, which bears the number “242” (which I cannot interpret) and the annotation by de Candolle, “Coccus oblongifolius”. Not found in the S. & M. herbarium. Relegated by Standley (Contr. U. S. Natl. Herb. 23: 274. 1922) to the synonymy of *Coccus (Cebapha) diversifolius* DC.

**Monotropaceae**


Locality cited: Desierto de los Leones, D.F. [“in Sancto Eremo P.P. Camelliaturn plurimisse Europae locis, supra arborum radices, Floret Junio”]. Briefly described. In the S. & M. herbarium no. 1037 (CNHM neg. 47070), labelled “Monotropa Hypopitys”, was determined by Standley as *Monotropa coccinea* Zucc.


Locality cited: Desierto de los Leones, D.F. [“in Sancto Eremo. P.P. Carmeliarum, Marilandia, Virginia et Canada, Floret Junio”]. Briefly described. Not found under this name in the S. & M. herbarium, but no. 988 (CNHM neg. 43374), labelled “Pirola uniflora”, apparently represents *Moneses uniflora* (L.) A. Gray.

**Moraceae**

*Castilla elastica* Sessé in Cervantes, Gac. Lit. Méx. Supl. 2 Jul. 1794.

Type-locality: Mexico. For a discussion of the nomenclature of this species, see Langman, I. K., Brittonia 12 [Tax. Index 23]: viii. 1960. In the S. & M. herbarium no. 4633 (CNHM neg. 47071), labelled “Castilla”, is according to Standley *Castilla elastica* Cerv.


Locality cited [Pl. Nov. Hist.]: Near Jorullo (“Xorullum”) and near the sea at Coahuayana (“Coahuayanae mariimis”), Michoacán; and in Jamaica. Ic. Fl. Mex. 435, cited in Pl. Nov. Hist. and included among the icones obtained during the “Third Excursion”, that to western Mexico in 1790-91; this is represented by an original unnumbered painting at MA, with hand-printed name “Cecropia Peltata.” The latter was listed by name, with description, and identified as RJB Lám. 114 in the Catálogo de las Láminas del Real Jardín Botánico (RJB 1987, p. 344). It was well reproduced (though with emphasis on the browns) in full color at nearly natural size (ca. 28 by 19 cm) and identified as RJB Lámina 114 (RJB 1987, p. [237]). It was no. 20 of Ramírez (Anales. Inst. Méd.-Nac. México 6, part 1: 75. 1903), who correctly stated that it was the same as DC. plate 115, a later copy annotated “Cecropia pendentiflora”. There is no copy of the same in the Torner Collection. In the S. & M. herbarium no. 4765 (CNHM neg. 47072), labelled “Cecropia peltata”, is according to Standley *Cecropia obtusifolia* Bertol. Fl. Guat. 439. 1840 (= C. mexicana Hems.., to which the *Cecropia peltata* of Sessé & Mocinó had provisionally been referred by Standley in Contr. U. S. Natl. Herb. 23: 217. 1922). According to Servando Carvajal (in Fl. Bajío 53: 6. 1997), *C. obtusifolia* is the common *Cecropia* of western Mexico.


Locality cited: Zoxocole, Veracruz [“cum praecedenti”, i.e., *D. houstroni*: “in umbrosum et calidis Zoxocolei montibus ... Floret Augusto”]. See *D. houstroni*.

Described. In the S. & M. herbarium no. 594 (CNHM neg. 47082), labelled “Dorstenia contrayerba” (or “Contrayerba”), was determined by Standley as *Dorstenia contrayerba* L.

*Dorstenia cristata* Sessé & Moc. Fl. Mex. 27. 1893; ed. 2. 24. 1894.

Type-locality: “In anfractibus inter Oppidum de la Tuna et Praedium de Camuy”, Puerto Rico. Urbán (Symb. Antill. 4: 196. 1905; i.e. 666. 1911), who reported a single species of *Dorstenia (D. contrayerba* L.) from Puerto Rico, seems to have noticed neither the publication of *D. cristata* nor the localities from which it was cited. Not found in the S. & M. herbarium. Not identified.


Locality cited [Pl. Nov. Hist.]: Apatzingán, Michoacán, and mountains of Mazatlán near the road to Acapulco, [Guerrero] (“in Apatzingan et praed[Sic] Mazallanensis montibus prope tier Acaupuli. Floret Augusto”); [Fl. Mex.]: “in montibus Apatzingan”. Ic. Fl. Mex. 446, cited in Pl. Nov. Hist., represented by no. 1668 in the Torner Collection, bearing the number “446” [crossed out] and “124” added in another hand: almost identical is an original painting at MA, unnumbered, labelled “Dorstenia Drakenia.” It was listed by name, with description, and identified as RJB Lám. 32 in the Catálogo de las Láminas del Real Jardín Botánico (RJB 1987, p. 325). It was reproduced in color, nearly natural size at ca. 28 by 19 cm, and identified as RJB Lámina 32 (RJB 1987, p. [229]). It was cited as no. 31 by Ramírez (Anales. Inst. Méd.-Nac. México 6, pt. 1: 76. 1903), who correctly stated that this corresponds with DC. plate 1161, a copy. The plant shown in these illustrations has the

Locality cited: Zozocolco, Veracruz ["in umbrosis et calidis Zozocolae montibus. Toconaci Isagaga Totolongo, sive Galli crisim ex figura receptaculi dicunt"] (the Toconaci call it cockscob because of the shape of the receptacle). The locality is about 45 km SW of Papanlia; Sessé & Castellón passed through here in 1792, probably in October. Described at length. In the S. & M. herbarium no. 708 (CNHM neg. 47083) is labelled "Dorstenia Houstonii". Another sheet of the same number (neg. 47084) is labelled "Dorstenia Houstoni" and, by Mocino, "Lc. N. 328". This last is not a reference to lc. Fl. Mex. 328, which represents a different plant, but the number assigned to this species after 1800, as a part of the final numbering of the collection. Both sheets of no. 708 were determined by Standley as Dorstenia contrajera var. houstonii (L.) Bureau.

It may be that this is the plant depicted in no. 6092 of the Torner Collection, a painting without any significant annotation. The drawing is a good one, showing a plant with sharply pinnately lobed leaf-blades constricted above an auriculate base, and irregularly lobed receptacles of the "cockscob" type. Torner 6092 was well reproduced in color, at ca. 22.8 by 16.5 cm, and identified only as an "Ilustración original de la Flora Mexicana" by Lozoya (1984, p. [160]).


Locality cited: Ahujillo, Jalisco [Fl. Mex.]; ["Habitat in haereditate Ahuejuyo"]. Not adequately described. In the S. & M. herbarium no. 3833 (CNHM negs. 47100, 47101), labelled "Ficus benjamina", was determined by Standley as Ficus podálfolia H. B. K.


Locality cited: Cuernavaca, Morelos ["in saxosis Quauhnaueae calidumque altaurn Novae Hispaniae regionum montibus et in India"]. Described at length and its medicinal uses described. The description can hardly refer to any species other than Ficus petiolaris H. B. K., to which no. 3826 in the S. & M. herbarium (CNHM neg. 47104) was referred by Standley. The specific epithet appears to have been based on "Ficus Nymphaeae folio vulgo. Roy. Lugdb. 211", with the diagnosis (character) and the reference taken directly from Palau (1: 548. 1784). "Roy. Lugdb. 211" was one of the synonyms of Ficus sycomorus L.


Locality cited: Cuernavaca, Morelos ["in Quauhnaueae agris et Surinam"]. Briefly described. In the S. & M. herbarium no. 3839 (CNHM neg. 47093), labelled "Ficus pertusa", was determined by Standley as Ficus brevifolia Nutt., and no. 3824 (neg. 47099), similarly labelled, was determined as F. podálfolia H. B. K.


Locality cited: "in Porto Rico, ubi vulgo Higuierillo adpellatur". Short description. The diagnosis is essentially the same as that under Ficus pertusa in Pl. Nov. Hisp., but the description differs in many details and the cited locality is not the same.


Reported from "Mexico" by Bureau on the basis of a collection by "Pavon". I have not seen this specimen or that reported under the following variety, but presumably both were from the herbarium of Sessé & Mocino. In the original herbarium of S. & M. several collections of the plant now called Chlorophora tinctoria (L.) Gaud. in Freyc. Voy. Bot. 508. 1826, as named by Standley, were called "Morus tinctoria" by the collectors. In the Fl. Mex., Mora tinctoria was reported from Puerto Rico, where it was said to be called Mora.
Maclura tinctoria [var.] subintegerrima (Miq.) Bureau, in DC. Prodr. 17: 228. 1873.
Reported from "Mexico" by Bureau on the basis of a collection by "Sesse et Mocinno". See above under var. chlorocarpa.

**Musaceae**

Locality cited: Ahuauulco, [Tabasco]; ["cum praecedenti", i.e., *psittacorum* of ed. 2, p. 66]. Described at length. Not found in the S. & M. herbarium. Not identified, but probably of this genus.

**Heliconia psittacorum** [L.f.] sensu Sesse & Moc. Fl. Mex. ed. 2. 65. 1894.
Locality cited: None cited ["Habitat in eisdem locis eodem nomine insignita"]. Described. Not identified. The description refers several times to the "preceding" species, *H. rubra* of Fl. Mex. ed. 2, p. 65, and perhaps the statement of habitat (quoted above) is intended to do the same. The second *psittacorum* (p. 66), described independently, seems linked in a similar way to the two species that follow it, *H. hirsuta* and the second *H. rubra*, from a different locality.

**Heliconia psittacorum** [L.f.] sensu Sesse & Moc. Fl. Mex. ed. 2. 65. 1894.
Locality cited: Ahuauulco, [Tabasco]; ["in densioribus Ahualulci sylvis, Floret Augusto"]. Described. In the S. & M. herbarium no. 907bis (CWHM neg. 47116), labelled "Heliconia psittacorum", presumably represents this genus.

**Heliconia rubra** Sesse & Moc. Fl. Mex. ed. 2. 65. 1894; ed. 1. 71. 1895.
Type-locality: In the hot mountains of the "Totonalac" [i.e., northern Puebla and adjacent Veracruz], where said to flower in August. Described quite separately from the next species, and perhaps actually different. Not found in the S. & M. herbarium but probably of this genus.

**Heliconia rubra** Sesse & Moc. Fl. Mex. ed. 2. 65. 1894; ed. 1. 72. 1895; not of Fl. Mex. ed. 2. 65. 1894; ed. 1. 71. 1895.
Type-locality: Dense woods, Ahualulco, [Tabasco]; ["cum praecedentibus", i.e., *H. hirsuta, H. psittacorum* of ed. 2, p. 66]. Not found in the S. & M. herbarium. Not identified but probably of this genus; see first *Heliconia rubra*, above.

Localities cited: Almost everywhere in America. In Fl. Mex. 439, cited in Pl. Nov. Hisp., and listed among the plates obtained on the "Third Excursion", that to western Mexico in 1790–1791. DC. plate 1229, labelled "Musa sapientium", a colored copy [perhaps an original copy], is a good picture of the inflorescence, showing the young fruits developing and the terminal bracteate staminal cluster. Ramirez (Anales, Inst. Med.-Nac. Mexico 6, pt. 1: 84. 1903) alluded to such a plate supposedly at MA, which he had not seen. No comparable painting has been found in the Torre Collection. The species seems not to be represented in the S. & M. herbarium.

**Myrsinaceae**

Type-locality: "in Mexico". Type: [Note after description]. ["(Ex icono)"] The *icon* was DC plate 740, as cited in Calques des Dessins (Field Mus. neg. 30750), which is an unfinished copy derived from one or both of two nearly identical paintings in the Torrson Collection, nos. 0519 and 1762, both annotated by A. P. de Candolle "Tybrea erubescens". No. 0519 bears the number "251", and no. 1762 is numbered "57". I cannot explain either number. DC. plate XXI [sketches only; Field Mus. neg. 30321], annotated "Tybrea erubescens", seems to have been taken from Torner 1762. Not found in the S. & M. herbarium. Referred by Standley (Contr. U. S. Natl. Herb. 23, 1109. 1924) to the synonymy of *Icacorea revoluta* (H. B. K.) Standl. (*Ardisia revoluta* H. B. K. Nov. Gen. & Sp. 3: 246. 1819).

**Ardisia capollina** A. DC. Trans. Linn. Soc. London 17: 116. 1834, et in DC. Prodr. 8: 124. 1845, with citation of "Icon. Mexic. ind." as the basis for the name.
Type-locality: "in Mexico". Type: DC. plate 741, as cited in Calques des Dessins (Field Mus. neg. 30751). This is a copy derived from one or both of two nearly identical paintings in the Torner Collection, nos. 1119 and 1621, each numbered "262" (which I cannot explain) and annotated by A. P. de Candolle "Tybrea capollina". No. 1119 bears the hand-printed caption "Uulg. Capollin. Sylvestre". In no. 1621 the colors are lighter and brighter. DC. plate XXI [sketches only; FM. neg. 30322] was copied from the same model. In the S. & M. herbarium no. 1396 (CWHM Neg. 47118) is labeled "Caponin Zimaron"; according to Faustino Miranda the plant is *Parthenis serrulata* (Sw.) Mez in Urban, Symb. Antill. 2: 403. 1901. By Standley, however (Contr. U. S. Natl. Herb. 23: 1110. 1924), *A. capollina* is referred to the synonymy of *Icacorea compressa* (H. B. K.) Standl. (*Ardisia compressa* H. B. K. Nov. Gen. & Sp. 3: 245. 1819).

Type-locality: "In Ameríca meridionali". Type: "Pav. in h. Moricand" (Field Mus. neg. 26665). Not seen by Mez [the monographer of Myrsineae], according to Macbride (Publ. Field Mus. Nat. Hist., Bot. Ser. 13, pt. 5: 184. 1959), who stated further that the species is "perhaps not an *Ardisia* and possibly Mexican". The specimen from Moricand's herbarium (at G) is marked by Pavón "Ardisia esculenta de N. E.", from which it may be inferred that Pavón supposed it to have come from "New Spain", not from Peru. According to Alphonse de Candolle, the species was similar to another Mexican one: "vix differt a praeecedenti [A. bracteosea], tamen stamina diversissimae, ex ione supra citata [DC. plate 740]". Not found in the S. & M. herbarium.

**Myrsine penduliflora** A. DC. Trans. Linn. Soc. London 17: 110. 1834; and in DC. Prodr. 8: 100. 1844, with citation of "Icon. Mexic. ined." as the basis for the name. *Heberdenia penduliflora* (A. DC.) Mez, Pflanzenreich IV. 236 (Heft 9): 159. 1902.

Type-locality: "In Mexico". Holotype [not cited in the protologue, but in the *Prodrorum*, and in Calques des Dessins]: DC. plate 739 (Field Mus. neg. 30749). The latter is a fair copy of Torner no. 1539, which is annotated by A. P. de Candolle, "Mangillla penduliflora". Not found in the S. & M. herbarium. Not further identified.

**Myrtaceae**

**Eugenia conglobata** Sessé & Moc. Pl. Nov. Hisp. 83. 1888; ed. 2. 77. 1893.

Type-locality: Acahuiztotla, Guerrero ["in umbrosis Acahuiztollahمنتجی""] The authors treated more than one species under the above name. In the S. & M. herbarium no. 2104 (CNHM neg. 47157), labelled "Eugenia conglobata N.", was identified by McVaugh as *Eugenia aff. monticola* (Sw.) DC. Nos. 2055 ("Eugenia conglobata (descr.)") and 2107 ("Eugenia conglobata N.") (CNHM negs. 47172, 47173) were referred by McVaugh to *E. origanoides* Berg, Linnacea 29: 229. 1858 (Eugenia *venezuelensis* Berg). The description of *Eugenia conglobata* is distinctive (as descriptions of Myrtaceae go), mentioning the "tomentose", short-petiolate leaves, "villous" branches and "globose" axillary racemes. No. 2055 at MA may be designated as lectotype. Nelson (1997) designated "Sessé 2107" as "material type" of *E. conglobata*.


**Eugenia tabasco** (Schlecht. & Cham.) G. Don, Gen. Hist. 2: 866. 1832. "Myrtus Tabasco, Moc. et Sesse" [erroneously attributed to Cham. & Schlecht. by G. Don, i.e., in synonymy.

Type-locality: "Mexico". The name *Myrtus tabasco* was originally applied by Schlechtendal and Chamisso to a specimen from *Venezuela, Humboldt* in the Wildenow herbarium; cf. Fieldiana, Bot. 29: 511. 1963. The plant described under this name was *Pimenta dioica* (L.) Merr., known to Sessé & Mociño as *Myrtus piperia*, q.v.

**Eugenia triflora** Sessé & Moc. Pl. Nov. Hisp. 83. 1888; ed. 2. 77. 1893, not of Hamilton.

Type-locality: Guermacuca, Morelos. In the S. & M. herbarium nos. 2103 and 2106 (CNHM negs. 47137, 47138), labelled "Eugenia triflora N.", were determined by McVaugh as *Myrianthes fragrans* (Sw.) McVaugh, Fieldiana, Bot. 29: 485. 1963. The original description supports this disposition of *Eugenia triflora*. No. 2106, at MA, may be designated as lectotype. The same specimen was designated by Nelson (1997) as "material type" of *E. triflora*.

**Myrtus acuminata** Sessé & Moc. Fl. Mex. ed. 2. 124. 1894, not of Miller.

Type-locality: Tumacaco ["Tumacaco"], Puerto Rico, near the ocean. Urban (Symb. Antill. 4: 443. 1910) and Britton and Wilson (Sci. Surv. Porto Rico & Virgin Islands, pt. 1: 29. 1925) suggested that this may be the same as *Myrica leptolacada* DC.; the description suggests a *Myrica*, but there are no specimens of *M. leptolacada* in the S. & M. herbarium. In the herbarium, no. 2036 (CNHM neg. 47144), labelled "Myrtus acuminata", and no. 2094 (neg. 47145), labelled "Myrtus acuminata N. ... D.", were identified by McVaugh as *Calyptranthes pallens var. mexicana* (Lundell) McVaugh, which is Mexican, not West Indian. Two other specimens, nos. 2056 (neg. 47131), labelled "Myrtus acuminata N E" in the manner of Pavón, and no. 2057 (neg. 47132), labelled "Myrtus acuminata N.", were determined by McVaugh as another Mexican species, *Eugenia karwinskiana* Berg. Evidently Sessé & Mociño confused at least two species (and two genera) under this name. Nelson (1997) designated "Sessé 2036" as "material type" of *M. acuminata*.


Locality cited: "in Cordovaee montibus", Veracruz. Short description. In the S. & M. herbarium no. 2059 (CNHM neg. 47134), labelled "Myrtus biflora. 1001", is referable to *Myrianthes fragrans* (Sw.) McVaugh. The number "1001" is not one assigned to this particular plant, but the number assigned to this species after 1800, when an attempt was made to number the entire herbarium. The numbers assigned to the Myrtaceae included 1000-1011; see McVaugh 1990, p. 209.

Type-locality: Mountains of Coamo, Puerto Rico. Correctly referred by Urban (Symb. Antill. 4: 446. 1910) to the synonymy of Eugenia ligustrina (Sw.) Willd. Sp. Pl. 2: 962. 1800. In the S. & M. herbarium nos. 2027, 2032, and 2090 (CNHM negs. 47168–47170) are referable to Eugenia ligustrina. No. 2090 is labelled "Myrtus bracteiflora". The long-pedicellate flowers at bracteate nodes were noted in the original description of *M. bracteiflora*, making this one species of *Myrtus* that can be identified without much question from the Fl. Mex. The name "Myrtus bracteiflora" is also used in the herbarium for a specimen of *Eugenia procer a*, but this seems to have been simply a misidentification, for *E. procer a* has neither the long pedicels, the bracteate flowers nor the glabrous branchlets and foliage of *Eugenia ligustrina*.


Localities cited: Temperate mountains of Temascaltepec and Sullepec, Michoacán ["in Asia, Africa, plurimisque Europae provinciis et in temperatis Temascaltepec et Sullepec montibus, Floret Julio"]. Not described. Not found in the S. & M. herbarium. Not identified. Probably the plant in question was one of the native montane species of *Eugenia*.


Type-locality: Mountains, Temascaltepec, Edo. de México. Not found in the S. & M. herbarium. The plant described is probably a species of *Eugenia*; cf. "bracteae germinis baseos binae, oppositae, subtomentaude", the first part of the protologue of this species (8 lines, ending with the words "Folia ... glaberrimique") was published on page 136 of the first edition of the *Flora Mexicana*. The rest appeared on page 137 of the first edition, published in 1895. The complete protologue appeared in the second edition (1894) on page 125, chronologically between the two parts published in the first edition.


Locality cited: "in montibus Insulace de Puerto Rico". Description. In the S. & M. herbarium no. 2050 (CNHM neg. 47162), labelled "Myrtus [cumini crossed out] Americana. 1000", was determined by McVaugh as *Eugenia capuli* (Schlecht. & Cham.) Berg., a Mexican species. No. 2027 (neg. 47168), labelled "Myrtus [cumini crossed out] ovalis", was determined by McVaugh as *Eugenia ligustrina* (Sw.) Willd., which is primarily West Indian in distribution. No. 2048 (neg. 47149), labelled "Myrtus [corymbosa crossed out] cummini? 1010", was determined by McVaugh as *Eugenia acapulecensis* Sieud., mixed with *Mouriri domingensis* (Tuss.) Spach. as determined by Thomas Morley. For explanation of the numbers "1000" and "1010", see *Myrtus biflora* above.


Type-locality: Not stated. Not found in the S. & M. herbarium. The description is not distinctive, and I have no idea what the plant may be.

Myrtus emarginata Sessé & Moc. Fl. Mex. ed. 2. 124. 1894, not of earlier authors.

Type-locality: Mountains, Fajardo, Puerto Rico. Doubtfully referred by Urban (Symb. Antill. 4: 452. 1910) to the synonymy of *Eugenia fragans* var. *fajardensis* Krug & Urb. There is nothing in the S. & M. herbarium to support the conflation of Urban, and that of Britton and Wilson (in Sci. Surv. Porto Rico & Virgin Islands 6, pt. 1: 42. 1925), that *Myrtus emarginata* may have been a form of *Myrcianthes* (*Eugenia*) fragans. The name *Myrtus emarginata* was applied by the collectors, on the contrary, to two different species, *Anomis caryophyllata* (Jacq.) Krug & Urban and *Pseudanomomis umbellulifera* (H. B. K.) Kausel. The former is represented by no. 2042 (CNHM neg. 47124), labelled "Myrtus emarginata N"). and by two other numbered specimens. The latter species is represented by no. 2093, also labelled "Myrtus emarginata N"). (neg. 47136). Both *Anomis* and *Pseudanomomis* are known in Puerto Rico, the latter perhaps only as an introduction.

The identity of *Eugenia andina* Berg, Linnaea 27: 274. 1856, of which "Myrtus emarginata Ruiz hh.", cited by Berg, i.e., is a synonym, has long been a mystery; cf. Publ. Field Mus. Nat. Hist., Bot. Ser. 13, pt. 4: 774. 1958. Berg saw the type at Berlin. In view of the occasional errors in labeling that are known in other herbaria, it is conceivable that the plant seen by Berg at Berlin was actually one of the West Indian species cited above, and that Berg was in error in supposing the specimen to have come from Peru. As pointed out in the *Flora of Peru* (McVaugh in Publ. Field Mus. Nat. Hist., Bot. Ser. 13, pt. 4: 816–817. 1958), Pavón distributed some specimens under the name of "Myrtus emarginata" (among them some plants of *Anomis* probably from the West Indies), and Moricand, at least, assumed these were from Peru; similar assumptions may have been made at Berlin.


Type-locality: Mountains of Humacao ["Tumaco"], Puerto Rico. The description suggests some species of *Myrica*, e.g. the statements that the peduncles are long and "subrufioloris", and the flowers pentapetalous. Urban (Symb. Antill. 4: 442. 1910) and Britton and Wilson (Sci. Surv. P.R. 6, pt. 1: 28. 1925) suggested that *Myrtus nitida* might be *Myrica citrifolia* (Aubl.) Urban, Repert. Spec. Nov. Regni Veg. 16: 150. 1920 [*Myrica paniculata* (Jacq.) Krug & Urban], but the herbarium
provides no evidence of this. In the S. & M. herbarium one sheet of no. 2046 (CNHM neg. 47161), labelled "Myrthus nitida", is Eugenia monticola (Sw.) DC. or a closely related species, as is a sheet at Fl (herb. Webb), marked by Pavón "Myrthus nitida N.E.". Probably some misidentification is involved, as described in the Fl. Mex. can hardly apply to this species of Eugenia.

**Myrthus parviflora** Sessé & Moc. Fl. Mex. ed. 2. 124. 1894, not of Sprengel.

Type-locality: Seashores, Palo Seco and Cangrejos, Puerto Rico, where said to flower in August. Urban (Symb. Antill. 4: 450. 1910) suggested that this might represent a variety of Eugenia pseudopodium Jacq., but this seems unlikely. The leaves of Myrthus parviflora are described as "ovate-lanceolate", which does not apply well to the rather broadly ovate leaves of *Eugenia pseudopodium*. I think it more likely that the plant of Sessé & Mocino was *Eugenia procera* (Sw.) Poir. Encycl. Suppl. 3: 129. 1815. This species is represented in the S. & M. herbarium by 4 sheets, probably from two gatherings, of this West Indian species. No. 2092 (CNHM neg. 47163) is labelled "Myrthus parviflora N." and may be taken as the lectotype. Nelson (1997) designated "Sessé 2002" as "material type" of *M. parviflora*.

The description of *M. parviflora* is not unequivocal, but the plant is said to have axillary one-flowered filiform peduncles in 3's, and 4-parted flowers. Another West Indian species, which does not fit the published description, was mistakenly identified by the collectors with *M. parviflora*; this was determined by Standley as Myrthus citrifolia (Aubl.) Urban, Repert. Spec. Nov. Regni Veg. 16: 150. 1920 (in the S. & M. herbarium no. 2028; CNHM neg. 47180; another sheet is at G, ex herb. Babey-Boissier, marked by Pavón "Myrthus parviflora N E.")

**Myrthus piperita** Sessé & Moc. Fl. Mex. ed. 2. 124. 1894.

Type-locality: Papanlita ["in Provincia Papanlita"], near the Gulf of Mexico, Veracruz. In the S. & M. herbarium nos. 2043 and 2044 (CNHM negs. 47189, 47190), both labelled "Myrthus piperita N.", are referable to Pimenta dioica (L.) Merrill, Contr. Gray Herb. 165: 37. 1947. No. 2043 was cited as "type" by McVaugh in the Flora of Guatemala (Fieldiana. Bot. 24, pt. 7: 383. 1963). A plant of the same species at Fl (herb. Webb) is labelled by Pavón "Myrthus piperita N E". From the account in the Fl. Mex., there seems to be no doubt that *Pimenta dioica* is the species described.

**Myrthus racemosus** Sessé & Moc. Fl. Mex. ed. 2. 125 [1st on page.]. 1894, not of earlier authors.

Type-locality: Not stated. Described as having axillary racemes and 4-parted flowers, and so probably some species of Eugenia. Not identified; see below under the second species of this name.

**Myrthus racemosa** Sessé & Moc. Fl. Mex. ed. 2. 125 [2nd on page]. 1894; ed. 1. 137. 1894, not of earlier authors.

Type-locality: Mountains of Tuxtla, [i.e., presumably San Andrés Tuxtla, Veracruz]. Described as a glabrous tree, "the racemes" "di aut trichotomos", the flowers pentapetalous, the fruit rather dry, the size of a pea. This suggests a species of Myrthus. In the S. & M. herbarium no. 2040 (CNHM neg. 47187), labelled "Myrthus racemosa", and no. 2052 (neg. 47188), originally labelled "Myrthus racemosa", then "Myrthus trifida", and finally "Myrthus longifolia", are both referable to *Myrthus densiflorus* (Sw.) DC. in DC. Prodr. 3: 244. 1828. The flowers in this species are 5-parted, as required by the description of *Myrthus racemosa*, and the inflorescences are "di aut trichotomos", but the plants are by no means glabrous. There is also in the S. & M. herbarium a mixture of material under the number 2041 (negs. 47656-47659) of a Prunus (perhaps *P. samyoides* Schlecht.) of the Rosacaeae, and twigs of *Achatocarpus nigricans* Triana of the Phytolaccaceae; the label with neg. 47659 reads "Myrthus [puntata crossed out] racemosa. 1009". For explanation of the number "1009", see *Myrthus biflora*, above.

**Myrthus trifida** Sessé & Moc. Fl. Mex. ed. 2. 124. 1894.

Type-locality: Mountains, Cabo Rojo, Puerto Rico, where said to flower in August. According to Urban (Symb. Antill. 4: 442. 1910), who cited a collection by "Mocino (bb. Boiss.")", this is a synonym of *Myrthus citrifolia* (Aubl.) Urb. [*M. paniculata* (Jacq.) Krug & Urban]; see also above under *Myrthus nitida* and *M. parviflora*. The original description of *M. trifida* mentions the sub sessile oval-lanceolate leaves, "trifid" peduncles and "usually 3-flowered, umbellate" pedicels, the spreading bracts at the base of the "pedicels" and the 5-parted flowers; this may well apply to *Myrthus citrifolia*, which is represented in the S. & M. herbarium by no. 2028 (mentioned under *M. parviflora*) and also by nos. 2030 (labelled "Myrthus sp. nova de N E") in the manner of Pavón and 2091 (CNHM negs. 47180-47182); no. 2091 is labelled "Myrthus trifida N. d.". Nelson (1997) cited "Sessé 2091" as "material type" of *M. trifida*, at the time same reporting the determination of the specimen as "Myrthus citrifolia" (Plum. ex Aubl.) C. Nelson", I cannot find that this combination has been formally published; if so it would be unfortunate, as the presumed basionym was not published as new by Aublet (Pl. Guianen Frænal. 513. 1775), who cited the trinomial "Myrthus cotinifolium Plum. Cat. 19" among other such citations not intended as new names.

"**Myrthus tuxtilensis** Desc. fol. 65". In the S. & M. herbarium no. 2035 (CNHM neg. 47183), labelled as above, was determined by McVaugh as *Myrthus densiflorus* (Sw.) DC.
Myrtaceae


Locality cited: [in Tuxtlas montibus] “cum praecedentibus”, i.e., M. racemosa, and M. sp.

Description. In the S. & M. herbarium no. 2061 (CNHM neg. 47178), labelled “Myrtus Zeylanica. Desc. fol. 66. [descri].” was determined by McVeagh as Eugenia acapulcensis Steud.

Myrtus sp. (“———Myrtus pedunculis racemosis, verticillatis ...”, etc.) sensu Sessé & Moc. Fl. Mex. ed. 2. 125. 1894.

Locality cited: “Habitat in Tuxtlas montibus. Floret Julio”. From the description of a plant with axillary solitary racemes, a very long, suberect and angled, tomentose peduncle (“pedunculus communis”), and white insipid and inodorous fruits, I suspect that this was not a member of the Myrtaceae.


Localities cited [Pl. Nov. Hosp.]: Many places in America [“in urbe America”]; [Fl. Mex.]: Temperate and hot places in New Spain. Ic. Fl. Mex. 92, cited in Pl. Nov. Hosp. and included among the icones obtained in the region of Mexico City, 1787–88 (MA, mss.), is represented by two drawings in the Torner Collection. The two drawings of a flowering branch are essentially identical. Torner no. 045 bears the number "92", a hand-printed note on the edibility of the fruit, and hand-printed names “Psidium Pomiferum. Linn.” and “Xalocotl. Hrz. 85. Guaya[?]ls”. No. 0052 includes colored illustrations, natural size, of a fruit and a cross-section of another, and an annotation by de Candolle, “Psidium pomiferum L.”. The plant depicted is the common guava, Psidium guajava L. Sessé & Mocínó, as indicated by their discussion and by specimens in their herbarium, applied this name to Psidium guajava, and also to another species, Psidium friederichshilianum (Berg) Nied. (cf. no. 2134; CNHM neg. 47193).

Psidium sartorianum (Berg) Nied. in Engler and Prantl, Natürl. Pflanzenfam. 3. Abt. 7: 69. 1893.


Torner no. 0159 is a painting on two pages, originally without inscription. It was reproduced in full color, without any caption, by Grobet (1982, outside front cover). It shows a fully colored, thick, much-branched twig of this species, with leaves, flowers and fruit. The plant is infested with the tentlike web of a moth, which is depicted in various stages of its life-cycle. Bordering the picture at left and on the lower side are six detached carefully drawn leaves of what appear to be three or four Mexican species of the genus Quercus (Fagaceae). This species of Psidium is widespread at middle elevations in Mexico and Central America, but like the oaks it is not very common at lower elevations in the tropics.

Nyctaginaceae

Abronia umbellata Lam. Tab. Encycl. 1: 469. 1791.

Reported from “Mexico” by Choisy (in DC. Prodr. 13, pt. 2: 435. 1849) as “Pav. in h. Boiss.”. The basis for this report is a specimen at G, ex herb. E. Boissier, with printed label “Herb. Pavon”, determined by Choisy and the determination confirmed by Heimerl in 1899. This species occurs on sea beaches from British Columbia to Baja California, and the “Pavon” specimen was presumably collected by Mociño in the course of his trip to Notka, 1792–1793. Not found in the S. & M. herbarium.


Localities cited [Pl. Nov. Hosp.]: Chilpancingo, Guerrero, and Cumaná, [Venezuela] (“in agros arenosis Chilpantzingi et in Cumaná”); [Fl. Mex.]: “… Chilpancingi, iter Acapulci et in Cumaná. Floret Augusto”]. Ic. Fl. Mex. 32 (cited in the manuscript of the Pl. Nov. Hosp., but not in the printed version, nor in the Fl. Mex.), but included among the icones obtained during the “Third Excursion”, that to western Mexico in 1790–91. I believe that this last resulted from a deliberate decision to re-number the painting, and that it should have been included among those from the “Second Excursion”, to Guerrero in 1789. In that list (MA, mss.), no. 300 was omitted, but nos. 288–299 and 301–304 all represent plants that were reported from Chilpancingo or near it. No. 0678 in the Torner Collection, annotated by de Candolle “Allionia affinis”, bears the number “300” (partly erased and “90” added in another hand). Essentially identical is an original painting at MA, which bears the number “78” and the hand-printed name “Allionia Incarnata.” It was listed by name, with description, and identified as RJB Lám. 27 in the Catálogo de las Láminas del Real Jardín Botánico (RJB 1987, p. 324). It was well reproduced in full color, reduced to ca. 15.8 by 10.5 cm, and identified as RJB Lámina 27 (RJB 1987, p. 196), and it was reproduced in somewhat more realistic color at ca. 18 by 12 cm by Maldonado Poio (1996, p. [315]). This was no. 78 of a manuscript list by Mociño, no. 3 of Ramírez (Anales Inst. Méd.-Nac. México 6, pt. 1: 72. 1903), who correctly stated that this is also the same as DC, plate 1075, an incomplete copy after Torner 0678. In the S. & M. herbarium no. 552 (CNHM negs. 47203, 47204) is according to Standley correctly identified by the collectors as Allionia incarnata L. Syst. ed. 10. 890. 1759.

Locality cited: None, but a note says "Mexican Medici utilem in epilepsy credunt". In Fl. Mex. 1, cited in the manuscripts of Pl. Nov. Hisp. but not in the printed version. This is presumably represented by no. 0124 in the Turner Collection, unnumbered, but bearing the handprinted name "Boerhaavia [triandra] crossed out; Diffusa written in] Sp. N.`. DC. plate 1068* (not seen) is presumably a copy. The plant depicted is apparently a species of Boerhaavia. In the S. & M. herbarium no. 58 (CNHM neg. 47207), labelled "Boerhaavia diffusa" and (by Mocino) "No. 10", is according to Standley Boerhaavia caribaea Jacq. The "No. 10" is one of a series assigned (to species) during the renumbering of the herbarium after 1800 (cf. McVaugh 1990, p. 209).


Localities cited: Veracruz, and Apatzingán, Michoacán ["Veracruz et oppido Apatzingan. Floret Octobri"]; "Verca Cruce" was the locality cited by Linnaeus. In the S. & M. herbarium no. 54 (CNHM neg. 47209), labelled "Boerhaavia erecta", was correctly identified according to Standley.

**Boerhaavia hirsuta** Willd. Phytog. 1: 1. 1794.

"In Mexico (Pavon in h. Boiss.)", as cited by Choisy in DC. Prodr. 13, pt. 2: 451. 1849. This report was based on a specimen at G, ex herb. E. Boissier, with printed label "Nueva España Herb. Pavon", determined as above by Heimerl in 1899. According to Standley (N. Amer. Flora 21: 206. 1918), this is a synonym of *B. caribaea* Jacq. Obs. Bot. 4: 5. 1771. For herbarium material, see below under Boerhaavia viscosa.

**Boerhaavia scandens** L. Sp. Pl. 3. 1753.


Mexico. (Pavon); as cited by Choisy in DC. Prodr. 13, pt. 2: 454. 1849. This specimen, reported by Choisy as Boerhaavia scandens, is at G, ex herb. E. Boissier, determined as *B. scandens* by Heimerl in 1899; marked by Pavón "Boerhaavia erecta de Mexico". In the S. & M. herbarium no. 55 (CNHM neg. 47211), labelled *Boerhaavia scandens*, is thus identified by Standley. Nos. 59 and 60 are also named *B. scandens* L., by Standley (negs. 47212-47213). In Pl. Nov. Hisp. 2: 1887; ed. 2: 2. 1893, *B. scandens* was reported as "in oppido Apatzingan, [Michoacán] et in civitate S. Jacobsi de la Vega"). The second locality is taken from the *Species Plantarum*, where it is given as "in Jamaica ad urbem jago de la vega".

**Boerhaavia spicata** Choisy in DC. Prodr. 13, pt. 2: 456. 1849.

Type-locality: Mexico. Type: "V.s. in h. Boissier ex Pavon". This specimen is at G, ex herb. E. Boissier, with printed label "Nueva España Herb. Pavon" and marked by Pavón "Boerhaavia spicata de Mexico". The flowers were studied and sketched by Sereno Watson. According to Heimerl in 1899, this was the only known collection at that time. In the S. & M. herbarium no. 56 (CNHM neg. 47214), labelled "Boerhaavia spicata N.", is according to Standley *B. spicata* Choisy. According to Standley (N. Amer. Flora 21: 213-214. 1918), the species ranges from Arizona to Sinaloa.

**Boerhaavia viscosa** Lag. & Rodr. Anales Ci. Nat. 4: 256. 1801.

Type-locality: "Perú"; grown at the Madrid Botanical Garden, the source of the material not specified. Reported from "Mexico (Pavon in h. Boiss.)" by Choisy in DC. Prodr. 13, pt. 2: 452. 1849. A sheet at G, ex herb. E. Boissier, is marked by Pavón "Boerhaavia viscosa de Mexico", the identification affirmed by Heimerl in 1899. According to Standley (N. Amer. Flora 21: 206. 1918), this is a synonym of *B. caribaea* Jacq. Obs. Bot. 4: 5. 1771. In the S. & M. herbarium nos. 47, 57, and 58 (CNHM negs. 47205-47207) are identified by Standley as *B. caribaea* Jacq.; one of these, no. 47, was originally named "Boerhaavia viscosa".

**Calyxhymenia aggregata** Ort. Dec. 81, pl. 11.


**Oxybaphus aggregatus** (Ort.) Vahl. Enum. 2: 41. 1806.

Type-locality: New Spain, grown at the Madrid Botanical Garden, "ë seminibus missis per D. Sesse". Cavanilles gave the original locality as San Agustín de las Cuevas [Talpan, D.F.], and the date of flowering in Madrid as August and September 1798. Type: Not seen. At G, ex herb E. Boissier, is a specimen whose identity was attested by Choisy and later by Heimerl, and which is marked by Pavón "Mirabilis aggregata Cav. Calyxhymenia a. Ortega". This may be the specimen cited by Choisy (in DC. Prodr. 13, pt. 2: 432. 1849) as from Mexico ("Pavon in h. Boiss."). In the S. & M. herbarium no. 5406 (CNHM neg. 47221), determined as this species by Standley, was originally labelled by the collectors as a new species of *Mirabilis*. Nos. 1579 and 5409 (negs. 47201, 47202), labelled "Mirabilis aggregata", were left unnamed by Standley, but apparently represent a species of *Mirabilis*.

**Calyxhymenia glabridolia** Ort. Dec. 5, pl. 1.


Type-locality [Ort.]: "Habitat in Peruvii et Nová Hispaniá", grown at the Madrid Botanical Garden, where it flowered from July to October, "ë seminibus missis per D. Antonium de la Cal, in Puebla de los Angeles Nosocomii Reg. Pharmacopoeiam primarium, et peritissimum Botanicum". The reference to "Peruvii" may originally have been intended to apply to the genus *Calyxhymenia* as a whole: Ortega mentioned having
received seed of another species from Ruiz and Pavón.
Type: Not seen. At G, ex herb. E. Boissier ex herb. Pavón, is a specimen determined as "Calyxythymia gladiorifolia" and marked "[call] Jardín", its identity as this species was attested by Choisy and Heimerl. In the S. & M. herbarium nos. 1576, 1577 and 5404 (CNHM negs. 47222-47224), determined by Standley as Mirabilis corymbosa Cav., were named by the collectors as two unpublished species of Mirabilis. The name Mirabilis corymbosa, often used for this species, was published at least some months after Calyxythymia gladiorifolia; cf. Cavanilles, Ic. 4: 69.1798 and Johnston's comment in J. Arnold Arbor. 25.179.1944. The two species were presumably based on the same garden material, but the original locality was given by Cavanilles merely as "Nova-Hispania", and the date of the flowering in Madrid as July 1797.

Locality cited: In temperate parts of New Spain, and in Europe. Ic. Fl. Mex. 25. in the manuscript of Pl. Nov. Hisp. but not cited in the published version; included as "Mirabilis jalapa" in the list of icones obtained in the vicinity of México, D.F. during the "First Excursion". 1787-1788, and also in the list of icones 1-416 (MA, mss.). It is represented by two essentially identical paintings in the Torner Collection, each bearing the number "25" and an annotation by de Candolle, "Nyciagalo jalapa", Torner no. 0238 includes the hand-printed names "Mirabilis [Dichotoma, cross out and Jalapa written in] Linn." and "Tlaquihin. Hern. F. 279." No. 1156 has the names "Mirabilis Jalapa. Linn." and "Tlaquihin. Hrz. 279" and a note on the use of the root as a purgative. In the S. & M. herbarium no. 5407 (CNHM neg. 472225), labelled by Mociño "Mirabilis Jalapa. Ic." and "No. 512. 5-1", is according to Standley correctly identified.

Locality cited [Pl. Nov. Hisp.]: Temperate parts of New Spain; and in Europe. Ic. Fl. Mex. 231, cited in Pl. Nov. Hisp., represented by two essentially identical paintings in the Torner Collection, each bearing the number "231" (on one as "237" in another hand). Torner no. 1160 bears the hand-printed names "Mirabilis Longiflora. Linn." and "Atzoayl. Hern. F. 170." No. 1719, in addition to the number, has an annotation by de Candolle, "Nyciagalo longiflora." Reported by Choisy (in DC. Prdr. 13, pt. 2: 423. 1849) from "Mexici montibus et locis frigidis" on the basis of a specimen of "Pavón". The latter was a sheet at G, ex herb. E. Boissier, with printed label "Nueva España", determined as M. longiflora by Choisy, and by Heimerl in 1899. In the S. & M. herbarium nos. 860, 1575, and 5405 (CNHM negs. 47226-47228), labelled "Mirabilis longiflora", are according to Standley correctly identified.

Mirabilis parviflora Sessé & Moc. Fl. Mex. 30. 1893; ed. 2. 27. 1894.
Type-locality: Dry mountains, Alfaajaya, Hidalgo ["in aridis Alfajayaca eccentibus. Floret Septembris"]. Not found in the S. & M. herbarium. Said to differ from M. triandra Sessé & Moc. and from M. viscosa Cav. by the smooth herbaceous stem, much-branched dichotomous panicle, longer and non-viscid, coriaceous leaves. Not further identified; perhaps the same as Mirabilis corymbosa Cav., q.v. above under Calyxxythymia gladiorifolia.

Type-locality: Dry places around Querétaro, Querétaro. In the S. & M. herbarium two species are confused under this name, these according to Standley Mirabilis microchlamydea (Stas.) Standl. Standl. Publ. Field Mus. Nat. Hist., Bot. Ser. 8: 304. 1931 (nos. 1578, 5403; CNHM negs. 47229, 47230), and Mirabilis viscosa Cav. Ic. 1: 13. 1791. The description in the Fl. Mex. is detailed, and is apparently based on a different plant from that described under the name triandra in the Pl. Nov. Hisp., but I cannot distinguish between them with any certainty. Nelson (1979) designated "Sessé 5403" as "material type" of "Mirabilis triandra" [sic] of Fl. Mex. 30. No. 5403 (neg. 47230) was labelled "Mirabilis triandra N. Calyxythymenia Casim. Ortg. No. 174" and on another ticket, "Mirabilis triandra N. [descr.] No. 516". This last number is not one assigned to this particular plant, but the number assigned to this species after 1800, when an attempt was made to number the entire herbarium. The numbers assigned to the Nyctaginaceae (except Boerhaavia) included 512-518; see McVaugh 1990. p. 209.

Type-localities: Crevices in walls, Yecapixtla and Cuernavaca, Morelos ["in timis peritum Ayacapanes et Quahunahudae"]; Ic. Fl. Mex. 26 [bis], not cited in the Pl. Nov. Hisp., but included among the icones obtained in the vicinity of Mexico City, 1787-1788 (MA, mss.). This may be the same as no. 0635 in the Torner Collection, which bears the hand-printed name "Mirabilis [triantra. N. crossed out]". A copy is DC. plate 1081, labelled "Mirabilis triandra" (Field Mus. neg. 30846). The plate presumably represents the plant of Morelos, not that from Querétaro described in the Fl. Mex., the latter presumably having been observed on the trip of 1790-1791. For citation of herbarium material and discussion of the identity of Mirabilis triandra-triandra, see above under the latter.
**Nyctaginaceae**

*Nyctaginia capitata* Choisy, in DC. Prodr. 13, pt. 2: 429. 5 Mai 1849. “Boerhavdia [sic] aggregata Pav.”, cited in synonymy by Choisy, i.e., as one of the bases for *Nyctaginia capitata*.

Type-locality: San Antonio de Bejar ["Biscar"]; i.e., San Antonio, Texas; and Mexico, the locality unspecified. Syntypes: Berkander 2108; and “Pavon” in herb. Boissier. The name was lectotypified, by mention of the type-locality, on the basis of Berkander’s specimen, by Standley (N. Amer. Flora 21: 201. 1918). The “Pavon” specimen, at G ex herb. E. Boissier, bears a printed label “Nueva España Herb. Pavon”; it was annotated by Choisy, and in 1899 by Heimerl; it was labelled by Pavon. “Boerhavdia [sic] aggregata de Nueva España”. A sheet in the S. & M. herbarium under the name “Boerhavdia [sic] aggregata N.” is according to Standley *Nyctaginia capitata* (no. 394; CNHM neg. 47236).

Choisy also cited “Moc. et Sesse ic. ined.,” which is a reference to DC. plate 1082, an original painting, unnumbered, which was reproduced by Choisy (Mém. Soc. Phys. Genève 12: pl. facing p. 168. Post Jun. 1849). No. 1680 in the Torner Collection is a very closely similar copy, without inscription except for an annotation by de Candolle, “Vancouveria acuminata”. The species is also illustrated in DC. plate XII [sketches only; Field Mus. neg. 30286], drawn from the same model.


This South American species was doubtfully reported by Choisy (i.e.) from Mexico, in the words “Nyctago cordifolia Moc. et Ses. fl. Mexic. ined. cum ic.?”. This report was presumably based on one of the plates in the Candolle collection in G-DC, but none of them is labelled “Nyctago cordifolia”, nor does the name appear in the Torner Collection. Not found in the S. & M. herbarium. Standley (N. Amer. Flora 21: 230. 1918) stated that *O. cordifolius* “appears to be exclusively South American”, so probably the illustration represents some other plant.


Reported from New Spain by Choisy, i.e., on the basis of a collection by “Pavon” in herb. Moricand; this specimen, now at G, is marked by Moricand “Boerhavdia octandra Nov. Esp. Mr. Pavon”, and annotated by Heimerl in 1913 as *Pisoniella arborescens* (Lag. & Rodr.) Standl. Contr. U. S. Natl. Herb. 13: 385. 1911. The latter species, according to a determination by Standley, is in the S. & M. herbarium under “Pisonia”, with an epithet referring to 10 stamens instead of 8 (no. 5413; CNHM neg. 47238). *Pisonia hirtella* is now generally regarded as a synonym of *Pisoniella arborescens*. This is perhaps the plant depicted in no. 1010 of the Torner Collection, a painting without any inscription, which appears to have been based on a sketch (no. 1829) that is annotated (probably by Sesse) “Pisonia”. DC. plate 1090 is a partial copy after Torner 1010.


Reported from “Nova Hispania” by Choisy (in DC. Prodr. 13, pt. 2: 442. 1849) on the basis of a collection by “Pavon” in herb. Boissier. I have not seen this specimen, very probably it represented one of the North American species of *Pisonia*, e.g., *P. aculeata* L., which occurs in the S. & M. herbarium (no. 5412; CNHM neg. 47237).

*Pisonia sp. (—— [no diagnosis; long description])* sensu Sesse & Moc Fl. Mex. ed. 2. 237, left hand column. 1894.


*Pisonia sp. (—— [no diagnosis; long description])* sensu Sesse & Moc Fl. Mex. ed. 2. 237, right hand column. 1894.


Type-locality: Mexico. Type: DC. plate 1077, as cited in Calques des Dessins (Field Mus. neg. 30845). This is a fair copy of no. 1777 in the Torner Collection, which is without inscription. Not found in the S. & M. herbarium; not identified. Standley long ago (Contr. U. S. Natl. Herb. 13: 410. 1911) pointed out the discrepancies between the original plate and Choisy’s description; he concluded “The drawing suggests an Allionia [i.e., Mirabilis], but I have seen nothing that resembles it even remotely”.


DC. plate 1086, cited by Choisy, is labelled “Boerhavdia pentandra”. It is a copy after no. 1851 in the Torner Collection, which is a well-executed sketch without inscription except for the name hand-written [by Sesse], “Boerhavdia pentandra”. The “Pavon” specimen, “in h. Boiss.,” is at G, ex herb. E. Boissier, with printed
Ochnaceae

Sauvagesia geminiflora DC. in DC. Prodr. 1: 315. 1824, with citation of “fl. mex. i.e. ined.” as the basis for the name.

Type-locality: “In Mexico”. Lectotype: no. 0487 in the Torner Collection, without inscription. DC. plate 38*, a copy, as cited in Calques des Dessins, is a copy. The plant depicted is apparently the common Sauvagesia erecta L. Sp. Pl. 203. 1753. In the S. & M. herbarium apparently the only representative of this genus is no. 933 (CNHM neg. 47248), originally labelled “Sauvagesia erecta”, and this confirmed by Standley.

Olacaceae

Ximenia americana L. (Sp. Pl. 1193, 1753).

In the S. & M. herbarium no. 4680 (CNHM neg. 47253), unnamed on the original ticket, but labelled “[description]. Habitat jalapa[le Floret Marjot et Abrili]”, was determined by Standley as noted above.

Oleaceae

Nyctanthes arbor-tristis [L.] sensu Sessé & Moc. Fl. Mex. 4. 1891; ed. 2. 4. 1894.

Locality cited: Veracruz (“Habitat Veracruz, ubi Jasminum audit. Floret Aprili et Maii”). Described at some length. In the S. & M. herbarium no. 371 (CNHM neg. 47258), labelled “Nyctanthes Arbor tristis. Lc. No. 15.”, was determined by Standley as Jasminum sambac (L.) Solander. In the Torner Collection no. 1990, annotated by Sessé as “Nyctanthes arbor tristis fol. 3” and “Tab. 24”, bears the additional annotation by de Candolle, “Mogosium sambac”. Nelson (1997) designated “Sessé 371” as “material tipo” of “Nyctanthes arbor-tristis Sessé & Moc.”, but that is inappropriate as no such name exists.

Onagraceae


Epilobium mexicanum Seringe in DC. Prodr. 3: 41. 1828, with citation of “fl. mex. i.e. ined. t. 379” as the basis for the name. Epilobium palustre [L.] sensu Sessé & Moc. Pl. Nov. Hisp. 15. 1888; ed. 2. 52. 1893.

Type-locality: [DC.]: Mexico; (Pl. Nov. Hisp.): México, D.F. (“Mexici et in Hispania”). Lectotype: DC. plate 379, as cited by Seringe and in Calques des Dessins (Field Mus. neg. 30567), an original painting bearing the number “74”, labelled “Epilobium lacustre Linn.”, and annotated by de Candolle “mexicanum”. A near-duplicate is no. 0404 in the Torner Collection, which also bears the number “74”, the hand-printed name “Epilobium lacustre Linn.”, crossed out except for the generic name and “Epilobium mexicanum” added by de Candolle. The paintings represent Ic. Fl. Mex. 74, cited in Pl. Nov. Hisp. Not found in the S. & M. herbarium.


“Epilobium undulatum”.

The above name appears on no. 1949 of the Torner Collection, as an annotation by de Candolle, who added the word “Notata”. This painting was reproduced in color, reduced to ca. 6.4 by 4.5 cm., but readily recognizable (RJB 1987, p. 123). The original, evidently the work of the artist Echeverría, represents the common “fireweed” of
northern regions, *Epilobium angustifolium* L. No floral details are shown.

**Fuchsia arborea** Sessè & Moc. Pl. Nov. Hisp. 58. 1888; ed. 2. 54. 1893; Fl. Mex. ed. 2. 93. 1894.

Type-locality: Uruapan, Michoacán ["in oppido Uruapan Provinciae Michoacanensis, Floret Septembris"]; i.e. Fl. Mex. 191, cited in Pl. Nov. Hisp. and included among the *icons* that were obtained during the "Third Excursion", that to western Mexico in 1790-91. This is represented by an original painting at MA, which bears the number "11" and the hand-printed name "Fuchsia Arborea." It was listed by name, with description, and identified as RJB Lám. 67 in the *Catálogo de las Láminas de los Real Jardín Botánico* (RJB 1987, p. 333). It is no. 11 of a manuscript list by Moctezuma (MA, ms.), and no. 36 of Ramírez (Anales. Inst. Méx.-Nac. México 6, pt. 1: 77. 1903), who correctly stated that it is equivalent to DC. plate 366, "Fuchsia racemosa," an uncolored copy derived from no. 0826 in the Torner Collection, which bears the number "191" and de Candolle's annotation "Fuchsia racemosa". In the S. & M. herbarium there is no specimen labelled "Fuchsia arborea", but Munz (Proc. Calif. Acad. Sci., ser. 4, 25: 85. 1943) stated that he had seen the type and referred *Fuchsia arborea* to the synonymy of *F. arborescens* Sims, q.v.; he also cited (l.c.) from the herbarium at F a sheet of no. 5216 of the S. & M. herbarium, labelled "F. arborea".


The report by de Candolle was based on DC. plate 365, labelled "Fuchsia hamnellioiides", which is a copy of no. 0132 in the Torner Collection, by de Candolle, "Fuchsia hamnellioiides". George Don (Gen. Hist. 2: 677. 1832) followed de Candolle in relegating "Fuchsia hamnellioiides" to the synonymy of *F. arborescens*, and Don in turn was followed by Munz (Proc. Calif. Acad. Sci., ser. 4, 25: 85. 1943). Don also (l.c.) incautiously endorsed de Candolle's tentative assignment of "Fuchsia racemosi" to the same synonymy, but some error seems to have been involved here; see under *Fuchsia fulgens*. Without much doubt DC. plate 365 represents *F. arborescens* as does *F. arborea* Sessè & Moc., q.v. The only major superficial difference between 365 and 366 seems to be that in the former the leaves are ternate, and in the latter they are opposite.

**Fuchsia fulgens** DC. in DC. Prodr. 3: 39. 1828, with citation of "fl. mex. icon. ined." as the basis for the name. *Fuchsia racemosa* Sessè & Moc. Pl. Nov. Hisp. 58. 1888; ed. 2. 54. 1893; Fl. Mex. ed. 2. 93. 1894, not of Lamarck.

Type-locality [DC.]: Mexico; [Pl. Nov. Hisp.]; Pátzcuaro, Michoacán ["in saxulis Patzcuari montibus. Floret Augusto"]; lectotype: DC. plate 362, as cited in Calques des Dessins (Field Mus. neg. 30665); this is a good colored copy of no. 0837 in the Torner Collection, which is annotated by de Candolle, "Fuchsia fulgens". The *icons* presumably represent i.e. Fl. Mex. 195, cited in Pl. Nov. Hisp. under *Fuchsia racemosa*; the description of that species corresponds in essential details to the *icons*. In the S. & M. herbarium no. 5311 (CNHM neg. 47268), labelled "Fuchsia cordifolia" and "i.e. 195"; is according to Standley *Fuchsia fulgens* DC.

De Candolle (in DC. Prodr. 3: 37. 1828), in the treatment of *Fuchsia arborescens*, stated "F. racemosa ejusdem florae [i.e., the projected *Flora Mexicana* to which he so often referred as "fl. mex. ined."] etiam si oppositifoliae huc referenda videtur"; this is a reference to another plate, DC. 366, a pencil sketch only, labelled "Fuchsia racemosi": as noted by Ramírez (see under *F. arborescens* above), this is a copy of Sessè & Mocinó's illustration of their *Fuchsia arborescens*. Without much doubt the *racemosa* of Sessè & Mocínó is a synonym of *F. fulgens* DC.; this was tacitly accepted by Munz in the index to his treatment of *Fuchsia* (Proc. Calif. Acad. Sci., ser. 4. 25: 104. 1943). It should be remembered that the "Fuchsia racemosa" of Sessè & Mocínó was not the plant to which de Candolle applied that name, which was *Fuchsia arborescens* Sessè & Moc.


Type-locality: Mountains of Pátzcuaro, Michoacán ["Habitat et floret cum praecedenti. (F. racemosa, q.v. under *F. fulgens*)."]. The two names are equated as above because the treatments in the two florae differ only in minor details of arrangement and wording. Munz (Proc. Calif. Acad. Sci., ser. 4. 25: 97–98. 1943) accepted *F. micoacanensis* as a valid species, relegating *F. biflora* to synonymy with a statement that he had seen the type, no. 5209 [of the S. & M. herbarium], i.e., CNHM neg. 47267, labelled "Fuchsia biflora N."


The basis for the report by de Candolle was presumably no. 0408 in the Torner Collection, without inscription except for an annotation by de Candolle, "Fuchsia gracilis"; DC. plate 368, labelled "Fuchsia gracilis", is an unfinished copy after Torner 0408. The original painting was not very skillfully executed, but perhaps someone with knowledge of the genus *Fuchsia* could name the species. Munz (Proc. Calif. Acad. Sci., ser. 4. 25: 94. 1943) repeated the reference to *F. gracilis* as a synonym of *F. microphylla* and cited two specimens of *microphylla* collected by Sessè, Mocinó et al.

in synonymy of *F. thymifolia* by DC. in DC. Prodr. 3: 37. 1828. "F. ovata fl. mex. icon. ined.?" cited in synonymy of *F. parviflora* by DC., i.e.

The report of "Fuchsia alternans" is based on no. 1556 in the Torner Collection, annotated by de Candolle, "Fuchsia alternans". DC. plate 363, annotated "Fuchsia alternans", is a copy. The report of "F. ovata" is based on two essentially identical paintings in the Torner Collection, each annotated by de Candolle "Fuchsia ? ovata". Torner no. 0661 bears the number "23", no. 1758 has two numbers, "100" and "156". DC. plate 367, labelled "Fuchsia ovata" and bearing the two numbers "100" and "156", is a colored copy. The relevance of numbers "23", "100" and "153" is unknown to me, but Ic. Fl. Mex. 156 was cited under *Daphne pontica*, q.v., and it is conceivable that the description given for *D. pontica* (Fl. Mex. 102. 1894; ed. 2. 94. 1894) may have applied to some species of *Fuchsia*. Nothing referable to *F. thymifolia* or to the above synonyms was found in the S. & M. herbarium.

**Fuchsia uniflora** Sessé & Moc. Pl. Nov. Hisp. 58. 1888; ed. 2. 55. 1893; Fl. Mex. ed. 2. 93. 1894.

Type-locality: Very cold mountains of the Desierto de los Leones ["in frigidissimis Sanctae Eremi P. P. Carmelitarum montibus. Floret December E. [southwest of Mexico, D.F.]. Reported by Munz in his revision of *Fuchsia* as "unknown" (Proc. Calif. Acad. Sci., ser. 4. 25: 105. 1943). Not found in the S. & M. herbarium. The description suggests *F. microphylla* H. B. K., q.v., a species confined chiefly to the higher mountains of south-central Mexico, and well known from the Desierto de los Leones, the type-locality of *F. uniflora*.

**Gaura bracteata** Seringe in DC. Prodr. 3: 45. 1828. "G. sinuata et spicata fl. mex. ined. t. 373", cited in synonymy by Seringe, i.e., as bases for *Gaura bracteata*.

Type-locality: Mexico. Lectotype: DC. plate 373, as cited by Seringe and in Calques des Dessins (Field Mus. neg. 30666), labelled only "Gaura sinuata fl. mex. non Nutt.". This is a partial copy of no. 0423 in the Torner Collection, with hand-printed name "Gaura sinuata N.". It may be that the plant depicted is the one described in Pl. Nov. Hisp. and Fl. Mex. under the name "Gaura spicata". I do not know the basis for Seringe's citation of the name "Gaura spicata", which does not occur in the Torner Collection, nor in the S. & M. herbarium. In that herbarium nos. 936 and 938 (CUNHM negs. 47273 and 47274, respectively), labelled "Gaura sinuata", are according to P. A. Munz *G. coccinea* Nutt., var. *epilobioides* (H. B. K.) Munz, Bull. Torrey Bot. Club 65: 222. 1938, where the above specimens are cited under this latter name. Munz (i.c.) also referred to the synonymy of *var. epilobioides* the following. *Gaura spicata* Moc. & Sessé ex Ser.; *G. spicata* Sessé & Moc.; *G. suffrutescens* Moc. & Sessé ex Ser.; *G. bracteata* Ser. None of the names attributed to Sessé & Mocio, except *G. sinuata*, was found in the S. & M. herbarium.

**Gaura ? epilobia** Seringe, in DC. Prodr. 3: 45. 1828, with citation of "fl. mex. icon. ined. t. 375" as the basis for the name.

Type-locality: Mexico. Holotype: DC. plate 375, as cited by Seringe and in Calques des Dessins (Field Mus. neg. 30668). This is a copy of no. 1718 in the Torner Collection, which is annotated by de Candolle "Gaura epilobia", and signed by the artist at lower left, "Pedro Oliver F.T.". As noted by Munz (Bull. Torrey Bot. Club 45. 225. 1938), the *icones* represent *Oenothera rosea* Aiton, Hort. Kew. 2: 3. 1789.


Type-locality (Ort.): "Cuba"; flowered in the Madrid Botanical Garden in August, "è seminibus missis per D. Sessé"; [Cav.]: Near Pachua [Hidalgo] and San Agustín de las Cuevas [Tlapal, D.F.], where found by Née; flowered in the Madrid Botanical Garden from the latter part of May until August 1797; [Pl. Nov. Hisp.]: San Angel, south of Mexico, D.F. ["in Sancti Angeli hortis prope Mexicum"]; [Fl. Mex. 2nd on page: "in agris S. Augustini et S. Angeli. Floret Maio et Junio"]. Types: Not seen.

Cavanilles (Ic. 4. 72. 1798) stated that *Gaura hexandra* of Ortega is identical with his own *G. tripetala*; he presumably studied the same garden material that was available to Ortega. He nowhere specifically said that he saw living plants grown from seeds collected by Née, and it may be inferred that his references to Pachua and San Agustín were based on collections from Née's herbarium. Munz (Bull. Torrey Bot. Club 65. 212. 1938) referred *G. hexandra* Ott. and *G. hexandra* of the Pl. Nov. Hisp. to the synonymy of *G. tripetala* and cited under that name nos. 936 and 5147 of the S. & M. herbarium (CUNHM negs. 47277, 47278), originally labelled "Gaura hexandra". The second *Gaura hexandra* described in the Fl. Mex. may have been the same species as the first, but apparently the collectors described it independently; the localities for it were cited as "in agris S. Augustini et S. Angeli" [i.e., Tlapal, and San Angel, both in the Distrito Federal].

Ic. Fl. Mex. 75, cited in the Pl. Nov. Hisp. and enumerated among the *icones* painted in the vicinity of Mexico City in 1787-1788 (MA, mss.), is represented by no. 0044 in the Torner Collection, which bears the number "75", the hand-printed name "Gaura hexandra. N.", and annotations by de Candolle, "Ort. dec. 2. p. 14°" and "G. tripetala Cav. !

**Gaura mutabilis** Cav. loc. 3. 30. pl. 258. 1795.

Type-locality: New Spain; flowered at the Madrid Botanical Garden in August 7[1794]. Cavanilles later (Ic. 4. 71. 1798) stated that Née found it near Tlapal ["San Agustín de las Cuevas"] and at Cuernavaca. Type: Not


Gaura spicata Sessé & Moc. Pl. Nov. Hisp. 56. 1888; ed. 2. 52. 1893; Fl. Mex. ed. 2. 91. 1894.

Type-locality [Pl. Nov. Hisp.]: Around México, D.F. [/"in Mexicci circuitibus, Floræ Jumiæ]/; [Fl. Mex.]: Gardens, San Ángel, south of México, where said to flower in August. Ic. Fl. Mex. 76, cited in Pl. Nov. Hisp., but included as "Gaura sinuata N." among the Icces obtained during the First Excursion in the vicinity of México City 1787–88. The illustration in the Torner Collection with the name "Gaura sinuata" (for which see above, under Gaura bracteata) may represent "Gaura spicata", but there is no direct evidence of this. As noted above under Gaura bracteata, the epithet "spicata" seems not to be associated with any specimens in the S. & M. herbarium; nor is it to be found on any plate in the Candolle collection at G, although reported by Seringe in 1828. Presumably Munz was correct in referring Gaura spicata Sessé & Moc. to the synonymy of G. coccinea var. epilobioides (H. B. K.) Munz.

Gaura ? suffrutescens Seringe in DC. Prodr. 3: 45. 1828, with citation of "fl. mexie. ic. ined. t. 374" as the basis for the name.

Type-locality: "in Mexico". Holotype: DC. plate 374 as cited by Seringe and in Calques des Dessins (Field Mus. neg. 30667). This is a copy of no. 0717 in the Torner Collection, which is annotated by de Candolle "Gaura suffrutescens". Referred by Munz (Bull. Torrey Bot. Club 65: 222. 1938) to the synonymy of Gaura coccinea Nutt. var. epilobioides (H. B. K.) Munz; see above under G. bracteata. Not found in the S. & M. herbarium.

Hauya elegans DC. in DC. Prodr. 3: 36. 1828, with citation of "fl. mexie. ic. ined." as the basis for the name.

Type-locality: "in Mexico". Lectotype: No. 1455 in the Torner Collection, annotated by Sessé "G. [enus] N. [ovum] Inter Epilobium et Ereithram"; and by de Candolle, "Hauya elegans". The painting was reproduced by de Candolle (DC. Mem. 3 [Onag.]: 2. pl. 1. 1829) with the note "La figure ... est copiée de la Flore inédite de Mexico". The original illustration itself may have been destroyed in the process of engraving and printing, as in the Candolle collection there is a note by Alphonse de Candolle "Je ne retrouve pas le dessin [i.e., DC. plate 380] en 1873". DC. plate XVI [sketches only; good black and whites line drawings by Node-Véran after Torner 1455; Field Mus. neg. 30297]. This, the type-species of the genus, is interpreted by Munz (Also 4: 494. 1960) as a sparingly known plant from the Atlantic slope of México. None of the original herbarium material is known to exist.


Type-locality: "In flosce et aquosie Americae borealis à Canadæ ad Georgiam et in agro Mexicanx ex Fl. Mex. icon. ined. ["med."]”. Type: Not identified; evidently an actual plant specimen, as de Candolle wrote "v.s.". The reference to the "fl. Mex." was presumably based on no. 0822 in the Torner Collection, labelled "Isnardia mexicana". DC. plate 360, labelled "Isnardia mexicana", not cited in Calques des Dessins, is an unfinished copy, after Torner 0822. In the S. & M. herbarium nos. 599 and 628 (CNHM negs. 47279, 47280), labelled "Isnardia palustris", are according to Munz Ludwigia palustris var. americana.


Type-locality: Tepoztlan (vicinity of Orizaba and Córdoba, Vera Cruz), where said to flower in September. Not found in the S. & M. herbarium. Described as suffrutescent, erect, with 4-merous flowers. For comment on this epithet, see below.


Localities cited [both species]: Stream-margins, Cuernava, Morelos ["ad marginem rualorun Quaquhauhaeductae"]; and in India. Although the epithet "declinata" appears to be a new one in this genus, it is evidently taken from Linnaeus fil. Suppl. 235. 1782, where it is "inclinata", with exactly the same character as that of J. declinata of Fl. Mex. 120; in Fl. Mex. 121, where the name is used for a plant from another locality, the word "glabra" in the character is changed to "laevis". The above names as published in the Fl. Mex. and Pl. Nov. Hisp. are equated because the treatments in the two florals are identical except for minor differences in wording. References to Herm. Ljudgb. 396 in both florals and to Hecede in the Fl. Mex. are from the treatment of J. suffrutescens L. in the Species Plantarum. The plant is described in both florals as three feet high, villous, with four-merous flowers. In the S. & M. herbarium nos. 1029 and 1086 (CNHM negs. 47288, 47289), determined by Munz as Jussieua suffrutescens L. [Sp. Pl. 388. 1753], were given the same name by the collectors.
**Onagraceae**


Locality cited: Swampland places, Puerto Rico ["in paludosis Insulae de Puerto Rico locis; ... Floret Julio"]; Described. Said to be "affinis suffruticosae." In the S. & M. herbarium nos. 1030 and 5139 (CNHM negs. 47281, 47282), labelled "Jussieuana erecta", were determined by Munz as *Jussieuana decurrens* DC.


Of this West Indian variety de Candolle wrote "J. sessiflora fl. mex. ic. ined. huc verosimiliter referenda." This reference seems to have been based on no. 1460 in the Torner Collection, which is without inscription except for the annotation by de Candolle "Jussieuana sessiflora," or on DC. plate 371, a copy after Torner 1460, labelled "Jussieuana sessiflora.


Locality cited [Pl. Nov. Hisp.]: México, D.F.; and the East Indies ("Habitat Mex. [sic] et in Oriental India"); [Fl. Mex.]: ["in inundatis locis Mexico vicinis. Floret Septembris"]; Ic. Fl. Mex. 78, cited in Pl. Nov. Hisp., represented by no. 207 in the Torner Collection, which bears the number "78", the hand-printed name "Jussieuana [Repens. Linn. cross out]", and the annotation by de Candolle, "Jussieuana aquatilis." An unfinished copy is DC. plate 369, bearing the number "78" and the annotation "Jussieuana Aquatili," showing a repent aquatic plant with 5-merous flowers. In the S. & M. herbarium nos. 1028 and 1085 (CNHM negs. 47286, 47287), determined by Munz as *Jussieuana repens* L. (Sp. Pl. 388. 1753), were given the same name by the collectors.


Locality cited: New Spain, and in the island of Puerto Rico. This is described as a plant with creeping stems and 5-merous flowers. It may well be the same species as that described under the same name on the previous page; see above. There was probably no intention on the part of Sessé & Moc. to publish both descriptions.

**Jussieuana swartziana** DC. in DC. Prodr. 3: 54. 1828.

Of this primarily West Indian plant de Candolle wrote: "et verosimiliter Mexici ex ic. fl. mex." From the description in the *Prodromus*, it may be supposed that this reference was based on DC. plate 369 or 370, or both.


Type-locality [DC.]: Mexico; [Lagascas]: New Spain, grown at the Madrid Botanical Garden, "semina missis D. Sessé ann. 1804". Type: Not seen. Munz (Brittonia 13: 80-81. 1961) admitted this as a valid Mexican species and cited presumably authentic material from the Hortus Monspeliensis (1807) and from G-DC. Not found in the S. & M. herbarium.


Type-locality: Mexico; grown at the Madrid Botanical Garden. Type: Not seen. Munz (Brittonia 13: 86-87. 1961) referred this species to the synonymy of *Lopezia racemosa* Cav. Ic. 1: 12. 1791, and cited a specimen at Paris (P), presumably cultivated at Madrid in 1825, as authentic. Not found in the S. & M. herbarium under this name.

**Lopezia racemosa** Cav. Ic. 1: 12. pl. 18. 1791.

Type-locality: Near Mexico [City]; flowered in the Madrid Botanical Garden in November and December [1790]. Type: Not seen. Munz (Brittonia 13: 87. 1961) cited a number of specimens, presumably distributed from Madrid by Cavanilles and his contemporaries, and taken to be authentic. This is the type-species of the genus *Lopezia*. Cavanilles (Ic. 6: 82. 1801) equated this species with *Lopezia mexicana* Jacq. Ic. Pl. Rar. 2: pl. 203. 1794, and Munz (l.c.) suggested that the two species may have been based on the same garden material. In the S. & M. herbarium no. 88 (CNHM neg. 47290), determined by Munz as *Lopezia racemosa*, was originally labelled "Laposia [sic] racemosa Cav."

**Lopezia trichota** Schlecht. Linnaea 12: 273. 1838.

An original painting at MA, without name or number, presumably one of those forwarded from Guadalajara to Madrid in 1791, was photographed by Altamirano in 1898. A copy made from his negative was identified by P. Raven in 1970 as *Lopezia trichota*. The original was listed with description and identified as RJB Lám. 7 in the *Catálogo de las Láminas del Real Jardín Botánico* (RJB 1987, p. 319). It was also well reproduced in full color and nearly natural size (ca. 26 by 18 cm) and identified as RJB Lám. 7 (RJB 1987, p. 163]. *Lopezia trichota* is a species of central Mexico and could have been seen and studied by members of the Expedition as they passed through Guanajuato in 1790. Not found in the S. & M. herbarium.

**Oenothera latiflora** Seringe, in DC. Prodr. 3: 50. 1828, with citation of "fl. mex. ined. t. 376" as the basis...

Oenothera tetragona Cav. Ic. 3: 40. pl. 279. 1796.
Type-locality: “In Sotolucu Novaec.-Hispaniae”; flowered in the Madrid Botanical Garden in July 1795. Cavanilles later (Ic. 4: 71. 1798) stated that Née found it “in fundo de Gonzalez”, 7 leagues from Querétaro. Type: Not seen. This is presumably the same as Oenothera latiflora Seringe, q.v. for citation of herbarium specimens. One sheet in the S. & M. herbarium (no. 5199; CNHM ngs. 47301) is marked on one ticket “tetraptera Cav.”

Type-locality: Mexico. Holotype: DC. plate 377, cited by Seringe, and as type in Calques des Dessins (Field Mus. reg. 30670); it is an incomplete copy of no. 0858 in the Torner Collection, which bears an annotation by de Candolle, “Oenothera tubifera”. Not found in the S. & M. herbarium. Recognized by Munz (Amer. J. Bot. 18: 737. 1931) as a valid species of the subgenus Pachylophus. The few known modern collections are from the highland of the Mexican plateau, not far from Mexico City.

An original painting at MA, bearing the name “Rudicularia” but without contemporary name or number, presumably one of those forwarded from Guadalajara to Madrid in 1791, was photographed by Altamirano in 1898. A copy made from his negative was identified by P. Raven in 1970 as Semeiandra grandiflora. The original was listed under the name “[Rudicularia]”, with description, and identified as RJB Lám. 5 in the Catálogo de las Láminas del Real Jardín Botánico (RJB 1987, p. 319). It was reproduced in color, reduced to 5.8 by 4.5 cm, and identified only as “Dibuo botânico” (RJB 1987, p. 254). An almost identical copy at MA, also photographed by Altamirano, I cannot identify with any other of the unnamed Láminas in the same work (op. cit., Catalogue, pp. 317–345).
Opiliaceae


Type-locality: "in Mexico". Lectotype: In the Torner Collection no. 0712, annotated by de Candolle, "Schweinitz racemosa", and bearing the number "237" (which I cannot interpret). DC. plate 169, as cited in Calques des Dessins (Field Mus. neg. 30565), is a rather good copy, annotated "Schweinitz racemosa mss." DC. plate V B, as cited in Calques des Dessins [sketches only; Field Mus. neg. 30266], probably was taken from Torner 0712. de Candolle questioned in the protologue: "An genus proprium?". In the S. & M. herbarium Agonandra racemosa, according to determinations by Standley, is represented by nos. 4635 and 4672bis (CNHM negs. 47358, 47309), the former identified by the collectors as a species of Schaefferia.

Schaefferia ? viridescens DC. in DC. Prodr. 2: 41. 1825, with citation of "fl. mex. i.c. ined." as the basis for the name. See under Celastraceae.

"Trophis ? Americana ?"

A name not used in publication by Sessé & Mociño, but attached to a specimen in their herbarium (no. 4788; CNHM neg. 47306), so labelled, with an appended description and the note "Habitat in arenosis litoribus prope Jacqui Floret Nobembi.". This is a reference to the locality visited by Sessé in 1791, to the missions on the Río "Jacqui" in Sonora (cf. McVaugh 1977, p. 133). The specimen was determined by Standley as Agonandra obtusifolia Standl. J. Wash. Acad. Sci. 10: 507. 1920. That species was originally described from the Atlantic slope of Mexico. The species that is common in western Mexico is Agonandra racemosa (DC.) Standl., l.c., p. 506.

Orchidaceae

1. Numbering in the Sessé & Mociño herbarium and in the Torner Collection.

Numbers were assigned to individual species, during the final attempt at arrangement of the entire herbarium, in Madrid after 1800. The numbers assigned to the orchids (cf. McVaugh 1990, p. 204, 209) range from about 1773 to 1820. H. G. Reichenbach, fil. (in an article entitled "Orchidaceae Ruizianae et Pavonianae Musaei Boissieriian", in Bonplandia 4: 210–217. 15 Jul. 1856) cited many of these numbers, without explanation of their significance. In the table that follows, numbers in the right hand column are those cited by Reichenbach fil.; those in the left hand column are those found on labels in the S. & M. herbarium at MA. Numbers in parentheses are those of the corresponding "CNHM" negatives. The numbers cited by Reichenbach evidently belong to the same series as the numbers in the herbarium, but in no case do they duplicate a number found on a specimen at MA.

In the Torner Collection, most of the paintings of orchids were annotated by A. P. de Candolle, but only about one-third of them were studied and identified to species or genus by the botanists of the Expedition. The numbers that the botanists assigned (referred to in the text as "l.c. Fl. Mex.") are dealt with individually as far as possible. A series of other numbers that I cannot explain have been assigned, by some unidentified person, to many of the otherwise unidentified paintings of orchids. These numbers are placed in the lower left-hand corner of the painting, are about 20 in all, including most of the series between 195 and 218, and also 110 and 112.

1773 Habenaria clypeata (40945) "Orchis imbricata"
1774 Cypripedium iripaneum (41035) "Satyrium turgidum N. i.c."
1776 Sarcoglottis schaffneri (40915) "Ophris monostachia"
1778 Epidendrum virgatum (41017) "Ophris spiralis"
1779 Malaxis fastigiata (40966) "Ophris ovata"
1780 Erythrophleum clavigera (40938) "Ophris lancifolia"
1784 Physosiphon, aff. minor (40910) "Epidendrum emarginatum"
1787 Plectorrhiza stenostachya 1788 Stenorrhiza pauciflorus
1791 Epidendrum ochraceum (40994) "Epidendrum parviflorum"
1794 Malaxis parthoni (40969) "Epidendrum corimbosum"
1796 Iochilus linearis (40957) "Epidendrum lineare"
1797 Epidendrum diffusus (40991) "Epidendrum paniculatum"
1798 Epidendrum vitellinum
1801 Coraliphiza macrantha & Govenia sp. (40126) "Epidendrum lancilatum"
1802 Elleanthus capitatus (41034) "Epidendrum capitatum"
1803 Laelia furfuracea and Cattleya maxima
1804 Dithonaea lioensis and Epidendrum anthropophorum
1807 Ponera, aff juncifolia (40911) "Epidendrum gramineum"
1808 Epidendrum spatula (type)
1810 Epidendrum stenopetalum
1811 Epidendrum lindleyanum (40992) "Epidendrum speciosum"
1813 Epidendrum pterocarpum
1814 Oncidium altissimum
1815 Vanilla (no photo)
1817 Sobralia macrantha ? (40919) "Epidendrum grandiflorum"
1818 Epidendrum arbusculum
1820 Epidendrum rigidum (41012) "Epidendrum liliiflorum"
1821 Epidendrum auritum

408
2. Enumeration by species.


Type-locality: Mexico. Listed among the “Ruiz & Pavón” orchids in the Boissier herbarium, with the note, “(acc. etiam ab ill. Lindl. ‘Mexico. 166’)”. Not found in the S. & M. herbarium.


Mexico, whence cited by Reichenbach f. (Bonplandia 4: 216. 1856) from among the “Ruiz & Pavón” orchids in the Boissier herbarium. Not found in the S. & M. herbarium.


Reported as “flor de Nevedad [sic]. 1803” by Reichenbach f. (Bonplandia 4: 216. 1856) in a list of the “Ruiz & Pavón” orchids in the Boissier herbarium. No. 1803 was not found in the S. & M. herbarium. The specimen may well have been North American in origin, but *Cattleya maxima* is a South American species, and no. 1803 may actually have been a plant collected in South America by Ruiz & Pavón.


Mexico, “Pavón” fide Reichenbach, i.e. Apparently the basis for this report was a specimen at G-Del, marked “Pavón”, and by Sessé (on an original label like those in the S. & M. herbarium), “20–1 Epidendrum [resupinatum crossed out] secundum. ic.” (Field Mus. neg. 25430). The name *Cryptarrhena pallidiflora* is a synonym of *C. lutea* R. Br. Bot. Reg. 2: pl. 153. 1816, a species that is found in the S. & M. herbarium without specific epithets (nos. 4350, 4355; CNHM negs. 41030, 41031) but determined by Schweinfurth as *C. lutea*. See *Epidendrum resupinatum* Sessé & Moc.

**“Cymbidium antericiiflorum”**.

No. 0060 in the Torner Collection, without inscription except for the above annotation by de Candolle, was well reproduced in full color at ca. 22.8 by 16.5 cm and identified only as an “Ilustración original de la Flora Mexicana” by Lozoya (1984, p. 93). The plant depicted is apparently something that Sessé & Mocíño would have called “Epidendrum”.

**Cypripedium turgidum** Sessé & Moc. Pl. Nov. Hisp. 154. 1890; ed. 2, 143. 1893.

Type-locality: Chilpancingo, Guerrero [“in Chilantzingo montibus, alisque Novae Hispaniae locis. Floret Julio”]. Lectotype: DC. plate 1225, an original painting, bearing the number “294”, the name “Satyrium” crossed out, and “Cypripedium turgidum” written in by de Candolle (Field Mus. neg. 30871). Ic. Fl. Mex. 294, cited in Pl. Nov. Hisp., was included among the *icones* obtained during the “Second Excursion”, that to Guerrero in 1789 (MA, mss). The plant depicted was evidently a flowering example of *Cypripedium itacapuru* Lex. (in Llave & Lex. Nov. Veg. Descr. 2: Orch. Opusc. 10. 1825). The copy of the plate in the Torner Collection (no. 1112, also bears the number “294”), the hand-printed names “Cypripedium Turgidum. Sp. N.” and “Pipixhuitzalli. Mex. [icanorum]”, and the annotation by de Candolle, “Cypripedium turgidum”. It was reproduced in color in *Flora Novo-Galiciana*, vol. 16, frontispiece, 1985. No. 4368 in the S. & M. herbarium (CNHM negs. 41033–41035), labelled “Satyrium turgidum”, is *C. itacapuru* according to Schweinfurth.


This report was based on one of the “Orchidaceae Ruizianae et Pavonianae” in the Boissier herbarium; I have not seen the specimen. In the S. & M. herbarium no. 4300 (CNHM negs. 41036, 41037), referred by the collectors to the genus *Epidendrum*, is according to Oakes Ames *Dichaea muricata* (Sw.) Lindl. Gen. & Sp. Orch. 209. 1833, and no. 4299 (neg. 41038) is *Dichaea trichocarpa* Lindl. Of these two species, only the former occurs in Mexico, according to Williams (Ceiba 2: 315. 1951). See also *Packypodium dilluchum*.


Type-locality: Mexico. Type: “Pavon. (exam. s. sp. in Herb. Lamb[ert])”. The specimen is at BM. ex herb. Lambert, determined by Lindley, marked by Pavón “Serapias parasitica del Peru” and “Ophrys monophylla de Mexico”. Presumably the report by Ridley was based on this specimen. A specimen from “[nueva Espana]” was reported by Reichenbach f. (Bonplandia 4: 217. 1856) from among the “Ruiz & Pavón” orchids in the Boissier herbarium. In the S. & M. herbarium no. 4381 (CNHM neg. 40965), labelled “Ophrys? monophylla. ic.”, is according to Ames *Malaxis calycina*.


Type-locality: Mexico. Type: “Pavon. (exam. s. sp. in Herb. Lambert)”. The specimen is at BM, determined by Lindley, marked by Pavón “Ophrys de Mexico”. In the S. & M. herbarium no. 4379 (CNHM neg. 40968), determined by Ames as *Malaxis myurus*, was originally labelled “Ophrys diphylla”.

409

Reported by Reichenbach (l.c.) as no. “1804” from among the “Ruiz & Pavón” orchids in the Boissier herbarium. The number 1804, though apparently not among those now represented in the S. & M. herbarium, falls in the range of the numbers that were assigned to orchids in the final enumeration of the herbarium (cf. McVaugh 1990, page 204). See also Epidendrum anthropophorum. It is possible that no. 1804 was a South American plant collected by Ruiz and Pavón, as Diothonea iloensis is a South American species; see a note under Cattleya maxima.

**Epidendrum.** The treatments of eight species of *Epidendrum* that appeared in Fl. Mex. were repeated almost *verbatim* in Mocío (1993, pp. 127–129) and seven of these in Maldonado Polo (1996, pp. 309–311), all with moderately long descriptions, but with much less of the indication of locality or flowering season. The species in question were *Epidendrum acuminatum, ellipticum, emarginatum, lineare* (2nd on page), *nervosum, veracruzensis*, and *viridiflorum* (1st on page), and *Epidendrum* sp. (Fl. Mex. p. 203). In Fl. Mex. all were reported from southeastern Veracruz (in Acayucana montibus), “in Tuxtlas montibus” (prope Veracruzem), “in Alvarado littore”). Mocío had worked in this area on his way to Tabasco and Central America, and presumably recognized what he took to be the same plants in the Central American flora.


Type-locality (Fl. Mex.): Shady mountains, Toa Alta, Puerto Rico, said to flower profusely in April ("Floret Aprilii intese"). Included by Urban (Symb. Antill. 4: 177. 1903) among the doubtful species of *Epidendrum* reported from Puerto Rico. Lindley (1833) reported Oncidium pauciflorum from “Mexico” on the basis of a “Pavon” specimen in Lambert’s herbarium; this specimen, now at BM, is marked by Pavón “Epidendrum acinacifolium”, not "acinaciforme" as reported by Lindley. Not found in the S. & M. herbarium. L. O. Williams (Ceiba 2: 182. 1951) included this among the Sessé & Mocío species that he had been unable to recognize.


Type-locality: On trees in the mountains of Tuxtla [i.e., probably San Andrés Tuxtla, Veracruz]. Said to flower in November. In the S. & M. herbarium no. 4344 (CNPDM neg. 40999), labelled “Epidendrum acuminatum”, is according to Schweinfurth *Epidendrum pentotis* Reichb. fil. Linnaea 41: 81. 1876. The latter species, according to Williams (Ceiba 2: 165. 1951), ranges from Veracruz and Michoacán through Central America. According to Dressler and Pollard (Encyclia Mex. 36. 1974).


Reported by Reichenbach (l.c.) under the number “1804”, from among the “Ruiz & Pavón” orchids in the Boissier herbarium. No other specimen was cited. I found nothing bearing the number 1804 in the herbarium at G, but the plant reported by Reichenbach surely came originally from the collection of Sessé and Mocío, not of Ruiz and Pavón. See also Diothonea iloensis.

**Epíndrum arbusculum** Lindl. in Benth. Pl. Hartw. 93. 1842.

Reported from “Mexico” under the number “1818” by Reichenbach fil. (Bonplandia 4: 216. 1856) in an account of the “Ruiz & Pavón” orchids in the Boissier herbarium. For the meaning of this number, see a note in the introduction to the Orchidaceae. Plants of *Epidendrum arbusculum* so determined by Schweinfurth are found (unnumbered) in the S. & M. herbarium, under the name of *E. umbellatum* (no. 4333; CNPM negs. 40975, 40976).


Reported by Reichenbach fil. (Bonplandia 4: 214. 1856), under the number “1821”, from among the “Ruiz & Pavón” orchids in the Boissier herbarium. For the meaning of this number, see a note in the introduction to the Orchidaceae. Not found in the S. & M. herbarium. The name *Epidendrum auritum* has been replaced by *E. boothii* (Lindl.) L. O. Williams, Ann. Missouri Bot. Gard. 26: 282. 1939.


Type-locality: Not stated. Type: Reported by Reichenbach from among the “Ruiz & Pavón” orchids in the Boissier herbarium; not seen. Not identified. See *Epidendrum acuminatum*, above.

**Epidendrum bidens** Lindl. Gen. & Sp. Orch. 98. 1831.

Type-locality: Mexico. Type: “Pavon. (exam. ssp. sp in Herb. Lamb.)”, the specimen now at BM. Not found in the S. & M. herbarium. Williams (Orchidaceae of Mexico, Ceiba 2: 174. 1951) was uncertain of the identity of this species. The name was relegated by Dressler and Pollard (Encyclia Mex. 70. 1974) to the synonymy of *Encyclia boothiana* (Lindl.) Dressler, subsp. boothiana, a plant of the Caribbean lowlands.
Epidendrum calcaratum Sessé & Moc. Fl. Mex. ed. 2. 201. 1894, not of Vellozo.

Type-locality: On trees, mountains of Toa Alta, Puerto Rico. Included by Urban (Symb. Anill. 4: 177. 1903) among the doubtful species of Epidendrum reported from Puerto Rico. Not found in the S. & M. herbarium. L. O. Williams (Ceiba 2: 182, 1951) included this among the Sessé & Mocío species that he had been unable to recognize.


Type-locality: Mountains of Tuxtlas [i.e., probably San Andrés Tuxtlas, Veracruz, “in Tuxtlae monibus. Floret Junio”]. Judging from the long and detailed description of this species, it is not an orchid. The petals are said to be 5, the filaments 4 and capillary, bifid, bearing 8 anthers; the seeds are said to be flat and subrotund, borne in a torulose triloculate inferior ovary. L. O. Williams (Ceiba 2: 182, 1951) included this among the Sessé & Mocío species that he had been unable to recognize.


Type-locality: Along the river of Orizaba near the waterfall, Veracruz [“ad margines fluminis Orizavae, juxta Cataraclam. Floret Julio”]. The description of this species is relatively short and nondiagnostic. In the S. & M. herbarium two collections labelled “Epidendrum capitatum” (nos. 4301, 4317; CNHM negs. 41039, 41040) are according to Schweinfurt Elleanthus capitatus (R. Br.) Reichb. fil. in Walp. Ann. 6: 475. 1862. No. 4301 bears the number “1802”; for the meaning of this number see a note in the introduction to the Orchidaceae.


Locality cited: Cuba [“supra arbores Insulae Cubae, ubi Curugey de Concha vulgo auditi”]. Description. Not found in the S. & M. herbarium under this name, but no. 4337 (CNHM neg. 40982), labelled “Epidendrum Havanense.”[description].”, was determined by Schweinfurt as Epidendrum cochleatum L.

Epidendrum cornutum Sessé & Moc. Fl. Mex. ed. 2. 206. 1894, not of earlier authors.

Type-locality: On trees, Orizaba, Veracruz. The epithet was said to have been applied because of the horns of the nectary. The interior of the flower is described in great detail in 11 lines of text. Not found in the S. & M. herbarium. Referrred by Dunsterville and Garay (Venez. Orch. Illus. 3: 296. 1965) to the synonymy of Stanhopea oculata (Lodd.) Lindl.

Epidendrum crucifolium Sessé & Moc. F. Mex. ed. 2. 205. 1894.

This name was published as the result of an editorial misinterpretation of the epithet as written in the manuscript of the Flora Mexicana. See Epidendrum ensifolium.

Epidendrum cuspidatum Lodges, Bot. Cab. pl. 10. 1817.


Epidendrum diffusum Sw. Prodr. Veg. Ind. Occ. 121. 1788.

“Mexico”, “Pavón” in herb. Lambert, as cited by Lindley, Gen. & Sp. Orch. 102. 1831. Also reported from “Mexico” by Reichenbach fil. (Bonplandia 4: 216. 1856) from among the “Ruiz & Pavón” orchids in the Boisier herbarium. In the S. & M. herbarium no. 4303 (CNHM negs. 40989-40991) is according to Schweinfurt Epidendrum diffusum Sw., but apparently no specimen bears that name on an original label. See under Epidendrum paniculatum.


Type-locality: Tuxtlas [i.e., probably San Andrés Tuxtlas, Veracruz]; [“Habitet et floret cum praecedenti, =E. nervosum.”]. In the S. & M. herbarium nos. 4296 (CNHM neg. 41028, labelled “Epidendrum ellipticum”) and 4370 (neg. 41029, assigned doubtfully to “Opheis” with the same epithet) are both according to Schweinfurt Cranichis sylvatica A. Rich. & Gal. Ann. Sci. Nat., Bot., ser. 3: 3: 30, 1845. Nelson (1997) designated “Sessé 4296” as “material tipo” of E. ellipticum. L. O. Williams (Ceiba 2: 182, 1951) included this among the Sessé & Mocío species that he had been unable to recognize.


Type-locality: On trees in the mountains of Acayucan, [southern] Veracruz, where said to flower in December. In the S. & M. herbarium no. 4329 (CNHM neg. 40910), labelled “Epidendrum emarginatum” and “1784”, is according to Schweinfurt a species of Physophorum, near P. minor Rendle. Perhaps some error is involved, as according to Williams (Ceiba 2: 80, 1951) the only Mexican representative of the genus Physophorum is P. tubatius (Lodd.) Reichb. fil. in Walp, Ann. 6: 18. 1861. For explanation of the number “1784”, see a note in the introduction to the Orchidaceae. The name “Epidendrum emarginatum” appears on the list of Mexican plants received by the British Museum from Pavón’s herbarium after Lambert’s auction, but I could not find the specimen in 1963. Nelson (1997) designated “Sessé 4329” as “material tipo” of E. emarginatum. L. O. Williams (Ceiba 2: 182, 1951) included this among the Sessé & Mocío species that he had been unable to recognize.
Epidendrum ensifolium [publ. as “crucifolium”]
Type-locality: Mountains of Córdoba, Veracruz.
Technically this is to be regarded as a new name, as no reference is made to the work of Linnaeus, and neither the character nor the description resembles that in the Species Plantarum. The epithet is clearly written “ensifolium” in the manuscript of the Flora Mexicana, but was evidently misread by the printer or editor. Not found in the S. & M. herbarium. Not identified.

“Mexico”, “Pavón”, in herb. Lambert, according to Lindley (Gen. & Sp. Orch. 109. 1831). The specimen, now at BM, determined by Lindley, is marked by Pavón “Ophrys de Mexico”. The name Epidendrum floribundum is considered a synonym of E. paniculatum Ruiz & Pavón, Syst. 243. 1798, a species ranging from Mexico to Peru and Bolivia.

Type-locality: Not stated, presumably Mexico. Not found in the S. & M. herbarium; unknown. Williams, in his account of the Orchidaceae of Mexico, included this in a list of 28 species of unidentifiable species of Epidendrum published by Sessé & Mociño (Ceiba 2: 182. 1951).

Type-locality: On trees, Orizaba, Veracruz, where said to flower in July. Detailed description. Not found in the S. & M. herbarium; not identified. L. O. Williams (Ceiba 2: 182. 1951) included this among the Sessé & Mociño species that he had been unable to recognize.

Epidendrum fruticosum Lindl. Gen. & Sp. Orch. 101. 1831, with citation of “Pavon Mss.” as the basis for the name.
Type-locality: Mexico. Type: “Pavon. (exam. s. sp. Herb. Lambert.)”. This species is listed among the Mexican plants received by the British Museum from Pavón’s herbarium after Lambert’s auction, but I could not find the specimen in 1963. Williams (Ceiba 2: 182. 1951) listed E. fruticosum among the “unrecognized” species based on Mexican material. Not found in the S. & M. herbarium.

Type-locality: “Nueva [E] España”, according to Reichenbach. Type: Not seen; a specimen described from among the “Ruiz & Pavon” orchids in the Boissier herbarium (G). The reference to New Spain suggests that the plant was Mexican in origin, but Schweinfurth (Fieldiana, Bot. 30: 490. 1959) referred Epidendrum gratiosum to the synonymy of E. paniculatum Ruiz & Pavón, var. lineatifolium (Cogn.) C. Schweinf., a Peruvian variety of a wide-ranging species.

Type-locality: On trees in the mountains near Córdoba, Veracruz, where said to flower in August. Description. This is not to be taken as a new name, although there is no reference in the protologue to any earlier author. The diagnosis (character) is clearly a modified version of that in Plate (6: 847. 1787). In the S. & M. herbarium nos. 4330 and 4356 (CNHM negs. 40903. 40904), both labelled “Epidendrum guttatum”, are according to Schweinfurth Oncidium lankesteri Ames. Perhaps some error or confusion is involved, as O. lankesteri is a Costa Rican endemic. L. O. Williams (Ceiba 2: 182. 1951) included this among the Sessé & Mociño species that he had been unable to recognize.

Type-locality: On trees, Orizaba, Veracruz, where said to flower in July. Description. With an added note, “Vide Herbarium”. In the S. & M. herbarium no. 4331 (CNHM neg. 40960), labelled “Epidendrum lamellatum N.”, is according to Schweinfurth Leochilus carinatus (Knowles & Westc.) Lindl. Bot. Reg. 28: 823. 1842. Probably through an error in labelling, a sheet bearing a mixed collection (Govenia sp. and Corallorrhiza macrantha) also bears a ticket marked “Epidendrum lamellatum” and “1801” (no. 4331; CNHM neg. 41026). Nelson (1997) designated “Epidendrum 4313” as “material type” of E. lamellatum and reported the determination as Corallorrhiza macrantha Schltr. L. O. Williams (Ceiba 2: 137. 1951) included this among the Sessé & Mociño species that he had been unable to recognize.

Type-locality: Mexico. Type: “Pavon. (exam. s. sp. in herb. Lambert.)”. The specimen is at BM, labelled by Pavón and by Lambert. Also reported by Reichenbach fil. (Bonplandia 4: 214. 1856), both as A. lancifolium (“Ruiz Pav. Mexico”) and E. trulla (without citation of locality or type), from among the “Ruiz & Pavon” orchids in the Boissier herbarium. In the S. & M. herbarium no. 4319 (CNHM neg. 40981), labelled “Epidendrum lancifolium”, is according to Schweinfurth Epidendrum cochleatum L. Sp. Pl. ed. 2. 1351. 1763. According to Williams (Ceiba 2: 137. 1951), who admitted both E. lancifolium and E. cochleatum to the orchid flora of Mexico, the two species differ chiefly in details of petal-shape and color. Dressler
and Pollard (Encyclopaedia Mex. 43, 1974) maintain *Encyclia lancifolia* as a distinct species inhabiting southern and central Mexico.


Locality cited: On trees, mountains of Córdoba, Veracruz, where said to flower in August. In the S. & M. herbarium no. 4295 (CNHM negs. 40956, 40957), labelled “Epidendrum lineare”, is according to Schweinfurth *Isochilus linearis* (Jacq.) R. Br. in Aiton, Hort. Kew. ed. 2. 5: 209. 1813. One specimen (40957) is also labelled “1796”; the inference is that the plant was assigned this number and the epithet “lineare” in the final enumeration of the S. & M. herbarium; for comment and the meaning of “1796” see a note in the introduction to the Orchidaceae. The flowers were described by Sessé & Mocíño as “docinea”, whereas those of the other *Epidendrum lineare* (q.v. below) were described as “luteo”. It may be supposed that the two were tentatively described in manuscript as different taxa, without any real intention of publishing both.


Type-locality: On trees, mountains of Tuxtla [i.e., probably San Andrés Tuxtla, Veracruz], where said to flower in November. Technically published as an independent species without reference to Jacquin, but probably not intended for publication by its authors, probably a description of the plant from Tuxtla was drawn up for comparison with what the authors thought was the true *lineare*, q.v. above. L. O. Williams (Ceiba 2: 182. 1951) included *E. lineare* among the Sessé & Mocíño species that he had been unable to recognize.

** Epidendrum longiflorum ** Sessé & Moc. Fl. Mex. ed. 2. 206. 1894, not of H. B. K.

Type-locality: Tenampulco, Puebla [“cum praecedent. Flore Octobri”; the reference is to *E. tripetala*, where the citation is “supra arbore calidorum montium Tenampulcei”]. Not found in the S. & M. herbarium. Not identified. L. O. Williams (Ceiba 2: 182. 1951) included “Epidendrum longiflorum” among the Sessé & Mocíño species that he had been unable to recognize.

** Epidendrum nervosum ** Sessé & Moc. Fl. Mex. ed. 2. 203. 1894, not of Lamarc.

Type-locality: Mountains of Tuxtla [i.e., probably San Andrés Tuxtla, Veracruz], where said to flower in September. Short description. Not found in the S. & M. herbarium. Not identified. L. O. Williams (Ceiba 2: 182. 1951) included this among the Sessé & Mocíño species that he had been unable to recognize.


Type-locality: On trees in hot regions of New Spain. Apparently not to be taken as a new name; although no reference is made to the work of Linnaeus. The same name is fully treated by Palau (6: 846. 1787), with references to both Jacquin and Linnaeus. Not found in the S. & M. herbarium. Not identified. L. O. Williams (Ceiba 2: 182. 1951) included this among the Sessé & Mocíño species that he had been unable to recognize.

** Epidendrum nutans ** Sessé & Moc. Fl. Mex. ed. 2. 204. 1894, not of earlier authors.

Type-locality: On trees, mountains near Córdoba, Veracruz, where said to flower in August. In the S. & M. herbarium no. 4298 (CNHM neg. 40998), labelled “Epidendrum nutans”, is according to Schweinfurth *Epipendrum palaeaceum* (Lindl.) Reichb. fil. The latter, according to L. O. Williams (Ceiba 2: 166. 1951), is a synonym of *E. boothii* (Lindl.) L. O. Wms.; see *Epidendrum auritum*. Williams (l.c., p. 182) included *E. nutans* among the Sessé & Mocíño species that he had been unable to recognize.


Type-locality: Mexico. Type: “Pavon (exam. s. sp. in herb. Lambert”). The specimen is at BM, marked by Pavón “Ophrys corymbosa de Mexico”, and by Schweinfurth (anno 1935), “This plant appears to be referable to Epidendrum cholorop Rechb.f.”. If further study confirms this early judgment by Schweinfurth, then Lindley’s name should be taken up, as it has about 50 years’ priority over the name *E. chlorops* Rechb.f. Gard. Chron. II: 14: 524. 1800. Additional evidence that all these names represent the same plant may lie in the fact that in the S. & M. herbarium no. 4320 (CHHM negs. 40977–40979), labelled “Epidendrum corymbosum”, is according to Schweinfurth *Epipendrum chlorops*. The name “Epidendrum corymbosum”, however, seems also to have been applied by Sessé & Mocíño to *E. anceps* Jacq. (no. 4357; CNHM neg. 40974), and “Epidendrum (or *Ophrys*) corymbosum” to species of *Malaxis*.

** Epidendrum paniculatum ** Sessé & Moc. Fl. Mex. ed. 2. 204. 1894, not of Ruiz and Pavón.

Type-locality: On trees, mountains of Córdoba, Veracruz, where said to flower in July. In the S. & M. herbarium no. 4303 (CNHM neg. 40991), labelled “Epidendrum paniculatum. 1797.”, was determined by Schweinfurth as *Epidendrum diffusum* Sw., which see. Nelson (1997) designated “Sessé 4303” as “material tipo” of *E. paniculatum*. For the meaning of number “1797” see a note in the introduction to the Orchidaceae. L. O. Williams (Ceiba 2: 182. 1951) included this among the Sessé & Mocíño species that he had been unable to recognize.
Type-locality: Tenampulco, Puebla ("supra arbores calidarium regionum Tenampulci et vicinarum. Floret Octobrit"). In the S. & M. herbarium nos. 4326 and 4334 (CNHM negs. 40993, 40994), labelled "Epidendrum parviflorum", are according to Schweinfurth Epidendrum ochraceum Lindl. Bot. Reg. 24: pl. 26. misc. 14. 1838. Another collection labelled "Epidendrum parviflorum" (no. 4295; negs. 40954, 40955) is a mixture of Polystachya cerea and Hexadesmia (Scaphiglottis) crurigera. The name Epidendrum parviflorum Sessé & Moc. was referred by Dressler and Pollard (Encyclia Mex. 67. 1974) to the synonymy of Encyclia ochracea (Lindl.) Dressler. This is said to become a weed especially in coffee-growing areas of Veracruz.

Type-locality: Not stated. Type: Not specified; reported by Reichenbach from among the "Ruiz & Pavon" orchids in the Boissier Herbarium; not seen. Schweinfurth (Fieldiana, Bot. 30: 425. 1959) referred this species to the synonymy of Epidendrum cornutum Lindl. J. Bot. (Hooker) 3: 86. 1841, and stated that the type of E. pavonianum is Matthews 1895, from some unrecorded Peruvian locality.

Type-locality: Mexico. Type: "Pavon. (exam. s. sp. in herb. Lambert.)". The specimen is at BM, labelled by Pavón "Epidendrum polyanthum de Mexico". Not found in the S. & M. herbarium under this latter name; no. 4343 (CNHM neg. 41001), "Epidendrum"; is according to Schweinfurth E. polyanthum Lindl.

Reported from "Mexico" by Reichenbach fil. (Bonplandia 4: 214. 1856) in an account of the "Ruiz & Pavon" orchids in the Boissier herbarium. In the S. & M. herbarium this species is represented by no. 4339 (CNHM neg. 41002), determined by Schweinfurth, originally labelled with another epithet in Epidendrum.

Reported by Reichenbach fil. (Bonplandia 4: 214. 1856), under the number "1813", from among the "Ruiz & Pavon" orchids in the Boissier herbarium. For explanation of this number, see a note in the introduction to the Orchidaceae. In the S. & M. herbarium no. 4325 (CNHM neg. 41003), determined by Schweinfurth as Epidendrum pterocarpum Lindl., was originally labelled "Epidendrum pulchellum", q.v.

Epidendrum pulchellum Sessé & Moc. Fl. Mex. ed. 2. 1894, not of Swartz.
Type-locality: San Andrés near the volcano of Orizaba, Veracruz ["supra arbores montium frigidorum S. Andreae juxta vulcanae de Orizav. Floret Julio"]. There is an added "Obs. Translatum ad Hortos in terra floriem vidi a cumulque delineavimur." No corresponding illustration has been located in the Turner Collection. For citation of herbarium material, see above under Epidendrum pterocarpum. L. O. Williams (Ceiba 2: 182. 1951) included this among the Sessé & Mocío species that he had been unable to recognize.

Locality cited: Veracruz ["supra arbores prope Veracruem. Floret Novembris"]. Described only with the diagnosis (character) taken verbatim from the treatment of E. pulsilum by Palau (6: 850. 1787), "Epidendrum folius ensiformis, subarcus, scapo paucifloro". In the S. & M. herbarium no. 4307 (CNHM neg. 40905), labelled "Epidendrum pulsilum N. ic. d. 2. p. [descr.]", was identified by Schweinfurt as Oncidium pusillum (L.) Reichb. f. L. O. Williams (Ceiba 2: 182. 1951) included this among the Sessé & Mocío species that he had been unable to recognize.

Epidendrum radicans Lindl. Gen. & Sp. Orch. 104. 1831, with citation of "Pavon Mss." as the basis for the name.
Type-locality: Mexico. Type: "Pavon. (exam. s. sp. in herb. Lambert.)". The specimen is at BM, labelled by Pavón and by Lindley as Epidendrum radicans. In the S. & M. herbarium no. 4323 (CNHM negs. 41005-41007), labelled as "Epidendrum radicans" by the collectors, are determined by Schweinfurth as E. radicans Pav. ex Lindl. According to Williams (Ceiba 2: 153. 1951), E. radicans is a synonym of E. ibaguense H. B. K. Nov. Gen. & Sp. 1: 354. 1816.

Type-locality: Mexico. Syntypes: "Pavon. (exam. s. sp. in Herb. Lambert.)". The material at BM consists of two sheets, one marked by Pavón "Epidendrum racemosum de Mexico", the other "Ophrys tigrina", Lindley (i.e.) commented as follows: "This is in Mr. Lambert's Herbarium from Pavon under the names both of Ophrys tigrina, and Epidendrum racemosum; as I have no means of ascertaining which of these names was intended to be applied by the latter Botanist, I have not hesitated, in this and other cases, to reject both".
In the S. & M. herbarium nos. 4327 ("Epidendrum tigrinum") and 4345 ("Epidendrum racemosum") (CNHM negs. 41008, 41009) are according to Schweinfurth...


Epidendrum retusum [sic] Sessé & Moc. Fl. Mex. ed. 2. 201. 1894, not Epidendrum retusum L.
Type-locality: Shady mountains of Toa Alta, Puerto Rico, and of Tabasco, Mexico [published as "Toa Alta de Tabasco", but in the manuscript of Fl. Mex. clearly written "Toa Alta & Tabasco"]. Said to flower in April. Technically to be regarded as a new name; the diagnosis (character) is quite unlike that in the Species Plantarum, and unlike that of E. retusum as reported by Palau (6: 848. 1787). Included by Urban (Symb. Antill. 4: 177. 1903) among the doubtful species of Epidendrum reported from Puerto Rico. Not found in the S. & M. herbarium. Not identified. L. O. Williams (Cebu 2: 182. 1951) included this among the Sessé & Mocíno species that he had been unable to recognize.

Epidendrum rigidum Jacq. Enum. Carib. 29. 1760. Reported from "Mexico" by Reichenbach fil., as "Epidendrum rigidum Sw.", from among the "Ruiz & Pavón" orchids in the Boissier herbarium (Bonplandia 4: 216. 1856). In the S. & M. herbarium no. 4322 (CNHM neg. 41012), labelled "Epidendrum", with an unpublished epithet and "1820", is according to Schweinfurt Epidendrum rigidum, see also Epidendrum resupinatum, and for the meaning of the last-cited number see a note in the introduction to the Orchidaceae.

Type-locality: Mexico. Type: "Pavon ... exam β in Herb. Lambert.". The specimen is at BM, marked by Pavón "Epidendrum obusifolium de Mexico". Not found in the S. & M. herbarium.

Reported from "Mexico" by Reichenbach fil. (Bonplandia 4: 215. 1856), from among the orchids of "Ruiz & Pavón" in the Boissier herbarium. If correctly identified the specimen probably came from Guatemala, rather than from Mexico. Not found in the S. & M. herbarium.

Type-locality: Not stated. Type: The only citation of a specimen was the number "1808", reported by Reichenbach from among the orchids of "Ruiz & Pavón" in the Boissier herbarium; not seen. This (1808) was a number assigned to a species in the Sessé & Mocíno herbarium as finally arranged by them. The species has remained almost unknown to recent students of the orchids. It was not mentioned by Williams in his 1951 account of the Orchids of Mexico, by Ames and Correll in their 1953 account of the Orchids of Guatemala, or by Schweinfurt in the Orchids of Peru (1959), but treated by Dressler and Pollard (Encyclia Mex. 127–128. 1974) as a plant of uplands from Jalisco to Guerrero and Morelos.

Epidendrum spathaceum Lindl. in J. Bot. (Hooker) 3: 85. 1841.
Reported from "[Nueva España]" by Reichenbach fil. (Bonplandia 4: 215. 1856), from among the orchids of "Ruiz & Pavón" in the Boissier herbarium. If correctly identified this plant was presumably erroneously reported from North America. The type of Epidendrum spathaceum was a South American specimen; according to Schweinfurt (Fieldiana 30: 507–508. 1959), E. spathaceum is a synonym of E. ruizianum Steud. Perhaps the plant seen by Reichenbach was one of Pavón's own collections, erroneously labelled "N.E.", perhaps a part of the type-collection of E. spathaceum.

Reported from "Mexico", under the number "1810" by Reichenbach fil. (Bonplandia 4: 216. 1856), in his account of the orchids of "Ruiz & Pavón" in the Boissier herbarium. In the S. & M. herbarium no. 4309 (CNHM neg. 41013), labelled with an unpublished epithet in Epidendrum, is according to Schweinfurt probably E. stenopetalum. For the meaning of number "1810", see a note in the introduction to the Orchidaceae.

Type-locality: Papantla, Veracruz ("supra arbores calidarium regionum Regn. Octobri"). Description. For discussion, see below under Epidendrum tigrinum. Nelson (1997) designated "material tipo" of E. tigrinum; see above under E. raniferum. L. O. Williams (Cebu 2: 182. 1951) included E. tigrinum among the Sessé & Mocíno species that he had been unable to recognize.
Type-locality: Hot mountains of New Spain, e.g., near Córdoba, Veracruz [“supra arbores montium calidarium Nov. Hsp. ut Cordovae vicinis. Floret Junio”]. Description. In the manuscript of the Fl. Mex. the epithet is clearly written “tigrinum”, whereas that of the preceding species is written “tigrimum”. As there seems to be no way to determine which spelling was intended by the authors (or if both were intended), I have entered the two here according to the spellings in the manuscript. As noted above under Epidendrum raniferum, the epithet “tigrinum” was applied in the herbarium to some specimens by Sessé & Mocíño and by Pavón. The name may have been applied to the first tigrinum (tigrinum) or to the second; there seems no way of telling. For citation of specimens, see under Epidendrum raniferum.

Type-locality: On trees, hot mountains of Tenanulco [“Tenanulco”], Puebla, where said to flower in October. Description. Not found in the S. & M. herbarium. Not identified. L. O. Williams (Ceiba 2: 182. 1951) included this among the Sessé & Mociño species that he had been unable to recognize.

Reported from “Mexico”, as collected by “Pavón”, by Lindley, Gen. & Sp. Orch. 1: 103. 1831. The specimen is at BM, ex herb. Lambert. For material under this name in the S. & M. herbarium, see Epidendrum arbusculum.

Type-locality: On trees, Havana, Cuba. Description. Not found in the S. & M. herbarium. The name was referred by Dressler and Pollard (Encyclia Mex. 39. 1974) to the synonymy of Encyclia fragrans (Sw.) Lemée.

Locality cited: Córdoba, Veracruz, and other places near the shore [“supra arbores montibus Cordovae alisqae N. Hist. locis calidis mari vicinis”]. Description, and mention of medical uses, with comment, “Nonnulli (precipue Galli) potionio cocholate instimcent.” In the S. & M. herbarium no. 4394 (CNHM neg. 40937), labelled “Epidendrum vanilla”, was determined by Schweinfurth as “Vanilla pomponia Schiede?”. L. O. Williams (Ceiba 2: 182. 1951) included this among the Sessé & Mocíño species that he had been unable to recognize.

Type-locality: Mexico. Type: “Pavon. (exam. s. sp. in Herb. Lambert)”. Listed among the specimens received by the British Museum from Pavón’s herbarium after Lambert’s auction, but I could not find the specimen in 1963. Not found in the S. & M. herbarium.

Type-locality: Veracruz [“supra arbores prope Veracruce. Floret Augusto”]. Description. Not found in the S. & M. herbarium. Not identified. L. O. Williams (Ceiba 2: 182. 1951) included this among the Sessé & Mociño species that he had been unable to recognize.

Type-locality: Not stated. The protologue consists of the following only: “Vermifugum. Epidendrum scandens folis oblongis sessilibus, nervosis, caule radiante”. No. 4358 of the S. & M. herbarium (CNHM neg. 40936) is a sterile specimen labelled “Epidendrum vermifugum” and identified by Schweinfurth as Vanilla sp. Nelson (1997) designated this specimen as “material tipo of E. vermifugum”. L. O. Williams (Ceiba 2: 182. 1951) included this among the Sessé & Mocíño species that he had been unable to recognize.

Type-locality: Río de Alvarado [south of Veracruz] [“supra arbores in Alvarado litore. Floret Septembris”]. Not found in the S. & M. herbarium. Not identified. L. O. Williams (Ceiba 2: 182. 1951) included E. viridiflorum among the Sessé & Mocíño species that he had been unable to recognize.

Type-locality: Córdoba, Veracruz [“in Cordovae montibus, supra arbores”]. Perhaps different from the preceding species; the descriptions do not permit a reliable comparison. Not found in the S. & M. herbarium. Not identified.

Type-locality: Mexico. Type: “Pavon. (exam. s. sp. in Herb. Lambert)”. The specimen is at BM, marked by Pavón “Epidendrum croceum de Mexico”. The same species was reported “1798. De Mexico” by Reichenbach fil. from among the orchids of “Ruiz & Pavon” in the Boissier herbarium (Bonplandia 4: 214. 1856). For an explanation of the number “1798”, see a note in the introduction to the Orchidaceae. No. 4348 of the S. & M. herbarium (CNHM neg. 40108), identified only as
“Epidendrum”, is according to Schweinfurth *E. vitellinum*.


**Epidendrum** sp. (“—— Epidendrum nectarii labio integerrimo, maxime acuminato, renato, foliis ensiformibus, carnosis, calcarulatis, erectis [with rather long description]”) sensu Sessé & Moc. Fl. Mex. ed. 2. 203. 1894.

Locality cited: Tuxtla [i.e., probably San Andrés Tuxtla, Veracruz] [“supra arbores in Tuxtlae montibus. Floret Junio”]. Not identified. Apparently this plant was equivalent to that treated as [Epidendrum] “species [Mocino]” in *Guatemalensis Prima Flora* (Mocino 1993, p. 129). The diagnosis is identical with that in *Fl. Mex.*, but no locality or flowering season is given.

**Epidendrum** sp. (“—— Epidendrum bulbis ovatis compressis, foliis ensiformibus, nectarii labio trifido, lacinia intermedia rugosa, glandulosa [with description]”) sensu Sessé & Moc. Fl. Mex. ed. 2. 204. 1894.


Locality cited: Córdoba, Veracruz [“supra arbores in montibus Cordoveae. Floret Augusto”]. Not identified.

The first reference to “Epidendrum.” sp.” in *Fl. Mex.* ed. 2. 205. 1894, includes a description, evidently of another species, but includes no mention of a specific locality.


Locality cited: Córdoba, Veracruz [“supra arbores in Cordoveae montibus. Floret Julio”]. Not identified.


Type-locality: Mexico. Type: “Ruiz et Pavon. (exam. s. sp. in Herb. Lamberti.)”. Not found at BM in 1963 but listed among the plants received from Pavón’s herbarium at the time of Lambert’s auction. The species was referred by Williams (Ceiba 2: 232. 1951) to the synonymy of *Guvenia liliaeacea* (Llave. & Lex.) Lindl., a common Mexican orchid not found in the S. & M. herbarium.


Type-locality: “Nueva E[spaña]”. Type: Reported by Reichenbach, I.c., on the basis of a specimen from among the “Ruiz & Pavon” orchids in the Boissier herbarium; not seen. According to Schweinfurth (Fieldiana, Bot. 30: 53. 1958), this name is a synonym of *Elleanthus capitatus* (R. Br.) Reichb. fil. in Walp. Ann. 6: 475. 1862. The latter species ranges from Mexico to Brazil and Peru. In the S. & M. herbarium nos. 4301 and 4317 (CNHM negs. 41039, 41040), labelled “Epidendrum capitatum” and (no. 4301) “1802”, are according to Schweinfurth *Elleanthus capitatus* (no. 4317 identified with “?”). For a note on the numbering of the S. & M. orchids, see a note in the introduction to the Orchidaceae.


Reported from “N[ova] E[spaña]” by Reichenbach fil. (Bonplandia 4: 210. 1856), from among the “Ruiz & Pavon” orchids in the Boissier herbarium. The basis for this record was apparently a sheet at G, ex herb. E. Boissier, determined by Reichenbach and later by Kraenzlin and marked by Pavón “Orchis papilionacea N E”. In the S. & M. herbarium no. 4398 (neg. 40044), labelled “Orchis papilionacea N.”, is according to Schweinfurth **Habenaria clypeata**. Additional specimens of this species in the S. & M. herbarium were originally referred to the genus *Orchis* alone (no. 4396); *Orchis imbricata* with the number “1773” (no. 4400); or to *Orchis* with an unpublished epithet referring to the green flowers. (necs. 40943, 40945, 40946). From the above specimens and from the description, it seems likely that *Orchis imbricata* Sessé & Moc., q.v., represents **Habenaria clypeata** at least in great part.


Reichenbach reported **Habenaria macroceratitis** from “N[ova] E[spaña]”, on the basis of a specimen among the orchids of “Ruiz & Pavon” in the Boissier herbarium. The basis for this report was doubtless a sheet at G, ex herb. E. Boissier, determined by Reichenbach and later by Kraenzlin, and bearing an original Sessé & Mocino label “Orchis Havanaria”.. Another sheet in the same herbarium, determined by the same authorities, is marked by Pavón “Orchis longicornis N E”, and presumably represents authentic material of *Orchis longicornis* Sessé & Moc. The type-locality of the latter was in shaded mountains, Córdoba, Veracruz, where it was said to flower in July. In the S. & M. herbarium no. 4397 (CNHM neg. 40950), labelled “Orchis longicornis”, is according to Schweinfurth probably **Habenaria oreophila** Greenm. According to Williams (Ceiba 2: 26–27. 1951), both **Habenaria macroceratitis** Willd. and **H. oreophila** Greenm.
are to be regarded as synonyms of *Habenaria quinqueseta* (Michx.) Sw. Adnot. Bot. 46. 1829. Nelson (1997) designated "Sessé 4397" as "material tipo" of *Orchis longicornis*.


Type-locality: Unknown to Reichenbach. Type: Reported from among the "Ruiz & Pavon" orchids in the Boissier herbarium; not seen. Not identified.


Reported by Reichenbach from "N[ueva] H[ispania]" (Bonplandia 4: 210. 1856), from among the "Ruiz & Pavon" orchids in the Boissier herbarium. The plant is at G, ex herb. E. Boissier, determined by Reichenbach and later by Kraenzlin, and labelled by Pavón "Orchis spicata N E". In the S. & M. herbarium no. 4405 (CNHM neg. 40953), labelled "Orchis spicata N", is according to Ames and Schweinfurth *Habenaria strictissima*.


Reported by Reichenbach fil. (Bonplandia 4: 216. 1856) among the "Ruiz & Pavon" orchids in the Boissier herbarium, as from "Nueva EspaÑa", whence said to be named "Fernandezia". This plant seems to have been known to Sessé & Mocion as "Epidendrum lineare", q.v. for citation of specimens.


Reported with the number "1803" by Reichenbach fil. (Bonplandia 4: 216. 1856) from among the "Ruiz & Pavon" orchids in the Boissier herbarium; not seen. In the S. & M. herbarium nothing with the number 1803 is found at present, but the plant reported by Reichenbach surely came from the collection of Sessé & Mocion, not from Ruiz & Pavon. For discussion of the numbering of the Sessé & Mocion orchids, see a note in the introduction to the Orchidaceae.

**Limodorum spicatum** Sessé & Moc. Fl. Mex. ed. 2. 201. 1894.

Type-locality: Shady places, San Nicolás [near México, D.F.], not precisely located but thought to have been San Nicolás Totolapula, near Contreras, D.F., and a little more than two leagues southwest of San Angel. Said to flower in July. Not found in the S. & M. herbarium. The description, of a small terrestrial orchid with green flowers in a simple filiform spike, the whole plant from a membrane-covered bulb, suggests a species of *Malaxis*.


This South American plant was doubtfully reported (as above) from "Mexico" under the name of "Fernandezia" by Reichenbach fil. (Bonplandia 4: 213. 1856), from among the "Ruiz & Pavon" orchids in the Boissier herbarium. Not seen. Not identified.


Reported by Reichenbach fil. (Bonplandia 4: 217. 1856) from among the "Ruiz & Pavon" orchids in the Boissier herbarium. The basis for this seems to have been a sheet at G, ex herb. E. Boissier, marked "[by Boissier] "Herb. Pavon", and bearing an original Sessé & Mocion label "20-1. Orchis purpurea". Perhaps this was the only specimen of its kind collected by Sessé & Mocion, as the herbarium now seems to contain nothing under either of the above names, nor under *Malaxis ehrenbergii*.

**Microstylis fastigiata** Reichb. fil. Linnacea 22: 834. 1849. "Ophrys fastigiata Pav.", cited in synonymy by Reichenbach fil. Bonplandia 4: 217. 1856, as the basis for *Microstylis fastigiata*. *Ophrys ensifolia, Pavon, MSS.* cited in synonymy by Ridley, J. Linn. Soc., Bot. 24: 326. 1888. Reported by Reichenbach fil. (1856 Lc.) from among the "Ruiz & Pavon" orchids in the Boissier herbarium, with a comment on the use of the epithet *fastigiata* by Pavón so long before his own publication of it in Linnacea. The basis for the report of a "Pavon" specimen seems to have been a sheet at G, ex herb. E. Boissier, marked by Pavón "Ophrys fastigiata". A specimen so marked in the S. & M. herbarium (no. 4380; CNHM neg. 40967) is according to Oakes Ames *Malaxis fastigiata* (Reichb. fil.) kuntze. Rev. Gen. Pl. 2: 673. 1891. Ridley (i.e.) reported a "Pavon" collection from Mexico, but did not mention the herbarium in which he saw it.


Reported by Reichenbach fil. (Bonplandia 4: 212. 1856) from Mexico, with the number "1814", from among the "Ruiz & Pavon" orchids in the Boissier herbarium. For the meaning of this number, see a note in the introduction to the Orchidaceae. Not seen at G; not located in the S. & M. herbarium.

**Oncidium funereum** Llave & Lex. Nov. Veg. Descr. 2; Orch. Opuscul. 37. 1825.

Reported by Lindley (Gen. & Sp. Orch. 201. 1833) from Mexico on the basis of a specimen collected by "Pavon", seen by him in herb. Lambert. Many of the "Pavon" orchids from Lambert's herbarium are now at BM, but I was unable in 1963 to find this one or the next. Williams (Cebu 2: 302. 1951) did not know the identity of this species.


Reported by Lindley (Gen. & Sp. Orch. 203. 1833) from "Mexico" on the basis of a specimen collected by "Pavon", seen by him in herb. Lambert. The identity of
this specimen is unknown; see note above under 0. funereum.


Type-locality: Mexico. Type: Neither locality nor type mentioned in the protologue, but in 1833 Lindley (i.e.) wrote "Mexico, Pavon, (exam. s. sp. in herb. Lambert)"). The type, from Lambert's herbarium, now at BM, is marked by Pavon "Epipedium acinaciforme" [sic]. See **Epipedium acinaciforme** Sessé & Moc., which is a Puerto Rican species. Hemsley (Biol. Centr. Amer. Bot. 3: 286. 1884) referred Oncidium pauciflorum to the synonymy of **O. tetraptalam** (Jacq.) Willd., and repeated Lindley's record of a Mexican collection (by "Pavon") of this otherwise South American and West Indian species. Kraenzlin (Pflanzenreich IV. 50 [Heft 10]: 103–104. 1922) followed Hemsley and repeated the citation of "Pavon's" Mexican collection; the species was known otherwise to Kraenzlin from Colombia, Venezuela, Jamaica, San Bartolome, and Cuba, but not from Puerto Rico. Presumably the plant seen by Lindley came originally from Puerto Rico, but perhaps it was not Oncidium tetraptalam; the type should be examined critically. Williams (Cebia 2: 303. 1951), in his account of the orchids of Mexico, excluded Oncidium tetraptalam from the flora of that country, but did not mention O. pauciflorum. Lindley (Fol. Orch. [Oncidium 13]. 1855) reported O. tetraptalam from Mexico on the basis of a "Pavon" specimen, but I do not know the connection, if any exist, between this specimen and the type of O. pauciflorum.


Reported by Reichenbach fil. (Bonplandia 4: 212. 1856) from "Cuba" on the basis of a plant from among the "Ruiz & Pavon" orchids in the Boissier herbarium. Not seen.


Type-locality: Mountains of Temascaltepec, Edo. de México ["cum praecedentii" = Ophrys loesellii]. Said to flower in July. In the S. & M. herbarium no. 4371 (CNHM neg. 40966) is labelled (in part) "Ophrys corymbosa"; according to Oakes Ames the plant is *Malaxis fastigiata* (Reichb. fil.) Kuntze, Rev. Gen. Pl. 2: 673. 1891. The original description of O. corymbosa may well apply to this species, which is widely distributed in Mexico.

"Ophrys diphylla"

A name not published by Sessé & Mocioño but listed (as "Ophrys diphylla") as Ic. Fl. Mex. 175 among the *icones* obtained during the "First Excursion", in the vicinity of México, D.F., 1787–1788, and also included in another list among *icones* 1–416 (MA, ms.). McVaugh (1980, p. 122) suggested that it represented *Malaxis myurus* (Lindl.) Kuntze, Rev. Gen. 112: 673. 1891. This opinion was based on (in) a determination by Oakes Ames of no. 4379 in the S. & M. herbarium (CNHM neg. 40968), originally labelled "Ophrys diphylla". Probably the original "175" was represented by no. 0218 in the Torner Collection, which bears the number "175", the hand printed name "Ophrys [diphylla] Limn. crossed out]", and the annotation by de Candolle, "Malaxis leptostachya". The epithet "diphylla" appears to have been altered, perhaps from "diphylla". A near-duplicate (but with fewer floral details) is DC. plate 1219, an original painting. The plant depicted is a unifoliate species of *Malaxis*.


Type-locality: Fields, San Angel, near [south of] México, D.F. Ic. Fl. Mex. 176; this is represented by no. 0219 in the Torner Collection, which bears the number "176", the hand-printed name "Ophrys fastigiata. N.", and an annotation by de Candolle, "Malaxis ophioglossoides W.". A near-duplicate is DC. plate 1219, an original painting bearing the number "176", the name "Ophrys fastigiata N.", and the annotation by de Candolle "Malaxis ophioglossoides Wijl."). [Field Mus. neg. 30868]. It was annotated by A. Richard in 1847 as "Malaxis majoranemifolia". Presumably this is to be referred now to *Malaxis fastigiata*; for citation of herbarium material see under *Microstilis fastigiata*. The plant of the Pl. Nov. Hisp. is described as having the stem bifoliate (as in M. fastigiata), but the plate shows it as unifoliate.


Type-locality: Acahuizotla, Guerrero ["parasitica in Acahuizotlae montibus. Floret Julio"]; DC. plate 1197, an original painting bearing the number (apparently by Mochoño) "277", the name hand-written [by Sessé] "Seraphis Imbricata Sp. N.", and an annotation by de Candolle "Cymbidium imbricatum"; it was subsequently annotated by A. Richard in 1847 as "Fernandezia elegans Lindl." (Field Mus. neg. 30867). An almost identical copy is in the Torner Collection, no. 0183, with the name hand-printed, otherwise exactly as in DC. 1197. The plant depicted is *Lockhartia oerstedii* Reichb. fil. Bot. Zeitung (Berlin) 10: 767. 1852, represented in the S. & M. herbarium, according to a determination by Schweinfurth, by no. 4335 (CNHM neg. 40963); the collectors originally referred it to as "Epipedium imbricatum".

The number "277" on the *icones* is one of the numbers of the Ic. Fl. Mex. of Sessé & Mocioño; at one time applied to this species but eventually published for *Guatiaum afra* [L.] senn Sessé & Moc. In the list of *icones* obtained during the "Second Excursion", that to
Guerrero in 1789 (MA, mss), the number "277" was omitted, but most of the numbers in that list were used for plants that were reported from Acachuatzala, Mazatlán, and nearby places in Guerrero. In the manuscript of the Pl. Nov. Hisp. the number "277" was written in the appropriate place under *Ophrys imbricata*, but later crossed out. Apparently the icon was never renumbered.


Locality cited: Temascaltepec, Edno. de Mexico ["in montibus Temascaltepec. Floret Julio"]. Description. No mention was made of the work of Linnaeus, but the diagnosis (character) was repeated with some small additions from Palau (6: 813, 1787), and in any event it seems unlikely that the epithet "loeselii" should have been invented for a Mexican plant. Not found in the S. & M. herbarium. In the Torner Collection no. 1808, a painting without inscription except for "20-1" at the top, represents a species of *Liparis* with rather broad sub-halal leaves.


Localities cited: San Angel, D.F. ["cum praecedent (=*Ophrys nidus avis*). Floret Augusto"]. Not described. Apparently more than one species was included under this name. In the S. & M. herbarium no. 4371 (CNHM neg. 40966), labelled "Ophrys ovata", was determined by Oakes Ames as *Malaxis fastigiata* (Reichb. f.) Kuntze, and no. 4391 (neg. 40912), similarly labelled, was determined by C. Schweinfurth as *Sarcoglottis schaffneri* (Reichb. f.) Ames.


Type-locality: Gardens, San Angel, near [south of] México, D.F. ["in Fl. Mex. 173, cited in the manuscript of the Pl. Nov. Hisp. but not in the published version of that work, and included (as "Ophrys peregrina N") among the icones obtained in 1787–88 in the vicinity of Mexico City. This is represented by no. 0610 in the Torner Collection, which bears the number "178" (evidently a replacement for an older "173"), the hand-printed name "Ophrys peregrina N.", and an annotation by de Candolle. "Neottia peregrina". A near-duplicate is DC. plate 1220, an original painting bearing the number "173" and the hand-printed name "Ophrys peregrina N." (Field Mus. neg. 30869). DC. 1220 was annotated by A. Richard in 1847 as "Spiranthes orchoides AR". The plant described and illustrated by Sessé & Moc. was evidently one of the red- or orange-flowered species of *Spiranthes* [*Stenorrhynchus* in some current systems of classification]; in their herbarium at MA at least two species (but not *orchisoides*) appear under that name. No. 4376 (CNHM neg. 40920), according to Schweinfurth, is *Spiranthes aurantiaca* (Llave & Lex.) Hemsl., whereas nos. 4375 and 4384 (negs. 40923 and 40926) represent *Spiranthes cinnabarina* (Llave & Lex.) Hemsl. Biol. Centr. Amer. Bot. 3: 300. 1885. The original ticket of no. 4384 bears not only the name "Ophrys peregrina N.", but also a reference to "ic. 173", the inference being that the plate represents *Spiranthes cinnabarina*; see also *Stenorrhynchus lupulinus*.

**Ophrys pubescens** Sessé & Moc. Pl. Nov. Hisp. 153. 1890; ed. 2. 142. 1893, not of earlier authors.

Type-locality: Gardens, San Angel, near [south of] México, D.F. ["in Fl. Mex. 174, cited in Pl. Nov. Hisp. and included (as "Ophrys pubescens N") among the icones obtained in 1787–88 in the vicinity of Mexico City. This is represented by no. 1751 in the Torner Collection, which bears the number "174", the name hand-written ?[by Sessé]. "Ophrys pubescens. Sp N.", and an annotation by de Candolle. "Neottia pubiflora". A near-duplicate (but the plant shown without roots) is DC. plate 1221, an original painting bearing the number "174", the hand-printed name "Ophrys pubescens N.", and an annotation made by A. Richard in 1847, "Spiranthes montana ". (Field Mus. neg. 30870). Not found in the S. & M. herbarium under the name of *Ophrys pubescens*. The plant depicted is evidently one of the red- or orange-flowered species of *Spiranthes* [*Stenorrhynchus*], perhaps *S. cinnabarina* (Llave & Lex.) Hemsl., of which *Spiranthes montana* is considered to be a synonym (cf. Williams in Ceiba 2: 69. 1951).

"Ophrys" ("*Ophrys*" *spiralis*). [description]. Habitat in montibus S. August[ini], Floret Junio et Julio".

In the S. & M. herbarium no. 4374 (CNHM neg. 41017), labelled as above, was identified by Schweinfurth as *Epidendrum virgatum* Lindl.


Type-locality: Mountains, Temascaltepec, Edno. de México, where said to flower in July. Not found in the S. & M. herbarium under this name. Described as a small bulbous herb, the bulbs fibrous; leaves ensiform, radical,
two in number, twice as long as the filiform scape; peduncles dichotomous; flowers about 5, sordid yellow; petals linear-oblong, spreading; lip 3-lobed, the central lobe narrow, pendent, the lateral ones suberect, "disco purpureo lineatis". Not identified.

Orchis imbricata Sessé & Moc. Fl. Mex. ed. 2. 199. 1894, not of Vest.

Type-locality: Shady places, San Nicolás [near México, D.F.], not precisely located but thought to have been San Nicolás Totolapa, near Contreras, D.F., and a little more than two leagues south-southwest of San Angel. Said to flower in July. The plant described under this name is apparently a small species of Habenaria, said to have showy white flowers and a long spur. Probably this is Habenaria clypeata Lindl. Gen. & Sp. Orch. 311. 1835, as in the S. & M. herbarium, no. 4400 (CNHM neg. 40945), labelled "Orchis imbricata [.deser.] 1773.", determined by Schweinfurth. Sessé & Mocío also seem to have included under the name Orchis imbricata one or more of the green-flowered species of Habenaria that are superficially similar to H. clypeata. In the herbarium no. 4407 (CNHM neg. 40949), labelled "Orchis imbricata var. N.", is according to Schweinfurth Habenaria novemfida Lindl. in Benth. Pl. Hartw. 94. 1842. A sheet at G, ex herb. E. Boisier, labelled by Pavón "Orchis imbricata", is according to determinations by Reichenbach fil. and by Kraenzlin Habenaria diffusa Rich. & Gal. (i.e., H. novemfida Lindl.). Nelson (1997) designated "Sessé 4400" as "material tipo" of E. imbricata.


Locality cited: None, but see Ophrys nidus avis. Not described. Not found in the S. & M. herbarium. Not identified.

Orchis pauciflora Sessé & Moc. Fl. Mex. ed. 2. 200. 1894, not of earlier authors.


Type-locality: On trees, mountains of Córdoba, Veracruz, where said to flower in August. Not found in the S. & M. herbarium. Not identified.

Orchis vaginata Sessé & Moc. Fl. Mex. ed. 2. 199. 1894.

Type-locality: Temascaltepec, Edo. de México ["in montibus umbrosis Temascaltepec. Floret Julio"]). Not found in the S. & M. herbarium. From the description evidently a species of Habenaria. Described as being similar to "Orchis imbricata", i.e., Habenaria clypeata or a similar but green-flowered species. Said to be a herb with bulbous base and leafy stem, the leaves seven-nerved, lanceolate, erect, the flowers racemose, the corolla greenish white, small, the lip 5-parted, the spur longer than the ovary.


Reported from Mexico by Hemsley on the authority of Ridley (cf. Biol. Centr. Amer. Bot. 4: 89. 1887), who informed him of a "Pavón" specimen at BM. This "Pavón" collection was a mixture, now remounted on two sheets. One sheet, identified as Dichaea squarrosa Lindl. Ann. Nat. Hist. 4: 384. 1840, bears clippings from the original mount in Lambert's herbarium, "Mexico Herb Pavón", and in the hand of Pavón "Fernandezia Gen. Nov. del Peru y Mexico". The Dichaea element may well have come from Mexico; see also Dichaea squarrosa. The second part of the original mixture is marked by Pavón "Fernandezia de Mexico"; [by Lindley] "Dichaea? Pachyphyllum? Pachyphyllum near crystallinum Reich. fil."; and in another hand "These specimens were on the same sheet in Lambert's Herbarium as specimens of Dichaea squarrosa Reich. f. Dr. Lindley's names refer to the original sheet". Perhaps this, the Pachyphyllum part of the mixture, came originally from Peru, not from Mexico as supposed by Ridley.

Physurus claviger Reichb. fil. Bonplandia 4: 211. 1856. Erythrodes clavigera (Reichb. fil.) Ames, Orch. 7: 70. 1922.

Type-locality: "Nueva [Espa?]." Type: Based on one of the "Ruiz & Pavón" orchids in the Boissier herbarium. Not seen. Regarded by Williams (Ceiba 2: 73. 1951) as an obscure species, but in the S. & M. herbarium no. 4537 (CNHM neg. 40938), labelled "Ophris lancifolia" with the number "1780", is referred by Schweinfurth to Erythrodes clavigera.


Reichenbach's report was based on one of the "Ruiz & Pavón" orchids in the Boissier herbarium. Schweinfurth (Fieldiana, Bot. 30: 315-316. 1959) included this species among the orchids of Peru, stating that it was an "obscure species perhaps referable to P. pruinosa Lindl." His knowledge of the plant was derived chiefly from "a photograph of a Pavón collection designated Pleurothallis linearis (in the handwriting of Reichenbach f.) from the Delessert Herbarium". 

421
Pleurothallis stenostachya Reichb. fil. Linnaea 18: 399. 1844.

Reported by Reichenbach fil. from "Mexico" (Bonplandia 4: 216. 1856) as no. 1787, from among the "Ruiz & Pavón" orchids in the Boisier herbarium. I have not seen the specimen. For explanation of the number, see a note introductory to the Orchidaceae. In the S. & M. herbarium a part of a mixed collection, referred by the collectors to Epidendrum, is according to Schweinfurth Pleurothallis stenostachya (no. 4306; CNHM neg. 40909).

Polystachya luteola (Sw.) Hook. Exot. Fl. 2: pl. 103. 1825.

Reported from "Mexico" by Lindley (Gen. & Sp. Orch. 72. 1830) on the basis of a collection by "Pavón," and from "Nueva España" by Reichenbach fil. (Bonplandia 4: 213. 1856), from among the "Ruiz & Pavón" orchids in the Boisier herbarium. Not found in the S. & M. herbarium.

Poneria juncifolia Lindl. Gen. & Sp. Orch. 114. 1831, with citation of "Epidendrum granifolium Pavon Mss." as the basis for the name.

Type-locality: Mexico. Type: "Pavon. (exam. s. sp. in Herb. Lambert)." The specimen, in BM ex herb. Lambert, is annotated by Lindley and bears Pavón's identification as reported by Lindley. Another sheet at BM, ex herb. Shuttleworth, is marked by Pavón "Epidendrum granimum N.E." A sterile specimen in the S. & M. herbarium (no. 4305; CNHM neg. 40911), labelled "Epidendrum granimum 1807," is according to Schweinfurth Poneria juncifolia or near that.


This Peruvian specimen was reported from "Nueva España" by Reichenbach fil. (Bonplandia 4: 216. 1856), from among the "Ruiz & Pavón" orchids in the Boisier herbarium. I have not seen the specimen. There is apparently no material of the genus Scaphyglottis in the S. & M. herbarium.


Type-locality: Mountains of Mazatlán, Guerrero, where said to flower in July. In the Pl. Nov. Hisp. two species of "Serapias," from Mazatlán, both with plicate leaves, are distinguished chiefly by the flowers, which are described as "rosacei, cernui" in diphylla, and on the basis of the lip, which is said to be "trifidum, striis tribus interrupte foliaceis lineato" in diphylla. In S. palmifolia (q.v.), the flowers are described as "lutei, erecti," and the lip "obtusum, integerrimum, petalis brevius.

In Ic. Fl. Mex. 258, which is cited in Ic. Nov. Hisp. under Serapias palmifolia, and included under the same name among the "icones" obtained during the "Second Excursion," that to Guerrero in 1789 (MA, mss), the plant depicted is evidently a species of Bletia, with handsome rosy nodding flowers, and a long and broadly lobed lip, i.e., surely the plant described as Serapias diphylla. It appears that the icon belongs with the epithet "palmifolia," but that in Pl. Nov. Hisp. the description pertaining to that species was transposed with that of "diphylla," and the epithet "diphylla" (as "Diphilla") became associated with one copy of the icon, while the other took the epithet "palmifolia".

DC. plate 1196 (Field Mus. neg. 30866), an original painting, bears the number (apparently written by Mocián) "258," the hand-printed name "[Serapias (sic) Diphilla. Sp. N. crossed out]," and the annotation by de Candolle, "Cymbidium palmifolium." In the Torner Collection no. 0091 is an almost identical painting, but unnumbered, with names hand-written [by Sessé], "Serapias Palmifolia, Sp. N.," and "Chichílco Tepetateuxochitl. Mexic[andorum].", as well as de Candolle's "Cymbidium palmifolium.

In the S. & M. herbarium no. 4368 (CNHM neg. 41020), labelled "Serapias diphylla N.," was determined by Schweinfurth as "probably" Bletia coccinea Llave & Lex., and later by L. O. Williams as "probably" Bletia reflexa Lindl. Bot. Reg. pl. 1760. 1835. Nelson (1997) designated "Sessé 4368" as "material tipo" of Serapias diphylla, which is a decision of questionable value.

"Serapias Guatimalensis N." In the S. & M. herbarium no. 4367 (CNHM neg. 40973), labelled as above, was determined by Schweinfurth as Notylia trisepala Lindley & Paxton.


Localities cited: Mazatlán, Guerrero; and in Europe ["in secroribus Europeae locis et Mazatlanis monibus.

Not found in the S. & M. herbarium. Ic. Fl. Mex. 172, cited in Ic. Nov. Hisp., not seen. It is listed among the "icones" painted in the vicinity of the City of Mexico in 1787-1788, with annotations indicating that the plant was first called by the epithet "parasitica," then later "longifolia" (MA, mss).

What I take to be the two original paintings of Ic. 172 are in the Torner Collection, each bearing the number "172," the hand-printed names "Chichílco Tepetlaxochitl. Hrz. 368 (or Hrn². F. 368)," and an annotation by de Candolle, "Cymbidium limodoroides." Torner no. 0434 bears the hand-printed name "Serapias Parasitica. N." and shows the tip of a 4-flowered inflorescence and a floral dissection of what appears to be a pink- or purplish-flowered species of Laelia. Torner 1092 shows an entire plant, including a pseudobulb with a pair of opposed, trough-shaped and very acute leaves, and a bracteate scape surmounted by a raceme of four red (rather than purplish) flowers. Superficially it appears to be a different species from that shown in Torner 0434, but it has been identified as a species of Laelia. It bears the hand-printed name "Serapias parasitica. Linn."

Type-locality: Mountains of Mazatlán, Guerrero ["cum praecedentii", which was Serapias diphyllea]. Ic. Fl. Mex. 253, cited in Pl. Nov. Hisp. and included among the scenes that were obtained during the "Second Excursion", that to Guerrero in 1879. It is represented by no. 0370 in the Torner Collection, which is unnumbered, bears the hand-printed name "Serapias Lurida. Sp. N." and an annotation by de Candolle, "Cymbidium ? luridum". Nearly identical is DC, plate 1190, an original painting that bears the number "253" (apparently written by Mociño) and an annotation by de Candolle, "Epipendrum luridum". According to a note by Alphonse de Candolle, it was identified by A. Richard in 1847 as Epipendrum radiatum Lindl. Bot. Reg. 27: misc. 58. 1841. That species is represented in the S. & M. herbarium, according to a determination by Schweinfurth, by no. 4364 (CNHM neg. 41004), originally determined as an Epipendrum. A specimen originally called "Serapias lurida N." (no. 4369; neg. 40939) is according to Schweinfurth a mixture of the leaves of an Epipendrum and the flowers of a Govenia.


Type-locality: New Spain. Not found in the S. & M. herbarium. Briefly described, without citation of definite locality ["Habitat in Nova Hispania"]; not recognized.


Type-locality: New Spain. Type: "Ophrys ensifolia N E", so reported by Reichenbach from among the "Ruiz & Pavon" orchids in the Boissier herbarium. The specimen, at G ex herb. E. Boissier, is labelled by Pavón as reported in the protologue. In the S. & M. herbarium no. 4372 (CNHM neg. 40932), labelled "Ophris ensifolia N.", is according to Schweinfurth Spiranthus romanzoffianus Cham. Linnaea 3: 32. 1828. The latter species was reported from Mexico by Hemsley (Biol. Centr. Amer. Bot. 4: 90. 1887) on the basis of a "Pavon" specimen at BM, identified by Ridley. As Spiranthes romanzoffiana is a boreal species not known to occur in Mexico, it may be inferred that all the above specimens, if correctly identified, were collected by Mociño on his trip to Nutka, 1792–1793.

Spiranthes graminea Lindl. in Benth. Pl. Hartw. 25. 1840.

Reported from "[Nueva] [Español]" by Reichenbach fil. (Bonplandia 4: 211. 1856) on the basis of a specimen from among the "Ruiz & Pavon" orchids in the Boissier herbarium. I have not seen this specimen. In the S. & M. herbarium nos. 4377 and 4385 (CNHM negs. 40928–40930), originally labelled as Ophrys spiralis, are according to Schweinfurth Spiranthus graminea.


Type-locality: Mexico. Type: "Ruiz et Pavon. (exam. s. sp. in Hort. [sic] Lambert.)". The basis for this report seems to have been a sheet now at BM, ex herb. Lambert, marked by Pavón "Maxillaria de Mexico", and annotated by C. H. Dodson in 1962 as Stanhopea oculata (Lodd.) Lindl. Gen. & Sp. Orch. 158. 1832. Not found in the S. & M. herbarium.


Type: Not verified. Reported from "Mexico" on the basis of a collection by "Ruiz and Pavon", according to Williams (Ceiba 2: 245. 1951). Also reported by Reichenbach (Bonplandia 4: 214. 1856) from among the "Ruiz & Pavon" orchids in the Boissier herbarium. I have not seen the earlier publication by Reichenbach. Not found in the S. & M. herbarium.

Stanhopea tigrina Bateman ex Lindl. Sert. Orch. pl. 1. 1838.

Reported from Mexico by Reichenbach fil. (Bonplandia 4: 214. 1856) on the basis of one of the "Ruiz & Pavon" orchids in the Boissier herbarium. I have not seen the specimen. Not represented in the S. & M. herbarium.


Reported by Reichenbach fil. (Bonplandia 4: 211. 1856) from "[Nueva] [Español]" on the basis of one of the "Ruiz & Pavon" orchids in the Boissier herbarium, cited as "N. E. 'Ruiz Pavon'!". As this is a Peruvian species, an error in labelling or a misidentification is to be suspected. Reichenbach noted, "Specimen bene quadrat cum planta herb. ill. Hooker."


Cited, presumably from Mexico, by Reichenbach fil. (Bonplandia 4: 211. 1856), from among the "Ruiz & Pavon" orchids in the Boissier herbarium. The basis for this report is apparently a specimen at G, ex herb. E. Boissier, with an original S. & M. label, "20-1. Ophrys", and marked by Pavón "diphylleia". The plant is now better known as Spiranthus cinnabarinus (Llave & Lex.) Hemsley. Biol. Centr. Amer. Bot. 3: 300. 1885. It is a widely distributed Mexican species.
**Stenorrhynchus lupulinus** Lindl., Gen. & Sp. Orch. 479. 1840.

Reported, presumably from Mexico, by Reichenbach fil. (Bonplandia 4: 211. 1856) from among the “Ruiz & Pavon” orchids in the Boissier herbarium. The basis for this report was apparently a specimen at G, ex herb. E. Boissier, with a ticket apparently by Boissier, “Ophrys peregrina. herb. Pavon. Mexico.” Williams (Ceiba 2: 70. 1951) referred *Stenorrhynchus lupulinus* with some reservation to the synonymy of *Spiranthes auriculata* (Llave & Lex.) Hemsl. Biol. Centr. Amer. Bot. 3: 300. 1885. This species is represented in the S. & M. herbarium, according to determinations by Schweinfurth, by nos. 4376, 4383 and 4387 (CNHM negs. 40920–40922). Nos. 4376 and 4387 were originally labelled “Ophris peregrina”, as was also no. 4575 (neg. 40923), referred by Schweinfurth to *Spiranthes cinnabarina* (Llave & Lex.) Hemsl. Without doubt Sessé & Mociño confused these two rather similar species.

**Stenorrhynchus pauciflorus** (Rich. & Gal.) Reichb. fil. Bonplandia 4: 211. 1856.

Reported from Mexico by Reichenbach (i.e.) on the basis of “no. 1788” of the “Ruiz & Pavon” orchids in the Boissier herbarium. The basis for this report is a specimen at G, ex herb. E. Boissier, bearing an original Sessé & Mociño label “1788. Epipendrum pauciflorum” and marked by Pavón “de Mexico”. In the S. & M. herbarium no. 4308 (CNHM neg. 40931), labelled “Epipendrum pauciflorum”, is according to Schweinfurth *Spiranthes hymalis* Rich. & Gal. Ann. Sci. Nat., Bot., ser. 3, 3: 32. 1845. This specimen was not numbered by the collectors; for explanation of the number “1788”, see a note in the introduction to the Orchidaceae, above.

According to Williams (Ceiba 2: 65. 1951), the plant reported by Reichenbach as *Stenorrhynchus pauciflorus* (i.e., presumably “no. 1788”) was not *Spiranthes pauciflorus* Rich. & Gal., but also *Spiranthes hymalis*.


Type-locality: “[Nuev]a [E]spaña”. Type: Reported as having been found among the “Ruiz & Pavon” orchids in the Boissier herbarium under the name of “Ophrys rotundifolia”. The specimen, now at G, ex herb. E. Boissier, bears an original Sessé & Mociño label, “Ophrys [lessii] crossed out] rotundifolia N.”. Pavón has written on the same ticket, “N.E. Ophrys rotundifolia”. Not found in the S. & M. herbarium under this name: no. 4403 (CNHM neg. 40962), determined by Schweinfurth as *Liparis veillifera*, was originally labelled by the collectors as a species of *Ophrys*, with an unpublished epithet.

---

**Vanilla pompona** Schiede, Linnaea 4: 574. 1829.

Reported by Reichenbach fil. (Bonplandia 4: 212. 1856), from among the “Ruiz & Pavon” orchids in the Boissier herbarium, as “1815 de Mexico”. I have not seen the specimen. In the final numbering of the S. & M. herbarium (MA, mss), the number 1815 was assigned to a species of *Vanilla*; see also in a note introductory to the Orchidaceae.

**Orobanchaceae**

"Orobancha Americana ic." Apparently there is no reference in Pl. Nov. Hisp. or in Fl. Mex. to any species of *Orobancha*, but the above name appears in the S. & M. herbarium (no. 2351; CNHM neg. 47313). According to Standley, the plant is *Conopholis americana* (L.f.) Walr. The "ic." was presumably no. 1038 in the Torner Collection, without any inscription except an annotation by de Candolle, "Orobancha mexicana". It is an elegant drawing of a flowering plant of *C. americana*, showing not only the inflorescence but the basal structures attached to a wooden root.

"Orobancha cytoides"

This name appears as an annotation by de Candolle, on no. 1968 of the Torner Collection, an elegant sketch of a flowering stem and its enlarged fleshy base, which also bears the annotation "Notka" by de Candolle. The plant depicted is apparently *Boschniakia hookeri* Walp., which ranges from northern California to Vancouver Island. This drawing is evidently one of the sketches made by Chevereria at Notka in 1792. DC. plate 97914 is a colored copy.

**Oxalidaceae**


Locality cited: México, D.F. ["in Mexici agris; vulgo Xocoloxtolteq; floret toto vere"]; described at some length as a yellow-flowered plant with numerous procumbent filiform stems. In the S. & M. herbarium no. 1003 (CNHM neg. 47315) appears to be a mixture of *Oxalis corniculata* L. and *O. albicans* H. B. K.


Type-locality [DC.]: "in Mexico", (Many places in New Spain, according to Pl. Nov. Hisp.). Type: de Candolle cited no herbarium material, mentioning only "fl. mex. ic. ined." and "Hern. mex. 386. f. 3", Lectotype [designated by M. Denton, Publ. Mus. Michigan State

Type-locality [DC.]: “in agris Mexici”; [localities in Pl. Nov. Hisp.]: “Europa et Mexici agris”. Lectotype [DC., designated by Denton, i.e., p. 557]; DC. plate 150, a copy, cited as an “original” in Calques des Dessins (Field Mus. neg. 30556). It is unnumbered, and bears the name “Oxalis Nudiflora”, hand-printed apparently by the copyist. An original painting of the same in the Torner Collection is no 0417, which bears the number “84”, the hand-printed name, “Oxalis violacea Linn. crossed out”, and “nudiflora” added by de Candolle. The *icones* represent Ic. Fl. Mex. 84, cited under “Oxalis violacea” in Pl. Nov. Hisp. and in the list of paintings obtained in the vicinity of Mexico City in 1787–1788 (MA, ms). The leaflets as shown in the *icones* are three in number and obcordate, as described by Sessé & Mocíño for *O. violacea*, and these authors seem not to have described any other species of the *Ixonoxalis* group except for *O. flabelliformis*. Not found in the S. & M. herbarium.


Although no previous author was mentioned, this can hardly be considered a new name. The diagnosis (character) was taken directly from Palau (3: 768. 1785) with some changes in word-order. In the S. & M. herbarium no. 1008 (CNHM neg. 47319), labelled “Oxalis sensitiva”, was determined by Standley as *Biophyllum dendroides* (H. B. K.) DC. Nelson (1997) designated “Sessé 1008” as “material type” of “Oxalis sensitiva Sessé & Moc., which is inappropriate as no such name exists.

Oxalis tetraphylla Cav. Ic. 3: 19. pl. 237. 1795.

Type-locality: Mexico; flowered at the Madrid Botanical Garden in May, the year not stated. Treated by most authors since Cavanilles as a Mexican species, but Cavanilles himself stated (Ic. 4: 71. 1798) that it was found by Nee “in Madalena oppido peruvian inter Batatas”. Type: Not seen. In the S. & M. herbarium no. 1007 (CNHM neg. 47314), labelled “Oxalis tetraphylla”, has been identified (in part) as this species.


Type-locality [DC.]: San Angel, south of Mexico, D.F. [“in hortis Sancti-Angeli in Mexico”]. Lectotype: DC. plate 151 as cited in Calques des Dessins (Field Mus. neg. 30577), an original painting bearing the number “85”, the hand-printed names “Oxalis [stricta Linn. crossed out]”, (“verticillata DC. prodr.” added by de Candolle), and “Xoxocoyol hoioihoian Herna. F. 440”. A nearly identical duplicate is no. 0211 in the Torner Collection, which bears the number “85”, the hand-printed name “Oxalis [stricta Linn. crossed out]”, and “verticillata” added by de Candolle.

The *icones* represent Ic. Fl. Mex. 85, correctly cited in the manuscript of the Pl. Nov. Hisp., but as “87” in the published version, and included among the paintings obtained near Mexico City in 1787–1788 (MA, ms). There is no material labelled Oxalis stricta or *O. verticillata* in the S. & M. herbarium; probably the latter was an invention of de Candolle’s. By most authors *Oxalis verticillata* DC. has been regarded as a probable synonym of *O. albicans* A. B. K. Nov. Gen. & Sp. 5: 189. 1821. What is very likely the same species was described independently as Oxalis stricta [L.] sensu Sessé & Moc. Fl. Mex. ed. 2. 118. 1894; in that work the locality is given as Córdoba, [Veraetu], and the description was presumably based on new material from that locality.

Palmae

In the Pl. Nov. Hisp. and the Fl. Mex., the authors mentioned three genera of palms, namely *Cocos* (4 species), *Corypha* (1 species), and *Phoenix* (1 species). None except the following was treated except in general terms.

Bactris ? pavoniana Mart. Palm. Orbign. 70. 1847.

Type-locality: “Puerto Rico, Pavon in hb. Webb”. The type (fl. ex herb. Webb.) is labelled “Martineziæ sp. nova de Puerto Rico sine floribus”. Urban (Symb. Antill. 4: 131. 1903) noted that the specimen was undoubtedly collected by Sessé and Mocíño, not Pavón.


Type-locality: San Andrés Tuxtla, Veracruz [in oppido Sancti Andreae de Tuxtlae. Floret Novembri]. Not found in the S. & M. herbarium. Diagnosis and a two-line description. Perhaps this is the plant depicted in no. 0113 of the Torner Collection, showing what appears to be a
large palm in flower and a lateral branch of a staminate inflorescence. It is inscribed [by Sessé], "Cocos lagua", "fol. 187", and "Tab. 13". Not identified.

Papaveraceae


Localities cited [Pl. Nov. Hisp.]: New Spain and Europe ["passim in Nova Hispania ac plerisque Australis Europae locis"]; [Fl. Mex.]; Puerto Rico and New Spain. Ic. Fl. Mex. 99, cited in Pl. Nov. Hisp. and included among the paintings obtained during the "First Excursion", in the region of Mexico City, 1787–88. It is represented by no. 0274 in the Turner Collection, which bears the number "99" and the hand-printed name "Argemone mexicana. Linn." and "Chicalotl. Hern. F. 215". Probably Turner no. 0114 represents the same species, but it is without inscription except for the notation in ink at upper left, "Num 6". Judging by the style of the notation and the picture itself, it is one of the earliest that were completed by the artists. A sheet in the S. & M. herbarium, named "Argemone mexicana" (no. 2262; CNHM neg. 47325), is according to Standley Argemone platycera Link & Otto, Ic. Pl. Rar. Hort. Berol. 85. pl. 43. 1831. In the S. & M. herbarium no. 2261 was cited as A. platycera by Ownbey (Mem. Torrey Bot. Club 21: 107. 1958); this is CNHM neg. 47324, labelled by the collectors with an unpublished name.


Localities cited: Ario and Uruapan, Michoacán; other places in New Spain: Dominica, Jamaica and Cuba [Pl. Nov. Hisp.]: "in oppidis Ario, Uruapan, alisque Novae Hispaniae locis, [etc.]. Floret Septembri", [Fl. Mex.]: "in Oppido Ario", Ic. Fl. Mex. 394, cited in Pl. Nov. Hisp. and included among the icones obtained during the "Third Excursion", that to western Mexico in 1790–91. This is represented by no. 0784 in the Turner Collection, without inscription except for the notation by de Candolle, "Bocconia cernua". It is from the collection at MA, which bears the number "14" and the hand-printed name "Bocconia Frutescens." It was listed by name, with description, and identified as RBJ Láminas 80 in the Catálogo de las Láminas del Real Jardín Botánico (RBJ 1987, p. 336). It was also well reproduced (though with emphasis on the brown) in full color at ca. 15.7 by 10.5 cm and identified as RBJ Lámina 80 (RBJ 1987, p. 257). It was also reproduced in somewhat more natural color at ca. 18.5 by 12 cm by Maldonado Polo (1996, p. 323). It is no. 14 of a manuscript list by Mocino; no. 13 of Ramírez (Anales. Inst. Méd.-Nac. México 6, pt. 1: 74. 1903), who also correctly equated this icon with DC. plate 14, the type of B. frutescens [var.] B. cernua DC., q.v. In the S. & M. herbarium nos. 1806 (CNHM negs. 47326, 47327) and 1806bis (CNHM negs. 47328, 47329) are all labelled "Bocconia frutescens". According to Standley, no. 1806 represents Bocconia arborea S. Watts. Proc. Acad. Nat. Sci. Philadelphia 25: 141. 1890, and 1806bis represents B. frutescens L. Sp. Pl. 505. 1753. The plant illustrated in Ic. Fl. Mex. 394 does not have the long-attenuate leaf-lobes of B. arborea (the commoner species in western Mexico), but rather resembles what is called B. frutescens in eastern Mexico; similar plants are not unknown in Michoacán and Jalisco, however, and the "ern" may have been based on a plant from the west.

Bocconia frutescens [var.] B. cernua DC., Syst. 2: 90, 1821, with citation of "Moc. et Sessé in fl. mex. ined." as the basis for the name.

Type-locality: Mexico; see above under Bocconia frutescens. Lectotype: no. 0784 in the Turner Collection, without inscription except for the annotation by de Candolle, "Bocconia cernua". DC. plate 14, as cited in Caldes des Dessins (Field Mus. neg. 30451), is a copy of Turner 0784. Ic. Fl. Mex. 394 (see under B. frutescens). The "ern" condition of the inflorescence, from which this takes its name, was probably brought about by the artist's desire to illustrate the ample panicle of this plant without having to use a larger piece of paper.

Bocconia integrifolia [var.] B. mexicana DC. Syst. 2: 91. 1821.

Type-locality: "in Novæ Hispaniæ". Lectotype: In the Turner Collection, no. 0669, without inscription except for the annotation by de Candolle, "Bocconia laxiflora". DC. plate 15, as cited in Caldes des Dessins (Field Mus. neg. 30452), is an incomplete copy of Turner 0669. In the S. & M. herbarium no. 1807 (CNHM neg. 47330), named "Bocconia integrifolia", is according to Standley (in Standl. & Stereysmark, Flora of Guatemala, Fieldiana, Bot. 24, part 4: 351. 1946) Bocconia glaucofolia Hutchinson, Bull. Misc. Inform. Kew 1920: 281. 1920. Standley referred "B. integrifolia var. mexicana DC." to the synonymy of B. glaucofolia, adding "It is of interest to record that a specimen of this species is in the Sessê & Mocino Herbarium (No. 1807), and since the plant is not known from Mexico — although it may occur there — it seems probable that the collection was made in Guatemala". This inference is confirmed by the locality cited for Bocconia integrifolia in Mocino's manuscript flora of Guatemala (MA, ms) and repeated in the published version (Guat. Prima Flora 82. 1993): "in temp[eratisibus] Cuchumatanae montibus".

Corydalis notkana".

A name not used by Sessê & Mocino, but applied by de Candolle to an elegant sketch in the Turner Collection, no. 1555, which is otherwise without inscription. DC. plate 17 is a copy, after Turner 1555. The original sketch, found in a folder associated with others supposedly
Passifloraceae


**Type-locality:** Mexico. Lectotype (designated by MacDougal, Syst. Bot. Monogr. 41: 92. 1994). In the Torner Collection, no. 1000, marked by de Candolle, "Passiflora vitifolia". DC. plate 32, cited in Calques des Dessins (Field Mus. neg. 30463), is a copy after Torner 1000. Killip (Publ. Field Mus. Nat. Hist., Bot. Ser. 19: 223. 1938) cited no. 4478 in the S. & M. herbarium (CNHM negs. 47334-47338) as the "type" of *P. adenopoda*, but this is unacceptable, as de Candolle is not known to have studied any material except for the painting. According to Killip (1938, p. 222), *Passiflora aspera* Sessé & Moc., and probably *P. scabra* Sessé & Moc., q.v., are synonyms of *P. adenopoda*. MacDougal (i.e.) confirmed these synonyms. Both of the Sessé & Mocíño species were reported from Córdoba, Veracruz, but one of the specimens of *P. adenopoda* at MA (neg. 47334), a sheet designated by Killip as the "type", is labelled in the hand of Castilla with an unpublished epithet. As Castilla died in 1793, before the Expedition visited Córdoba for any length of time, it is difficult to establish a probable source for that specimen.


**Localities cited:** "in Mexicis hortis et Brasilia. Floret Augusto... Flos passionis vulgo adpellatur". Briefly described. Not found in the S. & M. herbarium. Not identified.


Reported from Mexico by de Candolle (in DC. Prodr. 3: 324. 1828) on the basis of an "icon. flor. mex. ined."

This is apparently a reference to DC. plate 30, q.v. under *Passiflora obtusifolia*. The plant depicted is evidently *P. coriacea* Juss. or something very like it.


**Type-locality:** Near Córdoba, Veracruz, where said to flower in July. Description. No. 4447 of the S. & M. herbarium (MA; CNHM negs. 47363-47365) was designated as "type" of *P. denticulata* by Killip (Publ. Field Mus. Nat. Hist., Bot. Ser. 19: 379. 1938). Specimens of the same number, and also those of no. 4448 (negs. 47366-47367), originally labelled "Passiflora denticulata", were all referred by Killip in the herbarium and in publication (i.e., pp. 378-379) to *Passiflora serratifolia* L. Sp. Pl. 955. 1753. See also Nelson (1997, p. 404).


**Type-locality:** [DC.]: "[in Nová Hispaniá]; [Pl. Nov. Hist.]: Cuernavaca, Morelos, and other hot regions of New Spain and South America ["America Meridionalis"]. Lectotype [DC.]: DC. plate 28, cited in Calques des Dessins (Field Mus. neg. 30459); it is an original painting bearing the number (apparently in the hand of Mocíño) "362". In the Torner Collection, no. 0363, which bears the number "362", and the hand-printed name "Passiflora Normalis. Linn." but no annotation by de Candolle, is a somewhat more carefully drawn duplicate of DC. plate 28. Both represent Ic. Fl. Mex. 362, as cited in Pl. Nov. Hist. and listed under the name of "Passiflora normalis" among the icons obtained during the "Second Excursion", that to Guerreró in 1789. In the S. & M. herbarium no. 3302 (CNHM neg. 47339), labelled "Passiflora normalis", was cited by Killip (Publ. Field Mus. Nat. Hist., Bot. Ser. 19: 186. 1938) as the "type" of *P. normalis* sensu Sessé & Moc., and referred by him to *Passiflora biflora* Lam. Encycl. 3: 36. 1789. As the type of *Passiflora dictano* was presumably drawn from plants of *Passiflora biflora* Lam., de Candolle's species is best referred to the synonymy of *P. biflora*, a course already suggested (but not followed) by Killip (1938, p. 144).

Localities cited [Pl. Nov. Hisp.]: “in Nova Hispania et Americanis Insulis”; [Fl. Mex.]: Santo Tomás [presumably near Hostotipacucho, Jalisco] and Córdoba, Veracruz [“in predio S. Tomae et montibus Cordovae, Floret Augusto”]. Description. In the S. & M. herbarium several collections were correctly labelled as “Passiflora foetida”. No. 4469 (CNHM neg. 47350), determined by Killip as var. *gossypifolia* (Desv.) Mast., bears one ticket in the hand of Castillo, who similarly annotated a number of specimens from Jalisco and nearby areas.


Localities cited [Pl. Nov. Hisp.]: Mazatlán, Guerrero (“in Mazatlani circuitibus, Dominica et Curassavii, Floret Julio”). In the S. & M. herbarium no. 4467 (CNHM neg. 47349), labelled “Passiflora hirsuta”, was determined by Killip as Passiflora *foetida* var. *gossypifolia* (Desv.) Masters. MacDougal (1994, p. 84, with discussion on p. 87) assumed that specimen no. 4475 in the S. & M. herbarium (at MA) is a part of the same gathering as the holotype of *Passiflora pilosa* DC., q.v., which is labelled “Passiflora hirsuta”, as is a presumed isotype at G.


Localities cited: Mazatlán, Guerrero (“in Mazatlani montibus et Veracruce, Floret Junio”). Briefly described. In the S. & M. herbarium no. 4468 (CNHM neg. 47356), labelled as above, was correctly named according to E. P. Killip.

“**Passiflora longifolia** N. incolit [word illegible] mari vicinae Havanae”.

In the S. & M. herbarium no. 4451 (CNHM neg. 47372), labelled as above, was determined by Killip as *Passiflora subpeltata* L.


Localities cited: Cuernavaca, Morelos, etc. [“in saxetis Quauhnahauacae, Virginiacae, et Jamaicae, Floret Augusto”]. Brief description. In the S. & M. herbarium no. 4464 (CNHM neg. 47376), labelled “Passiflora lutea. 1842”, was determined by Killip as *Passiflora subpeltata* Ortega. The number “1842” is not a collection-number, but the number assigned to the species during the attempt to arrange the entire herbarium, in Madrid after 1800 (see McVaugh 1990, p. 209). The numbers assigned to *Passiflora* included at least 1832 to 1848.


Localities cited: [Veracruz] [“in Praedio de la Punta, Floret Augusto”]. The locality is thought to have been San Juan de la Punta, some “three leagues” ESE of Córdoba (cf. McVaugh 1977, p. 175). Description. In the S. & M. herbarium no. 4465 (CNHM neg. 47373), labelled “Passiflora minima. d. 2. 20. 4”, no. 4466 (neg. 47374), without original label, and no. 4466 (neg. 47375), labelled “Passiflora minima. 20. 5”, were all determined by Killip as *Passiflora suberosa* L.

This is not to be regarded as a new name. The diagnosis (character) was taken verbatim from that in Pala (6: 877. 1878), with the addition of two words. Nelson (1997) designated “Sessé 4466” as “material tipo” of *Passiflora minima Sessé & Moc.”, which is inappropos as no such name exists. Nelson did not cite a negative number.

**Passiflora muchronata** [sic] Sessé & Moc. Fl. Mex. ed. 2. 209. 1894, not *Passiflora mucronata* Lam.


Apparently this plant was thought to be equivalent to that treated as “Passiflora mucronata” by Mocinó (1993, p. 129) and by Maldonado Polo (1996, p. 312), where the treatment was repeated from Fl. Mex. but neither the locality nor the flowering season was stated.

**Passiflora obtusifolia** Sessé & Moc. Pl. Nov. Hisp. 156. 1890; ed. 2. 145. 1893; Fl. Mex. ed. 2. 208. 1894.

Type-locality: Near Apatzingán, Michoacán [“prope oppidum Apatzingam, Floret Octobri”]. Lectotype: [c. Fl. Mex. 426, represented by no. 0830 in the Torner Collection, which bears the number “2” (over-written “3”), the name hand-written (by Mocinó or Sessé) “Passiflora [obtusifolia] crossed out”], and an annotation by de Candolle, “Passiflora sexpunctata”. Essentially identical is an original painting at MA, which bears the hand-printed name “Passiflora Obtusifolia.” It was listed by name, with description, and identified as RJL Lám. 106 in the Catálogo de las Láminas del Real Jardín Botánico (RJB 1897, p. 342). It is no. 2 of a manuscript list by Mocinó and no. 51 of Ramírez (Anales. Inst. Méd.-Nac. México 6, pt. 1: 79. 1903). DC. plate 30 is a later copy, unnumbered but listed in the index to the Candollean collection at G as “Passiflora obtusifolia Sess. Mos.” (Field Mus. neg. 30461); see Mus. Genève, n.s. 5 [no. 42]; 12, 15, 1964, where the painting at MA and the copy at Geneva are reproduced on approximately the same scale. Killip (Publ. Field Mus. Nat. Hist., Bot. Ser. 19: 83. 1938) referred *Passiflora obtusifolia* to the synonymy of *Passiflora coriacea* Juss., q.v. above, but MacDougal
(in litt.) treats *P. obusifolia* as a distinct species of the Pacific lowlands of Mexico. No. 4462 of the S. & M. herbarium (CNHM neg. 47346), labelled “Passiflora obusifolia”, was designated by Killip in the herbarium and in publication (l.c., p. 84) as the ‘type’ of that name.


**Passiflora pilosa** DC. in DC. Prodr. 3: 330. 1828, with citation of “Ruiz et Pav ined.” as the basis for the name.

Type-locality [DC]: Mexico. MacDougal (1994) supposed that the original material was found near Mazatlán, Guerrero; see above under *Passiflora hirsuta*. Type: Presumably “Ruiz et Pav “, “v. s. in h. Lamb “. What I assume to be the plant seen by de Candolle is at BM, ex herb. Lambert, labelled by Pavón “Passiflora hirsuta de Mexico”; Killip annotated this specimen in 1925. Another sheet, in G-Del ex herb. Moricand, is labelled by Pavón “Passiflora hirsuta de N E”. In the S. & M. herbarium no. 4475 (CNHM neg. 47357), labelled “Passiflora villosa N “, is determined on the sheet by Killip as the type-collection of *Passiflora pilosa*. In his monograph on *Passiflora*, Killip (Publ. Field Mus. Nat. Hist., Bot. Ser. 19: 104. 1938) recognized this as a valid Mexican species, citing the three collections noted above, and a few modern collections from the States of Michoacán and México. The species was fully treated by MacDougal (1994). The name should be cited as *Passiflora pilosa* DC., as he was clearly the author of the epithet.

**Passiflora scabra** Sessé & Moc. Fl. Mex. ed. 2. 209. 1894.


Localities cited: San Miguel de Allende, Guanajuato ("prope Michaelopolin et in Martinica. Floret Junio").

Description. In the S. & M. herbarium no. 4477 (CNHM neg. 47342) is according to E. P. Killip a mixture of *Passiflora bryonioides* H. B. K. and *P. eudoxa* Zucc.


Type-locality [DC]: “in Mexico”. Lectotype: DC. plate 31, as cited in Calques des Dessins (Field Mus. neg. 30462), an original painting bearing the number “314” (apparently in the hand of Mociño), the name handwritten “[by Sessé] “Passiflora [Tiliaefolia Linn. crossed out]”, and an annotation by de Candolle, “serratistipula”. It was reproduced in color, reduced to ca. 10 by 10 cm, and identified only as “Passiflora tiliaefolia” (RJB 1987, p. 285). Almost identical is no. 1157 in the Torner Collection, with number “314”, hand-printed name “Passiflora [Tiliaefolia crossed out] Linn.”, and “serratistipula” added by de Candolle. It was well reproduced in full color at ca. 22.5 by 16.5 cm and identified as an “Ilustración original de la Flora Mexicana” by Lozoya (1984, p. 85).


**Passiflora subspeltata** Ort. Dec. 78. 1798.


Type-locality [Ortega]: New Spain; grown at the Madrid Botanical Garden, “sennisimis missis per D. Sessé” [locality from Pl. Nov. Hisp.]: “in Quauhnahuacae. Virginiae. Jamaicae saxetis. Floret Julio”. Type: Not seen, but cited by Killip (l.c., p. 437) as from “Mexico (probably Cuernavaca), the type seen at Madrid”. Presumably Killip mentioned Cuernavaca because it was the locality cited by Sessé & Mocinó for the plant they called *Passiflora lutea* [L.], but which Killip determined on the basis of their specimens to be *P. subspeltata* Ort. (no. 4464 of the S. & M. herbarium; CNHM negs. 47376, 47377). Killip (l.c., p. 438) stated further: “Ortega’s description is in great detail except in regard to the coronal structure, and agrees excellently with the material here listed. It was based upon a plant grown from seeds sent from Mexico by Sessé, and very likely Sessé & Mocínó 4464 represents the actual plant from which the seeds were obtained”. It is apparent from Killip’s discussion that he did not see the actual cultivated specimens on which Ortega’s description was based, but
only the Sessé & Mociño material, which as far as we
know was never available to Ortega, and cannot be type-
material of Passiflora subpetala.

Passiflora trisetosa DC. in DC. Prodr. 3: 324.
Nov. Hisp. 155: 1890; ed. 2. 144. 1895.
Type-locality [DC.]: Mexico. Lectotype: DC. plate
29, as cited in Calques des Dessins (Field Mus. neg.
30460), an original painting bearing the number “355”
(apparently in the hand of Mociño). An almost identical
painting is no. 0379 in the Torner Collection, which
bears the hand-printed name “Passiflora [Punctata. Linn.
crossed out]” and “trisetosa” added by de Candolle. The
Hisp. and, according to a manuscript list at MA, obtained on
the “Second Excursion”, that to Guerrero in 1789. Killip
referred both Passiflora trisetosa and P. punctata sensu
Sessé & Moc. to the synonymy of Passiflora jorullensis
H. B. K. Nov. Gen. & Sp. 2: 133. 1818, and cited (l.c.,
p. 142) no. 4459 of the S. & M. herbarium (CNHM neg.
47558) as the “type” of *P. trisetosa*. This specimen is
labelled “Passiflora punctata”, Killip said of it further.
“Sessé & Mociño 4459: in the Madrid Herbarium, clearly
is the original of the drawing of *P. trisetosa* and therefore
the type”. This reasoning is unacceptable, since de
Candolle named the whole wholly on the illustrations.

2. 201. 1894.
Type-locality: Mountains, Tuxtle [i.e., probably San
Andrés Tuxtle, Veracruz], where said to flower in
November. Apparently this plant was thought to be
equivalent to that treated as “Passiflora tuxtensis” by
312), where the treatment was repeated from Fl. Mex. but
neither the locality nor the flowering season was stated.
Not found in the S. & M. herbarium. Killip (Publ. Field
the name may be a synonym of Passiflora holosterica L.,
but said further (l.c., p. 101): “their description of that
species [*tuxtensis*] does not apply well to any known
Mexican species. Certain details suggest *P. holosterica, P.*
jorullensis, *P. Helleri*, and *P. Rovirosae*”.

Passiflora sp. (“— Passiflora folis ovato-
oblongis, integerrimos, petioliis biglandulosis, floribus
Locality cited: Havana, Cuba [“Incinct ripae supra
antrum de Tagarana Havaneae. Floret Martio”). Not
identified.

Passiflora sp. (“— Passiflora folis ovatis,
1894.
Locality cited: Puerto Rico [“in umbrosis montibus de
Toa Alta, altiores arbores scandens”]. Not identified.

Passiflora sp. (“—— Passiflora folis triobis,
integerrimos, acutis, glabris, petioliis biglandulosis. [with
description]”) sensu Sessé & Moc. Fl. Mex. ed. 2. 209
(3rd on page). 1894.
Locality cited: Puerto Rico [“in calidis montibus de

Pedaliaceae

Mex. ed. 2. 151. 1894.
Locality cited: Tenampulco, Puebla, ca. 30 km S
Papantla, Veracruz [“in calidis Tenampulcii montibus.
Floret Septembri”). Said to be called Talzinquihuitl by
the Tononaci. Sessé and Castillo passed by this place
between August and October 1792. Long description.
Nothing is said of any use that is made of the plant, nor is
it said to be cultivated. In the S. & M. herbarium no.
2194 (CNHM neg. 47379), labelled “Sesamum Indicum”
in the hand of Castillo, was determined by Standley as
*Sesamum orientale* L.

Phytolaccaceae

Agdestis clematidea DC. Syst. 1: 543. 1817, with
citation of “Moc. et Sessé fl. mex. ic. ined.” as the basis
for the name.
Type-locality: “in Nová-Hispaniá”. Holotype: (“Descri-
ex ic. mex.”): In the Torner Collection no. 1450, labelled
by de Candolle, “Menispernum clematitideum” [sic].
DC. plate 12, as cited in Calques des Dessins (Field Mus.
eg. 30449), is a copy after Torner 1450, as is DC. plate
III A, cited in Calques des Dessins [sketches only, Field
Mus. neg. 30258]. The name *Agdestis* was attributed by
de Candolle to Sessé & Mociño, but apparently he
himself was the author, as he was of so many specific
epithets. Not found in the S. & M. herbarium.
Apparently de Candolle himself saw a specimen at some
time after the first publication of the genus, as he said (in

Mex. ed. 2. 90. 1894.
Locality cited: Apatzingán, Michoacán [“in calidis
Apatzingani circuitibus, ubi vulgo Zorrillo audit”]. Short
description. Not found in the S. & M. herbarium.
Presumably the same plant as *Petiveria octandra* of Pl.
Nov. Hisp.

90. 1894.
Phytolaccaceae

Type-locality: Hotter places in New Spain, as for example at the Hacienda La Punta ["velutum praedidi de la Punta"] [for comment on this locality see Passiflora minima, above]. The character given for this species ["Petiveria floribus hexandris"] is the same as that of Petiveria alliacea L. in the second edition of the Species Plantarum, but as the same feature is mentioned under P. alliacea L. in the Fl. Mex., there is little reason to suppose Sessé & Mocíño intended "Petiveria hexandra" to replace P. alliacea L. In the S. & M. herbarium no. 5436 (CNHM neg. 47382), labelled "Petiveria hexandra", is according to Standley Petiveria alliacea L. Nelson (1997) designated "Sessé 5436" as "material type" of P. hexandra.


Type-locality: Mexico. Holotype: DC. plate 1094, as cited by Moquin, l.c., and in Calques des Dessins, a partial copy (Field Mus. neg. 30850). An original and more complete copy in the Torner Collection is no. 1386, annotated by de Candolle "Petiveria" and in a hand unknown to me, "ochroleuca". The stamens are said by Moquin to be eight in number, and in the figure on Torner 1386 they appear to be eight. According to Walter (Pflanzenreich IV. 83 [Heft 39]: 118. 1909), this is a synonym of Petiveria alliacea L. Sp. Pl. 342. 1753.


Localities cited [Pl. Nov. Hisp.]: Apatzingán, Michoacán, México; and South America ["in Apatzingani et America Meridionalis, Floret Octobri"; [Fl. Mex.]; in "Oppido Apatzingani, Floret Octobri"].: Fl. Mex. ed. 188, cited in Pl. Nov. Hisp. and included among the icones obtained during the "Third Excursion", that to western Mexico in 1790–91. This is represented by an original painting at MA, which bears the number "21" and the hand-painted name "Petiveria Octandra." It was listed by name, with description, and identified as RJF Lám. 65 in the Catalogo de las Láminas del Real Jardín Botánico (RJB 1987, p. 333). It is no. 21 of a manuscript list by Mocíño, and no. 53 of Ramírez (Anales Inst. Méx.-Nac. México 6, pt. 1: 79. 1903). Almost identical is no. 1795 in the Torner Collection, which bears the number "21" and the annotation by de Candolle, "Petiveria", followed by "alliacea" in a hand unknown to me. The plant depicted is presumably Petiveria alliacea L., to the synonymy of which P. octandra L. was referred by Walter (Pflanzenreich IV. 83 [Heft 39]: 118. 1909). Not found in the S. & M. herbarium.

Phytolacca dodecandra Sessé & Mocíño Fl. Mex. ed. 2. 119. 1894, not of L'Héritier.

Type-locality: Puerto Rico. Referred by Urban (Symb. Antill. 4: 229. 1905) to the synonymy of Phytolacca icosandra L. Syst. ed. 10. 1040. 1759. A sheet at G, ex herb. E. Boissier, marked by Pavón "Phytolacca dodecandra N°E", is also determined as P. icosandra; in the S. & M. herbarium, however, nos. 1014 and 1825 (CNHM negs. 47384, 47385), labelled "Phytolacca dodecandra", are according to Standley P. rivinoides Kunth & Bouché, Ind. Sem. Hort. Berol. 1848: 15. 1849. The vernacular name of no. 1825 is given as "Yerba de Juan de Bargas", a name current in Puerto Rico according to Urban, l.c. (reported as "Juan de Bargas", under P. icosandra.)

Prockia macrostachya DC. in DC. Prodr. 1: 261. 1824.

Type-locality: Mexico. Lectotype: In the Torner Collection, no. 1431, labelled by de Candolle, "Prockia? macrostachya". DC. plate 310, as cited in Calques des Dessins (Field Mus. neg. 30647), is a copy of Torner 1431, but less complete. It bears a pencilled number "118" as does the Torner copy, but the significance of this is unknown to me. No. 1018 in the Torner Collection is an unfinished copy with no more than a fruit and some flowers copied. De Candolle stated, in describing this plant: "A genere, forsan ab ordine removenda". The illustration is a good one, suggesting in its technique some of the plates made by Echeverría in the West Indies in the later years of the Expedition. According to R. W. Kiger, the plant depicted is not a member of the Flacourtiaeae, but a species of Trichostigma (Phytolaccaceae). In the S. & M. herbarium, no. 2086 (CNHM neg. 47392), labelled "Genus 12-1", and no. 4800 (neg. 47393), unlabelled, were both determined by Standley as Trichostigma octandra (L.) Ha. Walter.


Type-locality: Mexico. Holotype: DC. plate 1095, cited by Moquin and in Calques des Dessins (Field Mus. neg. 30651). The holotype is a good copy of no. 0444 in the Torner Collection, which is without inscription. Moquin said of his Rivina mexicana: "Videtur R. laevis Fl. Mexic. miss. et idea hab. in humidis et umbrosis Quauanahuacae circuitibus. Fl. septembris". In the Pl. Nov. Hisp. the locality for R. laevis is given as: "In humidis, umbrosis calidurarum Novae Hispaniae regionum locis. Floret Septembris". In this instance as in numerous others it seems that de Candolle had had additional information from a manuscript of Mocíño's. The plant depicted in the plate appears to be Rivina humilis L. Sp. Pl. 121. 1753, of which several specimens are in the S. & M. herbarium under the name of Rivina laevis (nos. 630, 653, 705, 706: CNHM negs. 47386–47390).

In G-DC is a specimen apparently of this species, collected at Tehuantepec, Oaxaca, by Alaman in 1832. The plant is accompanied by a manuscript description in the hand of de Candolle, who proposed to describe it as a new genus, referring incidentally to "lec. fl. mex. pl. 181". DC. plate 181 is a partial copy after no. 1873 in the Torner Collection, which latter is annotated by de Candolle "Cyclostemon rubripes", and in ink "C. 10.3.". The drawing shows a flowering branch of a species of *Siegesbeckia*. On the same sheet, at bottom, are drawings of a fruit and seed of another plant, with the annotation "C. 5.1.".

**Piperaceae**

**Peperomia agapatensis** C. DC. in DC. Prodr. 16, pt. 1: 455. 1869.

This South American species was reported by C. de Candolle from "Nueva Hispania" on the basis of a collection by "Pavon" in herb. Boissier. The specimen, at G ex herb. E. Boissier, bears a printed label "Nueva España Herb. Pavon" and is marked by William Trelease as a new species, with an unpublished epithet.

**Peperomia angustifolia** Sessé & Moc. Fl. Mex. 12. 1893; ed. 2. 11. 1894.

Type-locality: Zozococo ["Toxocono"], Veracruz, where said to be called "Izcacatapat" by the Totonac. Not found in the S. & M. herbarium under this name. Described as a glabrous shrub 4 feet high, thickened at the nodes; leaves alternate, oblong-lanceolate, long-acuminate, trinerved; petioles subclasping; spikes pedunculate, opposite the leaves; bracts sessile, ovate. This is surely a species of *Piper*. A specimen at G, ex herb. Barbe-Boissier, with printed label "Nueva España Herb. Pavon", is determined by C. de Candolle as *Piper schlechtendalii* [i.e., *Piper schlechtendalii* Steud. Nom. ed. 2. 2: 343. 1841], and is marked by Pavón "Piper angustifolium N.E.F., as cited by C. de Candolle in DC. Prodr. 16, pt. 1: 324. 1869]. In the S. & M. herbarium no. 309 (CNHM negs. 47471, 47472), labelled "Piper angustifolium N.E.F.", is according to Trelease an undescribed species. From the description of *Peperomia angustifolia* in the Fl. Mex., it seems not unlikely that the plant described was *Piper schlechtendalii*, which came from a nearby locality in Veracruz.


Reported from "Nueva Hispania" by C. de Candolle (in DC. Prodr. 16, pt. 1: 458. 1869) on the basis of a collection by "Pavon" in herb. Boissier. The specimen bears a printed label "Nueva España Herb. Pavon" and a note indicating that the collector was Tafalla. Presumably if collected by Tafalla, the plant came from Ecuador, not from New Spain.


Standley and Steyermark, in the *Flora of Guatemala* (Fieldiana, Bot. 24, pt. 3: 273. 1952), in describing *Peperomia treleasei* as new, stated that "this is related to *P. fraseri* C. DC. ... We have seen a photograph of the type of that species, and believe that it is quite distinct from the plant of Guatemala and Mexico". The type of *P. treleasei* was from a garden plant in Guatemala, *Steyermark 46.198* (F); additional specimens cited were: Sessé & Mocño 2 [not found], 320, 330 [CNHM negs. 47431, 47432] (both at MA, labelled by Trelease as *P. fraseri*).


Reported from "Nueva Hispania" by C. de Candolle (in DC. Prodr. 16, pt. 1: 457. 1869) on the basis of a collection by "Pavon" in herb. Boissier. At G, ex herb. Barbe-Boissier, there is a "Pavon" specimen ostensibly from Peru, and another with printed label "Nueva España Herb. Pavon". As *Peperomia loxensis* is a little known species not reported by recent authors from North America, the two specimens cited above should be re-examined.

**Peperomia major** (Miquel) C. DC. in DC. Prodr. 16, pt. 1: 432. 1869.

A Brazilian species reported from "Nueva Hispania" by C. de Candolle (i.e.) on the basis of a collection by "Pavon" in herb. Boissier. The specimen, now at G, bears Boissier's usual printed label "Nueva España Herb. Pavon". Doubtless some other species is involved, the specimen should be re-examined.

**Peperomia muscophylla** C. DC. in Seem. J. Bot. 4: 133. 1866; et in DC. Prodr. 16, pt. 1: 395, as "muscophila". 1869.

Type-locality: Mexico ["Nova Hispania inter musgos", fide C. DC. in DC. Prodr.]: Type: "Herb. Pav. in Herb. Boiss.". The specimen, at G ex herb. Barbe-Boissier, bears a printed label "Nueva España Herb. Pavon" and is marked by Pavón "Peperomia cordata Peru Tafalla" (Field Mus. neg. 34152). Very likely the specimen is South American in origin, but apparently this possibility was not considered by the author of the *Flora of Peru*, or by Yuncker in his treatment of the Piperaceae of northern South America. In the S. & M. herbarium no. 353 (CNHM neg. 47427), labelled "Peperomia cordifolia", is according to Trelease *Peperomia muscophila* C. DC., but this may be questioned.

**Peperomia nitida** Sessé & Moc. Fl. Mex. 12. 1893; ed. 2. 11. 1894.
Without citation of locality. “Vulgo Chilillo”.
Description. Said to be like *Piper obliquum* but differing in several characters. Not found in the S. & M. herbarium. Not identified.


This species belongs to the group of acaulescent, corn-producing, scapose, peltate-leaved species designated by Trelease (Bot. Gaz. 73: 135. 1922) as *Campylotropae*. The plants on the type-sheet have broadly ovate and sharp-pointed leaves and unbranched scapes. According to a determination by Trelease, *Piperomia ovo-peltata* is represented in the S. & M. herbarium by no. 361 (CNHM neg. 47428), labelled “Piperomia tuberosa”, q.v.

**Piperomia pseudo-amplexicaulis** C. DC. in DC. Prodr. 16, pt. 1: 432. 1869.
Type localities: Cuba and New Spain. Synotypes: [Ossa in G-DC, not cited in the protologue]; and “Pavon” in herb. Boissier. The latter I have not seen, and I do not know what it may represent.

**Piperomia pumilla** Sessé & Moc. Fl. Mex. 11. 1893; ed. 2. 11. 1894, not *P. pumilla* Opiz.
Type-locality: Among mosses on tree-trunks, mountains near Zitácuaro, Michoacán (“inter Muscos supra arborum trunces in montibus Zitacuari vicinis”). Not found in the S. & M. herbarium under this name. Described as a small erect somewhat branched herb from a small solid bulb; leaves alternate, subumbon, venous, villous, peltate spikes slender, usually opposite the leaves, bracts subumbon; fruit tiny, pedicelate.

**Piperomia quinquenervia** Sessé & Moc. Fl. Mex. 12. 1893; ed. 2. 11. 1894.
Type-locality: Córdoba, Veracruz. Not found in the S. & M. herbarium under this name. Described as a glabrous succulent creeping jointed herb with alternate branches; lower leaves subumbon, the intermediate ones ovate, 5-nerved, the upper ones elliptic; spikes opposite the leaves, and terminal, filiform, erect; flowers alternate, distant. Not identified.

**Piperomia trinervis** Ruiz & Pavón, Fl. Per. 1: 32. pl. 50. 1798.
A Peruvian species, reported from “Nova Hispania” by C. de Candolle (in DC. Prodr. 16, pt. 1: 417. 1869) on the basis of a collection of “Pavon” in herb. Boissier. The specimen at G, ex herb. Barbey-Boissier, bears a label indicating its source as “Nueva España” and another as “Peru” and a ticket by Pavón, “Piperomia polysichachia N E”. In the S. & M. herbarium no. 355 (CNHM neg. 47413), labelled “Piperomia polysichachia”, is according to Trelease *Piperomia botterii* C. DC. J. Bot. Brit. & For. 4: 146. 1866.

**Piperomia tuberosa** Sessé & Moc. Fl. Mex. 11. 1895; ed. 2. 11 [1st on page]. 1894, not of Opiz.
Type-locality: Shaded mountains, Pátzcuaro, Michoacán; and near México [City]. The description of this plant is almost identical with that of *Piper tuberosum* Sessé & Moc., q.v., but the leaves in *Piperomia tuberosa* are said to be “subumbon, acumínatis” (not merely “subumbon”); and the reference to “Mexici vicinis” has been added. Presumably the original “Piper tuberosum” was *Piperomia campylotropae* A. W. Hill, Ann. Bot. (Oxford) 21: 156. 1907, or something very like it, collected near Pátzcuaro; later collections made near Mexico City were assumed to belong to the same species, and the description was enlarged to include these plants with pointed leaves. The oldest name for these Mexican plants with acute leaves is apparently *Piperomia ovo- peltata* C. DC., q.v. for discussion and citation of herbarium specimens.

Type-locality: Among rocks in the mountains near México, D.F. (“inter saxa montium vicinius”). The leaves are described as “peltatis, orbiculatis”; from this, and the rest of the description, I take this to be *Piperomia campylotropae* A. W. Hill, or a closely related species; it may also be the same as the original *Piper tuberosum* Sessé & Moc., q.v. which seems not to be found in the S. & M. herbarium.

Type-locality: “cum praecedenti” [i.e., Pátzcuaro, Michoacán, and San Angel], [south of Mexico City], D.F. This third “Piperomia tuberosa” is very probably the same as the “acuminatis”, leaves element of the first *P. tuberosa*, q.v. above. The leaves are described as “subumbon, acumínatis”, and the descriptions of the two are otherwise nearly identical.

PAPRIACEAE

Type-locality: [1st on page]: Pátzcuaro, Michoacán; [2nd on page]: Cold mountains of Pátzcuaro; and mountains of San Angel near México, whence brought to the Royal [Botanical] Garden and there growing vigorously ("unde in Hortum Regium translatae late vivit"). The descriptions of the two plants described as "Piperomia verticillata" seem to have been prepared quite independently, but seem to apply to the same or a very similar plant; probably the first one was written at Pátzcuaro in 1790, and the other one later. In the S. & M. herbarium two species are labelled "Piperomia verticillata". One of these is labelled as from Orizaba, Veracruz, and is evidently not the plant described in the Fl. Mex. The other (no. 359; CNHM negs. 47422, 47423) is according to Trelease Peperomia leptophylla Miquel, Linnaea 18: 712. 1844, a species of eastern Mexico which may or may not be the plant from Pátzcuaro and from San Angel.


Localities cited [Pl. Nov. Hosp.]: Mazatlán, Guerrero ["ad torrentes rivulorum Mazatlani. Florof Jum.""]; [Fl. Mex.]: "Nascitur rivulorum Mazatlani marginibus et Jamaica". Briefly described. Said to differ from Piper siribou by having leaves ovate-lanceolate, 5-nerved and rugose (instead of cordate, 7-nerved, and venose), and by its more slender axillary spikes (instead of solitary and opposite the leaves. In the S. & M. herbarium no. 314 (CNHM neg. 47439), labelled "Piper amalago", was determined by William Trelease as an undescribed species of Piper.

The same species was treated in Fl. Mex. 10 [first on page]. 1893; ed. 2. 9. 1894, with diagnosis only (identical with the second one on page 10), and a different locality, Tuxtlas, [Veracruz] ["cum praeceptent!", i.e., P. siriboa].

Piper cordifolium Sessé & Moc. Pl. Nov. Hosp. 10 [as "cardifolium"]; 1887; ed. 2. 9. 1893; Fl. Mex. 11. 1894; ed. 2. 10. 1894, not of Swartz.

Type-locality: Along streams in the hot regions, New Spain. Not found in the S. & M. herbarium under this name. Briefly described; said to resemble Piper decumanum [P. tenuifolium C. DC., according to Trelease's determination in the S. & M. herbarium], and P. latifolium [P. umbellatum L. of the herbarium]. No. 1798 in the Torner Collection bears the number "189", the name hand-printed [by Sessé], "Piper [cardifolium Linn. crossed out]", and an annotation by de Candolle, "Piper oystachys". I cannot explain the number "189", the same number was applied in the final numbering of the herbarium (McVaugh 1990, p. 209) to a very different species, a Peperomia. Not identified.


Localities cited [Pl. Nov. Hosp.]: Mazatlán, Guerrero ["cum praeceptent!", i.e., P. amalago, P. siriboa]; [Fl. Mex.]: "in umbrosis Mazatlani montibus et India orientali". Briefly described including the words: "Spicae oppositifoliae. Amalago longiores". In the S. & M. herbarium no. 345 (CNHM neg. 47466), labelled "Piper decumanum", was determined by Trelease as Piper tenuifolium C. DC.

Piper ellipticum Sessé & Moc. Fl. Mex. 10. 1893; ed. 2. 10. 1894, not of Lamark.


Localities cited: Ayahuatempa, Guerrero ["in umbrosis et humidis Ayahuatempam montibus. Florof Augusto". Briefly described. In the S. & M. herbarium no. 343 (CNHM neg. 47477), labelled "Piper latifolium", was determined by Trelease as Piper lessertiann Carriu Miquel.


Type-locality: New Spain. Type: "Pavón" in herb. Boissier. This specimen, at G ex herb. Barbey-Boissier, bears a printed label "Nueva España Herb. Pavón" and is marked by Pavón "Piper obliquum N E". (Field Mus. neg. 34144). In the S. & M. herbarium no. 307 (CNHM neg. 47452), labelled "Piper obliquum", is according to Trelease Piper martensianum. Apparently Sessé & Mocinno confused two or more species under the name of Piper obliquum, q.v.


Type-locality: [Pl. Nov. Hosp.]: Apatzingán, Michoacán ["in Apatzingan, ubi vulgo dictor Chilillo. Florof Novembri.""] The two names are equated as above because the treatments in the two floras, except for the different generic names, are identical. The description is

434
very short, but presumably the plant described is a *Piper*, as it is compared by the authors with *Piper obliquum*, q.v. In the S. & M. herbarium no. 313 (CNHM neg. 47433), labelled "*Piper nitidum*", is assigned to Trelease an undescribed species of *Piper*.

**Piper novae-hispamiae** C. DC. in DC. Prodr. 16, pt. 1: 301. 1869.

Type-locality: New Spain. Type: "Pavon" in herb. Boissier, not seen. In the S. & M. herbarium nos. 311 and 312 (CNHM negs. 47453, 47454), according to determinations by Trelease, are *Piper novae-hispamiae*. No. 311 is marked by the collectors with an unpublished epithet.

**Piper nudum** C. DC. in DC. Prodr. 16, pt. 1: 325. 1869.

Type-locality: New Spain. Type: "Pavon" in herb. Boissier. This plant is at G, ex herb. Barbery-Boissier, with printed label "Nueva España Herb. Pavon" and marked by Pavón *"Piper sp. nova de N. E. Mexico"* (Field Mus. neg. 34145). Not found in the S. & M. herbarium.

**Piper obliquum** Sessé & Moc. Pl. Nov. Hisp. 10. 1887; ed. 2. 9. 1893; Fl. Mex. 11. 1893; ed. 2. 10 [2nd on page]. 1894, not of Ruiz & Pavón.

Type-locality [Pl. Nov. Hisp.]: Cuernavaca, Morelos ["ad Quahuanahuae tortentes"]; [Fl. Mex.]: "ad tortesentes rivilorum Quahuanahuae". Described as a tall shrub ["trigyalis" or in Fl. Mex. "octopedalis"]; leaves ovate-oblong, or sometimes sub lanceolate, unequal at base, rugose-veiny, pubescent, short petiolate; spikes pedunculate, solitary, the fruit sessile. The other species described under this name (Fl. Mex. 10. 1893; ed. 2. 10 [1st on page], 1894) from Tuxtlas ["in Tuxtlae sylvis", i.e., probably San Andrés Tuxtla, Veracruz], may have been some different plant. The leaves were described as obliquely ovate, 5-nerved, scabrous, tomentose. In the S. & M. herbarium the name "Piper obliquum" (or "oblicum") is applied to *Piper leucophyllum* (Miquel) C. DC. in DC. Prodr. 16, pt. 1: 278. 1869; and to *Piper martensianum*, q.v.; a sheet at G, ex herb. Barbery-Boissier, with printed label "Nueva España Herb. Pavon". Pavon, is marked by Pavón *"Piper obliquum N E"*, and determined by C. de Candolle as *Piper angustifolium* Ruiz & Pavón, Fl. Peruv. 1: 38. 1798. Another sheet of the same species at G is marked by Pavón *"Piper longifolium N E"*, whereas a sheet marked "*Piper longifolium N." in the S. & M. herbarium (no. 338; CNHM neg. 47450), is also, according to Trelease, *Piper leucophyllum*. Probably Sessé & Mocích confused several species having unequal-sided leaf-bases.

**Piper obtusifolium** Sessé & Moc. Fl. Mex. 10 ("obtusifolia"). 1893; ed. 2. 10. 1894.


Locality cited: Nejapa, Oaxaca ["in America calidore et umbrosis Nexapae montibus. Floret Junio"]. The short description suggests a species of *Peperomia*. In the S. & M. herbarium, according to determinations by Trelease, no. 320 (CNHM neg. 47431) represents *Peperomia fraseri* C. DC., and no. 333 (neg. 47449) represents *Peperomia leucophyllum* C. DC. The locality is about 20 km east-northeast of Tlapa, Guerrero, and 90 km east of Chilapa (McVaugh 1977, p. 171).


Locality cited: Pátzcuaro, Michoacán ["in saxosis Pátzcuari montibus"]. Not found in the S. & M. herbarium. Described as a small species a few inches tall, with quaternate leaves. From the description apparently a species of *Peperomia*. Not further identified.


Type-locality [Pl. Nov. Hisp.]: Mountains of Mazatlán, Guerrero; and the East Indies ["cum praecedentibus", i.e., *Piper amalago, P. siriboa, P. decumanum*]; [Fl. Mex.]: "ad margines rivulorum Mazatali". In the *Flora Mexicana* appears the misleading notation "lc. 189; H.". This was not a reference to a specific icon, but to the numbering system commenced in Spain for the entire herbarium (McVaugh 1990, p. 209). In the final manuscript list of the herbarium, no. 189 is a species of *Piper*. The entry in the Fl. Mex. perhaps should have read "Tc.; [herbarium no. 189]". There seems to be nothing in the S. & M. herbarium called *Piper reticulatum*. Not identified.

**Piper rotundifolium** Sessé & Moc. Fl. Mex. 10 ("rotundifolia"). 1893; ed. 2. 10. 1894.


**Piper ruizianum** C. DC. in DC. Prodr. 16, pt. 1: 308. 1869.

Type-locality: New Spain. Type: "Pavon" in herb. Boissier. This specimen at G, ex herb. Boissier, bears a printed label "Nueva España Herb. Pavon"; it is annotated by Pavón "*Piper heterophyllum N.E Mexico*", and also bears an original Sessé & Mocío label with a short description and the words "2-3 Piper heterophyllum Mexicolo". (Field Mus. neg. 34147). In the S. & M. herbarium no. 323 (CNHM neg. 47457) is referred by Trelease to *Piper ruizianum*; it was originally named by
Piperaceae

the collectors with a latinized epithet, the equivalent of "heterophyllum".

"Piper Sanctum" N. [description]. No. 179. V. Yerba Santa en el Obispado de Oaxaca.

In the S. & M. herbarium no. 346 (CNHM neg. 47437), labelled as above, was determined by Trelease as Piper auritum H. B. K. On the original label the words "No. 179" and "en el Obispado de Oaxaca" appear to be in the hand of Mociño, the rest in that of Sessé.


For discussion, see above under Peperomia angustifolia.


The same species was treated in Fl. Mex. 10 [1st on page]. 1893; ed. 2. 9. 1894, with diagnosis only (identical with the other), but with citation of a different locality, Tuxtla, ["in Tuxtlae sylvis. Floret toto anno"].


Type-locality: Nova Hispania. Type: "Pavón" in herb. Boissier. This specimen at G, ex herb. Barbey-Boissier, bears a printed label "Nueva España Herb. Pavón", and a ticket by Pavón. "Piper tenuifolium N E" (Field Mus. neg. 34148). In the S. & M. herbarium no. 349 (CNHM neg. 47467), labelled "Piper tenuifolium N", is according to Trelease correctly named; in the same herbarium P. tenuifolium is represented by nine other sheets (negs. 47458-47466), variously determined as Piper membranaceum (q.v.), P. decuminanum, and P. urostachion.

Piper tigerianum C. DC. in See. J. Bot. 4: 300. 1866.


Piper tuberosum Sessé & Moc. Pl. Nov. Hisp. 10. 1887; ed. 2. 9. 1893, not of D. Dietrich.

Type-locality: Mountains of Pátzcuaro, Michoacán ["in umbrosis Patzcuari montibus. Floret Septembris"]. Probably referable to Peperomia campyloptera A. W. Hill, q.v. under the first Peperomia tuberosa, above.

"Piper verticillatum" [description]. No. 7. En Orizaba se conoce con el nombre de Borreguito, y en Puebla Selonacatl.

In the S. & M. herbarium no. 358 (CNHM neg. 47420), labelled as above, was determined by Trelease as Peperomia eulata Miquel. On the original label the first two words appear to be in the hand of Sessé, and rest in the hand of Ignacio León.

Plantaginaceae


Locality cited: Vicinity of Chucándiro, Michoacán ["in frigidis Chueandiri montibus ..."].

In the S. & M. herbarium no. 506 (CNHM neg. 47480) was determined by Standley as Plantago mexicana Link.

Platanaceae


Plumbaginaceae

Plumbago lanceolata Sessé & Moc. Fl. Mex. 31. 1893; ed. 2. 28. 1894.

Type-locality: Not stated, presumably Mexican because of the vernacular name Tietapli. No. 3036 in the Torrey Collection bears the hand-printed names "Plumbago Mexicana N" and "Tietapli Hrz. 423", a note on economic value of the plant, the number "27", and an annotation by de Candolle, "Plumbago acutiflora". N. 27 was included under the name of "Plumbago mexicana N." among the paintings obtained in 1787-88 in the region of Mexico City (MA, mss), but in the final
organization of the Ic. Fl. Mex. that number was used for a different icon.

In the S. & M. herbarium no. 1688 (CNHM neg. 47488), labelled "Plumbago lanceolata N.", is according to Standley Plumbago pulchella Boiss. in DC. Prodr. 12: 692. 1848. Standley, in publication (Contr. U. S. Natl. Herb. 23: 1113, 1924), referred Plumbago lanceolata to the synonymy of P. pulchella. No. 1390 in the same herbarium (neg. 47486), labelled "Plumbago mexicana N.", was determined by Standley as a mixture of Plumbago pulchella and P. scandens L.


Polemoniaceae

Cobaea scandens Cav. Ic. 1: 11, pl. 16, 17. 1791.

Type-locality: Near Mexico City; flowered in the Madrid Botanical Garden in November and December [1790]. Type: Not seen. This is the type-species of the genus Cobaea. Not found in the S. & M. herbarium. There are four paintings of species of Cobaea in the Turner Collection, including one of the very earliest made by the artists of the expedition, no. 1436, which is signed by the artist, "Juan de Dios Vizente de la Cerda", and bears the notations in ink "Numb 2" and floral dissections a, b, c, and d.

Gilia sessei G. Don, Gen. Hist. 4: 245. 1838.

"Gilia pinnaütisada Sessé & Moc." cited in synonymy by G. Don, i.e., as the basis for Gilia sessei.

Type-locality: "Mexico". Type: Sessé & Moc. in herb. Lambert; not seen. In 1963 not found at BM, FL, G, or OXF. Probably seen by Bentham, who in DC. Prodr. 9: 309. 1845 referred Gilia sessei to the synonymy of Navaretta heterophylla (Hook.) Bentham, i.e. (Collomia heterophylla Hook.), with the notation "In Mexico? (Mocino et Sessé?)". The species has been referred to Collomia heterophylla, perhaps always on the authority of Bentham, by Mason (in Abrams. Ill. Fl. Pac. States 3: 405. 1951) and Verne Grant (Nat. Hist. Phlox Fam. 1: 139, 140. 1959). In the S. & M. herbarium no. 1686 (CNHM neg. 47490), labelled "Phlox pinnaütisada N.", is according to Grant Collomia heterophylla. This species does not occur in Mexico; the original specimens were probably collected by Mocino in California or on Vancouver Island.

Loeselia involucrata G. Don, Gen. Hist. 4: 248. 1838.

"Phlox involucrata. Sessé et Moc. in herb. Lambert" cited in synonymy by G. Don, i.e., as the basis for Loeselia involucrata. Phlox involucrata Sessé & Moc.


Type-locality: [G. Don]: Mexico; [Sessé & Moc.]: Apatzingán, Michoacán, where said to flower in October. Type [G. Don]: Two specimens at BM, ex herb. Lambert, one labelled by Pavón "Phlox involucrata N E". In the S. & M. herbarium nos. 1685 and 5009 (CNHM negs. 47494, 47495), labelled "Phlox involucrata N.", are according to Verne Grant Loeselia ciliata L. Sp. pl. 628. 1753. Some authors (e.g., Standley, Contr. U. S. Natl. Herb. 23: 1212. 1924) have referred Loeselia involucrata to the synonymy of L. ciliata. Standley said, "There does not appear to be any essential difference between the two forms". Students of the Polemoniaceae (e.g., Brand and Grant) have maintained the two as distinct. Nelson (1997) designated "Sessé 5010" as "material tipo" of P. involucrata.

Apparently Phlox involucrata of Fl. Mex. was thought to be the equivalent of that treated under the same name by Mocino (1993, p. 36) and by Maldonado Polo (1996, p. 177), where the locality was given as Chiapas ("in Civitatis Regiae montibus. Floret Julio"). Mocino's Ciudad Real was the modern San Cristóbal de las Casas.

Phlox auriculata Sessé & Moc. Fl. Mex. 41. 1893; ed. 2. 38. 1894.

Type-locality: Mountains between Tepalcatepec and Coahuayana, Michoacán ("Habitat inhospitalibus montibus Tepalcatepec a Coahuayana separantibus. Floret Januario"). In the S. & M. herbarium no. 1682 (CNHM neg. 47491), labelled "Phlox auriculata N. No. 404", and no. 5010 (neg. 47492), labelled "Phlox auriculata i.e. N. No. 70.", are according to Grant Bonplandia geminiflora Cav. Anales Hist. Nat. 2: 131, pl. 20. 1800. A specimen of the same species at BM, ex herb. Lambert, is marked by Pavón "Phlox auriculata N E". Nelson (1997) designated "Sessé 5010" as "material tipo" P. auriculata, including a transcription of the label. I cannot explain the number "70". The number "404" is one of a series (403-408) assigned (to species of the Polemoniaceae) during the attempted numbering of the whole herbarium after 1803 (cf. McVeagh 1990, p. 209). The name "Phlox divaricata", which see, was also applied by Sessé & Mociño to Bonplandia geminiflora.


Localities cited [Pl. Nov. Hisp.]: Apatzingán, Michoacán; and Virginia and elsewhere in America; [Fl. Mex.]: "in Apatzingani. Floret Octobri"; i.e., P. involucrata. i.e. Fl. Mex. 132, cited in Pl. Nov. Hisp., represented by an original unnumbered painting at MA that bears the hand-printed name "Phlox Divaricata." It was listed by name, with description, and identified as RJB Lám. 55 in the Catálogo de las Láminas del Real Jardín Botánico (RJB 1987, p. 331). It is no. 54 of Ramírez (Anales. Inst. Méd.—Nac. México 6, pt. 1: 79.)
Polemoniaceae

1903). Almost identical but with additional details of flowers and fruit, is no. 0513 in the Torner Collection, bearing the number "132" but without other inscription. No. 1902 in the Torner Collection, annotated by de Candolle "Bonplandia geminiflora Cav.", is a partial copy after the same model. The plant depicted is apparently Bonplandia geminiflora Cav., also known to Sessé & Mociño as Phlox auriculata, q.v. Not found in the S. & M. herbarium under the name divaricata.

The Icones depicting three of the species of "Phlox" described by Sessé & Mociño, namely "divaricata," "spinosa" and "violacea," represented in Fl. Mex. 132, 134, and 133, respectively. The drawings, at least those of Fl. 133 and 134, are of the style with dark ink frames, that prevailed during the first year of the Expedition, but the numbers 134 are all wanting from the list of Icones obtained during that "First Excursion." Not do they appear in the list from the "Second Excursion" (1789). Two of them (132, Phlox divaricata and 133, Phlox violacea) are recorded as from the "Third Excursion," and "134 Phlox spinosa" seems to be recorded only in the final list of Icones 1-416. No. 132, cited above, may indeed have been based on a plant from Apatzingán. The other two may have been taken from the cited localities near Mexico City, but if so the illustrations were presumably prepared earlier than the record shows.


Type-locality [both floras]: On the hill of Itzapalapa near [south of] Mexico, D.F. ["in Colle de Itzapalapa. Floret Septembri et Octribi"]). The two names are equated above because the treatments in the two floras, except for differences in arrangement and wording, are identical. In the S. & M. herbarium nos. 1681 and 5008 (CNHM negs. 47499, 47500), labelled "Phlox reticulata N.", are according to Grant Loeselia coerulea (Cav.) G. Don, Gen. Hist. 4: 248. 1837. A sheet at G, ex herb. Morcand, is marked by Morcand "Nouvelle Espagne, Mr Pavon", and by Pavon "Phlox reticulata sp n° N E". A sheet at BM, ex herb. Lambert, is marked [by D. Don] "Hoitzia coerulae Cav.", and by Pavon "Flos [sic] reticulata N E".


Type-locality: near Mexico, D.F. ["in montibus Mexici vicinis"]). Fl. Mex. 134, not seen, perhaps represented by no. 0402 in the Torner Collection, without inscription except for the annotation by de Candolle, "Hoitzia coerulae Cav."). The plant depicted is Loeselia mexicana (Lam.) Brand, which is clearly the plant described in Pl. Nov. Hisp. and Fl. Mex. 1888; ed. 2. 25. 1893; Fl. Mex. 41. 1893; ed. 2. 38. 1894.

Locality: Los Remedios, [northwest of Mexico, D.F.], Edad de Mexico ["in aridis Sanctae Mariae Remediorum prope Mexicanum montibus"]). Fl. Mex. 133, represented by an original painting at MA, which bears the number "27" and the hand-printed name "Phlox Violacea." It was listed by name, with description, and identified as RJB Lám. 56 in the Catálogo de las Láminas del Real Jardín Botánico (RJB 1897, p. 331). It is no. 27 of a manuscript list by Mociño, no. 55 of Ramírez (Anales. Inst. Mód.-Nac. México 6, pt. 1: 79. 1903). It was reproduced in color, reduced to ca. 6.8 by 4.5 cm, and identified as RJB Lám. 56 (RJB 1897, p. 91). Nearly identical in detail but slightly reduced in size is no. 0400 in the Torner Collection, bearing the numbers "133" and "27", and the annotation by de Candolle, "Hoitzia coerulae Cav."). A second copy, lacking floral details, is Torner no. 0401. Not found in the S. & M. herbarium. The paintings represent a species of Loeselia, probably L. glandulosa (Cav.) G. Don, Gen. Hist. 4: 248. 1837. This species is in the S. & M. herbarium, according to determinations by Grant, under another epithet referring to the spike-like branches (nos. 1684, 5007; CNHM negs. 47496, 47497).

Apparently Phlox violacea of Fl. Mex. was thought to be the equivalent of that treated under the same name by Mociño (1993, p. 36) and by Maldonado Polo (1996, p. 177), where the locality was given as Guatemala ("prope Xalpataguan, Floret Novembr"). "Xalpatagua" (Xalpatagua) was the road between Guatemala City and San Salvador.

Polemonium candidum Sessé & Mociño. Fl. Mex. 42. 1893; ed. 2. 38. 1894.
Type-locality: On the road from Texcoco [Edo. de México] to Calpulalpan, [Tlaxcala]. "[in itinere de Tecuico ad Capultlapa. Floret Junio]." This is described as having many virgine stems a foot and a half high, pinnate leaves with 7-9 linear cuspidate leaflets, congested second inflorescence, long white corollas purplish at the mouth of the tube. This is probably the plant illustrated in no. 1838 of the Torner Collection, which bears the name hand-printed (by Echeverria) "[Phlox Pulsperma crossed out]", hand-written "[by Sesse]" "Polemonium candidum. N. d.\n\n, and the annotation by de Candolle, "Gilia longiflora." A copy is DC. plate 839, unnumbered, annotated by de Candolle "Gilia longiflora." Grant (Nat. Hist. Phlox Fam. 1: 156. 1959) suggested that Polemonium candidum must be a species of Ipomopsis. I suppose from the painting that it represents Ipomopsis piniflora (Cav.) V. Grant, Aliso 3: 357. 1956. Not found in the S. & M. herbarium.


Locality cited: Desierto de los Leones, D.F. ["in Eremo PP. Carmeliarum, Europa et Asia. Floret Julio"] Brieefly described. Not found as such in the S. & M. herbarium, but see under P. mexicanum.


Type-locality: Mexico, grown in the Madrid Botanical Garden; "seminia praedicto nomine missit cel. D. Vinc. Cervantest." Type: Not seen. Said to have flowered in the garden in May and June 1815. Commonly recognized as a valid species. In the S. & M. herbarium no. 1624 (CNHM neg. 47501), labelled "Polemonium coeruleum crossed out" mexicanum," is according to Grant correctly named as mexicanum. Presumably this was the species that Sessé & Mocího first called Polemonium coeruleum. No. 1628 in the Torner Collection, a painting without any inscription, is a good representation of a species of Polemonium with pinkish flowers.

Polygalaceae

Monnina bifurcata DC. in DC. Prodr. 1: 339. 1824, with citation of "fl. mex. ic. ined." as the basis for the name.

Type-locality: "in Mexico". Lectotype: DC. plate 41, an original painting according to A. D.C. in Calques des Dessins (Field Mus. neg. 30473). An almost identical copy in the Torner Collection, no. 0424, is labelled by de Candolle, "Monnina lanceolata." Referred doubtfully by S. F. Blake (Contr. U. S. Natl. Herb. 23: 595. 1923) to the synonymy of Monnina salapensis H. B. K. Nov. Gen. & Sp. 5: 414. 1821. There seems to be no material of this genus in the S. & M. herbarium. See also Polygala baccifera.

Monnina ciliolata DC. in DC. Prodr. 1: 340. 1824, with citation of "fl. mex. ic. ined." as the basis for the name. Monnina ciliolata DC. ex G. Don, Gen. Hist. 1: 368. splanh. 1831. Polygala baccifera Sessé & Moc. 1889, q.v. Monnina schlechtendaliana D. Dietr. 1847, and in the sense of various authors, a name based on M. angustifolia Schlecht. 1840, not M. angustifolia DC. 1824.

The primary synonymy was noted by Tom Wundt (in Rzedowski and Rzedowski, Fl. Fan. Valle Méx. 3: 416. 1990, who adds (in litt. 1998), "there is no doubt whatsoever, looking at Torner 711 and at the tracing in the Calques (#42 in the renumbered series), as to the identity of M. ciliolata DC.

Type-locality: "in Mexico". Lectotype: In the Torner Collection, no. 0711, annotated by de Candolle "Monnina ciliolata." The diagnostic feature cited by de Candolle, "petalo brevi ciliolato," is conspicuous in the illustration. DC. plate 42, cited in Calques des Dessins (Field Mus. neg. 30474), is a partial, colored copy of no. 0711. Referred doubtfully and erroneously, according to Wundt) by Blake (Contr. U. S. Natl. Herb. 23: 595. 1923) to the synonymy of Monnina salapensis; see M. bifurcata, above; see also Polygala baccifera.


Blake (Contr. Gray Herb. 47: 44. 1916) cited a collection from Mexico, a "Pavon" specimen at BM. The latter, ex herb. Lambert, is marked by Pavón "Polygala mexicana N E".


In the S. & M. herbarium, according to determinations by S. F. Blake, "Polygala bryoides" is represented by nos. 3668 and 3671 (CNHM negs. 47505, 47506); no. 3671 is labelled "Polygala longifolia." The same author (Contr. Gray Herb. 47: 68. 1916) cited as "Polygala bryoides" a collection from Mexico, a "Pavon" specimen at BM.

The name Polygala bryoides St.-Hilaire, dating from the publication in his Fl. Bras. Merid. 2: 44. 1829, was extensively used for the Mexican representatives of this species, replacing P. angustifolia H. B. K., which was a later homonym of P. angustifolia Gilliberti, Fl. Lituana 2: 113. 1782. The latter is now treated as not validly published; cf. Greuter et al. 1994 (Tokyo Code) pp. 333-334, and Art. 32.8. The correct name for the inclusive species including the Mexican plant (according to Tom Wendt, in litt. 1998) is Polygala violacea Aublet, Fl. Guiane Franc. 735. 1775 (cf. Rodriguezia 48: 175. 1779), where the essential synonymy is set forth.
Polygala angustifolia Sessé & Moc. Fl. Mex. ed. 2. 163. 1894. not of H. B. K.

Type-locality: Mountains of San Angel, near [south of] Mexico, D.F., where said to flower in August. Not found in the S. & M. herbarium under this name. Described as an erect herb from a woody-fibrous root; leaves alternate, linear, few; flowers in terminal filiform spikes, white to greenish, small, beardless. Not identified.


Type-locality: in the very cold mountains of the Desierto de los Leones ("frigidissimis montibus Mexicanorum Carmelitarum Eremita"), [southwest of Mexico, D.F.]. Ic. Fl. Mex. 424, cited in the manuscript of the Pl. Nov. Hisp., but not in the printed version, and included as "Polygala baccifera N" among the notes obtained during the "Third Excursion", that to western Mexico in 1790-91; this is presumably represented by an original painting at MA, which bears the number "75" and the hand-printed name "Polygala Baccifera." It was listed by name, with description, and identified as RJB Lám. 100 in the Catálogo de las Láminas del Real Jardín Botánico (RJB 1987, p. 340). It was also well reproduced in color (though reduced to ca. 6.7 by 4.5 cm) and identified as RJB Lám. 100 (RJB 1987, p. 156). It is no. 75 of a list by Mocino (MA, mss.), no. 57 of Ramírez (Anales. Inst. Méd.-Nac. México 6, pt. 1: 79-1903). The plant illustrated is Monnina citlalata DC., as confirmed by Tom Wendt (in litt. 1998). There is no comparable painting in the Torner Collection nor, as far as I am aware, in Geneva. The copy at MA is in no sense identical with either of those that constitute the types of the two Candaltean species of Monnina.

If Ic. Fl. Mex. 424 is indeed represented by the above painting at MA, and if it were indeed painted during the "Third Excursion", that to western Mexico in 1790-91, it was possibly not painted anywhere in the vicinity of Mexico City, at the locality cited in Pl. Nov. Hisp.

Polygala capitata Sessé & Moc. Fl. Mex. ed. 2. 163. 1894, not of D. Don.

Type-locality: Temperate mountains, New Spain. In the S. & M. herbarium no. 3661 (CNHM neg. 47510), labelled "Polygala capitata N," is according to Blake Polygala longicaulis H. B. K. Nov. Gen. & Sp. 5: 396. 1823. That species was also reported from Mexico by Blake (Contr. Gray Herb. 47: 94. 1916) on the basis of a "Pavon" collection at BM. The latter is labelled by Pavón "Polygala capitata sp. nova de Mexico." Blake (N. Amer. Flora 25: 370. 1924) stated that Polygala capitata Sessé & Moc. was "indeterminable" from the description, which is generalized. Nelson (1997) designated "Sessé 3661" as "material tipo" of P. capitata.


Blake (Contr. Gray Herb. 47: 98. 1916) reported "Polygala paludosa" from Mexico on the basis of a "Pavon" collection at BM. In the S. & M. herbarium no. 3573 (CNHM neg. 47508), labelled "Polygala monspeliaca," is according to Blake Polygala leptocaulis.


The name Polygala mexicana Mociño can scarcely be typified satisfactorily except by the original description taken in conjunction with the cited locality of Mexico City. Torner 0736, if desired, might be appropriate as a neotype, but there is nothing written on the painting to show that Mociño (or Sessé) ever identified it by name. The name Polygala mexicana does not appear in Pl. Nov. Hisp. or in Fl. Mex., and it may be supposed that the epithet was originated by Mociño soon after his return to Spain, without any basis in manuscripts or illustrations that had been prepared in America. It may or may not have been fortuitous that de Candolle took up the same epithet.

According to Blake (i.e., p. 108.), true "Polygala scoparia" is nearly or quite confined to the Valley of Mexico, but the range is now known to extend well beyond those limits. Wendt (in litt. 1998) comments that the identity (conspecificity) of P. mexicana Mociño and P. scoparia is well established by the description of the former ("P. floribus crisatis racemosis, caulibus virgatis angulosis, foliis linearis subulatis") and the statement in the protologue by Mociño that the species is common around Mexico City [as the epithet "mexicana" implies].
In the S. & M. herbarium no. 3670 (CNHM neg. 47414), labelled "Polygala mexicana", is a mixed collection according to Blake; one of the plants is Polygala rivinifolia H. B. K. Nov. Gen. & Sp. 5: 409. 1823; the other is an unidentified species of Polygala. See also Polygala albomaculata, above. Another specimen in the S. & M. herbarium, no. 3664 (CNHM neg. 47416), labelled "Polygala [unpublished epithet] filiformis", was determined by Blake as Polygala scoparia. I have not seen the "Pavón" specimens cited by Chodat; they are to be sought at Geneva (G).

Polygala nutkana DC. in DC. Prodr. 1: 330. 1824, with citation of "Moq. ic. ined." as the basis for the name.

Type-locality [Prodr.]: "in Amer. bor. orä occidentali prope Notka", [Vancouver Island, B.C., Canada].

Lectotype: In the Torner Collection, no. 1947, annotated by de Candolle, "Nuttaka" and "Polygala nutkana". DC. plate 39, as cited in Calques des Dessins (Field Mus. neg. 30471), is an indistinct copy of no. 1947. The identity of this plant has long been in doubt. Blake (N. Amer. Flora 25: 370. 1924) called it "A very doubtful species, wrongly identified with P. californica Nutt. by Chodat". Chodat (Monogr. Polyg. 2: 105. 1893) had regarded it as a valid species and referred to it as a synonym Polygala euculata Benth. (=P. californica Nutt.). B. L. Robinson (in A. Gray, Syn. Fl. 1, pt. 1: 449. 1897) stated that it was quite unlike any species of Polygala known from the Pacific Coast of North America and suggested that it might have been Mexican in origin. Blake later (Contr. Gray Herb. 47: 112. 1916) concurred. In the Index Kewensis, Polygala nutkana was assigned to the synonym of P. ovalifolia DC., i.e., P. buxifolia H. B. K.

The painting shows it to be a perennial species with few large flowers and ovate-elliptic sharp-pointed leaves.

When the Torner Collection was received in Pittsburgh, one of the items was a small folder that included a number of sketches, all or most of which had been annotated by de Candolle with the name of the plant and with the word "Nuttaka" (or often "Notka"). The folder was labelled, apparently by Sessé, "Plantas de Notka y Borradores cé se han de copiar" [Plants of Notka and preliminary sketches to be copied]. It appears that the folder included not only sketches that were made by the artist Echeverría during his trip to the Pacific Northwest in 1792 with Mocíñio, but also a small collection of sketches that had been made by Echeverría the preceding year, 1791, when the entire Expedition travelled from Jalisco to Tepic, then northward as far as the Yaqui River in Sonora. My assumption is that when the folder eventually found its way into the hands of de Candolle, more than 20 years after the fact, Mocíñio had no memory of individual drawings (all unlabelled as they were), and confirmed de Candolle's benefit the statement on the folder that all the sketches had been made at Notka. A conspicuous example is the sketch of Jatropha cordata, which is a well known plant of the arid portions of western Mexico. I suspect when "Polygala nutkana" can be identified, it will prove to be of Mexican origin, as Robinson suggested a century ago, and in all probability one of the common species of the arid forested hills of the Pacific slope from central Jalisco northward.

Polygala ovalifolia DC. in DC. Prodr. 1: 331. 1824.

Type-locality: "in Nová Hispaniá". Type: Not cited as such: "v.s. in h. Deless."

The locality "Nová Hispaniá" suggests that it may have been a specimen from Pavón.


Polygala paniculata L. Amoen. Acad. 5: 402. 1759.

Blake (Contr. Gray Herb. 47: 100. 1916) reported a "Pavón" collection from Mexico at BM. In the S. & M. herbarium nos. 3665 and 3666 (CNHM negs. 47412 and 47413), named to genus only by the collectors, are according to Blake Polygala paniculata.


Type-locality: Mexico. Type: "Pavón" in herb. Boiss., not seen. According to Blake (Contr. Gray Herb. 47: 24. 1916), "the species, if really Mexican, may perhaps belong in the Ovatifoiliæ but is placed in the Obscuræ on account of Chodat's description of the leaves as "irregularia et diversa".


Blake (Contr. Gray Herb. 47: 85. 1916) cited a collection from Mexico, namely a "Pavón" specimen in BM. The latter, named by Blake in 1915, bears a ticket by Pavón, "Polygala verticillata sp. nova de Mexico". In the S. & M. herbarium this species is represented, according to determinations by Blake, by no. 3662 (CNHM neg. 47417), labelled "Polygala verticillata".

Polygalaceae


Locality cited: Pátzcuaro, Michoacán ["Patzsquari et in plurimis Europae locis. Floret Augusto"]). Not fully described but its medicinal properties enumerated in Pl. Nov. Hisp. Not found in the S. & M. herbarium. This was apparently thought to be the same as "Polygala vulgaris" of Guatimalensis Prima Flora (Mocño 1993, p. 115) and of Maldonado Polo (1996, p. 288), where the locality is given as Chiapas ("in Civitatis Regiae circuitibus. Floret Augusto"). Not identified.

Locality cited: Mexico, D.F. ["in pratis S. Angeli. Floret Julio"]). This is apparently "Polygala diffusa" of Guatimalensis Prima Flora (Mocño 1993, p. 115) and of Maldonado Polo (1996, p. 288), where the locality is given as "in Guatimalae suburbiis. Floret Octobri". The character (description) is essentially identical in all the above.
There is an added comment in Fl. Mex.: "Affinis Polygalae microphyllae, differt tamen foliis majoribus ovati-lanceolati et caulibus laevibus, nec in basi foliorum dentatis ut in illa".

Locality cited: Tuxtla (probably San Andrés Tuxtla, Veracruz) ["in Tuxtlae montibus. Floret Decembr"]).
Description. Described as a scandent shrub with lanceolate, obtuse, short-petiolate, spreading leaves and yellow ("lute".) flowers. The description differs in other details from the much longer one that was provided for the plant of the same name, second on the same page.

Locality cited: Cuernavaca, Morelos ["in calidis Quauhnahuancae montibus. Floret Februario"]). Long description, of a scandent shrub with impari-pinnate leaves, 17 ovate leaflets, and red-violet corollas. In the S. & M. herbarium no. 3649 (CNHM neg. 47420), labelled "Securidaca volubilis. [descr.]", was determined by Blake as S. volubilis L. No. 1589 in the Torner Collection, annotated by de Candolle "Securidaca volubilis", shows a woody vine with long, pinnate leaves, and a panicle of roseate flowers.

Polygonaceae

Type-locality: Presumably Tepic, Nayarit. Lectotype, here designated, Hook. & Arn. pl. 69. Locality cited [Fl. Mex.]: San Juan de los Pitanos [near Apatzingán], Michoacán, where said to flower in October; [Pl. Nov. Hisp.]: "in America calidiores. Floret Octobri". The basis for the report by Meisner was DC, plate 1098, labelled "Polygonum cirrhosum". This is an unfinished colored copy of no. 1822 in the Torner Collection, which is annotated by de Candolle, "Polygonum cirrhosum". It shows both flowers and fruits.
Ic. Fl. Mex. 262, cited under Polygonum scandens in Pl. Nov. Hisp., is presumably represented by two almost identical icons (based on a different model from that of Torner 1822). One is an original unnumbered painting at MA, which bears the hand-printed name "Polygonum Scandens". It was listed by name, with description, and identified as RJB Lám. 70 in the Catálogo de las Láminas del Real Jardín Botánico (RJB 1987, p. 334). It was not numbered by Mocño but cited as no. 58 by Ramirez (Anales. Inst. Méd.-Nac. Mexico 6, pt. 1: 80. 1903). The icon was well reproduced in color, though reduced to ca. 6.7 by 4.5 cm, and identified as RJB Lám. 70 (RJB 1987, p. 156). The plant depicted is the same as that in Torner 1822, but the image is of a young flowering specimen without fruits. Nearly identical is no. 1651 in the Torner Collection, which bears the number "262" and the annotation by de Candolle, "Polygonum". In the S. & M. herbarium no. 5418bis, labelled "Polygonum scandens", is according to Standley Antigonon cinerascens Mart. & Gal. Bull. Acad. Roy. Sci. Bruxelles 10, pt. 1: 354. 1843.

Coccoloba macrophylla Sessé & Moc. Fl. Mex. ed. 2. 96. 1894; not of Desfontaines.


Locality cited: Humacao, Puerto Rico ("in locis de Tamacao et vicinis, V.[ulg]o Calambreira"). Urban (Symb. Antill. 4: 666. 1911) pointed out that "Tamacao" was a misprint for Humacao. Described. Apparently more than one species was included under this name. In the S. & M. herbarium no. 952 (CNHM neg. 47531), labelled "Coccoloba punctata. V[ulg]o Calambreira", was determined by R. A. Howard as Coccoloba venosa L. No. 5431 (neg. 47532), identically labelled, was determined by Howard as C. pyrifolia Desf. Nelson (1997) designated "Sessé 5431" as "material tipo" of "Coccoloba punctata Sessé & Moc.", which is inappropriate as no such name exists.

Coccoloba umbilicata Sessé & Moc. Fl. Mex. ed. 2. 96. 1894.

Type-locality: Río de la Lapa ("Laxa"), near Toa Alta, Puerto Rico ("ad margines fluminis de Laxa Oppidum de Toa Alta irrigantis, Floret Aprilii"). According to Urban (Symb. Antill. 4: 214. 1905), this is a synonym of Coccoloba laurifolia Jaeg. In the S. & M. herbarium no. 949 (CNHM neg. 47534), labelled "Coccoloba umbilicata. [descr."]", and no. 5429 (neg. 47535), labelled "Coccoloba umbilicata N. i.c. [descr."]", are according to Howard as C. pyrifolia Desf. Cat. Hort. Paris ed. 3. 389. 1829. Nelson (1997) designated "Sessé 949" as "material tipo" of C. umbilicata.


Locality cited: Cuba ("Incolit litora arenosa Insulae Cubae, ubi vulgo Uvero audit. Floret vere et aestate"). Described at length. In the S. & M. herbarium no. 5427 (CNHM neg. 47543), labelled "Coccoloba uvifera (or 'uvifera')", was determined by Howard as C. uvifera (L.) L.


Locality cited: Alvarado, Veracruz ("in Alvarado litore, Floret Septembris"). Described independently of the Coccoloba uvifera on the preceding page, which see. Not identified further.

Polygonum angustifolium Sessé & Moc. Fl. Mex. ed. 2. 97. 1894, see Caryophyllaceae.


Type-locality: Apatzingán, Michoacán, where said to flower in December. In the S. & M. herbarium no. 5422 (CNHM neg. 47545), labelled "Polygonum fasciculatum" (and on another ticket with another epithet referring to the spiny branchlets), is according to Standley Pedopus mexicanus Humb. & Bonpl. Pl. Acquin. 2: pl. 107. 1809. The description in the Fl. Mex. may well apply to the same species. Nelson (1997) designated "Sessé 5422" as "material tipo" of P. fasciculatum.


Polygonum procumbens, see Caryophyllaceae.

Polygonum vulgare, see Basellaceae.


Rumex polygamus Sessé & Moc. Fl. Mex. ed. 2. 89. 1894, not of Cavanilles.

Type-locality: Margins of aqueducts, México, D.F. ("ad marginas Aquaeductum Mexicanorum. Teto anno floret"). The genus Rumex is apparently not represented in the S. & M. herbarium. The plant described was surely of this
genus, said to have oblong, acute leaves, short sheaths, all the valves of the fertile flowers grain-bearing, dentate.


Type-locality: “In Nová Granátá ? et Mexico”. Type: "Pavon! in herb. Shuttlew.", not seen. Not found at BM in 1963. In the S. & M. herbarium no. 4787 (CNHM negs. 47550–47554), named by the collectors to genus only, is according to Standley Triplaris auriculata. The reference to a South American locality by Meissner is presumably an error.

’Triplaris sp. nov. de Mexico’

In the S. & M. herbarium no. 4786 (CNHM negs. 47549), labelled as above, was determined by Standley as Ruprechtia chiapanensis Lundell. In this instance the locality 'Mexico' evidently does not mean Mexico City or its environs, as neither any species of Triplaris nor of Ruprechtia is known from the Valley of Mexico.

Polygonaceae, indet.

A painting of a woody Polygonaceae plant, perhaps a species of Coccoloba, was reproduced in full color at ca. 15.5 by 10.5 cm, in RJB 1987, p. 283. It appears from the included centimeter scale that the painting was one of those from the de Candolle collection (G-DC). It is identified only as "Dibujo botánico". Presumably it is one of the Sessé & Mocíño paintings, but not one contemporary with those sent to Madrid in 1791. I have not identified it further.

Pontederiaceae

"Heteranthera emarginata".

No. 0069 of the Torner Collection, annotated as above by de Candolle but without other significant inscription, was well reproduced in color, at ca. 22.8 by 16.5 cm and identified only as an "Ilustración original de la Flora Mexicana" by Lozoya (1984, p. [160]). The plant is shown as if trailing [floating] on a body of water, and the painting as a whole suggests that it was a companion to the one discussed as "Heteranthera sp." in the next paragraph. Perhaps both were based on plants from one of the shallow lakes near Mexico City. The leaf-blades in Torner 0069 are broadly reniform, cordate at base and emarginate at apex.

Heteranthera sp.

An original painting at MA (reproduced in full color, nearly natural size at ca. 24.8 by 18.0 cm) is labelled "Spiranthera" and identified as RJB Lám. 25 (RJB 1987, p. [127]). It was also listed by the same name, with description, and identified as RJB Lám. 25 in the Catálogo de las Láminas del Real Jardín Botánico (RJB 1987, p. 323). It is presumably one of the icones that were forwarded to the King from Guadalajara in 1791, but it seems not to have been named, nor included in Mocíno's list (MA, mss.). It is a skillfully drawn picture including floral details of a yellow-flowered species of Heteranthera in which the very slender floral tube is ca. 9.5–10 cm long and the spathes from less than half as long to a little more than half. According to Correll and Johnston (Man Vasc. Pl. Tex. 367, 368, 1970), this would identify the plant as Heteranthera liebmanni (Buchenau) Shinners, Field & Lab. 23: 21. 1955, which is said to range from southern Texas southward into Mexico. Not found in the S. & M. herbarium. I cannot guess where the plant may have been found. It is shown with what appears to be a mountain-rimmed lake in the background.


Locality cited: Region of Tuxtlas, [Veracruz]; ["ad fluviorum ripis in Tuxtlae provinciae. Floret toto anno"]. Described (the flowers in detail). Not found in the S. & M. herbarium. Not identified.

This is apparently "Pontederia unifolia" of Guatimalensis Prim Flora (Mocíno 1993, p. 59) and of Maldonado Polo (1996, p. 206), where the locality is given as "Guatemala", sensu kato ("ad fluviorum rip[plas] in calidis Guatimalae regionibus. Floret toto anno"). The diagnoses (characters) in all the publications are identical. This is apparently one of the species that was first seen in Veracruz when Mocíno was on his way to Central America, and later recognized by him as the same as the Mexican plant.

Portulacaceae


The basis for this report is no. 0743 in the Torner Collection, annotated by de Candolle "Geunisia rosea", or DC. plate 394 and DC. plate XIV [sketches only; Field Mus. neg. 30295], copied from Torner 0743. In the S. & M. herbarium no. 867 (CNHM neg. 47558) is apparently of this species; it was originally labelled as a new species of Claytonia; the label is by the botanist Castillo, who died in 1793. I cannot find that the name "Geunisia" was used by Sessé & Mocíño.

Claytonia alsinoides [var.] β rosea DC. in DC. Prodr. 3: 361. 1828.

Type-locality: "In Noottka", [Vancouver Island], British Columbia, Canada. Type: "Moq. icon. Nooth. [sic] ined.", Lectotype: In the Torner Collection, no. 1956, found in folder of sketches supposedly from "Nutka."
annotated "Claytonia" and by de Candolle "petiolaris". DC. plate 382, as cited in Calques des Dessins (Field Mus. neg. 30673), is a good colored copy of Torner 1956. Not found in the S. & M. herbarium. Referred with question to the synonymy of Linnia sibirica (Claytonia sibirica L.) by Rydberg in N. Amer. Flora 21: 304. 1932.

Claytonia parvifolia DC. in DC. Prodr. 3: 361. 1828, with citation of "Moc. icon. pl. Nootk. ined." as the basis for the name.

Type-locality: Nootka, [Vancouver Island], British Columbia, Canada. Lectotype: In the Torner Collection, no. 1955, found in folder of sketches supposedly from "Nutka", annotated "Claytonia" and by de Candolle "parvifolia". DC. plate 383, as cited in Calques des Dessins (Field Mus. neg. 30674), is a good colored copy of Torner 1955. Not found in the S. & M. herbarium. Maintained by Rydberg (N. Amer. Flora 21: 294. 1932) as a valid species, Naiocrene parvifolia (Moc. ex DC.) Ryd.; and by Hultén (Fl. Alaska & Yuk. 637. 1944) as Claytonia parvifolia.

Claytonia perfoliata Donn., Hort. Cantab. 25. 1796.

Mexico; de Candolle, in DC. Prodr. 3: 360. 1828, gave one locality as "ad Montes Sancti-Augustinii" [i.e., San Agustín de las Cuevas, now Thalpan, south of México, D.F.]. De Candolle made no reference to Sessé & Mociño, but the locality is one much cited by these authors.

"Claytonia scapifera N."

A name never published by Sessé & Mociño, but listed as l.c. Fl. Mex. 52 (as "Claytonia scapifera ? N.") among the icons obtained in the vicinity of México, D.F., during the "First Excursion", 1787-1788; and also included (as "Claytonia scapifera") in the list of icons 1-416 (MA, mss). Cited by McVaugh (1980, p. 117), before the recovery of the Torner Collection, as "unknown". The icon is represented by two essentially identical paintings in the Torner Collection, nos. 0039 and 1104, each of which bears the number "166" (which I cannot interpret) within the frame. The hand-printed name "Claytonia ? Scapifera N.", and the annotation by de Candolle, "Claytonia perfoliata". Torner no. 1104 is also numbered "52". Not found in the S. & M. herbarium. The plant depicted is Claytonia perfoliata Donn., or its Mexican representative.

Claytonia teretifolia Sessé & Mociño Fl. Mex. ed. 2. 65. 1894, not of O. Kuntze.

Type-locality: Not stated; presumably Mexico. Not found in the S. & M. herbarium. Briefly described as scapose, with tuberous-globose bitterish root covered with a thin deciduous rusty-cinnamon-colored epidermis; leaves radical, erect, crowded, terete, fleshy, glabrous; scape three inches high, filiform, glabrous. This is a good description of the plant illustrated in no. 0468 of the

Claytonia triandria Sessé & Mociño Fl. Mex. ed. 2. 65 (1st on page). 1894; ed. 1. 70. 1895; &Claytonia triandria Sessé & Mociño op. cit. ed. 2. 65 (2nd on page). 1894; ed. 1. 71. 1895.

Type-locality [ed. 2. 65 (2nd on page)]: Puebla, "in agris de Zacatlán de las Manzanas. Floret Septembrí", (1st on page); "in pratis humidis Zacatlan. Floret Septembrí". The two descriptions in the Fl. Mex. may well have been written on different occasions to describe plants of the same species; they differ but slightly. The descriptions suggest a plant of the genus Calandrinia. In the S. & M. herbarium no. 587 (CNHM neg. 4755), labelled by the botanist Castillo "Claytonia triandra N.", is apparently Calandrinia microantha Schlecht., the Mexican representative of the complex that includes Calandrinia caulescens H. B. K. Nov. Gen. & Sp. 6: 78. pl. 526. 1823. De Candolle (in DC. Prodr. 3: 359. 1828) reported this latter species from "Mexico" under the name of "Geunisia rosea fl. mex. ined.". This report was based on no. 0743 of the Torner Collection, labelled by de Candolle "Geunisia rosea"; DC. plate 394 and plate XIV (sketches only; Field Mus. neg. 30295) are copies based on the same original.

Claytonia virginica [L.] sensu Sessé & Mociño Fl. Mex. ed. 2. 64. 1894.


De Candolle (in DC. Prodr. 3: 353. 1828) pointed out that this species was said to be African, "in sod. fl. mexic. ined. video speciem huc similissimam P. stelliformem dictam". The icon mentioned by de Candolle is no. 1757 of the Torner Collection, or DC. plate 389, as cited in Calques des Dessins. Each is labelled by de Candolle "Portulaca stelliformis", a name never published by Sessé & Mociño and apparently invented by de Candolle. The icon represents a sprawling, narrow-leaved, yellow-flowered Portulaca. Not located in the S. & M. herbarium. The name Portulaca stelliformis Moc. & Sessé was taken up by Asa Gray (Syn. Fl. N. Amer. 1, pt. 1: 264. 1897) from the reference in the Prodrorum, and based primarily on DC. plate 389. Gray intended it to replace the older Portulaca suffruticosa Engelm. Bot. Gaz. 6: 236. 1881, a name he considered inappropriate because the plant is not suffrutescent. Percy Wilson (N. Amer. Flora 21: 332. 1932) referred the name Portulaca stelliformis in the sense of Gray, to the synonymy of P. suffruticosa.
**Portulaca meridiana** [L.f.] sensu Sessé & Moc. Pl. Nov. Hisp. 77. 1888; ed. 2. 72. 1893; Fl. Mex. ed. 2. 120. 1894.


Locality cited: Near Coyoacán, south of México, D.F. ['in saxosis Cuayedami circuitibus. Floret Maio']. I.e. Fl. Mex. 122, cited in the manuscript of the Pl. Nov. Hisp. but not in the printed version. The number “122” was not used in the list of *icones* made in 1787-1788, and was probably assigned to the *Portulaca* during the later stages of preparation of the manuscript of Pl. Nov. Hisp. The number 413 was listed for *Portulaca patens* in Mociño’s enumeration of *icones* 1-416, the name then crossed out and replaced by *Bignonia salicifolia*, but the same number (I.e. Fl. Mex. 413) was cited under *Portulaca patens* in the Fl. Mex. It may be inferred that no. 413 was painted somewhere along the route of the “Third Excursion”, in western México in 1790-1791, and then re-numbered to take the vacant number 122, leaving no. 413 for the *Bignonia*. I take it that the superseded I.e. Fl. Mex. 413, i.e. 122, is represented by an original painting at MA, with hand-printed name “Portulaca Patens.” It was well reproduced in color, nearly full size at ca. 23.5 by 15.5 cm, without caption (RJB 1987, p. [295]), and it was listed by name, with description, and identified as RJB Lám. 81 in the *Catálogo de las Láminas del Real Jardín Botánico* (RJB 1987, p. 336). It is no. 3 of a list by Mociño (MA, ms.), and no. 60 of Ramírez (Aanales. Inst. Méd.-Nac. México 6, pt. i: 80. 1903). As noted by Ramírez, it corresponds to DC. plate 591, “Talinum tuberosum”, a copy of no. 1324 of the Torner Collection, which bears the numbers “3” and “122”, the name ‘[in the hand of Sessé]. “Portulaca [Patens crossed out]”, and the annotation by de Candolle, “Talinum tuberosum”. The plant depicted has the rather sparingly branched inflorescence and large flowers of *Talinum triangulare*, but the leaves are shown as shorter and more pointed than usual in that species. In the S. & M. herbarium no. 1818 (CNHM neg. 47559), labelled “Portulaca patens”, is apparently *Talinum paniculatum* (Jacq.) Gaertn. Fruct. 2: 219. 1791.

**Portulaca pilosa** [L.] sensu Sessé & Moc. Fl. Mex. ed. 2. 120. 1894.

Locality cited: Loiza, Puerto Rico ['in agris de Loisa. Floret Augusto et Septembris']. Described. In the S. & M. herbarium no. 1822 (CNHM neg. 47566), labelled “Portulaca pilosa”, was according to Standley correctly identified.


Type-locality: Hot places, Acapona, Nayarit. No reference is made to Jacquin, but the writers were familiar with his work, this particular name was treated by Palau (4: 35. 1786), and it is unlikely that the epithet “triangularis” was a mere coincidence. In the S. & M. herbarium no. 1819 (CNHM neg. 47560), labelled “Portulaca triangularis” in the hand of the botanist Castillo, is apparently *Talinum triangularis* (Jacq.) Willd. Sp. Pl. 2: 862. 1800. Castilla accompanied the Expedition to Nayarit in 1791-1792, and the plant may well have been collected during that trip.

**Portulaca verticillata** Sessé & Moc. Fl. Mex. ed. 2. 121. 1894.

Type-locality: Not stated (“Inter rupes anfractus”). Not found in the S. & M. herbarium. Described as an herbaceous perennial a foot high, glabrous, dichotomous, jointed, the leaves in 3’s, terete, fleshy, sessile, acute; flowers in loose one-sided few-flowered spikes, sessile, the spikes with twin leafy bracts at base; corolla yellow, polyandrous; capsule conic, 3-valved. Not identified.

**Talinum napiforme** DC. in DC. Prodr. 3: 357. 1828. “Claytonia tuberosa fl. mex. ic. ined.”, cited in synonymy by DC., i.e., as the basis for *Talinum napiforme*.

Type-locality: “in Mexico.” Lectotype: In the Torner Collection, no. 0468, labelled “Claytonia tuberosa” by de Candolle. DC. plate 384, as cited in Calques des Dessins (Field Mus. neg. 30675), is a good copy of part of no. 0468, labelled “Claytonia tuberosa” by de Candolle. “Talinum napiforme”. This is very probably the same species as *Claytonia teretifolia* Sessé & Moc., q.v.


Locality cited: Thermal springs, central Mexico [Ad thermas Sancti Bartolomei prope Queretaro, Comangilae prope Guanajuatom,], and in Jamaica and Curaçao. I.e. Fl. Mex. 404; this is apparently represented by an original painting at MA, which bears the number “70” and the hand-printed name “Thrianthema Monogynia.” It was listed by name, with description, and identified as RJB Lám. 77 in the *Catálogo de las Láminas del Real Jardín Botánico* (RJB 1987, p. 335). It is no. 70 of a manuscript list by Mociño, no. 76 of Ramírez (Aanales. Inst. Méd.-Nac. México 6, pt. i: 82. 1903). No corresponding painting has been found in the Torner Collection. The plant depicted is evidently *Thrianthema portulacastrum* L. Sp. Pl. 222. 1753. The same species, according to a determination by Standley, is in the S. & M. herbarium under the name of *Thrianthema monogynia* (no. 992; CNHM neg. 41118).
Primulaceae


Locality cited: México, D.F. ["in pratis humidis et stagnantis Mexici. Floret Augusto"). The description is detailed and seems not to have been derived from that of Linnaeus, but as Sessé and Mociño were well acquainted with the Species Plantarum, the name given to this plant can hardly have been coincidental. In the S. & M. herbarium no. 504 (CNHM neg. 47569), labelled "Centunculus minimus", is apparently C. minimus L. Sp. Pl. 116. 1753.


Type-locality [Pl. Nov. Hisp.]: Yecapixtla ["in aridis et arenosis Ayacapixtlae agris"], Morelos. Not found in the S. & M. herbarium. Not identified. Described as a procumbent herb with 6-angled stems and branches, cuneiform-lanceolate ternate leaves attached at apex, filiform long axillary peduncles, and small white flowers.

This was apparently thought to be the plant treated under the same name in Quadrinulmides Prima Flora (Mociño 1993, p. 26) and of Maldonado Polo (1996, p. 164), where the locality is given as San Salvador ("in Servatoropolis agris. Floret April").


In the S. & M. herbarium no. 1397 (CNHM neg. 47573), determined by Standley as above, is labelled without a name, merely a description and "Habitat in littus Mariis prope Antiquam", i.e., presumably near Antigua Veracruz.

Pyrolaceae


Type-locality: New Spain (“N. E. herb. Lamb.”). Type: From herb. Lambert, now at G. marked by Lambert “Mocino & Sessé-Pavon”, and by Pavón “Clematis subtilroba N.E.” In the S. & M. herbarium no. 2267 (CNHM neg. 47581), labelled “Clematis subtilroba,” is according to Standley Clematis grossa Benth. Pl. Harts. 33. 1840. It is probable that Clematis subtilroba is the valid earlier name for the plant that has been commonly known as C. grossa. The type of C. subtilroba is a fruiting species in which the foliar pubescence is abundant but less conspicuous than in the flowering specimens that are common in herbaria. Don cited “[Nueva] E[spa]fa[Herb. Lamb.]”, which was taken by the compilers of the Index Kewensis to mean “[N]ews ab E[senbeck in] Herb. Lamb[ert].”


Localities cited: Along the river, San Juan del Rio, Querétaro [“in Virginia, Carolina et ad margines fluvii Villa Sancti Ioannis vulgo del Rio. Floret Maio.”]. Described as suffrutescens, scandent, the leaves “composita decompositaque”, the leaflets bilobed or trilobed, the peduncles solitary, tormentos, very long, nutant, the flowers “atropurpurei, tetrapetalal, petalis conniventibus, coriaceis, campanulatâ, limbo alquamente reflexo”. In the S. & M. herbarium no. 2269 (CNHM neg. 47582), labelled “Clematis viorna”, was determined by Standley as Clematis pitcheni Torr. & Gray. This is a species that may well have been encountered at the cited locality, by the Expedition in April or May 1790, on their way from México to Querétaro.


Localities cited: Ayahuatlaempe, Guerrero [”in Europa et frigidis Ayahuatlaempe montibus. Floret Augusto”].


Localities cited: San Angel, D.F., in the garden of the Carmelite Fathers [“in Europa et PP. Carmelitarum Sancti Angelii Hortu prope Mexican. Floret Augusto.”]. Not described. A specimen in the S. & M. herbarium (no. 2329; CNHM neg. 47583) is correctly so labelled, according to Standley.


Localities cited: Cuernavaca, Morelos [“in aquae ductibus Quauhnahuacuentibus et Europa.”]. Not described. Not found in the S. & M. herbarium. Not identified.


Type-locality [DC.]: Mexico. [Fl. Mex.]: Along aqueducts around México, D.F. Lectotype [DC.]: In the Torner Collection, no. 0857, annotated “Ranunculus dichotomus” by de Candolle. DC. plate 1, as cited in Calkins des Dessins (Field Mus. neg. 30441), is an incomplete copy of Torner 0857. Not found in the S. & M. herbarium under this name.

According to Lyman Benson (Amer. Midl. Naturalist 40: 107. 1948), Ranunculus pinnatus Sessé & Moc. is the same species as R. dichotomus DC., and it is probable that Sessé & Mocion never used the epithet dichotomus. In the S. & M. herbarium no. 2300 (CNHM neg. 47589), labelled “Ranunculus pinnatus”, is according to Benson Ranunculus dichotomus DC., and also the “type” of R. pinnatus Sessé & Moc. No. 2301 (neg. 47590) is also R. dichotomus according to Benson; it was originally labelled with a slightly different epithet referring to the pinnate leaves. A specimen in the folder of Ranunculus dichotomus at G, ex herb. Bussier, bears a printed label “Nueva España Herb. Pavon”, and is marked, presumably by Bussier after Pavón, “R. pinnatus”.


Type locality: Cold mountains of New Spain. Rightsed by Benson (Amer. Midl. Naturalist 40: 105. 1948) to the synonymy of Ranunculus macranthus Scheele, Linnaea 21: 585. 1848. No. 2304 of the S. & M. herbarium (CNHM negs. 47585-47588), labeled "Ranunculus fasciculatus", is according to Benson "Ranunculus macranthus"; specimens at F are cited by the same author (Amer. Midl. Naturalist 40: 106) as a part of the type-collection of R. fasciculatus, and are also referred to R. macranthus. Another sheet in the S. & M. herbarium (no. 2305: neg. 47602), comprising a mixture of Ranunculus uncinitus G. Don and R. geoides H. B. K., may have been confused in labelling; of the three original labels, two are marked "Ranunculus fasciculatus" and one "Ranunculus pensylvanicus". Benson noted in a later paper (Amer. Midl. Naturalist 52: 348. 1954) that a specimen at G, purporting to be R. fasciculatus Sessé & Moc., is actually R. petiolaris H. B. K.

Ranunculus multicaulis G. Don, Gen. Hist. 1: 34. 1831, with citation of "D. Don in herb. Lamb." as the basis for the name.

Type locality: Mexico. Righted: Lambert's specimen, in G-Del ex herb. Lambert, is marked [by D. Don] "Ranunculus multicaulis G. Don"; by Pavón "Ranunculus sp. nova N E"; and (on the back of the sheet by Lambert) "Moc. et Sesse. Pavon". The words "Mexique — Moç. et Sess." have been added to the sheet by Briquet. Benson (Amer. Midl. Naturalist 52: 347. 1954) referred Ranunculus multicaulis to the synonymy of R. geoides Humb. & Bonpl. ex DC. Syst. 1: 293. 1817, with the citation of what he called an "isotype", at G, labelled "Mexique — Moç. et Sess.". Presumably Benson's "isotype" is the sheet that is treated above as the holotype.


Type locality: "Nueva España", i.e., presumably Mexico. Type: [Sessé & Mocinio] in herb. Lambert. This specimen, now in G-Del ex herb. Lambert, is marked by Pavón "Ranunculus natans N E"; and by Briquet "Ranunculus sessel Briq." (Field Mus. neg. 27658). Another sheet at G, ex herb. Moricand, is marked by Pavón "Ranunculus natans [sic] Peru". In the protologue of R. natans the words "N[ueval] E[spana] herb. Lamb." followed immediately after the specific epithet. The compilers of the Index Kewensis, evidently taking this to mean "Nees ab Esenbeck in herb. Lambert", listed the name as Ranunculus natans Nees ex G. Don, and in this they have been followed by other authors including Benson, who even referred (Amer. Midl. Naturalist 40: 192) to the "Sessé & Mocinio collection in the Lambert herbarium labelled as R. natans by Nees". In the S. & M. herbarium no. 2306 (CNHM negs. 47598, 47599), labeled (also by Pavón) "Ranunculus natans N[ueval], E[spana]", is according to Benson R. hydrocharoides var. natans.


Locality cited: "Habitat in Anfractu de Zulatitlan, Floret Mayo". For a note on this locality, see Contr. Univ. Michigan Herb. 11: 190. 1977, where its exact whereabouts were unknown. References in the Fl. Mex. to the "anfractu" [i.e., a barranca], to "termas Zulatitlanenses" [i.e., hot springs], and to the month of May, suggest that Zulatitlan or Zalatlan may have been somewhere in the barrancas near Guadalajara. Description. No previous author is mentioned in the protologue, but the diagnosis (character) is taken directly from Palau (4: 487. 1786), with the change of "subunifloro" to "bifloro". Not found in the S. & M. herbarium. Not identified.


Locality cited: México, D.F. ["Habitat in aquaeductibus Mexicanis, præsertim, prope thermas del Peñol vulgo dictæ et in Europa. Floret Maiò"]: Not described. Not found in the S. & M. herbarium. Not identified. For a note on the location of these baths, now well within the urban area of México, see McVaugh (1977, p. 174).


Type-locality: México, D.F. ("in Norem de Chápitepec et Pratis Mexico vicinis. Floret toto anno"). Described as a stoloniferous herb with the radical leaves cordate, reniform, crenate, very smooth ("glaberrima"). The plant is described as scapose, and the "floral leaves" at the forks of the scape as linear-oblong, entire. In the S. & M. herbarium no. 2303 (CNHM neg. 47600) is labelled "Ranunculus stolonifer N. d. 2. p. [describ.]", and on another ticket, "Ranunculus obtusifolius N.". The plant was identified by Benson as R. cymbalaria var. saximontanus Fernald, Rhodora 16: 162. 1914. Benson in publication cited (Amer. Midl. Naturalist 40: 217. 1948) as at F, a Sessé & Mocíño collection of var. saximontanus, a taxon that ranges from Canada to south-central Mexico. In another place, however, Benson (Amer. Midl. Naturalist 40: 191–192) referred Ranunculus stolonifer to the synonymy of R. hydrocharoides var. natans (G. Don) Benson, citing as the "probable type collection" of R. stolonifer a specimen at F (sheet no. 846480). Probably some error is involved, as the basal leaves of var. natans are described as "ovate-lanceolate to lanceolate or rarely ovate, 1.5–6 cm. long, mostly 0.5–1 cm. broad, entire or serrate or denticulate, the cauline leaves similar but narrower and longer", and this could hardly be the plant described in the Fl. Mex. as Ranunculus stolonifer. Nelson (1997), quoting the modern identification as "Ranunculus tridentatus H. B. K.", designated "Sessé 2307" as "material tipo" of R. stolonifer. In the herbarium, however, as far as I can determine, there is no material except the one sheet of no. 2303 that is named "Ranunculus stolonifer", and no. 2307 (neg. 47596) is labelled "Ranunculus muricatus", and Benson confirmed its identification as R. muricatus L.

Ranunculus uncinatus G. Don, Gen. Hist. 1: 35. 1831, with citation of "D. Don in herb. Lamb." as the basis for the name.
Type-locality: "México". Type: [Sessé & Mocíño] in herb. Lambert. The specimen is now at G-Del, ex herb. Lambert (Field Mus. neg. 27660); it bears the name "R. uncinatus D. Don" in pencil traced over in ink. Benson (Amer. Midl. Naturalist 52: 343. 1954) cited what is presumably the same specimen as an "isotype", stating at the same time his conviction that the original material of Ranunculus uncinatus had been collected by Mocíño at Nutka, rather than in México as Don had supposed. The species is a widespread one of montane forests from Alaska to Arizona and New Mexico, but is not known from Mexico proper.


Briefly described. Not found in the S. & M. herbarium. Not identified.

Type-locality: Mountains of Chilpacingo, Guerrero, Mexico. Described by Bernard Boivin (Rhodora 46: 430. 1944) to the synonymy of a new species, Thalictrum roseanum Boivin, i.e., with the note: "T. peltatum Sessé & Moc. is a heterogeneous species as can be easily seen by what is preserved of it at the Field Museum. However the description seems mainly based on T. Roseanum. The fragments can not be identified with certainty." Boivin knew Thalictrum roseanum only from the vicinity of Cuernavaca, Morelos. The specimen that he saw at F is a duplicate of no. 2241 of the S. & M herbarium, labelled by Standley "Thalictrum peltatum DC.", but without any original label. Boivin seems not to have studied the material of this genus in the S. & M. herbarium, none of which is labelled "peltatum". The earlier homonym, T. peltatum DC., was basely wholly on a specimen collected in Mexico by Alamán.

Resedaeae


Rhamnaceae

Localities cited [Pl. Nov. Hosp.]: Near México, D.F. ["in Mexico vicinis montibus"]; also Virginia and Carolina; [Fl. Mex.]: San Angel, near México, D.F., where said to flower in July. Ic. Fl. Mex. 51, cited in Pl. Nov. Hosp., and included among the icones obtained in the region of Mexico City, 1787–88, represented by three paintings in the Torner Collection, all bearing the number "51", all with hand-printed (or hand-written) name "Ceanothus or [Ceanotus] Americanus. Linn.", and all annotated by de Candolle. Torner nos. 0195 and 0409 are identical or nearly so, rather unrealistically depicted; no. 0652 is based on a different model. DC. plate 176, a copy, represents the same species, but no corresponding painting has been located in the Torner Collection; cf. Ceanothus azureus, below. A sheet at BM, ex herb. Lambert, marked by Pavón "Ceanothus americanus", is Ceanothus caerulescens Lag. in the S. & M. herbarium nos. 850 and 1361 (CNHM negs. 47619, 47620), labelled "Ceanothus americanus", are according to Standley C. caerulescens Lag.

Mexico, "in Sancti Angeli circuitus", fide DC. in DC. Prodr. 2: 31. 1825, where this is reported on the basis of "T. mex. ic. et desc. ined.". The "icon" is presumably DC. plate 176; see above under *Ceanothus americanus*. The same species was reported in fl. Mex. as follows: "Nascitur Sancti Angeli circuitus"; cf. C. americanus, above. The name *Ceanothus azureus* was not properly published and is to be referred to the synonymy of *C. caeruleus* Lag. q.v.


Type-locality: New Spain; grown at the Madrid Botanical Garden, "Semina missit D. Sessè". Type: Not seen. A sheet at G-Del bears a label by Lagasca "Ceanothus coruleus [sic] H[ort.] R[eg.] M[iliaris]. Habitat in Nov. Hispania" and in another hand "Mocíno et Sessè". For identification by de Candolle, and for herbarium material, see above under *Ceanothus americanus* and *C. azureus*.

**Ceanothus macrocarpus** Cav. Lc. 3: 38. pl. 276. 1796. *Colubrina macrocarpa* (Cav.) G. Don, Gen. Hist. 2: 36. 1832.

Type-locality: New Spain; flowered in the Madrid Botanical Garden in August (?1794), and perfected fruit in December. Type: Not seen. Not found in the S. & M. herbarium, but see *Ceanothus mociinianus*.


Type-locality: "in Mexico". Lectotype: In the Torner Collection, no. 0533, a drawing bearing no inscription except the number "22", nearly identical with but perhaps slightly inferior to an original painting at MA, which bears the number "22" and the printed name "Ceanothus africanus." It was listed by name, with description, and identified as JRB Lám. 46 in the *Catalogo de las Láminas del Real Jardín Botánico* (RJB 1987, p. 329). It is no. 22 of a manuscript list (at MA) by Mociño, no. 19 of Ramírez (Anales. Inst. Méd.-Nac. México 6, pt. 1: 75. 1903) and, as correctly noted by Ramírez, corresponds to DC. plate 175 (a partially colored copy of Torner 0533), which was cited in Calques des Dessins (Field Mus. neg. 30568).

The *icones* represent fl. Mex. 235, which is included under the name of "Ceanothus africanus" among the *icones* obtained during the "Third Excursion", that to western Mexico in 1790-91. It is cited in Pl. Nov. Hisp., where seemingly the same plant is described. The latter is said to be a shrub 5 feet high, with leaves opposite, linear-lanceolate or oblong, subdeterminate above the middle, tomentum, granule, the margins revolute, the stipules subrotund; racemose short; flowers white, small. From the description and plate it seems certain that *Ceanothus paeueiolorus* is an earlier name for the plant commonly known as *Ceanothus greggia*. The only specimen of this species in the S. & M. herbarium (no. 849; CNHM neg. 47622) was originally labelled with another epithet in the same genus.

**Colletia ? dispersa** DC. in DC. Prodr. 2: 29. 1825, with citation of "fl. mex. ic. ined." as the basis for the name.

Type-locality: "in Mexico". Lectotype: In the Torner Collection, no. 0465, a drawing with no inscription. DC. plate 173, as cited in Calques des Dessins (Field Mus. neg. 30566), is an outlined copy of Torner 0465. The plant depicted is perhaps some species of *Lycium* (Solanaceae); the stamens appear to alternate with the corolla-lobes, not opposite as in the Rhamnaceae. Otherwise a doubtful species, apparently not noted by Standley in the *Trees and Shrubs of Mexico*. Not further identified.


I was unable to find the Lambert specimen at BM, G, or OXF in 1963, but at G, ex herb. Boissier, is a sheet with printed label "Nueva España Herb. Pavón", marked by Pavón "Rhamnus linearis N E". The plant is *Colletia infesta* in the sense of Brongniart, or *Adolphia infesta* (H. B. K.) Meissn. Pl. Vasc. Gen. 70. 1837. In the S. & M. herbarium is a sheet of the same species, named by Standley, originally labelled "Rhamnus linearis" (no. 811; CNHM neg. 47618).
Colletia ? multiflora DC. in DC. Prodr. 2: 29. 1825, with citation of "fl. mex. ic. ined." as the basis for the name.

Type-locality: "in Mexico". Lectotype: DC. plate 174, as cited in Calques des Dessins (Field Mus. neg. 30567). The type is an original painting, unnumbered; there is also in the de Candolle collection a water-color copy of the plate. The corresponding copy has been found in the Torner Collection. The plant represented is evidently Adolphia infesta (H. B. K.) Meisn., a synonym already noted by Standley (Contr. U. S. Natl. Herb. 23: 717. 1923). For citation of herbarium material, see above under Colletia infesta.


The basis for the report "in mus. Lessert." is probably a specimen at G-Del, with printed label "Mexique — Pavon", and marked by Pavón "52. Ceanothus granulatus sp. n.". This is presumably also the basis for the report of Colubrina granulosa Brongn. as a Mexican species, in the Index Kewensis. Another sheet at G, ex herb. Berol., is labelled "Ruiz legit, ex herbario Lamberti". A third sheet at G, ex herb. Moricand, bears a reference to R. & P. Fl. Per. pl. 228B. In herb. Webb (FL) is a sheet marked by Pavón "Ceanothus granulatus Fl. Per.". Evidently none of these specimens is Mexican in origin; all belong to the Peruvian species now known as Rhannus granulatus (Ruiz & Pavón) Weberbauer (cf. Publ. Field Mus. Nat. Hist., Bot. Ser. 13, pt. 3A: 401. 1956). Don took up the name Colubrina granulosa from Brongniart's Memoire, with knowledge of the Peruvian origin of the plant, and proper citation of the basionym from Ruiz & Pavón.


Type-locality [Brongn.]: Mexico. Type: Sessé & Mocino in herb. Lambert, cited by Brongniart and by Don; not seen. Type-locality [Pl. Nov. Hisp.]: Mountains between Tepalcatepec and Coahuayana, Michoacán ["in montibus inhospitalibus ub oppido Tepalcatepec Coahuayana usque interjectis. Floret Decembri"]. In Fl. Mex. by an egregious error, this appeared as "inter oppidum Temascaltepec Coahuayanaque interjectis". In the S. & M. herbarium no. 813 (CNHM neg. 47623), labelled "Rhamnus triflorus", is according to Standley Colubrina glomerata (Benth.) Hemsl.; this is a later synonym of Colubrina triflora Brongn. A sheet at BM, named "Rhamnus triflorus Sessé & Moc. Fl. Mex." by Lagasca, is according to M. C. Johnston (in litt. 1964) a fragment of the holotype of C. triflora. Nelson (1997) designated "Sessé 813" as "material type" of R. triflorus.


Type-locality: Hot regions of New Spain. Not found under this name in the S. & M. herbarium. At the end of the description in the protologue is this note: "Corrige Phyllica scandens ad quaam prius retulimus"; this I take it, that Phyllica scandens of Pl. Nov. Hisp. was at first thought to include both glabrous and tomentose forms, but that the tomentose form was later distinguished as G. mexicana. The character of the latter ["Gouania folis subitis tomentosis"] was apparently intended to contrast with that of G. domingensis L. ["G. folis glabris"]. In the S. & M. herbarium the tomentose Gouania polygama (Jacq.) Urb. Symb. Antill. 4: 378. 1910, as named by Standley, is represented by nos. 3806 and 5202 (CNHM negs. 47628-47631); these were originally named "Gouania domingensis", and may well have been West Indian in origin. The name Gouania domingensis of the Fl. Mex., however, is identical with Phyllica scandens, i.e., Gouania stipularis, q.v.


Type-locality [DC.]: Mexico. [Pl. Nov. Hisp.]: Apatzingán, Michoacán, where said to flower in October. The names Phyllica scandens and Gouania domingensis sensu Sessé & Mocino are equated as above because the treatments in the two floras differ in minor details of wording only. The locality for Gouania domingensis is given as "Mestitlan" [i.e., "cum praecedenti, Illecebrum nodiflorum"], but I suspect this may have been an error related in some way to the inaccurate condition of the manuscript of the Fl. Mex. Lectotype [DC.]: In the Torner Collection, no. 0989, bearing the number "441" and an annotation by de Candolle, "Gouania ? stipularis". DC. plate 178, cited in Calques des Dessins, is a copy of no. 0989, bearing the number "441" crossed off (Field Mus. neg. 30570).

The icons represent Ic. Fl. Mex. 441, cited under Phyllica scandens and included under the name of "Phyllica scandens N." among the paintings obtained during the "Third Excursion", that to western Mexico in 1790-91. Torner 0989 is here designated as lectotype of that name. In the S. & M. herbarium no. 3806 (CNHM neg. 47628), labelled "Gouania Domingensis.", and no. 5202 (neg. 47631), labelled "Gouania Domingensis. ic. 2. p. f. 92", were identified by Standley as Gouania polygama (Jacq.)
Type-locality: Hot places in Michoacán ["in plurimis provinciæ Michoacanensiis calidis locis, ubi communis omnium ore Amolli adpellatur. Floret Novembri"]. Type: In the S. & M. herbarium, no. 817 (CNHM neg. 47645), designated by Johnston (i.e., p. 1022). Johnston took up this name for the plant that had been known as Ziziphus sonorensis S. Wats. Proc. Amer. Acad. Arts, n.s. 24: 44. 1889, a widely distributed tree of the Mexican lowlands.

Type-locality: Apatzingán, Michoacán ["in Oppido Apatzanganii. Floret Octobribri"]; The range of the species according to Standley is from Sinaloa to Guerrero. Not found in the S. & M. herbarium.

Type-locality [DC.]; "in Mexico". Lectotype: In the Torner Collection, no. 0689, which bears the numbers "59" and "407" and an annotation by de Candolle, "Rhamnus ? biniflorus". DC. plate 171, as cited in Calques des Dessins (Field Mus. neg. 30563), is an unfinished sketch of the outlines of Torner 0689.
Type-locality [Pl. Nov. Hisp.]: Querétaro, Querétaro ["in Queretari agris. Floret Aprilii"]; [Fl. Mex.]: Querétaro, and at Santo Tomás near Hostotipaquillo, Jalisco. Ic. Fl. Mex. 047 was cited under "Rhamnus maculatus" in the manuscript of Pl. Nov. Hisp., but not in the printed version, and was listed under the same name in Mociño's list of icones 1–416. Apparently an original copy (not seen) is at MA, no. 59 of a list by Mociño (MA, mss.). Not found in the S. & M. herbarium.

Standley (Contr. U. S. Natl. Herb. 23: 717. 1923) referred both Rhamnus ? biniflorus and R. maculatus to the synonymy of Karwinskia hamboldtiana (Reem. & Schult.) Zucc., and it appears from the original descriptions and the icon that this is correct. Not found in the S. & M. herbarium.

Type-locality: Desierto de los Leones ["in Heremo PP. Carmelitarum. Floret Junio"], southwest of México, D.F. Not found in the S. & M. herbarium. The description suggests a species of Rhamnus, except that the fruits are said to be one-seeded. The epithet "calycifolius" has no obvious application as far as I can see from the protologue, and may have been an error for "salyceifolius", as the leaves are described as oblong-lanceolate, acuminate, minutely serrate, and glabrous on both sides. Not identified.

Type-locality: Coahuayana, Michoacán ["in Coahuayana. Floret Novembri"]; Not found in the S. & M. herbarium. Described as a diffuse shrub with alternate distichous branches and leaves; leaves ovate-oblong, serrate, scabrous, entire at base; petals very short, reflexed; spines axillary, solitary, recurved, arising from the side of the petiole. The flowers and fruit are not described. Presumably this description applies to Celtis ignaea (Jacq.) Sarg., Silva 7: 64. 1895, which is common in the Pacific lowlands of Michoacán.


Type-locality: Apatzingán, Michoacán, where said to flower in August. Not found in the S. & M. herbarium. In Flora Mexicana it is explained that the specific epithet is derived from the vernacular name "grangenos"; this same name (often spelled granjeno) is the usual one given in western Mexico to the spiny species of Celtis. From the description of Rhamnus grangenos it appears that the plant described was Celtis ignaea (Jacq.) Sarg., although Standley (Contr. U. S. Natl. Herb. 23: 201. 1922) suggested that it might be Celtis pallida Torr. The latter is not common in Michoacán, and the spines are straight rather than recurved as they are in C. ignaea and as described for Rhamnus grangenos.

"Rhamnus Guatamalensis".

In the S. & M. herbarium no. 822 (CNHM neg. 47609), labelled as above, was identified by McVaug about 1963 as Colubrina ferruginosa Brongn. The name was not listed by Mociño (1993).

Locality cited: "Nova Hispania." From the description of a plant with curved spines, and from the vernacular name of Granenos, it seems likely that the species called Rhamnus iguanea was the same as the Rhamnus granenos of the same authors, which see.


"Rhamnus mexicanus".

In the S. & M. herbarium no. 1444 (CNHM neg.47636), labelled as above, was determined by Standley as Rhamnus capreae folia Schlecht.

Rhamnus microphyllus Sessé & Moc. Fl. Mex. ed. 2. 62. 1894, not of Roemer and Schultes.

Type-locality: In the very deep dry barrancas between Cardonal and San Juan Aramajue, Hidalgo, where said to flower in June. In the S. & M. herbarium no. 808 (CNHM neg. 47626), labelled "Rhamnus microphyllus," is determined by Standley Condalia mexicana Schlecht. Linneae 15: 471. 1841. A presumed duplicate of this specimen (F. no. 849238) was cited by M. C. Johnston (Brittonia 14: 356. 1962) as Condalia mexicana. Nelson (1997) designated "Sessé 808" as "material tipo" of "Rhamnus microphylla Sessé & Moc.


Type-locality: Near Temascaltepec, Estado de Mexico ("in montibus Temascaltepec vicinis. Floret Julio"). From the description this appears to be a brownish species of Rhamnus. Not found in the S. & M. herbarium. Not otherwise identified.

Rhamnus pentaphyllus [Jacq.] sensu Sessé & Moc. Fl. Mex. ed. 2. 64. 1894.

Locality cited: Mountains of Tuxtlas [i.e., probably San Andrés Tuxtlas, Veracruz], where said to flower in June. No reference is made to Jacquin, but the character of Rhamnus pentaphyllus is quoted from his work, and it seems certain this is not intended as a new name. Not found in the S. & M. herbarium. The description suggests a species of Pisonia (Nyctaginaceae), but does not fit any species known to me.


Type-locality: Level fields, Colima, Colima ["in planis Colimae agris ubi Amolii, valgo nuncupatur"]. Not found in the S. & M. herbarium. Described as a glabrous tree 15 feet high with alternate imparipinnate leaves, 7 obovate crenate leaflets, these and the winged rachis bearing translucent dots on the margins; spines in pairs, opposite, recurved; racemes axillary, simple, subsimple. Flowers not described. This presumably refers to Zanthoxylum jagara (L.) Sarg. Gard. & Forest 3: 186. 1890, not a rare plant in western Mexico. The vernacular name is given as "Amolii" or "Amolle", perhaps because of some confusion with the equally spiny Ziziphus ("Rhamnus") amole.

Rhamnus rotundifolius Sessé & Moc. Fl. Mex. ed. 2. 61. 1894, not of earlier authors.

Type-locality: Seashores, Ponce, Puerto Rico, where said to flower in June. Referred by Urban (Symb. Anill. 4: 376. 1910) to the synonymy of Sarcocephalus reticulatus (Vahl) Urb. op. cit. 1: 357. 1899 [=Ziziphus reticulatus (Vahl) DC. in DC. Prodr. 2. 20. 1825]. In the S. & M. herbarium nos. 818 and 1458 (CNHM negs. 47642, 47643), with no. 1458 labelled "Rhamnus rotundolius N. [describ.]", were determined by Standley Sarcocephalus reticulatus. A specimen at G, labelled by Pavón "Rhamnus rotundolius Pto. Rico", is according to M. C. Johnston Ziziphus reticulata (Vahl) DC. (cf. Amer. J. Bot. 51: 1115). Another specimen, originally named Rhamnus rotundolius by Lagasca, is at BM. Nelson (1997) designated "Sessé 1458" as "material tipo" of R. rotundolius.


Rhamnus terebinthus DC. in DC. Prodr. 2. 26. 1825.

Type-locality: Mexico. Lectotype: In the Torner Collection, no. 1837, marked by Sessé "Rhamnus" and by de Candolle, "Rhamnus terebinthus". DC. plate 170, as cited in Calques des Dessins (Field Mus. neg. 30564), is a fair to poor copy of no. 1837. This was regarded by Standley (Contr. U. S. Natl. Herb. 23: 727. 1923) as a doubtful species. The type-illustration shows a part of a flowering and fruiting branch; the branchlets and lower leaf-surfaces are ferrugineous; the leaves are opposite, elliptic-ovate, crenate-serrate, obtusely pointed, up to 4 cm wide and 7 cm long; the flowers are about 3 in an axil,
pedicellate and fascicled; the styles and carpels are 3 and the fruit half-inferior; the flowers are 5-merous. Not found in the S. & M. herbarium. Except for the opposite leaves this might be Colubrina ehrenbergii Schl.\nLinn. 1815: 469. 1841. A specimen at BM, named by Lagasca as "Rhamnus ferrugineus Sessé Fl. Mex.", is Colubrina ehrenbergii according to M.C. Johnston (in litt. 1964) and probably also a part of the collection upon which the original illustrations of *R. ferrugineus* were based.

**Rhamnus turbinatus** Sessé & Moc. Fl. Mex. ed. 2. 62. 1894.\n
Type-locality: Near Tehuacán, Puebla. The vernacular name is given as "trompillo". Not found in the S. & M. herbarium. Described as a shrub 5 feet high, with alternate, ovate-oblong entire leaves tomentose beneath, axillary umbelate about 4-flowered peduncles, an involucre of setaceous bracts, corolla hermaphroditic and trigynous; fruit the size of a filbert, trilocular, 3-seeded. This may apply to some member of the Euphorbiaceae as well as to some Rhamnaceous plant, but I do not recognize it.

**Rhamnus zizyphus** [L.] sensu Sessé & Moc. Fl. Mex. ed. 2. 64. 1894.\n
Locality cited: "Nascitur in montibus Tepeacaulaca. Floret Maio". The locality cited was apparently Tepeacaulaca, Guerrero, ca. 10 km SE of Iguata, presumably visited during the "Second Excursion" in 1789 (McVaugh 1977, p. 184). Not found in the S. & M. herbarium. From the short description and the vernacular name *juyu* is, presumably, a species of *Ziziphus*.

**Rhizophoraceae**

**Rhizophora mangle** [L.] sensu Sessé & Moc. Pl. Nov. Hisp. 76. 1888; ed. 2. 71. 1893.\n
Locality cited: Probably near Coahuayana, Michoacán ("in inundatis Oceano Asiatico proximis. Vulgo Mangle"). Not found in the S. & M. herbarium. In the Candollean collection at Geneva, plate no. 447 apparently represents *Rhizophora mangle*. It is a copy, but no corresponding icon has been found in the Torner Collection. The S. & M. herbarium includes several specimens of this plant, correctly named, but none with any indication of collector, nor any locality data. The Expedition as a whole did not work on the shores of the Pacific before the compilation of the Pl. Nov. Hisp. for their visit to Coahuayana at the end of the year 1790. The one exception was the visit by Castillo to Acapulco in 1789, at which time he recorded the presence of *Rhizophora* there (MA, mss).

**Rosaceae**

**Acaena elongata** [L.] sensu Sessé & Moc. Fl. Mex. 29. 1893; ed. 2. 27. 1894.\n
Locality cited: San Nicolás, D.F. ("in frigidis Predii S. Nicolai montibus. Floret Junio"). Described at length. In the S. & M. herbarium no. 707 (CNHM neg. 57683), labelled by Mocinio as *Acaena elongata*. No. 337", was correctly named according to Standley. The number is not one of the *Icones Florae Mexicanae*, but probably the one assigned to this *species* in the attempt at numbering the entire herbarium, in Madrid after 1800. In that system most of the Rosaceae had numbers between 1012 and 1045, but *Acaena* was thought to be related to *Krameria*, for which the numbers are 333-336 (see McVaugh 1990, p. 209).

In the S. & M. herbarium no. 625 (CNHM neg. 57714), labelled "Acaena elongata? Nutka", was determined by Standley as *Sangusorba sicisthesis* C. A. Mey. and is evidently not a Mexican plant.

**Agrimonia eupatoria** [L.] sensu Sessé & Moc. Pl. Nov. Hisp. 79. 1888; ed. 2. 74. 1893.\n
Locality cited: México, D.F. ("Habitat Mexici et in Europa. Floret Junio"). Not described. In the S. & M. herbarium no. 1823 (CNHM negs. 47653, 47654), labelled "Agrimonia eupatoria", was determined by McVaugh as *Agrimonia macrocarpa* (Ryd.) Focke.

Locality cited [Pl. Nov. Hisp.]: In most cold mountains of America, Europe, and Asia. Not treated as a
Linnaean name, but "Hall. Helv. n. 1569" cited in synonymy. Ic. Fl. Mex. 127, cited in the manuscript of Pl. Nov. Hisp. but not in the published version, and also included in a list of icones 1–416, under the name "Alchemilla vulgaris [both words crossed out] Aphanes arvensis" (MA, mss.), is apparently represented by no. 1711 in the Torner Collection, which bears the number (in a hand unknown to me) "129" (not "127") and an annotation by de Candolle, "Alchemilla tormentilisae". The plant depicted is a species of Alchemilla. Not found in the S. & M. herbarium.


Type-locality: DC. "Mexico, locis temperatis frigidisque". Locality cited [Pl. Nov. Hisp.]: "in temperatis ac frigidis Novae Hispaniae locis, in Virginia et Carolina". Lectotype [DC.]: DC. plate 306, here designated. This is an original painting bearing the number "93", the hand-printed names "Prunus canadensis Lin." and "Coppolli Hrz. 95", and annotated by de Candolle "Cerasus capollin". A nearly identical duplicate is no. 0563 in the Torner Collection, also numbered "93", and inscribed as in DC. 306.

The paintings represent Ic. Fl. Mex. 93, one of the icones prepared during the early years of the Expedition's stay in Mexico City. The plant on which the drawing was based, known to Sessé & Mocino as *Prunus canadensis*, *Prunus virginiana* or sometimes *Prunus lusitanica*, and the plant known to Hernández (and still known in Mexico) as *capollin* or *capollin*, was surely a form of *Prunus serotina* Ehrh., viz. subsp. *capallii* (Cav.) McVaugh, Brittonia 7: 308. 1951. In the S. & M. herbarium no. 2102 (CNHM neg. 47702), first labelled "Prunus lusitanica", then later "canadensis", is *P. serotina* subsp. *capallii*.

The drawings do not accurately represent *Prunus serotina*, nor any related species; the fruiting inflorescences are shown as intricately branched, not as simple racemes. The plant described by Hernández (Thesaurus 95. 1651) is surely *Prunus serotina* subsp. *capallii*, but his illustration of the plant is likewise unrecognizable, having apparently gamopetalous flowers, branched racemes and a calyx quite unlike that of *Prunus serotina*.

The name *Prunus virginiana*, q.v., was assigned to the same plant in the Pl. Nov. Hisp., where Ic. Fl. Mex. 93 was cited. This is one of the few instances of a name published in the *Prodrorum* and based primarily on one of the Sessé & Mocino icones, when it seems evident from the locality cited by de Candolle or of his collaborators, that he had access to at least parts of the manuscript of the projected *Flora Mexicana* as well as to the paintings.


Type-locality: "in Mexico". Lectotype: "f.l. mex. ic. Fructus ignotus". This is a reference to DC, plate 307, not noted in Calques des Dessins (Field Mus. neg. 30646), a partial copy based on no. 0070 in the Torner Collection, annotated by de Candolle, "Cerasus ferruginea". The painting depicts a flowering branchlet of the rather uncommon but widely distributed Mexican plant more recently known as *Prunus zingiber* (Standl. Publ. Field Mus. Nat. Hist., Bot. Ser. 11: 157. 1936). This species is represented in the S. & M. herbarium by no. 3812bis (CNHM neg. 47681).


This reference is based no. 0681 of the Torner Collection, annotated by de Candolle, "Bertolonia gueroides", and on DC. plate 331 and DC. plate XVII (sketches only; Field Mus. neg. 30301), both copies after Torner 0681. In G-Del is a specimen of this species, annotated by Pavón with an unpublished name and the words "Gen. Nov. de Nueva España"; another sheet, probably part of the same collection, is in herb. Webb (Fl.). Not found in the S. & M. herbarium.


Type-locality: Mexico. Holotype: at BM, ex herb. Lambert. The original citation read, in part, "In an extensive Mexican collection, forming part of the Herbarium of the Spanish botanists Sessé and Mocino, which has lately come into Mr. Lambert's possession ...". In the S. & M. herbarium this species was originally identified as a species of *Geum* (no. 2112; CNHM neg. 47690). Lectotype [DC.]: no. 1674 of the Torner Collection, labelled "Geum ? sessiliflorum" by de Candolle; DC. plate 297 is a good colored copy, marked "Geum polygamum".

[Crataegus].


Localities cited: México, D.F. ["in frigidis ac temperatis Novae Hispaniae locis prope Mexicum praecipue et in Virginia, Floret Julio"]. Rather fully described, with reference to the vernacular name, "Texocotl, Mexican". Not found under the name of "Crataegus crus galli" in the S. & M. herbarium, but no. 2083 (CNHM neg. 47691), labeled "Mespulis Texocotl", was determined by Standley as Crataegus mexicana DC. ("Sessé & Moc.").

A note under Mespulis pyracantha says that this is the preferred name for the plant formerly called Crataegus crus galli, and the description published for that species belongs to Mespulis pyracantha. "Descripito Crataegi Crus galli huc pertinet, errore enim Mespulis haece inter Crataegeti [sic] species locata fuerat."


Localities cited [Pl. Nov. Hisp.]: Santa Rosa, Guanajuato ["in oppidum Sanctae Rosae prope Guanajuatun et in India, Floret Julio"]. The work of Linnaeus was not mentioned by Sessé & Mociño, but the character [diagnosis] was repeated verbatim from the Species Plantarum, as was the locality "India". Not found in the S. & M. herbarium. Not described, but perhaps the same species as Crataegus inermis, q.v.

Crataegus inermis Sessé & Moc. Pl. Nov. Hisp. 84. 1888; ed. 2. 79. 1893; Fl. Mex. ed. 2. 125. 1894.

Type-locality: San Miguel [de Allende] ["monibus Michaelopolitaniis, Floret Junio"], Guanajuato. 1c. Fl. Mex. 349; this is presumably the same as an original painting at MA, which bears the number "51" and the hand-printed name "Crataegus Inermis". It was listed by name, with description, and identified as RJL Lám. 83 in the Catálogo de las Láminas del Real Jardín Botánico (RJB 1987, p. 337). It was no. 51 of a manuscript list by Mociño (MA, mss.), no. 27 of Ramírez, Anales Inst. Méd.-Nac. México 6, pt. 1: 76. 1903. No. 0891 in the Torner Collection, without inscription except for an annotation by de Candolle, "Mespulis distyla", apparently represents the same species, but is based on a different model. The plant depicted is Amelanchier denticulata (H. B. K.) Koch. Dendroli. 1: 183. 1869. Apparently Sessé & Mociño first attempted to identify this species with Crataegus inermis, etc., of the Flora Lapponica of Linnaeus (publ. 1737) (C. Aria ß suecia of the Species Plantarum of 1753), then planned to give it a new name, Crataegus minor. Although the copy at Madrid is labelled Crataegus inermis, in Mociño's list of the same series it is called Crataegus minor. In the S. & M. herbarium no. 2128 (CNHM neg. 47685) bears both names, on different labels; the plant is Amelanchier denticulata. Nelson (1997) designated "Sessé 2128" as "material tipo" of C. inermis.

Crataegus mexicana DC. in DC. Prodr. 2: 629. 1825, with citation of "ic. fl. mex. ined." as the basis for the name.

Type-locality: "in Nová Hispaniá". Lectotype: In the Torner Collection, no. 0879, annotated "Mespulis mexicana" by de Candolle. The fruits were described in the protologue as "flavescentes 13–15 lin. longi", as shown in the painting. DC. plate 259, as cited in Calques des Dessins (Field Mus. neg. 30643), is a colored copy of Torner 0879, annotated "Mespulis tejocote". In the S. & M. herbarium no. 2083 (CNHM neg. 47691) identified by Standley as this species, was named by the collectors "Mespulis Texocotl"). According to Eggleston (Bull. Torrey Bot. Club 36: 502, 506–508. 1909) and Standley (Contr. U. S. Natl. Herb. 23: 336. 1922), this is the common Mexican species of Crataegus, and the only one known from most of the southern part of the Mexican plateau.

J. B. Phipps (Sida Bot. Misc. 15: 21. 1997), in a definitive paper on the species of Crataegus in northern Mexico, also treats this as "the most wide-ranging of the Mexican Crataegi". He cites the name (incorrectly) as "Crataegus mexicana Moc. & Sessé in DC.", and the type (incorrectly) as Sessé, Mocino, Castillo & Maldonado 2083 (holotype, MA!). De Candolle did not study the herbarium material, and he, of course, not Sessé & Mociño, provided the epithet and the description in the protologue.

Crataegus minor Sessé & Moc. Pl. Nov. Hisp. 84. 1888; ed. 2. 79. 1893; Fl. Mex. ed. 2. 126. 1894.

Type-locality: Cold mountains of Guanajuato ["in frigidis Guanaxuati montibus, Floret Junio"). Evidently the same plant as Crataegus inermis Sessé & Moc., q.v.

Geum ? cercocarpoides Seringe in DC. Prodr. 2: 554. Nov. 1825, with citation of "DC. adnot. in. flor. mex." as the basis for the name.

Type-locality: "in Mexico". Lectotype: "fl. mex. ined.", i.e. no. 0538 of the Torner Collection, labelled "Geum ? pediculatum" by de Candolle; DC. plate 296, as cited in Calques des Dessins, is a good colored copy. The plant depicted is Fallopia paradoxa (D. Don) Endl. ex Torrey in Emory, Notes Mil. Reconn. 140. 1848. It is represented in the S. & M. herbarium by no. 2111 (CNHM neg. 47692), originally labelled as a Geum, the specific epithet unpublished: see Sieversia paradoxa.


Type-locality: San Juan de los Lagos, Jalisco. Not found in the S. & M. herbarium under this name, but the description suggests Cowania mexicana D. Don. q.v. No. 1674 in the Torner Collection, although not named by Sessé & Mociño, evidently represents the same species. It was reproduced in full color, reduced to ca. 13.8 by 10 cm., by McVaugh (1998, fig. 5, p. 133). In the S. & M. herbarium no. 2112 (CNHM neg. 47690), determined by
Standley as *Cowania mexicana*, was called originally “Geum polygonum” with the notation “An genus novum?” (see under *Cowania mexicana* for another use of the name *Geum polygonum*). Under the description of *Geum resinum* is the observation: “Variet floribus masculis in eadem planta cum germinum rudimentos”, suggesting a basis for the epithet “polygonum”.


*Hirtella acayacensis* DC. in DC. Prodr. 2: 529. 1825, with citation of “fl. mex. ic. et mss. ined.” as the basis for the name.

Type-locality: “In Mexici Acayacae montibus” [i.e., near Acayucan, southern Veracruz]. Type: “fl. mex. ic.”, i.e., from the description apparently no. 1798 of the Torner Collection, labelled [by Séssé], “Hirtella americana?”, and annotated by de Candolle, “Hirtella octandra”. DC. plate 301, not cited in Calques des Dessins, labelled “Hirtella octandra (d’a après la page)”, is a copy. Not located in the S. & M. herbarium. Referred with doubt by Standley (as “acayacensis”) to the synonymy of *Hirtella americana* Aubl. (Conr. U. S. Natl. Herb. 23: 344. 1922). The latter is now properly known as *Hirtella racemosa* Lam. Encycl. 3: 133. 1789. The determination is questionable, as this latter species has 5-merous flowers and 5–7 stamens, whereas the original *icones*, as noted by de Candolle, show the flowers with 4 petals and 8 stamens.


Type-locality: Mountains of Ahualuleco, ?Tabasco?, where said to flower in October. Most probably this was not intended as a new name, no reference is made to the work of Linnaeus, but the Linnaean name was treated by Palau and must have been known to Séssé & Mocino. No character was provided, as in accordance with Linnaean practice this was not thought to be necessary for monotypic genera. Described as having 3 long filaments, 5 white petals, and simple terminal racemes as long as the leaves; leaves glabrous on both sides. Probably of this genus; in the S. & M. herbarium no. 459 (CNHM neg. 47695), labelled “Genus...ic. Hirtella 3-andra”, is according to Standley *Hirtella triandra* Sw. Another specimen, no. 876 (neg. 47694), is labelled “Hirtella Americana”; this was determined by Standley as *Hirtella racemosa* Lam. Nelson (1997) designated “Sessé 876” as “material tipo” of “Hirtella americana Séssé & Moc.”, but this is inappropriate as no such name exists.

On the page with the above (Pl. Mex. ed. 2. 61. 1894) is a long description headed GENUS? and followed by a locality [“in Acayucae montibus. Floret Augusto”] and the note “Obs. Hirtella Americana Jacq.”. The plant described is clearly not the same as the previous *Hirtella americana*, as the filaments are described as 8 in number, 3 times as long as the petals, the flowers 4-merous and purple, not white.

*Hirtella castanea* DC. in DC. Prodr. 2: 529. 1825, with citation of “fl. mex. ic. ined.” as the basis for the name.

Type-locality: “in Nová Hispaniá”. Lectotype: In the Torner Collection, no. 1526, a plate without inscription; DC. plate 304, as cited in Calques des Dessins (Field Mus. neg. 30645), is a good copy of no. 1526. Referred by Standley (Contr. U. S. Natl. Herb. 23: 344. 1922) to the category of “doubtful species”, with the comment that it is “probably the same as H. triandra Swartz”. I can add nothing to this; see above under *H. americana*.


Type-locality: “in Mexico”. Lectotype: In the Torner Collection, no. 0103, labelled “Hirtella dodecandra” by de Candolle. DC. plate 302, as cited in Calques des Dessins (Field Mus. neg. 30644), is an incomplete copy of Torner 0103.

Long regarded as an independent species, this was referred by Standley and Steyermark (Fieldiana, Bot. 24, pt. 4: 443. 1946) to the synonymy of *Couepia polygona* (H. B. K.) Rose, Contr. U. S. Natl. Herb. 5: 196. 1899, with the comment that “C. polygona and C. dodecandra have been maintained by some recent authors as distinct species, separated by the number of stamens, but there appears to be no good basis, if any at all, for recognizing more than a single species of *Couepia* with tenomosene leaves in Central America”. The plant appeared in the S. & M. herbarium, not named by the collectors.

*Hirtella oblongifolia* DC. in DC. Prodr. 2: 529. 1825. “H. rosea fl. mex. ined. ?”, cited in synonymy by DC., i.e.

Type-locality: New Spain. Lectotype: In G-DC., “v.s. comm. à cl. Lagasca”. The specimen (Field Mus. neg. 7013) is marked “[by Lagasca] "Hirtella sp. nov. Lag. ex Nov. Hispania n. 78" and by de Candolle, "Lagasca 1807". It is apparently referable to *Hirtella racemosa* Lam. Encycl. 3: 133. 1789, as supposed by Standley (Contr. U. S. Natl. Herb. 23: 344. 1922 where *H. oblongifolia* is referred to “americana Aubl.”). The reference by de Candolle to the “fl. mex. ined.” was presumably based on no. 0503 of the Torner Collection, a partially colored drawing without inscription (with rose-colored flowers !), of which DC. plate 303, cited in Calques des Dessins, but surely not a type, is a colored copy.
"Potentilla chiapensis" N.

In the S. & M. herbarium no. 2117 (CNHM neg. 47670), labelled as above, was determined by McVaugh about 1960 as Rubus stellatus J. E. Smith. As the latter is an Arctic and subarctic species, it appears that my original determination was incorrect, or that there has been a mixture of labels.

**Potentilla linearloba** Seringe in DC. Prodr. 2: 582. 1825, with citation of "fl. mex. inc. inc. icon. 298" as the basis for the name.

Type-locality: Mexico. Lectotype: DC. plate 298, as cited by Seringe, i.e., and in Calques des Dessins (Field Mus. neg. 30642). This is a fair copy of no. 1590 in the Torner Collection, which is annotated by de Candolle, "Potentilla linearloba". By Rydberg (N. Amer. Flora 22: 339. 1908) this name was regarded as a synonym of *Potentilla candidans* Humb. & Bonpl. ex Schlecht. Mag. Neuesten Entdeck. Gesammten Naturk. Ges. Naturf. Freunde Berlin 7: 285. 1815. The latter is represented in the S. & M. herbarium by no. 2125 (CNHM negs. 47679, 47680), originally labelled as a *Potentilla* with an unpublished epithet.


Localities cited: [in Siberia et Sancto Heremo P.P. Carmelitarum. Floriote Juici] ("Habitat et florae eum praecedentem" = *P. sericea*). Description. A sessile herb with dark purple corolla hardly longer than the calyx. In the S. & M. herbarium no. 2123 (CNHM neg. 47677), labelled "Potentilla argentea" and "Potentilla recta?", and no. 2124 (neg. 47678), labelled "Potentilla [recta crossed out]" and "Potentilla Argenta", were both determined by McVaugh as *Potentilla rubra* Willd. ex Schlecht.


Localities cited: México, D.F. ["in Mexicanorum Carmelitarum Eremo, adnexique Sancti Angelii et Sancti Augustini montibus et in Siberia. Floreto Martio"]. Adequately described. In the S. & M. herbarium no. 2125 (CNHM negs. 47679, 47680), labelled "Potentilla sericea", was determined by McVaugh as *Potentilla candidans* Humb. & Bonpl.

**Prunus domestica** [L.] sensu Sessé & Moc. Pl. Nov. Hisp. 84. 1888; ed. 2. 78. 1893.

Localities cited: México, D.F. ["in Europa et Tacubayensi Archiepiscopali horto"]. Not described, but its medicinal applications listed. Not found in the S. & M. herbarium. Not identified.


Localities cited: See above under *Cerasus capollin*. The plant known to Sessé & Mocino as *Prunus virginiana* was

**Prunus serotina** subsp. *capollin* (Cav.) McVaugh; cf. under *Cerasus capollin*.

In Fl. Mex. 93, as discussed above, was so badly drawn as to be misleading. It nevertheless formed the primary basis of *Cerasus capollin* of de Candolle and Seringe. A more nearly accurate drawing in the Torner Collection is no. 5762, also numbered "93", and annotated by de Candolle as "Cerasus capollin". Seringe (in DC. Prodr. 2: 539. 1825) also cited "Prunus virginiana fl. mex. inc. inc. mm.", but no illustration labelled "Prunus virginiana" has been located.

"Rubus? Bucurelenis* Sp. N."

In the S. & M. herbarium no. 2072 (CNHM neg. 47663), so labelled on one ticket, was determined by McVaugh as *Rubus pedatus* J. E. Smith. On the same sheet, on different tickets, are the inscriptions "Rubus Sxaxitlis?" and "Rubus [Saxatils crossed out] Pedatus 1027". This suggests that by the time of the attempted enumeration of the herbarium after the Expedition returned to Spain (McVaugh 1990, p. 209), when the species of *Rosaceae* were given the numbers 1012-1045, the name *Rubus pedatus* had been taken as the correct one for this species, superseding the provisional "Rubus? Bucurelenis", the latter doubtless referring to Maldonado's visit to southern Alaska in June 1792 (cf. McVaugh 1977, p. 156). See also *Rubus hispidus*, below.

**Rubus guatimalensis** Mocínó, Fontiquera 37 [Guat. Prima Flora] 89. 1993. [Name not validly published; see a note by the editors stating that no new names are published in Guat. Prima Flora].

Localities cited: Totonicapán, Guatemala, and San Cristóbal de las Casas, Chiapas ["in Totonicapániae ac Civitatis Regiae montibus. Floret Maiio et Junio"]. Described as a woody erect unarmed shrub with roughish coriaceae leaves, white "elegant" flowers, and acidulous very flavorful fruit with thick seeds. The plant described was probably *Rubus trilobus*, q.v., but in the S. & M. herbarium no. 2071 (CNHM neg. 47708), labelled "Rubus guatimalensis N.", was determined by Standley as *Rubus spectabilis* Pursh.


Localities cited: Uruapan and Ario, Michoacán ["in Uruapam Provinciae Michoacanensis, Ario, et Canada. Floreto Augusto"]. Not described. Several specimens in the S. & M. herbarium are labelled "Rubus hispidus", but none appears to represent a Mexican species. One specimen (no. 2080; CNHM neg. 47713) is labelled on one ticket, "Rubus Bucharelenis N.", which implies that the plant was collected by Maldonado in southern Alaska in June 1792; the specimen was identified by Standley as *Rubus vitifolius* Schlecht. & Cham.
Rosaceae

Rubus nutkanus Seringe in DC. Prodr. 2: 566. 1825, with citation of “Moc. pl. Nutk. icon.” as the basis for the name.

Type-locality: “In Americâ boreali”. Lectotype: In the Torner Collection, no. 1966, annotated by de Candolle “Rubus nutkanus” and “Notka”. DC. plate 291, as cited in Calques des Dessins (Field Mus. neg. 30638), is a fair copy of Torner 1966. Evidently the type was painted during Moenino’s sojourn on Nutka Island, B.C., Canada. The plant depicted is surely the same as *Rubus parviflorus* Nutt. Gen. 1: 308. 1818. This species, according to a determination by Standley, is represented in the S. & M. herbarium by no. 2067 (CNHM neg. 47705), originally thought by the collector to be *Rubus molecanus*, later *Rubus odoratus*.


Type-locality: Ayahualtempan, Guerrero. Not found in the S. & M. herbarium; not identified. Evidently some member of the group “Rubus”, described only as having all the leaves 5-foliolate, and the leaves and petioles angulate.

Rubus trilobus Seringe in DC. Prodr. 2: 566. 1825, with citation of “mex. ined. icon.” as the basis for the name.

Type-locality: “in Mexico”. Lectotype: DC. plate 290, as cited in Calques des Dessins (Field Mus. neg. 30638); this is a better-than-fair partial copy of no. 0677 in the Torner Collection, which is annotated by de Candolle “Rubus trilobus”. In the S. & M. herbarium are two sheets of this species, according to determinations by Standley. No. 2065 (CNHM neg. 47711) is labelled by the collectors “Rubus trilobus”. No. 2066 (neg. 47712) is labelled “[Rubus crossed out] Rosa angulata N. [description]. Habitat in vulcano Orizav[a]”. At G, ex herb. Moricand, is a sheet determined by Focke and marked by Pavón “[or Sessé] “Rubus trilobus” and by Moricand, “Mexique Mr. Pavon 1827”. See also *Rubus guatimalensis*, above.


“Geum plumosum Sessé & Moc.”, cited in synonymy by D. Don, i.e., as the basis for *Sieversia paradoxa*. *Fallugia paradoxa* (D. Don) Endl. ex Torr. in Emory, Notes Mil. Reconn. 140. 1848.

Type-locality: Mexico. Holotype: Sessé & Mociño in herb. Lambert, now at BM. In the S. & M. herbarium no. 2111 (CNHM neg. 47692), labelled “Geum plumosum N.”, is *Fallugia paradoxa*. This very characteristic species was also described by de Candolle, on the basis of a Sessé & Mociño painting, a few months after the publication of *Sieversia paradoxa*; see *Geum ? cercocarpoides*.

Spirea cuneifolia Sessé & Moc. Fl. Mex. ed. 2. 126. 1894, not of earlier authors.

Type-locality: “In clivo de la Librería”, near San Juan Amatlajue, Hidalgo. In the S. & M. herbarium no. 2079 (CNHM neg. 47716), labelled “Spirea cuneifolia N. d. i.e. 3. p. f. 265. [descr.]”, is according to Standley *Spirea hartwegiana* Rydb. N. Amer. Flora 22. 246. 1908. Judging from the description in the Fl. Mex., the plant treated there is the same one. Nelson (1997) designated “Sessé 2079” as “material type” of *S. cuneifolia*.


Type-locality: Santa Fe, near México, D.F. “[in collibus de Sancta Fe hau et procual a Mexico. Floret Septemberi]”. In the S. & M. herbarium no. 2078 (CNHM neg. 47697), labelled “Spirea elliptica N. d. i.e. 3. p. f. 265. [descr.]”, is one of the forms of *Holodiscus argenteus* (L.f.) Maxim. Trudy Imp. S.-Peterburgsk. Bot. Sada 6: 254. 1879. Judging from the description in the Fl. Mex., the plant treated there is the same one. Nelson (1997) designated “Sessé 2078” as “material type” of *S. elliptica*.

Spirea opulifolia*.

This is a Linnaean name not used in publication by Sessé & Mociño. In the Torner Collection no. 1965, annotated by de Candolle “Spirea opulifolia” and “Notka”, represents *Physocarpus capitatus* (Pursh) Kuntze, a plant of coastal regions from California northward.


Locality cited: El Desierto de los Leones, D.F. “[Incolit Montes Sancti Ereni P.P. Carmeliarum. Floret Junio ut Julio]”. Description. In the S. & M. herbarium no. 2080 (CNHM neg. 27715), labelled “Spirea tomentosa: 1020”, was determined by Standley as *Spirea douglasii* Hook., a species of the Pacific Northwest, from California to British Columbia. The number “1020” did not pertain to this particular specimen but was the one assigned to this species in Madrid after 1800, in an attempt to number the entire herbarium. In that system most of the Rosaceae had numbers between 1012 and 1045 (cf. McVaugh 1990, p. 209).

Rubiaceae

Borreria haenkeana DC. in DC. Prodr. 4: 547. 1830. “Sperm(aco) tenuior Pav. ! ined.”, cited in synonymy by DC., i.e., as one of the bases for *Borreria*


No. 0410 in the Torrner Collection, surely depicting a plant of this affinity, bears the hand-printed name “[Scabiosa ? crossed out]”, a name in *Asperula* crossed out, and the handwritten name (apparently by Sessé), “Spermacoce tenuior”. In the S. & M. herbarium nos. 577 and 635 (CNHM negs. 47727, 47729), labelled “Spermacoce tenuior”, are according to Standley *Borreria suaveolens* G. Mey. Prim. Fl. Essiq. 81. pl. 1. 1818.


*Borreria podocophala* DC. in DC. Prodr. 4: 542. 1830.

Type-locality: “In Mexico ? aut in Cubá ?”. Type: In G-DC, labelled “Mexique ? 1826.”. Probably not from the herbarium of S. & M.; this species is not otherwise represented in that herbarium.

*Borreria subulata* DC. in DC. Prodr. 4: 543. 1830.


*Bouvardia cordifolia* DC. in DC. Prodr. 4: 366. 1830. “Ixoraceifolia fl. mex. ic. ned.”, cited in synonymy by DC., i.e., as the basis of *Bouvardia cordifolia*. *Hedyotis lutea* Sessé & Moc. q.v.

Type-locality: Mexico. Lectotype: In the Torrner Collection, no. 1013, without inscription except for an annotation “Ixoraceifolia” by de Candolle. DC. Plate 487, as cited in Calques des Dessins (Field Mus. neg. 30696), is a fair copy of no. 1013. At one time this was considered by Standley a doubtful species (Contr. U. S. Natl. Herb. 23: 1365. 1926), but nos. 567, 610, and 610bis in the S. & M. herbarium (CNHM negs. 47737–47739) were identified by him as *Bouvardia cordifolia* DC. Bullock (in Hook. Ic. Pl. pl. 3323. 1936) maintained *B. cordifolia* as a valid species and equated it with *Hedyotis lutea* Sessé & Moc., of which he cited a specimen (at BM) from “Temescaltepec”. W. H. Blackwell, in a revision of *Bouvardia*, also maintained *B. cordifolia* (Ann. Missouri Bot. Gard. 55. 9. 1968), assuming that the “type” was a Sessé & Mocíno specimen at MA (which he had not seen), and that DC. plate 487 was “a drawing of the type”. These assumptions are not tenable unless it can be shown that de Candolle studied herbarium material in addition to the icon.

*Bouvardia quaternifolia* DC. in DC. Prodr. 4: 365. 1830. “Carphalea ? pubiflora fl. mex. ic. ned.”, cited in synonymy by DC., i.e., as one of the bases of *Bouvardia quaternifolia*.

Type-locality: Mexico. Lectotype: *Alamán s.n.*, in G-DC, not seen. The reference to “fl. mex. ic. ned.” was based on no. 0920 of the Torrner Collection, annotated by de Candolle, “Carphalea pubiflora”. DC. Plate 490 (a copy, not photographed) is marked “Carphalea pubiflora”, and this has been written over by de Candolle, “Bouvardia quaternifolia”. The plant depicted is apparently *Bouvardia ternifolia*. Not found in the S. & M. herbarium. Referred by Standley (Contr. U. S. Natl. Herb. 23: 1362. 1926) and by Blackwell (1968, p. 23) to the synonymy of *B. ternifolia* (Cav.) Schlecht.


Localities cited [Pl. Nov. Hisp.]: Near Mexico, D.F. ["in Mexici circuitibus"]; [Fl. Mex.]; ["in Mexici circuitibus, alisque temperatis Nouae Hispaniae regionibus. Floret Aestate, uere et Autumno"]. The names *Hedyotis mexicana* and *H. fruticosa* are equated as above because the treatments in the two floras differ only in details of arrangement and wording. No plate identifiable with the above names has been located in the de Candolle collection. Ic. Fl. Mex. 23 (cited in Pl. Nov. Hisp.) is presumably represented by the illustration, or a copy of it, that was reported by de Candolle under the name of *Bouvardia jacquinii*. In the Torrner Collection, nos. 0431 and 0574 were originally labelled “Ixora americana” but were annotated by de Candolle as *Bouvardia ternifolia* (Cav.) Schlecht., of which *B. jacquinii* is a later synonym. In the S. & M. herbarium nos. 639 and 645 (negs. 47751 and 47752), originally labelled *Ixorax* (or *Hedyotis*) *americana*, are referable to *B. ternifolia* according to Standley. No. 535bis (CNHM neg. 47750), labelled “Hedyotis fruticosa. ic. No. 234. 4–1”, was determined by Standley as *Bouvardia ternifolia*. The number “234” did
not pertain to this particular specimen but was the one assigned in Madrid after 1800 to this species, during an attempt to number the entire herbarium. In that system numbers assigned to the tetrandrous Rubiaceae ranged from 234 to 292 (cf. McVaugh 1990, p. 209). Blackwell (1968, p. 25) typified the name Hedyotis fruticosa Sessé & Moc. ("Type Sessé & Mocino s.n. BM, F") and referred the name to the synonymy of B. obovata. Nelson (1997) designated "Sessé 553bis" as "material tipo" of "Hedyotis fruticosa Sessé & Moc.". These typifications are inappropriate as no such name exists.

Evidently Sessé & Mocino were not sure of species limits in this group of species with verticillate leaves. No. 553 in the herbarium (negr. 47747, 47748) is labelled "Hedyotis fruticosa. i.e.", but the plant is referable to Bouvardia obovata H. B. K. Nov. Gen. & Sp. 3: 385. 1820.


Type-locality [DC.]: Mexico; [Fl. Mex.]: Dry places near Tehuacán, Puebla ("in aridis Tehuacani circuitibus. Floret Maio"). Lectotype [DC.]: In the Torner Collection, no. 1662, inscribed with the number "75" (which I cannot explain) and an annotation by de Candolle, "Catesbaea erecta". DC. plate 460, labelled "Hedyotis spinescens", cited in Calques des Dessins (Field Mus. neg. 30689), is an unfinished copy of no. 1662. In the S. & M. herbarium no. 560 (CNYM neg. 47740), labelled on one ticket? [in the hand of Ignacio León], "Hedyotis spinescens No. 13. Ixora tepeacensis que llama Mociño. Quando paré por Tepeaca para Tehuacan la vi en flor y a la vuelta la encontre en ["Truta"], was determined by Standley as Bouvardia erecta (DC.) Standl. N. Amer. Flora 32: 110. 1921. A sheet in herb. Webb (FI) is marked by Pavón "Hedyotis spinescens de N E". Blackwell (1968, p. 18) agreed that both Catesbaea erecta and Hedyotis spinescens are correctly treated under the name of Bouvardia erecta. He cited "Sessé & Mocino s.n. (MA, not seen) as "type" of Catesbaea erecta, and added "pl. 460 of the Calques des dessin[sic] ... is a drawing of the type". These assumptions are not tenable unless it can be shown that de Candolle studied herbarium material in addition to the icon. Nelson (1997) designated "Sessé 560" as "material tipo" of H. spinescens, and included a full transcription of both labels on the specimen.

The number "13" on one original label of Hedyotis spinescens apparently refers to one of a series of more than a hundred specimens that were presented to the botanists of the Expedition by Ignacio León, who lived near Tepeaca, Puebla; for discussion, and a partial listing of this series, see McVaugh 1990, pp. 205, 208. For explanation of the number "239" on the other label, see Bouvardia ternifolia, above.


Reported by de Candolle (in DC. Prodr. 4: 533. 1830) from "Guiana ... Trinitatis ... et forsan in Mexico (si C. cyanocarpa fl. mex. ic. ined. huc. refer.)". This is a reference to no. 1975 in the Torner Collection, which bears an annotation (apparently by Sessé), "Tab. 9"; and one by de Candolle, "Cephalis cyanocarpa". DC. plate 452 (Field Mus. neg. 30684) is a very closely similar copy, in which the fruit is shown as bright blue. Apparently not represented in the S. & M. herbarium.


Localities cited: Apatzíngán, Michoacán ("Habitat ad torrentes fluminis praeidum Sanctae Iphigeniae irrigantis et in Apatzíngan. Floret Septembris"). I have not located the praeidum called Santa Iphigenia; see a note in Contr. Univ. Michigan 11: 180. 1977. The juxtaposition of the name with that of Apatzíngan and its mention in Pl. Nov. H isp. imply that it may have been a place visited by the Expedition in 1790-1791. Not found in the S. & M. herbarium. From the rather full description, I see no reason to doubt that the genus was correctly identified.

Chiococca axillaris, see Margaris nudiflora under Caprifoliaceae.

Chiococca nocturna, see Amaranthaceae.


Localities cited [Pl. Nov. H isp.]: Cuernavaca, Morelos ("in Surinam, America Meridionalis et Quahuanahuae agris. Floret Maio"); [Fl. Mex.]: "in calidis Cordovae montibus. Floret Augusto". Described; the descriptions in the two florae are by no means identical. In the S. & M. herbarium no. 1601 (CNYM neg. 47838), labelled "Chiococca paniculata", and no. 5480 (neg. 47839), labelled on two separate tickets "Chiococca paniculata [etc."]", were determined by Standley as Machaena velutina Mart. & Gal. Nelson (1997) transcribed most of the material on the labels from neg. 47839 and designated "Sessé 5480" as "material tipo" of "Chiococca paniculata Sessé & Moc.", which is inappropriate as no such name exists.


Locality cited: "in calidis Noviae Hispaniae montibus. Floret Augusto". No previous authority was cited in Fl. Mex., but Sessé & Mocíto evidently derived Jacquin’s name from Palau (2: 250. 1785), where the name C. racemosa is followed by another Jacquin name (also
published by Sessé & Mocíño, l.c.), Chiococca nocturna, with contrasting character "folis alternis" instead of "folis oppositis" as in C. racemosa. In Fl. Mex. the character of C. racemosa begins with "folis oppositis", then continues at length. Nelson (1997) designated "Sessé 1602" as "material tipo" of "Chiococca racemosa Sessé & Moc.", which is inappropriate as no such name exists.

In the S. & M. herbarium no. 885 (CNHM neg. 47755), labelled "Chiococca Racemosa", and no. 1602 (neg. 47757), labelled "Chiococca racemosa. 1st", were determined by Standley as Chiococca alba (L.) Hitchc.

Coffea rosea DC. in DC. Prodr. 4: 499. 1830, with citation of "fl. mex. ic. ined." as the basis for the name.

Type-locality: Mexico. Lectotype: In the Torner Collection, no. 1033, without inscription except for an annotation by de Candolle, "Coffea rosea". DC. plate 479, as cited in Calques des Dessins (Field Mus. neg. 30693), is a good copy of no. 1033. Not found in the S. & M. herbarium. Regarded by Hensley (Biol. Centr. Amer. Bot. 2: 40. 1881) as a "Doubtful Mexican plant". Apparently not noted by Standley in the Trees and Shrubs of Mexico. The type is a seemingly carefully and well-drawn illustration of some fleshy-fruited Rubiaceae plant, almost certainly one of the paintings done by Escher in Cuba or Puerto Rico, probably the latter, in 1796. Not further identified.

Coutarea flavescens DC. in DC. Prodr. 4: 350. 1830, with citation of "fl. mex. ic. ined." as the basis for the name.

Type-locality: Mexico. Lectotype: No. 0734 of the Torner Collection, annotated "Coutarea flavis" by de Candolle. DC. plate 459, as cited in Calques des Dessins (Field Mus. neg. 30688), is an incomplete copy of Torner 0734. It is annotated "Coutarea flavis" and, by Alphonse de Candolle, "Sans doute C. flavescens DC.". Removed by Standley (Contr. U. S. Natl. Herb. 23: 1367. 1926) to the synonymy of Coutarea hexandra (Jacq.) Schum. in Mart. Fl. Bras. 6, pt. 6: 196. 1889. Not found in the S. & M. herbarium as "Coutarea hexandra", but nos. 1621 and 5470 (CNHM negs. 47762; 47763), determined by Standley as Coutarea hexandra, were referred by the collectors to Portlandia grandiflora, q.v. Probably Portlandia grandiflora of the Fl. Mex. was this plant, i.e., Coutarea hexandra (Jacq.) Schum.


Lectotype [DC.]: No. 0856 of the Torner Collection, annotated by de Candolle "Coutarea latiflora" and "copalchi". DC. plate 458, as cited in Calques des Dessins (Field Mus. neg. 30687), is an original painting, nearly identical with Torner 0856, annotated "Portlandia hexandra" and "copalchi".

Bullock showed that the plant known to Standley as Coutarea latiflora was in fact another species (Hintonia standleyana Bullock) and that the true Coutarea latiflora DC. was in fact the Mexican plant that had been passing as C. pterosperma. The common name copalchi was quoted by de Candolle (?from Mocíño’s lost manuscript). The same name is cited in the Pl. Nov. Hisp. for Portlandia hexandra and, as Bullock states, it is commonly applied in Mexico to the plant known as Hintonia latiflora (or Coutarea pterosperma), thus confirming the supposition that all these names apply to the same plant. In the S. & M. herbarium no. 1620 (CNHM neg. 47764), labelled "Portlandia hexandra", is according to Standley "Coutarea latiflora Moc. et Sessé" (i.e., the true latiflora).

Crusea calceolus DC. in DC. Prodr. 4: 567. 1830. "Spermacoce capitata fl. mex. ic. ined." and "S. hirta Pav. ined." were cited in synonymy by DC., i.e., as part of the basis for Crusea calceolus. The plant is not Spermacoce capitata Sessé & Moc. Pl. Nov. Hisp. 17. 1888; ed. 2. 16. 1893.

Type-locality [DC.]: Mexico. Lectotype [DC.]: "Pavon" in herb. Dunant, not seen. A fragment is in G-DC, marked by de Candolle "Spermacoce hirta Pav. in h. Dunant" and "Mexique". Another sheet, perhaps a part of the same gathering, is at G, ex herb. Moricand, marked "Nov. Esp. Mr. Pavon" and annotated by de Candolle. The reference to "Spermacoce capitata fl. mex. ic. ined." was based on the no. 5011 of the Torner Collection and DC. plate 497, which see under Spermacoce capitata, below.

In the S. & M. herbarium, according to determinations by Standley, three specimens represent Crusea calceolus; of these no. 63 (CNHM neg. 47770) is labelled "Spermacoce capitata N.", no. 586 (neg. 47768) is labelled "Spermacoce hirta"; and no. 587 (neg. 47769) with an epithet referring to the hispate stems.

According to W. R. Anderson (1972), a duplicate of no. 633 (at F), represents Crusea hispida, not C. calceolus. It seems more than likely that two species were confused by Sessé & Mocíño, as their Spermacoce capitata was described from Pátzcuaro, Michoacán, but their illustration was based on a plant probably from Morelos or Guerrero.

Crusea cocinea DC. in DC. Prodr. 4: 567. 1830. "Spermacoce cocinea Pavon!", cited in synonymy by DC., i.e., as part of the basis for Crusea cocinea.
Spermacoce coccinea Sessé & Moc. Fl. Mex. 24. 1893; ed. 2. 22. 1894.

Type-locality [DC.]: New Spain; [Fl. Mex.]: Between Malacatepec [Edo. de México] and Zitácuaro, [Michoacán] ["in montibus de Malacatepec ad Zitacuarum interjectus. Floret Augusto"]. Lectotype [DC.]: "Pavon" in herb. Dunant, not seen. A fragment in G-DC is marked by de Candolle "Spermacoce coccinea Pav. N. Esp.". In the Torner Collection no. 7777 is without inscription except for the number "103" (which I cannot explain) and an annotation by de Candolle, "Spermacoce rubra". DC. plate 498, not a duplicate of Torner 7777 but apparently representing the same species, is an (unfinished) original painting, unnumbered, annotated "Spermacoce" and (by de Candolle) "rubra" (Field Mus. neg. 33557). In the S. & M. herbarium no. 588 (CNHM negs. 47771–47774) is Crusea coccinea according to Standley; on the sheet corresponding to neg. 47773 is the label "Spermacoce coccinea N. ic... Icon incerta a Cerda". Nelson (1997) designated "Sessé 588" (neg. 47773) as "material type" of S. coccinea. Anderson (1972, p. 39) provisionally designated no. 588 at MA as lectotype of Spermacoce coccinea.

Diodia arenosa DC. in DC. Prodr. 4: 564. 1830. Reportedly doubtfully by de Candolle (1c.) from New Spain as "Spermacoce ciliaris Pav. in h. Morie[and]". This is based on a sheet at G, ex herb. Moricand, marked by Pavon "Spermacoce ciliaris de NE y Pío Rico". The plant is a species of Diodia, presumably D. rigida Cham. & Schlcht. Linnaea 3: 341. 1828; see Spermacoce ciliaris Sessé & Moc. According to Schumann (in Mart. Fl. Bras. 6, pt. 6: 17. 1888), Diodia arenosa is known only from the original collection from central Brazil.


Type-locality: San Bernardo de Xochiatlán [not specifically located, but see McVaugh 1977, p. 189] and Huaytlapan "Huexiltlae", Puebla. In the S. & M. herbarium no. 549 (CNHM neg. 47781), labelled "Diodia erecta N.", is according to Standley Diodia brasiliensis Spreng., var. angulata (Benth.) Standl. (Troidon angulatum Benth. Pl. Hartw. 70. 1840). Nelson (1997) designated "Sessé 549" as "material type" of D. erecta.

Diodia villosa DC. in DC. Prodr. 4: 562. 1830. with citation of "fl. mex. ic. ined." as one of the bases for the name. "Spermacoce declinata Pavon. ic. ined.", cited in synonymy as one of the bases for Diodia villosa, by DC., l.c.

Type-locality: Mexico. Lectotype: "Pavon", "v.s. in h. Dunant et Moricand". I have not seen the specimen in herb. Dunant, but at G, ex herb. Moricand, is a specimen marked by Moricand, "Spermacoce declinata Pav. in lb.", and by de Candolle labelled with the same epithet in Diodia. This sheet, rather than the unlabelled fragment in G-DC., is to be regarded as the lectotype. The reference to "fl. mex. ic. ined." is based on no. 0728 of the Torner Collection, which is without inscription except for an annotation by de Candolle, "Diodia villosa". DC. plate 494, as cited in Calques des Dessins (Field Mus. neg. 30699), labelled "Spermacoce declinata", is a good copy of Torner 0728. In the S. & M. herbarium no. 582 (CNHM negs. 47786, 47787), labelled "Spermacoce declinata", is according to Standley Diodia sarmentosa Sw. Prodr. 30. 1788.


Localities cited: Puerto Rico ["in litore maris ad margines itineris de la Aguadilla ad Oppidum del Rincon tendens. Floret junio"]. Described at some length. In the S. & M. herbarium no. 1584 (CNHM neg. 47789), labelled "Erithalis fruticosa", is correctly named according to Standley. In the Torner Collection no. 1549, evidently one of the elegantly detailed and colored drawings made by Echeverría, probably in Puerto Rico in 1796, is without inscription except for an annotation by de Candolle, "Erithalis fruticosa L."

Ernodoea littoralis Sw. Prodr. 29. 1788.

Reported by de Candolle (in DC. Prodr. 4: 576. 1830) from Mexico on the basis of "Icon. fl. mex. ined.". The basis for the report was apparently no. 1557 of the Torner Collection, annotated by de Candolle, "Ernodoea mexicana". DC. plate 478, similarly labelled, is an unfinished copy of Torner 1557. The Torner copy is one of the elegantly drawn and colored sketches made by Echeverría in Puerto Rico or Cuba. According to Standley (Contr. U. S. Natl. Herb. 23: 1393, 1926), this primarily West Indian species does not occur in Mexico except in Yucatán. No. 614 of the S. & M. herbarium (CNHM neg. 47790), unidentified by the collectors, is according to Standley Ernodoea littoralis.


Localities cited [Pl. Nov. Hisp.]: México, D.F. ["Mexic eti in Europa. Floret Julio"]). Not described. In the S. & M. herbarium no. 528 (CNHM neg. 47798), labelled "Galium aparine", was determined by Standley as Galium mexicanum H. B. K.


Localities cited [Pl. Nov. Hisp.]: Tixtla ("in aridis Tixtlae [sic] montibus et Europa. Floret Augusto"); [Fl. Mex.]: Tixtla ("in aridis Tixtlae [sic] montibus et Europae pratis. Floret Augusto"). It seems likely that "Tixtla" was an error for "Tixtla". The Expedition was based in Tixtla, Guerrero, from August to October 1789, and published many references to plants from there. Not
described. In the S. & M. herbarium no. 523 (CNHM neg. 47802), labelled "Gallium boreale", was determined by Standley as *Gallium uncinulatum* DC.

The *Gallium boreale* of Fl. Mex. 23 (as "Gallium boreale"). 1893; ed. 2. 21. 1894, may or may not represent the same species as the same name published on page 24, but the cited localities are in México, D.F. and the flowering season is different ("in anfractibus Sancti Angeli et montibus Praedii Sancti Nicolai. Floret Junio"). The diagnoses (quoted from "Hall. Helv. n. 722") are identical, and neither is otherwise described.

"*Gallium mexicanum* N. [description]."

A name not published by Sessé & Mocínó, but in their herbarium no. 529 (CNHM neg. 47803), labelled as above, was determined by Standley as *Gallium uncinulatum* DC.

*Gallium repens* Sessé & Mocínó. Fl. Mex. 24. 1893; ed. 2. 22. 1894.

Type-locality: Sandy meadows, Calpulapan, Tlaxcala. Not found in the S. & M. herbarium. Described as a perennial with many slender branched woody stems, these 4-angled, glabrous, the leaves in 4's, linear-ovate, rather scabrid, the peduncles short and l-flowered; the flowers "ex albo pallentes", the fruit smooth. Not identified.

*Gallium* sp. ("Gallium folis oppositis, ovato-lanceolatis, glabris, seminibus laevibus") Sessé & Mocínó. Fl. Mex. 23. 1893; ed. 2. 21. 1895.

Locality cited: México, D.F. ("in montibus Sancti Nicolai Praedii. Floret Junio"). Described at length. Not identified; perhaps also a *Gallium*.

*Gardenia luceifera* Sessé & Mocínó. Fl. Mex. ed. 2. 54. 1894; ed. 1. 59. 1895.

Type-locality: Yecapixtla ("Ayacapixtla in ed. 1], Morelos, near the church [in Yecapixtla hau procul ab Eclesia. Floret Aprili]). From the very detailed description evidently a species of *Randia*. Not found in the S. & M. herbarium under this name.

*Gardenia mexicana* Sessé & Mocínó. Fl. Mex. ed. 2. 54. 1894.

Type-locality: Not stated. Not found in the S. & M. herbarium. Not identified. Described as a glabrous unarmed shrub, the tubular calyx unlobed, 5-toothed, opposite teeth usually longer, setaceous, persistent; corolla contorted; leaves ovate-lanceolate; berry subrotund, depressed, 4- or 5-locular, many-seeded.

*Gardenia* sp. (long description, no diagnosis) Sessé & Mocínó Fl. Mex. ed. 2. 55. 1894.

Locality cited: Yecapixtla, Morelos ("in Ayacapixtla. Floret Aprili"). From the description probably a species of *Randia*, perhaps recognizable by someone with a knowledge of that genus.


Reported doubtfully from Mexico by de Candolle (in DC. Prodr. 4: 378. 1830) as follows: "Iconem in flor. mexic. ined. habeo hic similimum". This is a reference to DC. plate 457, originally labelled "Genipa mexicana" and by de Candolle "Genipa oblongifolia fl. per.", Plate 457 is a colored copy of no. 1449 of the Turner Collection, which is annotated by de Candolle "Genipa mexicana."


*Genipa* sp. (described at length; no diagnosis). Sessé & Mocínó. Fl. Mex. ed. 2. 59. 1894.


Reported by de Candolle (in DC. Prodr. 4: 458. 1830) from "Mexico" as "Terebraria Sessé fl. mex. in h. Puer". The basis for this is evidently a specimen in G-DC (not photographed as one of the microfiches made by the International Documentation Centre because the inscription is on the back of the sheet only). The inscription reads "Laugeria resinosa H. Vahl. Terebraria fl. mexic. Djoytris Sessé. Herb. Puer. 1824. Ex America Meridionali D° Sessé dedit Cl. West". If actually a specimen collected by Sessé, this one presumably came from Puerto Rico. In the S. & M. herbarium no. 4681 (CNHM neg. 47837), labelled as a species of *Guettarda* with an unpublished epithet, is according to Standley *Laugeria resinosa* Vahl.

*Guettarda rugosa* Sessé & Mocínó. Fl. Mex. ed. 2. 217. 1894, not of Swartz.

Locality cited: Dry mountains, Arecibo, Puerto Rico, where said to flower in June. Long description. Urban (Symb. Antill. 4: 589. 1911) considered this to be the same species as *G. rugosa* Sw. and referred to that synonymy of *G. scabra* (L.) Lam. Encycl. 2: 218. 1793. In the S. & M. herbarium no. 4619 (CNHM neg. 47820), labelled "Guettarda rugosa", is according to Standley *G. scabra* (L.) Lam. Nelson (1997) designated "Sessé 4619" as "material tipo" of *G. rugosa*. 
Type-locality: Hot mountains near Córdoba, Veracruz, where said to flower in June. Long description. Referred with doubt by Standley (Contr. U. S. Natl. Herb. 23: 1384. 1926) to the synonymy of Guettarda elliptica Sw., but specimens in the S. & M. herbarium (no. 4622; CNHM neg. 47819), labelled “Guetarda tetrandra”, were identified later by Standley as Guettarda galeottii Standl., l.c. In an unpublished manuscript on the Rubiaceae of the Sessé & Mocño herbarium, Standley noted that G. galeottii was a synonym of the earlier G. tetrandra. Nelson (1997) designated “Sessé 4622” as “material tipo” of G. tetrandra, commenting on the synonymy of the names Guettarda galeottii and G. tetrandra. No. 1859 in the Torner Collection, a sketch apparently by Echeverría, was annotated by Sessé “Guetarda elliptica” and by de Candolle, “Guetarda tetrandra”.

Locality cited: Puerto Rico ["in montibus inter Arecibo et Manati, Floret Junio"]. Not further identified.

Type-locality: Mountains near Ahuillulco; ["in montibus Haereditatis Ahusuyo, Floret Novembrir"]. Jalisco. Not found under this name in the S. & M. herbarium. The description is short and not recognizable; the leaves are described as ternate, as they often are in this genus. The name was referred by T. S. Elias (Mem. New York Bot. Gard. 27: 104. 1976) to the synonymy of Hamelia patens Jacq. Enum. Pl. Carib. 16. 1760, but Elias did not mention the basis for this decision.

Hamelia declinata Sessé & Moc. Fl. Mex. ed. 2. 60. 1894.
Type-locality: Fields, Puerto Rico. Referred by Urban (Symb. Anill. 4: 588. 1911) and by Elias (1976, p. 122) to the synonymy of Hamelia axillaris Sw. Prodr. 46. 1788; Fl. Ind. Occ. 1: 443. 1797. Specimens in the S. & M. herbarium determined by Standley as Hamelia axillaris Sw. (nos. 1457, 1597; CNHM negs. 47821, 47822) were originally labelled “Hamelia declinata N.”. Nelson (1997) designated “Sessé 1597” (neg. 47822) as “material tipo” of H. declinata.

Type-locality [Pl. Nov. Hisp.]: “In Mexici montibus Mazatlan” [i.e., Mazatlan, Guererro]. Lectotype: DC. plate 489, as cited in Calques des Dessins (Field Mus. neg. 30697). This represents fl. Mex. 243; it is an original painting so numbered, bearing the hand-printed name “Hamelia Patens. Linn.”, this crossed out and replaced by de Candolle with “Hamelia verticillata (patens var.)”. No. 0613 in the Torner Collection is almost identical, bearing the number “243”, the hand-printed name “Hamelia [verticillata Sp. N. crossed out]”, the hand-written inscription “[Patens Linn. crossed out]”, and the added annotation by de Candolle, “Hamelia verticillata”. In the S. & M. herbarium, specimens marked “Hamelia patens” are referred by Standley to two different species, viz. no. 886 (CNHM neg. 47824) to H. patens Jacq., and no. 1598 (neg. 47826) to H. versicolor A. Gray. The plant shown in the paintings has the short calyx-lobes and second flowers of H. patens. Elias (1976, p. 104), referred the var. quinifolia without comment to the synonymy of H. patens var. patens, but he somewhat injudiciously designated as “holotype” of y quinifolia a Sessé & Mocño specimen that he supposed to be at MA but had not seen.

Hedyotis crasifolia [sic] Sessé & Moc. Fl. Mex. 23. 1893; ed. 2. 21. 1894, not of earlier authors.

Hedyotis dichotoma Sessé & Moc. Fl. Mex. 22. 1893; ed. 2. 20. 1894, not of Cavanilles.

Locality cited: Puerto Rico ["in agris inundatis Insulae de Puerto [sic] Rico, Floret Junio"]. Described. In the S. & M. herbarium nos. 555 and 621 (CNHM negs. 47846, 47847), labelled “Hedyotis herbacea”, have been determined as Oldenlandia herbacea L.
Hedyotis lutea Sessé & Moc. Fl. Mex. 22. 1893; ed. 2. 20. 1894.

Type-locality: Mountains, Temascaltepec, Edc. de Mexico, where said to flower in July. In the S. & M. herbarium no. 563 (CNHM neg. 47733), labelled "Hedyotis lutea N. No. 241. 4-1", and nos. 608 and 648 (negs. 47734, 47736), originally referred to the genera Aeginetia or Yxora, with the same specific epithet, are all according to Standley Bouvardia chrysantha Mart. Del. Sem. Hort. Monac. 4. 1848. Blackwell (1968, pp. 10-11) did not discuss these specimens in his treatment of B. chrysantha, and they should be re-examined. The description is of a shrub with opposite, ovate, "obliquely lined", villous-margined leaves; corymb terminal and the flowers more or less in threes; flowers yellow-red; fruit unknown. Nelson (1997) designated "Sessé 563" as "material type" of H. lutea.

Bullock (in Hook. l.c. Pl. pl. 332. 1936) equated Hedyotis lutea Sessé & Moc. with Bouvardia cordifolia DC., q.v. for citation of additional material. Blackwell (1968, p. 9) doubtfully equated the same two names at the same time designating as "type" of H. lutea, "Sessé & Moccio s.n., MA, not seen". The description of H. lutea, as excerpted above, does not fit very closely the plant depicted in the original paintings of B. cordifolia, Torner 1013 and DC. 487, in which the leaves are shown as cordate. The fruit, not described for H. lutea, is illustrated, suggesting that a second species is involved. Both species, B. cordifolia and B. chrysantha, are represented in the S. & M. herbarium, and the identity of H. lutea is of academic interest only, as no name change is involved.

Hedyotis villosa Sessé & Moc. Fl. Mex. 21. 1893; ed. 2. 20. 1894, not of Wight & Arn.

Type-locality: Mountains, Fajardo, Puerto Rico, where said to flower in August. Described at length. Referred by Urban (Symb. Antill. 4: 582. 1911) and by Standley (N. Amer. Flora 32: 81. 1918) to the synonymy of Rondeletia pitosa Sw. Prodr. 41. 1788. Not found in the S. & M. herbarium.

Hillia longiflora Sw. Prodr. 58. 1788.

Reported by de Candolle (in DC. Prodr. 4: 351. 1830) on the basis of "icon fl. mex. ined.". This is a reference to no. 1587 in the Torner Collection, annotated by de Candolle, "Hillia tetraxona". DC. plate 454, labelled "Hillia tetraxona", is a copy of Torner 1587. According to Urban (Symb. Antill. 4: 583. 1911), Hillia longiflora is a synonym of H. parasitica Jacq. Enum. Carib. 18. 1760. It seems likely that the plant shown in this plate is the one described by Sessé & Mocío with a reference to an "io", under the name of Hillia parasitica [Jacq.]." [Fl. Mex. ed. 2. 85. 1894] and with the locality "Saiboito", [Puerto Rico]. Not found in the S. & M. herbarium.


Locality cited [Fl. Mex.]: Tuxila [i.e., probably San Andrés Tuxila, Veracruz] ("Habitat parasitica supra procerorum arborum axillias in Tuxtensibus sylvis. Flore: Julio"). Not found in the S. & M. herbarium. De Candolle (in DC. Prodr. 4: 351. 1830) noted under Hillia tetraxona Sw. "An H. tuxillis B. Mex. ind. circà Tuxtilan observata, verè distincta, etiamse calyce bilo bo et involucro diphyllis donata dicatur". This is a reference to no. 1980 in the Torner Collection, which bears the inscription "Tab: 116", an annotation apparently by Sessé, "Hillia tetraxona Swartz" and an annotation by de Candolle, "Hillia tuxillisens". DC. plate 455 [sketch only; Field Mus. neg. 30685] is annotated by de Candolle, "Hillia tuxillisens = Hillia tetraxona Sw. ex DC. Prodr. 4, p. 351".

The plant was described in Fl. Mex. as having the "folia floraria gemina", suggesting that this may have been the plant illustrated in Torner 1980, and contrasted by de Candolle with Hillia tetraxona Sw., q.v., on the basis of a 2- rather than 4-parted involucel. As the type-locality was "Tuxila", the epithet "tuxillisens" quoted by de Candolle may well have been applied at one time to the plant later referred in the Fl. Mex. to tetraxona.


Localities cited: Stream banks, Quazinipilapa, Guerrero ["ad margines fluvii diversiori de Quazinipilapa"]; and India. Ic. Fl. Mex. 321; this is represented by no. 1146 of the Torner Collection, which bear the number "327" (evidently an error for "321"), the hand-printed name ["Ignatia Amara. Linn. crossed out", and an annotation by de Candolle, "Phaloe cabalonga"; DC. plate 468 (Field Mus. neg. 30691) is an original painting numbered (apparently by Mocínio) "321", and annotated by de Candolle "Phaloe cabalonga", the epithet taken from the vernacular name as cited in the Pl. Nov. Hisp. The same species is depicted in DC. plate XXI [sketches only; Field Mus. neg. 30405]. In the S. & M. herbarium no. 862 (CNHM neg. 47890), labelled "Ignatia amara", is according to Standley Posoqueria latifolia (Rudge) Roem. & Schult. Syst. Veg. 5: 227. 1819.

Standley (Contr. U. S. Nat. Herb. 23: 645. 1923) had previously referred Ignatia amara of the Pl. Nov. Hisp. to the synonymy of Hura polyandra Baill. (Euphorbiaceae), but this was surely an error. The description in Pl. Nov. Hisp. calls for a small tree with opposite entire leaves, ovate membranaceous stipules, fragrant white flowers, and a fruit the size of a Chinese orange. What is apparently the same plant, shown in the paintings cited above, is
surely rubiaceous and apparently is correctly referred to *Posoqueria latifolia*.


Localities cited: Mazatlán, Guerrero (“in India ac montibus Mazatlan. Florae Junio”). Described. In the S. & M. herbarium no. 649 (CNHM neg. 47743), labelled “Ixora alba”, was determined by Standley as *Bouvardia leiantha* Benth.

**Ixora aphylla** Sessé & Moc. Pl. Nov. Hisp. 16. 1887; ed. 2. 15. 1893.

Type-locality: Near Xochitlán (“Xochitlan”), Morelos. Described as suffruticose, glabrous, a little over a foot high, simple, whitish, leafless, the flowers scarlet, odorless, in a terminal head. No. 0575 in the Torner Collection bears the hand-printed name “*Ixora Aphylla. Sp. N.*” and an annotation by de Candolle, “*Ixora tenuifolia*”. The painting represents a species of *Bouvardia*, but the name was not noted by Blackwell in his revision of that genus (1968). Not located in the S. & M. herbarium.

It appears that this species was originally listed as *Ic. Pl. Mex. 188*. That number (now trimmed off almost wholly) seems to have been written in the upper left corner of Torner 0575. The same number has been added twice, by different writers. The number was eventually used for another plant, *Petiveria octandra* (Phytolaccaceae). It is probable that the painting was made in Morelos during the years of the “First Excursion”, 1787–1788. The list of * illustrating made during those years (MA, mss) includes numbers up to and including 187.

**Ixora pulcherrima** Sessé & Moc. Pl. Nov. Hisp. 16. 1887; ed. 2. 15. 1893.

Type-locality: Mountains, Mazatlán, Guerrero. Described as a glabrous shrub 3 feet high, with entire ovate opposite, short-petiole leaves (some attenuate at base), the flowers terminal, fasciculate, the corolla white, with very long filiform tube. Not found in the S. & M. herbarium. The description suggests one of the white-flowered species of *Bouvardia*, but the name was not noted by Blackwell in his revision of that genus (1968).

**Ixora ternifolia** Cav. ic. 4. 3. pl. 305. 1797. *Bouvardia ternifolia* (Cav.) Schlecht. Linnaea 26: 98. 1853.

Type-locality: New Spain; introduced into the Madrid Botanical Garden in 1792 and fruited there in October 1795. Cavanilles later (ic. 4. 71. 1796) stated that Née found the species at Real del Monte, Hidalgo. Although it is possible that plants received in Madrid in 1792 came from Mexican seeds collected by Née, it is at least as likely that the first introductions came from Sessé or Cervantes. Type: Not seen. Not found under this name in the S. & M. herbarium, but no. 0431 in the Torner Collection, which bears the number “23” and the hand-printed names “*Ixora Americana ? Linn.*” and “*Tlaxochitl Hrz. 23*”, was annotated by de Candolle “*Ixora ternifolia Cav.*” (What seems to have been an “improved” copy, identically annotated by de Candolle, is no. 0574 in the Torner Collection, with more formally hand-printed names, including “*Ixora Americana Linn.*” with no expression of doubt, the addition of a note on medicinal virtues, and the number “43”). Apparently the name *Ixora Americana* [L.] was not used in publication by Sessé & Mocío, but was known to them. See also under *Bouvardia ternifolia*.

**Ixora uniflora** Sessé & Moc. Pl. Nov. Hisp. 16. 1887; ed. 2. 15. 1893.

Type-locality: San Miguel de Allende (“Michaelopoli”), Guanajuato. *Ic. Pl. Mex. 26*, cited in Pl. Nov. Hisp., and included in the list of * cones* obtained on the “Third Excursion”, that to western Mexico in 1790–91 [Ic. Pl. Mex. 26 was listed under “Mirabilis (randria)” among the paintings from the “First Excursion”, from near Mexico City, but not in later lists and not cited in Pl. Nov. Hsp.]. No. 26 of Pl. Nov. Hsp. is presumably represented by two very nearly identical original paintings at MA. Each bears the penciled number “43”. One is without other inscription, but includes a detached fruit and a sectioned fruit showing the two locules. It was listed as “[*Aeginetia*]”, with description, and identified as RJB Lám. 28 in the *Catálogo de las Láminas del Real Jardín Botánico* (RJB 1987, p. 324). It was reproduced in color, reduced to ca. 14 by 10.5 cm, and identified as “[*Aeginetia*] RJB Lám. 28” (RJB 1987, p. 285). The other copy lacks the drawings of a detached and a sectioned fruit, but bears the hand-printed name “*Ixora Uniflora*.”. It was listed as “*Ixora uniflora*”, with description, and identified as RJB Lám. 33 in the *Catálogo de las Láminas del Real Jardín Botánico* (RJB 1987, p. 325). It was reproduced in color, reduced to ca. 15.8 by 10.5 cm, and identified as “*Ixora uniflora. RJB Lám. 33*” (RJB 1987, p. 247). These * cones* represent no. 43 of a manuscript list by Mociño (MA, mss), and no. 43 of Ramírez (Aranas Inst. Méd.-Nac. México 6, pt. 1: 78. 1903), who identified the plant as *Bouvardia longiflora* (Cav.) H. B. K. Nov. Gen. Sp. 3: 385. 1820. This may be the correct disposition of the name, as the original collection came from very nearly the same locality as that of *Aeginetia longiflora* Cav. (i.e., between Guanajuato and Querétaro). I have not located any equivalent painting in the Torner Collection nor in the Candollean collection. The species occurs in the S. & M. herbarium, according to a determination by Standley (no. 568; CNHM neg. 47744), but under the name of “*Hedionaxis grandiflora N.*”, with the number “247” (for explanation of that number, see Pavetta racemosa, below). The name *Ixora uniflora* seems not to have been noted by Blackwell in his revision of *Bouvardia* (1968).

**Lygodysoea ciliata** Bartling ex DC. in DC. Prodr. 4: 470. 1830. “Lygodysoea mexicana DC. annot. fl.”
Rubiaceae

mex. ined."

Type-locality: Mexico. Lectotype [DC.]: "s.s. sine fl. in h. Haenkei". Also cited: Ic. Fl. Mex. 275, represented by no. 0970 of the Torner Collection, which bears the number "275" and an annotation by de Candolle, "Ligiodisoea ? mexicana". An almost identical original painting is DC. plate 463, bearing the number "275", the hand-printed name "Rondeletia Volubilis Sp. N.", and the annotation by de Candolle, "Lygodiodoea ? mexicana ciliata Bart." (Field Mus. neg. 30690). Ic. Fl. Mex. 275 was cited in Fl. Nov. Hisp., where the type-locality of Rondeletia volubilis was given as Acahuizolita, [Guerrero]; it was given by de Candolle as "Acahuizolita". No. 1393 in the S. & M. herbarium (CNHM neg. 47851), labelled "Rondeletia voluvilus L.", was named Paederia ciliata by Standley and cited by him (Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 386. 1940) as the "type" of R. volubilis Sessé & Moc. The name Lygodiodoea ciliata was long overlooked, prior to Standley's transfer of it to Paederia, and the species to which it pertains was treated under the name of Paederia pringlei Greenm.


Type-locality: Not stated. Described as a nearly glabrous shrub 15 feet high; leaves lanceolate, villous on the veins beneath; racemes tridif; calyx-lobes 5, subovate, persistent; corolla funneliform, subventricose above; lobes ovate, spreading-reflexed, woolly within; filaments woolly; capsule roundish, bicolar; seeds many, roundish. Not found in the S. & M. herbarium; not identified.


Locality cited: "In Havana, ubi Piña de Raton vulgo audit". Described in detail. In the S. & M. herbarium no. 1589 (CNHM neg. 47845), labelled "Morinda Royoe", is correctly named according to Standley.


Locality cited: Atualuluco, ? [Tabasco] ["in Atualulucii depressis. Floret Septembris"] Described in detail. The description is by no means a copy of the preceding one, though perhaps the two refer to the same species.

Mussaenda formosa Sessé & Moc. Fl. Mex. ed. 2. 60. 1894.


Type-locality: Seashores, Puerto Rico ["ad littoriam maris Insulam de Puerto Rico alluentis, sub nomine Azota Caballos. Floret Aprii"] Relegated by Urban (Symb. Antill. 4: 589. 1911) to the synonymy of Randia aculeata L. Sp. Pl. 1192. 1753. In the S. & M. herbarium no. 5488 (CNHM neg. 47894), which according to Standley is Randia aculeata, was originally referred by the collectors to Gardenia, with the epithet rotundifolia.

"Mussenda [sic] Nuda. Sp. N."

A name not published by Sessé & Mociano, but occurring as a hand-printed name on no. 0002 of the Torner Collection, which bears no other inscription except the number "270" or "276", written at upper left. In the style commonly used for the numbers pertaining to the Icones Florae Mexicanae. It is probable, by judging by the presence of the number and the hand-printed name, that the painting dates from the "Second Excursion", that to Guerrero in 1789, but neither number appears in the list of icones obtained in that year (MA, ms), and both numbers were eventually used for other plants. The plant depicted is apparently Rubiaceae.

"Mussenda"

A hand-printed name on no. 0012 of the Torner Collection, which also bears the number "284" at upper left [as if for a number of the Ic. Fl. Mex.] and an annotation by de Candolle, "Mussaenda breviflora". I do not find any record of the publication of de Candolle's name. It is probable that the painting dates from the "Second Excursion", for reasons set down in the preceding example, but the number "284" does not appear in the list of icones for that year and was eventually used for another plant. The drawing should be easily recognizable by anyone having a good knowledge of the Rubiaceae.


Locality cited: Jorullo, Michoacán ["in montibus Xorullo vicinis, Floret Septembris"]. Not found in the S. & M. herbarium. Rather fully described as a procumbent hirsute herb with opposite leaves connected by a stipular membrane, hirsute capsule, and small white sessile axillary flowers. Presumably rubiaceous but not identified further.

Oldenlandia depressa Sessé & Moc. Fl. Mex. 27. 1893; ed. 2. 25. 1894, not of Willdenow.

Locality cited: Mountains, Taiapan ["S. Augustini et vicinis"], [south of México, D.F.], where said to flower in July. This is actually a new name for Hedyotis herbacea L.; although that name is not mentioned in the Fl. Mex., the character taken from "Fl. Zcyli. 65" by way

469
of the *Species Plantarum* is quoted word for word. The name “Oldenlandia depressa” is thus not only a later homonym, but was superfluous when published. In the S. & M. herbarium no. 601 (CNHM neg. 47900), labelled “Oldenlandia depressa N.”, is according to Standley *Richardia triocca* (Torr. & Gray) Standl. Publ. Field Mus. Nat. Hist., Bot. Ser. 8: 386. 1931. A presumed duplicate of no. 601 (at F) was cited as *R. triocca* subsp. *tetracocca* (Mart. & Gal.) Lewis & Oliver (Brittonia 26: 287. 1974).

**Oldenlandia racemosa** Sessé & Moc. Fl. Mex. 28: 1893; ed. 2. 25. 1894.

Type-locality: Córdoba, Veracruz, where said to flower in July. Not found in the S. & M. herbarium. Described as a very small glabrous herb (“semi pollicaris”), with linear-lanceolate, subsessile entire leaves that are veiny beneath, waxy above; compound axillary racemes two to three times as long as the leaves; flowers white, odorless. Not identified.

“Pavetta mexicana” N. [description].

In the S. & M. herbarium no. 540 (CNHM neg. 47720), labelled as above, was determined by Standley as *Anisomeris barbata* Standl.

**Pavetta odoratissima** Sessé & Moc. Fl. Mex. 20: 1893; ed. 2. 19. 1894.

Type-locality: “In Praedio Sacarino de la Langosta, Equitis D. Gonzalo de Herrera”. This locality has not been identified but presumably was in one of the sugar-growing areas in the lowland of eastern Mexico, in Cuba, or in Puerto Rico. In the S. & M. herbarium no. 547 (CNHM neg. 47793), labelled “Pavetta odoratissima N.”, according to Standley *Fareaea ocidentalis* (L.) Rich. Mém. Soc. Hist. Nat. Paris 5: 176. 1834. The long description in the Fl. Mex. seems to confirm this identification. Nelson (1997) designated “Sessé 547” as “material tipo” of *P. odoratissima*.

**Pavetta quinqueflora** Sessé & Moc. Fl. Mex. 20: 1893; ed. 2. 18. 1894.

Type-locality: Mountains of Toa Alta, Puerto Rico. Where the vernacular name is reported as “Ramoncillo”. Described at great length. Referred by Urban (Symb. Antill. 4: 595–596, 1911) to the synonym of *Ixora ferrea* (Jacq.) Benth. Linnaea 23: 447. 1850. In the S. & M. herbarium no. 537 (CNHM neg. 47834), labelled “Pavetta 5-flora i. d. N. Ramoncillo.”, and no. 539 (neg. 47836), labelled “Pavetta 5-flora N E” in the manner of Pavón, are both according to Standley *Ixora ferrea*. Nelson (1997) designated “Sessé 183” as “material tipo” of *P. quinqueflora*, quoting from the original label “Pavetta quinqueflora i. N.”, reporting a determination of *Ixora ferrea* by C. E. B. Bremerkamp, and stating that the specimen was not represented by a CNHM negative. I have not seen no. 183 of the S. & M. herbarium and cannot comment upon it, but it would seem that no. 537, which repeats the published vernacular name, might be more appropriate if a lectotype is to be named.

**Pavetta racemosa** Sessé & Moc. Fl. Mex. 20: 1893; ed. 2. 18. 1894.

Type-locality: Mountains of Tuxla, [i.e., probably San Andrés Tuxtlas, Veracruz], where said to flower in July. Described at some length. In the S. & M. herbarium no. 543 (CNHM neg. 47918), labelled “Pavetta racemosa N. No. 289.”, is according to Standley *Rondeletia villosa* Hemsl. Diagn. Pl. Mex. 27: 1879. The number ‘289’ did not pertain to this particular specimen but was the one assigned in Madrid after 1800 to this species, during an attempt to number the entire herbarium. In that system numbers assigned to the tetrandrous Rubiacae ranged from 234 to 292 (cf. McVaugh 1990, p. 209). Nelson (1997) designated “Sessé 543” as “material tipo” of *P. racemosa*.

**Pavetta secunda** Sessé & Moc. Fl. Mex. 20: 1893; ed. 2. 18. 1894.

Type-locality: Mountains of Toa Alta, Puerto Rico. Described at length. Apparently not noted by Urban in his flora of Puerto Rico. In the S. & M. herbarium nos. 545 and 576 (CNHM negs. 47814, 47815) are determined by Standley as *Gonzalezia panamensis* (Cav.) Schum. in Mart. Fl. Bras. 6, pt. 6: 292. 1889. Of these no. 545 was labelled by the collectors “Pavetta secunda N. IC. No. 288.”, and no. 576 was labelled “Pavetta Tabascensis, Desc. fol. 26”. According to Urban (Symb. Antill. 4: 584. 1911), the one species of *Gonzalezia* in Puerto Rico is *G. spicata* (Lam.) Maza. Nelson (1997) designated “Sessé 545” as “material tipo” of *P. secunda*.

**Petasites distachya** Sessé & Moc. Fl. Mex. 21 [as “distachia”]: 1893; ed. 2. 19. 1894.

Type-locality: [Between] Cangrejos and the Hacienda [Premium] de Ingenio Viejo, Puerto Rico (“Habitat” [in montibus] ex Oppido de Cangrejos ad Premium de Ingenio viejo descurrentibus. Floret Augusto et Septembris). Described. Referred by Urban (Symb. Antill. 4: 591. 1911) to the synonym of *Antirrhoea coriacea* (Vahl) Urb. Symb. Antill. 1: 436. 1899. In the S. & M. herbarium, according to a determination by Standley, the latter species is represented by no. 520 (CNHM neg. 47722), which was named by the collectors “Pavetta distachia N.”, and on another ticket “Petesia spicata”.

**Petesia repens** Sessé & Moc. Fl. Mex. 21. 1893; ed. 2. 19. 1894.

Type-locality: Ahualulco, [Tabasco]; “[in Ahualec pratis, Floret Octobri]”. Described at great length. In the S. & M. herbarium no. 522 (CNHM negs. 47759–47761), labelled “Petesia repens N.”, is according to Standley *Coccopseudum hirsutum* Bartling ex DC. in DC. Prodr. 4: 396. 1830. Another sheet is at BM, ex herb. Lambert, labelled by Pavón “Petesia repens N E”. Nelson (1997) designated “Sessé 522” as “material tipo”
of *P. repens*, citing all three negative numbers. Of these only 47761 appears to be significant; the specimen is labelled "Petesia repens N. Fc. No. 290".


Type-locality [Pl. Nov. Hisp.]: Mountains, Mazatlán. Guerrero, where said to flower in May. Ic. Fl. Mex. 269, represented by no. 0643 in the Torner Collection, which bears the number "269", the hand-printed name "Petesia [Odoratissima. crossed off; stipularis written in and crossed off] Sp. N.", and an annotation by de Candolle, "Petesia odoratissima". Nearly identical is DC. plate 483 (Field Mus. neg. 30695), an original painting bearing the number "269", and an annotation (apparently by Sessé), "Petesia Stipularis Linn."

Probably the plant described by Sessé & Mocío from Acachiuzotla, [Guerrero], where it is said to flower in July (Fl. Mex. 21 [2nd on page]. 1893; ed. 2. 19 [2nd on page]. 1894) is the same species as the other, at least according to the description. In the manuscript of the Fl. Mex., but not in the printed version, "Ic. 269" is cited with the description of the plant from Acachiuzotla. In the S. & M. herbarium no. 643 (CNHM neg. 47721), labelled "Petesia stipularis", is according to Standley *Anisomeris protracta* (Bartling ex DC.) Standl. Publ. Field Mus. Nat. Hist., Bot. Ser. 4: 293. 1929.


Locality cited: Veracruz ("Interr oppidum de la Punta et Praedium ita dictum. Floret Augusto"). Described. In the S. & M. herbarium nos. 1621 and 5470 (CNHM negs. 47762, 47763), labelled "Portandia grandiflora", were determined by Standley as *Computa hexandra* [Jacq.] Schum. See *Computa flavescent* above. Nelson (1997), quoting the label on the specimen with neg. 47762 as "Portandia grandiflora. No. 473", designated "Sessé 1621" as "material type" of "Portandia grandiflora Sessé & Moc.". This is inappropriate, as no such name exists. The number "473" did not pertain to this particular specimen but was the one assigned in Madrid after 1800 to this species, during an attempt to number the entire herbarium. In that system numbers assigned to the pentandrous Rubiaceae ranged from 469 to 511 (cf. McVaugh 1990, p. 209).

The Hacienda [Praedium] of La Punta is thought to have been San Juan de la Punta, some "three leagues" ESE of Córdova (cf. McVaugh 1977, p. 175).

**Psychotria americana** Sessé & Moc. Fl. Mex. ed. 2. 57. 1894.

Type-locality: Mountains of the hot regions, as at Tenampuleo near Huasteca, [Puebla], and Acachiuzotla, Guerrero ("in montibus calidurum regionum, ut Tenampuleo prope Huastecam et Acachiuzotla versus Acapulcum"). Described at length. In the S. & M. herbarium nos. 1612 and 5477 (CNHM negs. 47885-47888), labelled at least in part "Psychotria" or "Psychotria americana", are according to Standley *Psychotria sessilifolia* Mart. & Gal. Bull. Acad. Roy. Sci. Bruxelles. 11, pt. 1: 228. 1844. A specimen at BM, ex herb. Lambert, marked by Pavón, "Psychotria americana N E", has been identified as *Psychotria sessilifolia*, with the note "cfr. Kew 24 July 1914". Nelson (1997), quoting the label shown in neg. 47885 as "Psychotria Americana N. Fc. No. 482", designated "Sessé 1612" as "material type" of *P. americana*.

**Psychotria annularis** ["pinularis"] Sessé & Moc. Fl. Mex. ed. 2. 57. 1894.

Locality cited: Puerto Rico ("in monticulo Porto de la Aguada vicino. Floret Junio"). Described at length. Accepted by Urban as *pinularis* (Symb. Antill. 4: 597. 1911) and by Standley (Corr. U. S. Nat. Herb. 23: 1389. 1926) as a valid species, but in an unpublished note on the Rubiaceae of the S. & M. herbarium, Standley referred the name to the synonymy of *Psychotria microdon* (DC.) Urb. Symb. Antill. 9: 539. 1928. As noted by Standley, and as indicated in the description in the Fl. Mex., "pinularis" seems to have been a printer's error for "annularis", the name used on the labels in the S. & M. herbarium (nos. 1338, 1613, 5478; CNHM negs. 47875-47877). In the Fl. Mex. the corolla-tube is described as "longus, ore circulo parum prominente anulus".

**Psychotria arborea** Sessé & Moc. Fl. Mex. ed. 2. 57. 1894, not of Hieron.

Type-locality: Ahualulco, [Tabasco], and hot mountains of Guatemala. Described. In the S. & M. herbarium nos. 1381 and 1605 (CNHM negs. 47857, 47858), labelled "Psychotria" or "Psychotria arborea N.", are according to Standley *Psychotria bertteriana* DC., a species of Cuba and Puerto Rico.

No. 5476 (neg. 47792), also labelled "Psychotria arborea N.", is according to Standley *Eustena mexicanum* A. Gray, Proc. Amer. Acad. Arts 5: 180. 1861. According to an unpublished note by Standley, "This is apparently not *Psychotria arborea* Sessé & Moc. as published, which is described as having coriaceous leaves, and differing in various other characters". Nelson (1997) designated "Sessé 5476" as "material type" of *P. arborea*.


Localities cited [Pl. Nov. Hisp.]: Acachiuzotla, Guerrero ("in Asia et umbrosa Acachiuzotlae montibus. Floret Julio"); [Fl. Mex.]: Veracruz ("in calidis Zozocolo montibus vicinis. Floret Augusto"). Described; the descriptions in the two volumes are quite different. In the S. & M. herbarium, according to
determinations by Standley, two species were so labelled (no. 1618, CNHM neg. 47872, "Psychotria asiatica. No. 476", referred to *P. horizontalis* Sw., and no. 864, neg. 47878, "Psychotria asiatica", to *P. pubescens* Sw.). Nelson (1997) designated "Sessé 1618" as "material tipo" of "Psychotria asiatica Sessé & Moc.", which is inappropriate, as no such name exists.

No. 0031 in the Torner Collection bears the number "271" at upper left (as if for one of the Ic. Fl. Mex.), the hand-printed name "Psychothria [Asiatica.] Linn. crossed out", and "Psychothria oblongata" added by de Candolle. It is likely that the illustration dates from the "Second Excursion" in 1789, but see the remarks above, under "Mussenda [sic] nuda" and "Mussenda". The number "271" was omitted from the list of icones obtained on the "Second Excursion" and was eventually used for another plant.

**Psychotria cuneifolia** Sessé & Moc. Fl. Mex. ed. 2. 58. 1894, not of de Candolle.

Type-locality: Mountains near Córdoba, Veracruz, where said to flower in August. In the S. & M. herbarium no. 544 (CNHM neg. 47874), labelled "Paveta cuneifolia N.", is according to Standley *Psychotria microdon* (DC.) Urb. Symb. Antill. 9: 539. 1928. See *Psychotria annularis*. According to an unpublished note by Standley, "P. cuneifolia is a curious form in which the leaves are broadly rounded, truncate or even emarginate at the apex. I believe it to be only an abnormal form of *P. microdon* but further study may show that it is a distinct species."


Locality cited: Puerto Rico ["in umbrosa montibus prope Oppidum de la Aguadilla, Floret Maio"]. Described. In the S. & M. herbarium nos. 1339 and 1604 (CNHM negs. 47812, 47813), labelled "Psychothria (or Psychothia) herbacea", were determined by Standley as *Geophila herbacea* (Jacq.) Schum.

**Psychotria incurvata** Sessé & Moc. Fl. Mex. ed. 2. 58. 1894.

Type-locality: Ponce ["in agris de Ponce"], Puerto Rico. Referred by Urban (Symb. Antill. 4: 601. 1911) to the synonymy of *Palicourea domingensis* (Jacq.) DC. in DC. Prodr. 4: 529. 1830. In the S. & M. herbarium nos. 1614 and 5475 (CNHM negs. 47852, 47853), labelled "Psychothia incurvata N.", are both according to Standley *Palicourea domingensis*. Nelson (1997) designated "Sessé 5475" as "material tipo" of *P. incurvata*.

**Psychotria thyrsoides** Sessé & Moc. Fl. Mex. ed. 2. 58. 1894.

Type-locality: Near Córdoba, Veracruz, where said to flower in August. Not found in the S. & M. herbarium. Not identified.

**Psychotria sp.** ("Psychotria caule suffrutescens, foliis oblongo-lanceolatis, etc.") Sessé & Moc. Fl. Mex. ed. 2. 58. 1894.


Localities cited: Cuernavaca, Morelos ["in Quahunahuaec et in Jamaica, Floret Maio"]. Described. In the S. & M. herbarium no. 1383 (CNHM neg. 47895), labelled "Randia aculeata", was determined by Standley as *Randia canescens* Greenm.

**Randia echinocarpa** DC. in DC. Prodr. 4: 385. 1830, with citation of "fl. mex. icon. inedit. as the basis for the name. **Mussenda spinosa** [Jacq.] sensu Sessé & Moc. Pl. Nov. Hisp. 36, in part. 1888; ed. 2. 34, in part. 1893.

Type-locality [DC.]: Mexico. Lectotype [DC.]: In the Torner Collection, no. 0032 bears the number "237", the hand-printed name ["Randia tetrandra. Sp. N." crossed out], the name hand-written ["by Mocñio or Sessé"] ["Mussenda spinosa Linn." crossed out], and an annotation by de Candolle, "Randia echinocarpa". DC. plate 469, as cited in Calques des Dessins (Field Mus. neg. 30692), is an original painting, essentially identical with Torner 0032, bearing the number "237", the hand-printed name "Mussenda Spinosa. Linn.", and the annotation by de Candolle "Randia echinoarpa". Both paintings represent Ic. Fl. Mex. 237, obtained in the course of the "Second Excursion" (MA, mass) and very probably painted in Guerrero in 1789. The "Mussenda spinosa" of Sessé & Mocñio seems to have been a mixture, as according to determinations by Standley the name was applied to *Randia aculeata* L. (no. 1456, CNHM neg. 47893) as well as to *Randia cenicera* Standl. (no. 1583; neg. 47896) detached flowers; and *Randia watsonii* B. L. Rob. (the same number, a leafy branch). Apparently *Randia echinocarpa*, as typified by the Ic. Fl. Mex. 237, is not represented in the herbarium.

**Randia inermis** Sessé & Moc. Fl. Mex. ed. 2. 50. 1894.

Type-locality: Amatitán ["in Amatitani clivo ... Floret Maio"], Jalisco. Described as a tree 15 feet high, with opposite, entire, subesszile leaves tomentose beneath, short thickened axillary one-flowered peduncles, and capsules obovate, umbilicate, 5-lineate below; the flowers were unknown to the collectors. The vernacular name was given as "Testiculus taurinus", which is evidently a Latin rendering of "Huevos del toro." Not found in the S. & M. herbarium, but from the description probably referable to *Stemmaderia tomentosa* Greenm. Proc. Amer. Acad. Arts, n.s. 35: 310. 1903 (Apocynaceae).
"Fortê Mexicî", according to de Candolle (in DC. Prodr. 4: 385. 1830). This is apparently a reference to DC. plate 470, labelled by de Candolle "Randia latifolia?". The painting is a copy derived from no. 1534 in the Torner Collection, one of Echeverría's fine detailed and colored sketches of West Indian plant, and without inscription except for an annotation by de Candolle, "Randia decussata". According to Standley (Contr. U. S. Natl. Herb. 23: 1376. 1926), Randia latifolia is a synonym of R. aculeata L. Sp. Pl. 1192. 1753, as is Musaenda rotundifolia Sessè & Mocc., q.v.

Type-locality [Pl. Nov. Hesp.]: "cum praece dentibus", i.e., R. tetracantha: Ahuajullo [in montibus Haereditatis Ahuesuyo. Floret Decembrì]. Jalisco. Described as a shrub 10 feet high, glabrous, the leaves in fascicles at the tips of the branches, lanceolate, entire, subsessile; stipular spines paired, straight, stout; flowers white, terminal, sessile, crowded; fruit round, smooth, a little larger than a pea ["cicere"]. Not found in the S. & M. herbarium. Not identified, but presumably of this genus; perhaps the same as Randia? mitis, q.v.

Locality cited: Hot and dry places in New Spain. I.e. Fl. Mex. 226, presumably represented by an original painting at MA that was not numbered or listed by Mociño, but bears the hand-printed name "Randia Mitit." It was listed by name, with description, and identified as RBJ Lám. 26 in the Catálogo de las Láminas del Real Jardín Botánico (RJB 1987, p. 324). It is no. 62 of Ramírez (Anales Inst. Méd.-Nac. México 6, pt. 1: 80. 1903), who correctly equated it with DC. plate 472, a copy, labelled "Randia? tetracantha DC.". In the Torner Collection no. 0666 is essentially identical with the copy at MA, but is without inscription except for the number "226" and the annotation by de Candolle, "Randia? tetracantha?".
I.e. Fl. Mex. 226, according to a list at MA, was obtained on the "Third Excursion", therefore somewhere in western Mexico in 1790-1791. The plant depicted is a small-flowered, small-fruited species with paired spines at the tips of the branches only, and with (apparently) solitary flowers. Not found in the S. & M. herbarium.


Type-locality [Pl. Nov. Hesp.]: Ahuajullo ["in montibus Haereditatis Ahuesuyo. Floret Decembrì"]. Jalisco. Not found in the S. & M. herbarium. The plant described may be the same as Randia tetracantha (Cav.) DC., but the name must have been proposed independently, as the manuscript of the Pl. Nov. Hesp. was completed in 1791, some years before the publication of Musaenda tetracantha Cav.

Randia sp. [without diagnosis; described at length] Sessè & Mocc. Fl. Mex. ed. 2. 50. 1894.
Locality cited: [La Punta, Veracruz] ["in Puntae hereditat. Floret Augusto"]). The precise location of the Prætium or Oppidum called La Punta is unknown, but McVaugh (1977, p. 175) thought probably it was in Veracruz not far from Córdoba. Species not further identified.

Type-locality: Ahualulco, ?[Tabasco]. Not found in the S. & M. herbarium. From the long description this is evidently some herbaceous rubiaceous plant. It may well have been Richardia scabra L. Sp. Pl. 330. 1753, as the corolla is described as 6-parted, the stamens 6 and the "seeds" 3.

Type-locality: Mountains of Temascaltepec, Edo. de México ["in montibus Temascaltepec plurimisque aliis N.H. locis arenosis. Floret Julio"]). See discussion above. The diagnostic features of corolla, calyx and fruit are omitted from this description, and I cannot guess at the identity of the plant.

Richardsonia adscendens DC. in DC. Prodr. 4: 569. 1830. "Spermacoece adscendens Pav. in h. Moric.", cited in synonymy by DC., i.e. as the basis for Richardsonia adscendens. "Richardia villosa fl. mex. i.e. med. ex qui corollae roseae", a comment in synonymy by DC., i.e. Spermacoece adscendens Sessè & Mocc. Fl. Mex. 25. 1893 ed. 2. 23. 1894.
Type-locality [DC.]: México, [Fl. Mex.]: Low wet places, Ahualulco, [Tabasco], where said to flower in October. Lectotype here designated [DC.]: "Pavon", at G ex herb. Moricand, named by de Candolle, and marked by Pavón "Spermacoece adscendens de N. E"). No. 1993 in the Torner Collection, in which the corollas are definitely pink with no hint of purplish, appears to have been the reference for the reference to "Richardia villosa", although it was annotated by de Candolle, "Richardia ovalifolia". I find no other candidate in the Torner Collection, DC. plate 493 (Field Mus. neg. 30698) is a copy of Torner 1993. The plant depicted appears to be Richardia scabra L. Sp. Pl. 330. 1753. In the S. & M. herbarium no. 583 (CNHM neg. 47899), labelled "Spermacoece adscendens N.", is according to Standley Richardia scabra L. The
description of *Spermacoce ascendens* in the Fl. Mex. is not very informative. Lewis and Oliver (Brittenia 26: 279. 1974), without comment, designated the "Pavón" specimen at G as "type" of *Richardsonia adscendens* at the same time referring the latter name and *Spermacoce ascendens* Sessé & Moc., to the synonymy of *Richardia brasiliensis* Gomes (1801). Nelson (1997) designated "Sessé 583" as "material tipo" of *S. ascendens*.


Localities cited: "In montibus del Mariel" and near Morro Castle, Cuba ["in montibus del Mariel in Insula Cubae et prope Castellum del Morro. Floret Augusto"]. The authors included the notation "ic.H.", indicating that they had an illustration (icon) and a herbarium specimen of this plant. The illustration may well have been the one cited below under *Rondeletia odorata*. In the S. & M. herbarium nos. 1625 and 5468 (CNHM negs. 47914, 47915), labelled "Rondeletia obovata. ic.", are according to Standley *Rondeletia odorata* Jacq.

Although in the protologue of *R. obovata* no reference is made to Jacquin or to Linnaeus, there is reason to suppose that Sessé & Mocíño were proposing a new name. They must have been familiar with the version published by Palau (2: 237. 1785), where the name was attributed to Jacquin but the epithet spelled "sbovata". Jacquin originally spelled it "odorata", but it was published by Linnaeus as *obovata* because of a typographical error (cf. DC. Prodr. 4: 408. 1830), and the error was perpetuated by Palau and by Sessé & Mocíño.


De Candolle's report from "Mexico" seems to have been based on no. 1487 of the Torner Collection, which is without inscription except for an annotation by de Candolle. "Rondeletia coccinea". DC. plate 465 [466] is annotated by de Candolle "Rondeletia odorata". This is presumably the same plant to which Sessé & Mocíño referred in the Fl. Mex. under the name of *Rondeletia obovata*, q.v., and is therefore Cuban, not Mexican, in origin. The Torner copy is one of Echeverría's sketches of West Indian plants, with details exquisitely drawn and colored.

**Rondeletia tetrandra** Sessé & Moc. Fl. Mex. 23. 1893; ed. 2. 21. 1894. not of Roxburgh.

Type-locality: Mountains of Toa Alta, Puerto Rico, where said to flower in March. Referred by Urban (Symb. Antill. 4: 583. 1911) to the synonymy of *Rondeletia inermis* (Spreng.) Krug & Urb. Symb. Antill. 1: 416. 1899. In the S. & M. herbarium, nos. 1622 and 5467 (CNHM negs. 47906, 47907), labelled "Rondeletia tetrandra", are according to Standley *Rondeletia inermis*. Nelson (1997) designated "Sessé 5487" [sic] (neg. 47907) as "material tipo" of *R. tetrandra*, but that was an error for "5467", labelled [by Sessé] "Rondeletia tetrandra. N."

**Rubia diphylla** Sessé & Moc. Fl. Mex. 23. 1893; ed. 2. 21. 1894.

Type-locality: México, D.F., in barrancas ["anfructibus"] of San Angel, and the gardens of Tlapan ["Sancti Augustini "]. In the S. & M. herbarium I found nothing under the name of *Rubia diphylla*, but no. 534 (CNHM neg. 47778), under the name of "Galium diphyllum N.", is according to Standley *Didymaea mexicana* Hook. f. *[Didymaea alsinoides* (Schlecht. & Cham.) Standl. Publ. Field Mus. Nat. Hist., Bot. Ser. 18: 1291. 1938]. From the description of *Rubia diphylla*, I suppose this is the same plant. Very likely *Rubia mexicana* Cerv. ex Lag. Elench. 19. nomen. 1816, is the same species; many of the species to which Cervantes gave names were plants that had been transplanted to gardens, as apparently had *Rubia diphylla*.

**Sabicea hirta** Sw. Prodr. 46. 1788.

A Jamaican species reported by de Candolle (in DC. Prodr. 4: 439. 1830) from Puerto Rico and, on the basis of an "icon. fl. mex. ined.", from Mexico. The "Mexican" plant, according to de Candolle, was "forsan specificè diversa". The basis of this report was no. 1665 of the Torner Collection, a painting without inscription except for the number "78" (which I cannot explain) and an annotation by de Candolle, "Sabicea stipulata". DC. plate 456 (Field Mus. neg. 30686) is a fair copy of no. 1665. According to Urban (Symb. Antill. 4: 586. 1911), the Puerto Rican plant included by de Candolle under *Sabicea hirta* was actually *Sabicea aspera* Aubl. The plant shown in Torner 1665 and DC. 456 is evidently a species of *Sabicea*, superficially like *S. aspera* and perhaps also from Puerto Rico rather than from Mexico. The genus *Sabicea* is apparently not represented in the S. & M. herbarium.

**Spermacoce avenia** Sessé & Moc. Fl. Mex. 25. 1893; ed. 2. 23. 1894.

Type-locality: Near the cave of Tagarnana, Havana, Cuba ("ad litora maris prope antrum de Tagarnana [sic], Habanæ"). Not found in the S. & M. herbarium. Described as a glabrous procumbent herb with oval lanceolate scabrous sessile leaves, the stipular membrane setigerous; flowers in globose verticils; calyx 4-toothed, the opposite teeth shorter; corolla small, white, 4-toothed; stamens as long as the corolla. Not identified.

**Spermacoce capitata** Sessé & Moc. Pl. Nov. Hisp. 17. 1888; ed. 2. 16. 1893, not of Ruiz & Pavón.

Type-locality: "cum precedentii" (*S. tenuifolia*), i.e., Pátzcuaro, Michoacán. Ic. Fl. Mex. 234, not cited in Pl. Nov. Hisp., but listed among the icones obtained on the "Second Excursion", that (to Guerrero) in 1789. Lectotype (here designated): Ic. Fl. Mex. 234 as represented by DC. plate 497, an original painting bearing the number "234"
and the hand-printed name “Spermacoece Capitata. Sp. N.” (Field Mus. neg. 30700); a nearly identical copy is no. 0011 in the Torner Collection, which bears the number “234” and the hand-printed name “Spermacoece [stricta crossed out and capitatta written in]”. Under *Crusea calceophala* (DC. in DC. Prodr. 4: 567. 1830), de Candolle cited “Spermacoece capitata fl. mex. ic. ined. non fl. peruv.”

The flowers in the paintings are apparently larger than those of *Crusea calceophala*, and it may be that two species were confused by Sessé & Mocño, as their *Spermacoece capitata* was described from Pátzcuaro, but their illustration was based on a plant probably from Morelos or Guerrero. W. R. Anderson (Mem. N. Y. Bot. Gard. 22: 111. 1972), in his revision of *Crusea*, assigned *S. capitata* Sessé & Moc. to the synonymy of *Crusea hispida* (Mill.) B. L. Rob. Proc. Amer. Acad. Arts, n.s. 45: 409. 1910. In the S. & M. herbarium, according to determinations by Standley, three specimens represent *Crusea calceophala*; of these no. 633 (CNHM neg. 47770) is labelled “Spermacoece capitata N.”; no. 586 (neg. 47768) is labelled “Spermacoece hirta?”; and no. 587 (neg. 47769) with an epithet referring to the hirsute stems. According to Anderson, i.e., a duplicate of no. 633 (af fl) represents *Crusea hispida*, not *C. calceophala*. A specimen labelled “Spermacoece [verticillata crossed out] capitata” (no. 593; CNHM neg. 47728) was determined by Standley as *Borreria suaveolens* Mey.

**Spermacoece ciliaris** Sessé & Moc. Fl. Mex. 26. 1893; ed. 2. 24. 1894.


**Spermacoece depressa** Sessé & Moc. Pl. Nov. Hisp. 17. 1888; ed. 2. 16. 1893.

Type-locality: “cum praecedentibus”, i.e., Pátzcuaro, Michoacán. Not found in the S. & M. herbarium. Described as a diffusely villous herb 3 inches high; leaves linear-lanceolate, glabrous, sessile; stipular membrane selloferous; flowers few, terminal, involucrate, small, sub-campanulate; calyx-teeth linear-lanceolate, ciliate; capsule hirsute. Not identified.

**Spermacoece glabra** Sessé & Moc. Pl. Nov. Hisp. 17. 1888; ed. 2. 16. 1893; Fl. Mex. 25. 1893; ed. 2. 23. 1894, not of Michaux.

Type-locality: Pátzcuaro, Michoacán. (“cum praecedentibus”, i.e., *Spermacoece” Tenui”, for which read *tenifolia*). Not found in the S. & M. herbarium. Described as a glabrous herb a foot high or more, with lanceolate leaves, globose terminal heads of flowers subtended by unequal bracts; flowers white. Not identified.

**Spermacoece linearis** Sessé & Moc. Fl. Mex. 25. 1893; ed. 2. 23. 1894, not of H. B. K.

Type-locality: Mountains near Jorullo, Michoacán, where said to flower in September. In the S. & M. herbarium no. 590 (CNHM neg. 47788), labelled “Spermacoece linearis N.”, is according to Standley *Diodia teres* Walt. Fl. Carol. 87. 1788. The description of *Spermacoece linearis* could apply to *Diodia teres* and this is perhaps a satisfactory disposition of the Sessé & Mocío name. Nelson (1997) designated “Sessé 590” as “material tipo” of *S. linearis*.

**Spermacoece repens** Sessé & Moc. Fl. Mex. 25. 1893; ed. 2. 23. 1894.

Type-locality: Sandy seashores between the port of Cabo Rojo and Aguadilla, Puerto Rico, where said to flower in June. Described. Referred by Urban (Symb. Antill. 4: 605. 1911) to the synonymy of *Diodia maritima* Thonn. in Schum. & Thonn. Beskr. Cnn. Plant. 95. 1827, a species represented in the S. & M. herbarium but under another name.


Localities cited [Pl. Nov. Hisp.]: Cuernavaca, Morelos (“cum praecedenti. (=S. verticillata)”). Described. In the S. & M. herbarium no. 650 (CNHM neg. 47776), labelled “Spermacoece stricta”, was determined by Standley as *Crusea cruciata* S. Wats. [= *Crusea seosa* (Mart. & Gal.) Standl. & Steyerm.]. Nelson (1997) designated “Sessé 650” as “material tipo” of *Spermacoece stricta Sessé & Moc.”, which is inappropriate because no such name exists.

The name *Spermacoece stricta*, both in Pl. Nov. Hisp. and Fl. Mex., seems to have been taken from *S. stricta* L., although no reference was made to this in Fl. Mex. In Fl. Mex. no definite locality was cited (“in calidis, N.H. ...”), and the description differs in many particulars from that in Pl. Nov. Hisp.
Spermacoce tenuiflora Sessé & Moc. Fl. Mex. 24. 1893; ed. 2. 22. 1894.

Type-locality: Zitacuaro, Michoacán (“in agris Zitacuari. Floret Augusto”). In the S. & M. herbarium no. 584 (CNHM neg. 47765), labelled “Spermacoce tenuiflora N.”, is according to Standley Cræsea brachyphylla Schlcht. & Cham. Linnaea 5: 165. 1830. This identification was confirmed by W. R. Anderson (1967) on a duplicate of no. 584 at F. Described as a small herb with oval-lanceolate leaves, the floral leaves in 4’s; corolla-tube white, filiform, much longer than the calyx, the limb sub-violaceous; filaments white, as long as the limb; anthers blue.


Type-locality: Patzcuaro (“Habitat Patzcuari. Floret Augusto”), Michoacán. The epithet was written “tenuifolia” in the manuscript of the Fl. Mex., then the “folia” part of the word crossed out and the letters “g.n.” (genus novum) written over it, so that the printer set up only the first half of the epithet. Not found in the S. & M. herbarium. Described as a weak erect glabrous herb with linear-subulate, revolute, nerveless leaves; flowers small, white in a terminal head subtended by an involucre of about 7 narrow bracts; calyx-teeth very short and unequal, subulate; styles filiform, the stigmas rather thick; capsule somewhat tetragonal, bisulcate. This suggests a species of Borreria; possibly the name tenuifolia was taken up at some time to replace “tenuior”, but never added to the herbarium specimens; see Borreria haenkeana, which is probably a synonym of B. tenior and of B. suaveolens G. Mey. Prim. Fl. Esseq. 81. pl. 1. 1818.


Locality cited: Jorullo, Michoacán (“in prædio Xorulli”). Short description. In the S. & M. herbarium no. 580 (CNHM neg. 47785), labelled “Spermacoce verticillata”, is according to Standley Diodia sarmientosa Sw. No. 593 (neg. 47728), labelled “Spermacoce verticillata crossed out” capitata”, was determined by Standley as Borreria suaveolens Mey.


Type-locality: “Mexico” [i.e., probably Puerto Rico]. Lectotype: no. 1019 in the Torner Collection, without inscription except the annotation by de Candolle, “Laugeria dichotoma”. DC. plate 482, cited as “type” in Calques des Dessins (microfiche; photograph McVaugh), is a later copy, labelled “Laugeria dichotoma”, and by de Candolle “Stenostomum dichotomum”. Referred by


Standley (Contr. U. S. Nat. Herb. 23: 1232. 1924) and Johnston (Contr. Gray Herb. 92: 69. 1930) referred Stenostomum dichotomum to the synonymy of Tournefortia bicolor Sw., of the Boraginaceae, but this seems an untenable view. The original painting surely depicts a Rubiaceae plant, with opposite leaves, forked compound cymes with second spikelike branches, inferior ovary, two opposing stigmas, and a 2-locular fruit.


Locality cited: Near the cave of Tagama, Havana, Cuba ["Habitat littor maris prope antrum de Tagama Havanæ. Floret Februarii”]. Hardly to be considered as a new name, even though no reference is made to a previous publication of it. In the S. & M. herbarium no. 4110 (CNHM neg. 47923), labelled “Strumpfia [sic] maritima”, is according to Standley correctly identified.

Rutaceae

Amyris, see Burseraceae.


De Candolle cited no species under the generic name Pleenekia; his implication was that Sessé & Mociño had one species which was a synonym of the one species of Choisy a. In fact there are two paintings under this generic name, both in the Torner Collection and that of de Candolle. DC. plate 161 is a “large-flowered” species, also represented in DC. plate 162; an unnumbered original painting, is a “small-flowered” species, also represented by no. 0397 of the Torner Collection, annotated “Pleenekia parviflora” by de Candolle. In the S. & M. herbarium no. 5203 (CNHM neg. 47934), identified by Standley as Choisy a ternata, was labelled by the collectors as a species of Fagonia.


Localities cited: New Spain; the Islands of America; and India. Ic. Fl. Mex. 318, cited in Pl. Nov. Hisp. and cited in a list of icons obtained on the “Second Excursion” and so presumably painted in Guerrero or perhaps Morelos in 1789, is represented by no. 0628 of the Torner Collection, which bears the hand-printed name “Citrus Decumanus. Linn.” and the number “378” (evidently added in error after “318” in the upper left-hand
corner had been trimmed off). An almost identical duplicate, but made with more attention to detail, is Torner 1627, which is without inscription. Not found in the S. & M. herbarium. Evidently a species of Citrus but its exact identity not determined.


Localities cited: "in Acapulco hortis et Japonia. Floret Octobri". Described as a shrub 15 feet high, thorny, with terete leaves and the fruit subrotund, cherry-form. In the S. & M. herbarium no. 3615 (CNHM neg. 47939), labelled "Citrus trifoliata. 1455", is apparently referable to *Poncirus trifoliata* (L.) Raf. The number "1455" does not pertain to that *specimen* in particular, but is the number assigned to that *species* during an attempt to reorder the entire herbarium, in Madrid after 1800 (cf. McVaugh 1990, p. 209).


Locality cited: Coahuayana, Michoacán ["in agris Coahuayanae maris vicinis. Floret Januario"]. Moderately well described. Not found in the S. & M. herbarium. Not identified. See *Turracea viridis*.

**Ptelea pentandra** DC. in DC. Prodr. 2. 83. 1825, with citation of "fl. mex. ic. ined." as the basis for the name.

Type-locality: Mexico. Lectotype: In the Torner Collection, no. 0701 shows a plant with 5 stamens in the flowers, lacking any inscription except for the annotation by de Candolle, "Ptelea pentandra". DC. plate 201, as cited in Calques des Dessins (not photographed), is a poor copy, showing a flowering branch of a woody plant with trifoliolate leaves. The name was referred by Percy Wilson (N. Amer. Flora 25: 209. 1911) to the synonymy of *Ptelea trifoliata* L. Sp. Pl. 118. 1753. De Candolle originally distinguished the species from *P. trifoliata* because of its 5-andros rather than 4-andros flowers. Not found in the S. & M. herbarium.

**Ptelea podocarpa** DC. in DC. Prodr. 2. 83. 1825. "P. trifoliolata fl. mex. ic. ined." cited in synonymy by DC., i.e., as the basis for *P. podocarpa*.

Type-locality: Mexico. Lectotype: In the Torner Collection, no. 0622, which bears the number "307" (apparently added in error for "301"), a hand-printed name "Ptelea [Trifoliata. Linn. crossed out]", and "podocarpa" added by de Candolle. Almost identical with Torner 0622 is Torner no. 0732, which bears de Candolle's annotation "Ptelea podocarpa" and the number "301" (i.e., ic. Fl. Mex. 301 as cited in Pl. Nov. Hisp. under *P. trifoliolata* and includes additional floral details and illustration of the fruit, but lacks the hand-printed name. DC. plate 200, as cited in Calques des Dessins (Field Mus. neg. 30356), is an original painting, which does not bear the name "trifoliolata" or "trifoliata", and therefore can not be certainly equated with ic. Fl. Mex. 301, cited by Sessé & Mocñio under their *Ptelea trifoliata*. I judge from the *icones* that *Ptelea podocarpa* is a synonym of *Ptelea trifoliata* L.


Type-locality [Pl. Nov. Hisp.]: Along streams near Cuernavaca, Morelos ["ad torrentes fluminis Sanctae Mariae de Tetelea prope Quauhnahuacam"]; [Fl. Mex.]: "ad margines fluminis S. Mariae de Tetele. Augusto florentem cognovimus" and in another place, "Flores non vidimus, fructu cognovimus". Not found in the S. & M. herbarium. Not identified. Described as a treelet 10 feet high, glabrous, with alternate simple ovate-lanceolate, scarious, minutely serrate leaves, very short filiform petioles, and axillary peduncles bearing about 4 flowers. *Fructus* is not described.


**Turracea viridis** Sessé & Moc. Pl. Nov. Hisp. 68. 1888; ed. 2. 63. 1893.

Localities cited: Mazatlán, Guerrero, and "India Orientali". Ic. Fl. Mex. 246, cited in Pl. Nov. Hisp., was listed under the name of "Murraya simplicifolia" among the *icones* obtained on the "Second Excursion", that to Guerrero in 1789. This is represented by no. 0019 of the Torner Collection, which bears the number "246", the hand-printed name "Murraya Simplicifolia. Sp. N.", and an annotation by de Candolle, "vide mss. p. 131 et 150". DC. plate 158 is an original painting bearing the number "246" and annotated by de Candolle "Murraya? simplicifolia vide mss. p. 131 et 150". The plant depicted is the very distinctive *Amyris rekoii* Blake, Contr. Gray Herb. 53: 56. 1918. A specimen in herb. Webb (Fl., evidently the same plant, is labelled by Pavón "Genus novum de N.E. Cl. [assisi] 10". In the S. & M. herbarium no. 107 (CNHM neg. 47933) is the same plant, but the specimen was not labelled by the collectors. A duplicate of no. 1077 (F) has recently been labelled "Murraya simplicifolia N.".

Probably this was not intended by Sessé & Mocñio as a new name but was published in error for *Turracea viridis* L. Mant. 2. 237. 1771, a name that was available to them via Palau (2: 550. 1785). There is no reference in the Pl. Nov. Hisp. to any earlier use of the name, and no.
character is provided, but this latter was in conformity with Linnaean usage when there is but one species of a genus. The Linnaean locality was "in India orientali", and the repetition of this in the Pl. Nov. Hisp. is additional confirmation that there was no intention to describe a new species there.


Locality cited: Puerto Rico ("in omni fere Insula de Port Rico. Floret Februario. Vulgo espino blanco").

Long description, with added note: "Observe Mense Mai, arbores quasdam fructibus maturis onustas reperimus, cum simul aliae florere incipient in quibus germina cum suis stilis...". In the S. & M. herbarium no. 3808 (CNHM neg. 47947) and no. 4767 (neg. 47949), identically labelled "Zanthoxylum Clava Hercules. V. Espino blanco. 22°-5°", were both determined by Standley as Zanthoxylum martiniense (Lam.) DC. Nelson (1997) designated "Sessé 3808" as "material typo" of Zanthoxylum clava-herculis Sessé & Moc., which was inappropriate as no such name exists.


Type-locality: Near Acapona, Nayarit, where said to flower in October. Described as a tree 20 feet high, spiny, the leaves glabrous, imparipinnate; leaflets about 11, ovate, obtusely acuminate, crenate, punctate, the marginal glands larger; rachis apparently not winged; whole plant with the odor of skunk; flowers pentameros. From the description this would appear to be the species treated by Standley (Contr. U. S. Nat. Herb. 23: 534. 1923) as Zanthoxylum caribaeum Lam. Encycl. 2: 39. 1786. In the S. & M. herbarium no. 5130 (CNHM neg. 47932), determined by Faustino Miranda as Zanthoxylum caribaeum Lam., was originally labelled with the epithet "pentandra" (as described in Fl. Mex.), on another ticket are the words "foetida" and "Zorillo". The last is the vernacular name as given in the Fl. Mex., and this specimen may well represent Zanthoxylum horrida of that work.


Type-locality: Mezquite, near Sinaloa, Sinaloa ["in Predio Mezquite dicto prope Sinalon, ubi vulgo Limoncillo adpellant. Floret Septembre"]). Description. Standley (Contr. U. S. Natl. Herb. 23: 533. 1923) referred this with a question to the synonymy of Zanthoxylum fagara (L.) Sarg. Gard. & Forest 3: 186. 1890. From the description in Fl. Mex., I am inclined to agree. For citation of specimens, see below.


Type-locality: Havana, Cuba ("in agris Chorrenae [sic] vicinis. Floret Februario"). The locality was correctly spelled "Chorrenae" in the manuscript of Fl. Mex. In another reference in Fl. Mex., the citation was "incolit litora de la Charrera, non procul ab urbe Habanae". The place is now in the city, west of the harbor. In the S. & M. herbarium no. 4771 (CNHM neg. 47940), labelled "Zanthoxylum marginatum. [desc.] Havana, 21°-5°", was determined by Standley as Zanthoxylum fagara (L.) Sarg. Two additional sheets of no. 4771 (negs. 47941, 47942) are similarly labelled, without mention of Havana. Nelson (1997) designated "Sessé 4771" as "material typo" of Z. marginatum but cited no negative number. He indicated that the plant he was treating was that described in Fl. Mex. on page 230 (i.e., the plant from Sinaloa), not the one described in page 231.

Perhaps this latter species is the same as that described from Sinaloa under the same name (q.v. above), but the specimens in the herbarium may be all from Cuba. Sessé & Mocío saw the Mexican plant in the autumn only, when the trees were in fruit, but the Cuban plant is distinguished in the character by mention of the tetrads of flowers.


Type-locality [DC.]: "Mexico" [i.e., probably Puerto Rico]. Lectotype [DC.]: In the Torner Collection, no. 1580, without inscription except for an annotation by de Candolle "Pentanome simplicifolia". DC. plate 187, as cited in Calques des Dessins (Field Mus. neg. 30575) is an unfinished copy of Torner 1580. DC. plate XVIII C, as cited in Calques des Dessins [sketches only; Field Mus. neg. 30505], is derived from the same original. Sessé & Mocío (in Fl. Mex.) gave the locality as "Puerto Rico" ['cum praecedenti' = Z. Clava Herculis] and the vernacular name as "Espinó Peralta", a name reported for the same species by Urban (Symb. Antill. 4: 317. 1905). The correct name for the plant is Zanthoxylum monophyllum (Lam.) P. Wilson, Bull. Torrey Bot. Club 37: 86. 1910. In the S. & M. herbarium, according to determinations by Standley, this species is represented by nos. 3808 and 4751 (CNHM negs. 47930, 47951), similarly labelled. The more complete label is that of no. 3809, 'Zanthoxylum simplicifolium ic. d. N. [desc. V.'
Espino Rubial”. Nelson (1997) designated “Sessé 4751” as “material tipo” of *Zinnia simplicifolium*.


Locality cited: None cited. Description none except for the diagnosis “Zanthoxylum folis ternatis. Statura praecedentium”, i.e., trees up to 30 feet high. In the S. & M. herbarium no. 4769 (CNHM neg. 47943), labelled “Zanthoxylum trifoliatum. 22–5”, and no. 4769 (neg. 47944), labelled “Zanthoxylum trifoliatum N. [descr.] No. 67”, were determined by Standley as *Zanthoxylum liebmannaeanum* (Engl.) P. Wilson. Nelson (1997) designated “Sessé 4769” as “material tipo” of “Zanthoxylum trifoliatum Sessé & Moc.” which is inappropriate because no such name exists.

**Sabiaceae**


An original painting at MA, without significant exception except an annotation “cf. Mellisia sp.” by McVaugh in 1963, was reproduced in color, nearly full size at ca. 28 by 18 cm, and identified as “[Conosoleson] RJB Lámina 10” (RJB 1987, p. 281). It was cited in the catalogue in the same work (RJB 1987, p. 320) with a short description. The plant depicted is apparently *Mellisia dentata*, which is a common tree in the Mexican mountains.

**Salicaceae**


Locality cited: México, D.F. [“in montibus umbrosis S. Angeli et plurimus Hisp. locis”]. Diagnoses only, including two quoted from Palau (7: 342. 1787). Not found in the S. & M. herbarium.

*Salix taxifolia* H. B. K.

Sessé & Mociño seem to have been familiar with this distinctive small-leaved willow in the mountains around Mexico City, but oddly enough seem never to have published any of the names they used for it. In their herbarium there are what appear to be four collections (CNHM negs. 47961–47964), all determined by Standley as *Salix taxifolia*. No. 4760 (neg. 47964) is labelled “Salix angustifolia N.” and on the back of the ticket in Castillo’s hand, “Salix babylonica”? The plant must have been collected before Castillo’s death in 1793. A second sheet of no. 4760 (neg. 47963) is labelled “Salix angustifolia N. [description] in Heremo P.P. Carmelitarum”. No. 4759 (neg. 47962) is labelled “Salix linearis N. [description]”. Habitat in montibus S. Agusti[ni]. Floret tota aestate”. No. 4757 (neg. 47961) is labelled “Salix microphylla N. [description]” and on another ticket “Salix [babilonica crossed out] parvifolia N. [description]. Vulg. Taray”. From the several names and accompanying descriptions, it seems that the collectors never realized that they were dealing with a single species only.

**Sapindaceae**


Type-locality: New Spain; grown in the Madrid Botanical Garden, “semina miscit D. Vincenti. Cervantes ann. 1815”. Type: Not seen. Flowers said by Lagasca to be twice as large as those of *Cardiospermum halicacabum* L. [Sp. Pl. 366. 1753], of which according to Standley (Contr. U. S. Natl. Herb. 23: 700. 1923), *C. pubescens* is a synonym.

*Cupania? dentata* DC. in DC. Prodr. 1: 614. 1824, with citation of “fl. mex. ic. ined.” as the basis for the name.

Type-locality: Mexico. Lectotype: In the Torner Collection, no. 0938, without exceptions except for the number “94” (which I cannot explain) and the annotation by de Candolle “Cupania dentata”. DC. plate 123, as cited in Caliques des Dessins (Field Mus. neg. 30534) is an incomplete copy, with some details, of Torner 0938. This is a valid species according to Radtkof (Pflanzenreich IV. 165 [Heft 98]: 1037–1038. 1933), who cited a “Pavon” specimen in herb. Boissier, stating that this agreed well with the original painting. Not found in the S. & M. herbarium. According to Standley and Steyermark (Feldiana, Bot. 24, pt. 6: 243. 1949), “A good specimen of the original collection, Sessé & Mociño 4921, presumably from Mexico, is in the herbarium of Chicago Museum”.


Locality cited [Pl. Nov. Hisp.]: New Spain, and India; [Fl. Mex.]: India; the garden of the Carmelites Fathers at San Angel [south of México, D.F.]; and many places in New Spain. ic. Fl. Mex. 200; this is represented in the Torner Collection by no. 0428, which bears the number
“200”, the hand-printed names “Dodonaea [tetrapetala crossed off]” and “[viscosa written in and crossed off]”, and “emarginata” added by de Candolle. In the S. & M. herbarium no. 4912 (CHNM neg. 47969), labelled “Dodon[a]e[v]a viscosa”, is correctly identified according to Standley.

**Paulinia arborea** Sessé & Moc. Fl. Mex. ed. 2. 94. 1894.

Type-locality: Tenampulco, Puebla, where said to flower in August. Not found in the S. & M. herbarium. Described as a tree some 25 feet high, glabrous; leaves abruptly pinnate with 12–16 leaflets; flowers 5-merous, somewhat irregular with 2 calyx-lobes deciduous and 2 petals distant from the others; fruit a turbinate trilocular and 3-valved capsule; seed solitary. This suggests a species of *Cupania*.

**Paulinia occidentalis** Sessé & Moc. Pl. Nov. Hisp. 60. 1888; ed. 2. 56. 1893; Fl. Mex. ed. 2. 95. 1894.

Type-locality: Chilpancingo, Guerrero, where said to flower in July. In the S. & M. herbarium no. 958 (CNHM neg. 47978), labelled “Paulinia occidentalis N.”, is according to Standley *Serjania schiedeana* Schlecht. Linnaea 18: 44. 1844. The description of *Paulinia occidentalis* refers to a tomentose vine with pinnate, 5-foliate leaves; the fruit is not described.


Type-locality [DC.]: Mexico; [Fl. Mex.]: Colima, Colima. Lectotype [DC.]: no. 0094 in the Terner Collection, without inscription except for the annotation by de Candolle, “Paulinia pteropoda”. It was reproduced in full color, reduced to ca. 13.8 by 10 cm, by McVaugh (1998, fig. 6, p. 141). DC. plate 121, as cited in Calques des Dessins, is an uncolored outline-copy derived from Terner 0094 (Field Mus. neg. 30532). Terner 0094 is a near-duplicate, lacking some details, of an original painting at MA that bears the number “82” and the hand-printed name “Paulinia Tomentosa.” It was listed by name, with description, and identified as RJB Lám. 69 in the *Catálogo de las Láminas del Real Jardín Botánico* (RJB 1987, p. 334). It is no. 82 of a list by Mociño (MA, mss), and no. 52 of Ramírez (Anales Inst. Med.-Nac. Mexico 6, pt. 1: 79, 1903), who correctly equated it with DC. plate 121. The Madrid copy was reproduced in full color by Maldonado Polo (1996, p. 320). The *icones* evidently represent ic. Fl. Mex. 386, listed under the name of “Paulinia tomentosa” among the paintings obtained on the “Third Excursion”, that to western Mexico in 1790–1791. According to determinations by Standley, there is nothing in the S. & M. herbarium referable to *Paulinia tomentosa* Jacq. Enum. Carib. 37. 1760, but the paintings seem to represent that species, of which *Paulinia pteropoda* has often been considered a synonym.


Localities cited: “in calidis Americae locis. Floret Aprili”. Not described. Perhaps the same plant as that described under the same name in Fl. Mex., q.v. for locality and a named specimen.


Locality cited: Cuernavaca, Morelos [“Nascitur Quauhnahuaca. Floret Martio”]. Briefly described. In the S. & M. herbarium no. 4921 (CNHM neg. 47989), labelled “Paulinia seriana”, was determined by Standley as *Urtilea ulmacea* H. B. K.


Locality cited: “[Habitat Colimae. Floret Febrero]”. Described at length. In the S. & M. herbarium no. 4924 (CNHM neg. 47970), labelled “Paulinia tomentosa”, was determined by Standley as *Paulinia costaricensis* Radlk.

**Paulinia triquetra** Sessé & Moc. Pl. Nov. Hisp. 60. 1888; ed. 2. 56. 1893; Fl. Mex. ed. 2. 95. 1894, not of Dumont de Courset.

Type-locality: Apatzingán, Michoacán [“in Apatzingan. Floret Novembri”]. Described as scandent, with binate leaves villose beneath, the petioles and rachises not winged, the fruit a “capsule”. In the S. & M. herbarium nos. 4924 and 4927 (CNHM negs. 47970, 47971) are determined by Standley as *Paulinia costaricensis* Radlk. Ergänz. Monogr. Ser. 157. 1886. No. 4924 is determined as “Paulinia tomentosa”, and no. 4927 (on two of three tickets) as “Paulinia triquetra”. Standley (Contr. U. S. Natl. Herb. 23: 703. 1923) reported *Paulinia costaricensis* from eastern Mexico and from Central America only, but the description of *Paulinia triquetra* may refer to the same species.

**Sapindus amolli** Sessé & Moc. Pl. Nov. Hisp. 60. 1888; ed. 2. 56. 1893; Fl. Mex. ed. 2. 95. 1894.

Type-locality: Cuernavaca, Morelos [“Habitat in Quauhnahuaca (ubi vulgo Bolliche audit) alisque calidis Novae Hispaniae locis sub nomine Amolli”]. Said to
flower in December. Ic. Fl. Mex. 257, not seen. Described as a tree with abruptly pinnate leaves, 8–12 entire oblique glabrous leaflets, and three baccate, globose, mucilaginous "capsules" of which one or two abort. The common name is said to be "boliche" at Cuernavaca, and "amolli" in other hot regions in New Spain. All this suggests that the plant must have been Sapindus saponaria L. Sp. Pl. 367. 1753, even though that widely distributed plant is not represented in the herbarium. No. 944 in the herbarium, labelled "Sapindus saponarius. V[ulgaris]. Boliche.," was determined by Standley as Thouinia decandrum (Humb. & Bonpl.) Radlk. Abh. Math.-Phys. Cl. Königl. Bayer. Akad. Wiss. 8: 284. 1878, but some error may be involved here, as the fruits of Thouinia consist of 2 or 3 laterally compressed samaras.


The reference to "fl. mex. icon. ined." by de Candolle was perhaps derived jointly from no. 0596 in the Torner Collection, which bears the number "274" [evidently entered in error after the original "214" in the upper left-hand corner had been trimmed off] and the hand-printed names "Paulinia Mexicana..." and "Quaunmecail. Hern. F. 289"; and secondly from DC. plate 120, an original painting bearing the number "214", nearly identical with Torner 0596 but less finished and lacking the hand-printed names. The paintings represent Ic. Fl. Mex. 214, cited in the Pl. Nov. Hosp. without mention of a definite locality ("in calidas Americae regionibus"). According to a manuscript list at MA, Ic. Fl. Mex. 214 was obtained in the course of the "Second Excursion", that to Guerrero in 1789. Seven other icons numbered between 209 and 220, inclusive, pertain to species for which definite localities are cited in the Pl. Nov. Hosp.; in every instance the place is Cuernavaca, Morelos; this suggests at least the possibility that Ic. 214 may have been painted in this same locality. In the S. & M. herbarium nos. 951 and 4930 (CMNH negs. 47976, 47977), originally labelled "Paulinia mexicana", are according to Standley Serjania mexicana.


Type-locality [DC.]: Near Cuernavaca ["in Nová Hispaniá civi Creauannahuaca"], Morelos. Localities cited in Pl. Nov. Hosp.: Cuernavaca ["in Quauannahuaca"]; and Malabaria. Lectotype [DC.]: DC. plate 122, cited in Calques des Dessins (Field Mus. neg. 30533). This represents Ic. Fl. Mex. 198; it is an original painting bearing the number "198". It is nearly identical with no. 0230 of the Torner Collection, which bears the number "198", the hand-printed name "[Sapindus crossed out and Acer written in] Trifolia[im crossed out and s written in]. Limn.," and an annotation by de Candolle, "Thouinia villosa". In the S. & M. herbarium, according to determinations by Standley, nos. 939, 941, 3801 and 3802 (CNHM negs. 47980–47983) represent this species. They are labelled with epithets recalling the three leaflets, but apparently Sessé & Mocínó came to believe the plant represented a species of Acer rather than of Sapindus.

Sapotaceae

Achras acana Sessé & Moc. Fl. Mex. ed. 2. 84. 1894.

Type-locality: Puerto Rico. Described at some length. Referred by Urban (Symb. Antill. 4: 479. 1910) to the synonymy of Lucuma multiflora A. DC. [Pouteria multiflora (A. DC.) Baehni, Candollea 9: 391. 1942. In the character of Achras acana the feature of "baccis 4-ispermii" is mentioned, and the vernacular name is given as Acana. In the S. & M. herbarium nos. 1334 and 5110 (CNHM negs. 48001, 48002) are determined by Standley as Lucuma multiflora, and Cronquist (Lloydia 9: 280. 1946) cited the same numbers (at "FL") under Pouteria multiflora. No. 1334 was labelled by the collectors as a species of Achras with an epithet referring to the 4 seeds, and with the vernacular name cited as "Acana". An apparent duplicate, under the number 5154 (F), bears the same epithet and the same vernacular name, both in the hand of Lagasca.


Type-locality: Mountains of Aguadilla, Puerto Rico, where said to flower in June. Described at length. Referred by Cronquist (Bull. Torrey Bot. Club 72: 554. 1945) to the synonymy of Manilkara pelleana (Pierre) Cronquist, Ic. Cronquist cited no specimens from Sessé & Mocio, but in their herbarium nos. 1333 and 5109 (CNHM negs. 47990, 47992), labelled "Achras duplicata N.", are according to Standley "Achras Zapota L."


Localities cited: Hot regions in America ["in calidas Americae regionibus"]. Ic. Fl. Mex. 388; this is represented by DC. plate 746, attached to which is a long descriptive note by A. P. de Candolle, including the name "Achras brevipes" and the synonymous "A. mammosa Moq. et Sessé fl. mex. ined. ic. et mss.". DC. 746 appears to be a good copy taken from no. 1391 in the Torner Collection, which bears the number "388" and an annotation by de Candolle "Achras brevipes". The illustrations show a Sapotaceous plant with a brownish fruit about the size of a lime (the Mexican Limón) and small white flowers in cauliflorous clusters. According to
a manuscript list at MA, etc. Fl. Mex. 388 was obtained on the "Third Excursion", that to western Mexico in 1790–1791. Not found in the S. & M. herbarium.


*Achras olivacea* Sessé & Moc. Fl. Mex. ed. 2. 84. 1894.

Type-locality: In the mountains of the Totonac, i.e., in the tierra caliente of northeastern Puebla or adjacent Veracruz ["Habitat in montibus Totonacis. Fioret Augusto ... Baccae immutae Tempeschitae, matuerae jam Tilzapol apellantur"]. Not found in the S. & M. herbarium. According to Cronquist (J. Arnold Arbor. 26: 451. 1945), who cited Sessé, *Micoito et al.* 5151 (F), this species is a synonym of *Bumelia laetevirens* Hemsl. Biol. Centr. Amer. Bot. 2: 298. 1882.

*Achras pruniformis* Sessé & Moc. Pl. Nov. Hisp. 52. 1888; ed. 2. 49. 1893.

Type-locality: Chilapa and Mazatlán, Guererro, and elsewhere in New Spain. Ic. Fl. Mex. 453; although the type-locality is cited as above, this icon is listed (MA, miss) among those obtained on the "Third Excursion", that to western Mexico in 1790–1791. Ic. 453 is represented by no. 1670 in the Torner Collection, which bears the number "453" and an annotation by de Candolle, "*Achras microcarpa*". Nearly identical is an original painting at MA, unnumbered, but bearing the hand-printed name "Achras Pruniformis". It was listed by name, with description, and identified as RJB Lám. 64 in the *Catálogo de las Láminas del Real Jardín Botánico* (RJB 1987, p. 333). It is no. 2 of Ramírez (Anales Inst. Méd.-Nac. México 6, pt. 1: 72. 1903), who erroneously cited it as Ic. [Fl. Mex. no. ] 2. A copy of the same painting is DC, plate 750, annotated by de Candolle "*Achras microcarpa*". Not found in the S. & M. herbarium. Not further identified.


Localities cited: No specific locality ["in calidioire America"], except what can be taken from the following: "Colimenses, quasi ex cerae vel gypsum, ex massa hac chicle dicta diversas nce inelegantes figuris consecuient." [The people in Colima make divers not inelegant (moulded) figures from the chicle]. Described. Not found under this name in the S. & M. herbarium.

*Bumelia lycioides* (L.) "Gaertn." ex A. DC. in DC. Prodr. 8: 189. 1844.

Mexico, "(ex ic. Mexic. ined.)", according to A. de Candolle, i.e. This is based on DC. plate 754, marked by A. de Candolle "Bumelia lycioides Gaertn., Alph. DC prodr. 8 p. 189." The plate is a copy of no. 0448 in the Torner Collection, which bears an annotation by P. F. de Candolle, "*Bumelia dentiflora*". As Alphonse de Candolle's concept of *B. lycioides* was essentially the correct one, that of a species native to southeastern United States, he was presumably in error in supposing that plate 754 represented the same species. I found no specimen of any *Bumelia* in the S. & M. herbarium, nor anything so-called.

*Bumelia spiniflora* A. DC. in DC. Prodr. 8: 191. 1844, with citation of "DC. in ic. mexic. ined." as the basis for the name.

Type-locality: Mexico. Lectotype: DC. plate 753, as cited in Calques des Dessins (Field Mus. Neg. 30754); this is a fairly good but incomplete copy of no. 0972 in the Torner Collection, which is without inscription except for the annotation by A. P. de Candolle, "Bumelia spiniflora". Included with DC. 753 is a manuscript description by A. P. de Candolle, based on the same illustration. Although Alphonse de Candolle stated in the protologue that he had seen a specimen ("v.s.") as well as the plate, the *Prodrumus* herbarium contains only a small fragment, of which the identity was questioned by the elder de Candolle. Since Alphonse de Candolle provided an entirely new description, he must be regarded as the publishing author of the name, and as presumably he never studied the original painting, his account must have been based primarily on DC. plate 753 and on the notes made by the elder de Candolle. Not identified. This name was accepted by Standley (Contr. U. S. Natl. Herb. 23: 1117. 1924) as the valid one for the species called by Cronquist *Bumelia caesarhina* H. B. K. Nov. Gen. & Sp. 7: 212. 1825. (cf. J. Arnold Arbor. 26: 467. 1945).

Cronquist did not mention *B. spiniflora*.

*Bumelia spinosa* A. DC. in DC. Prodr. 8: 191. 1844, with citation of "DC. in ic. mexic. ined." as the basis for the name.

Type-locality: Mexico. Lectotype: DC. plate 755, as cited in Calques des Dessins (Field Mus. neg. 30755); this is a fairly good but incomplete copy of no. 0999 in the Torner Collection, which is without inscription except for the annotation "Bumelia spinosa" by A. P. de Candolle. Included with DC. 755 is a manuscript description by A. P. de Candolle, based on the same illustration. For remarks on typification, see above under *Bumelia spiniflora*. Not found in the S. & M. herbarium.

Referred with doubt by Standley (Contr. U. S. Natl. Herb. 23: 1117. 1924) to the synonymy of *Bumelia spiniflora* DC., and referred by Cronquist (J. Arnold Arbor. 26: 467. 1945) to the synonymy of *B. caesarhina* H. B. K.
Sapotaceae


Locality cited: "in Insula Cuba et Martinica. Vulgo Caimita". Fully described. In the S. & M. herbarium, according to Standley, no. 737 (CNHM neg. 47998), labelled "Chryosophyllum Caimito", is correctly named; and no. 5104 (neg. 48000), labelled "Chryosophyllum cainito", represents C. oliviforme L.


Type-locality: [A. DC.]: Mexico; [Pl. Nov. Hist.]: Michoacán ["in calandatismus Provinciae Michoacanensis regionibus. Florae Augusti"]. Lectotype [A. DC.]: "v. in ic. mex. ined.". This is a reference to DC. plate 749, as cited in Calques des Dessins (Field Mus. neg. 30753), labelled "Achras capiri" [with description] by A. P. de Candolle and "Lucuma Capiri" by A. de Candolle. The illustration is an adequate copy of no. 1078 in the Torner Collection, which bears the number "161" and the hand-printed name "Achras Capiri". Almost identical is an original painting at MA that bears the number "96" and the hand-printed name "Achras Capiri". It was listed by name, with description, and identified as RJB Lám. 63 in the Catálogo de las Luminarias del Real Jardín Botánico (RJB 1987, p. 332). It is no. 96 of a list by Mociño (MA, mss.), no. 1 of Ramírez (Anales Inst. Méd.-Nac. México 6, pt. 1: 72. 1903), who correctly equated it with DC. plate 749. In the S. & M. herbarium no. 5111 (CNHM neg. 48003), labelled (in part) "Achras capiri", is according to Standley Sideroxylon tempitique; the latter, according to Cronquist (I. c., p. 250), is to be regarded as a variety of Masticodontrum capiri. No. 5152 of the S. & M. herbarium is cited by Cronquist (I. c.) as typical M. capiri; the specimen is at F, annotated by Cronquist in 1944.


Reported by A. de Candolle (in DC. Prodr. 8: 171. 1844) in the words "Iconem Mexicanam ined. vidi sub nomine Sapote amarillo vel boracho, satim descripsione congruentem". This is a reference to DC. plate 747, which is annotated by Alphonse de Candolle "Lucuma salicifolia Kunth ?" and "seu Sapote Boracho ex Moc. mss.". A note by A. P. de Candolle, included with this plate, says "A. salicifolia Moc. et Sessé fl. mex. ined. ic. et mss." and mentions the vernacular names used in Mexico and in "Gayaca". No equivalent illustration has been found in the Torner Collection.

Cronquist (Lloydia 9: 281. 1946) reported having seen at F an unnumbered Sessé & Mociño collection of this species, now properly called Pouteria campechiana (H. B. K.) Baehni, Candolle 9: 398. 1942. The fruit of "Achras salicifolia", as portrayed in DC. plate 747 is somewhat elongated and pointed, resembling that of one of the cultivated varieties of Capsicum, not spherical as in Lucuma sphaerocarpa, which Cronquist also referred to Pouteria campechiana.

Lucuma sphaerocarpa A. DC. in DC. Prodr. 8: 169. 1844.

Type-locality: Mexico. Holotype: DC. plate 748, not listed in Calques des Dessins. annotated by A. P. de Candolle "Achras sphaerocarpa". Referred by Cronquist (Lloydia 9: 280. 1946) to the synonymy of Pouteria campechiana (H. B. K.) Baehni, Candolle 9: 398. 1942. The DC. plate is an incomplete copy of no. 1034 in the Torner Collection, which bears no inscription except for the annotation by A. P. de Candolle, "Achras sphaerocarpa". It was well reproduced in full color by Grobet (1982, 13th plate following p. 64) under the name of "Achras horocarpa", and it was reproduced in a darker color under the same name, reduced to ca. 10.5 by 8 cm, by Lozoya (1984, p. 164). Not found in the S. & M. herbarium, but see above under Lucuma salicifolia.

In Torner 1034 the painting of a cross-section of the nearly spherical fruit includes a beautiful rendition of the four large protruding seeds; see also above under Achras acana.

Richardia montana Sessé & Moc. Fl. Mex. 91. 1894; ed. 2. 84. 1894.

The publication of this name seems to have resulted from some inadvertent transposition of the loose descriptions that make up the manuscript of the Fl. Mex. Although the brief and incomplete description of "montana" follows Richardia procumbens in the text, the character of montana reads "Achras floribus solitariis, pentandris, folis lanceolatis, acuminatis". This character is constructed exactly like those of the other species of Achras treated in the Fl. Mex., and I think there can be little doubt it applied to another species of that genus, intended for publication but never fully described. According to Lewis and Oliver (Brittonia 26: 300. 1974), Richardia montana is to be identified as Manilkara sp. (Sapotaceae). The epithet cannot be considered as validly published in either genus.

Saururaceae

Aponogeton involucrata Sessé & Moc. Fl. Mex. ed. 2. 89. 1894.

Type-locality: Not stated. Not found under this name in the S. & M. herbarium. Described as having a simple involucrate spike and cordate-oblong leaves; involucral corolliform with 6–8 colored ovate sessile segments; flowers bracteolate, but without perianth; filaments 7 or rarely more, very short, surrounding the ovary; anthers
oblong-quadrangular, shorter than the bracteoles, dehiscent on both sides; ovary conic, 4-fid at apex, styles 4, rarely 3–5, subulate, shorter than the bracts; pericarp a capsule, fleshy, 4-locular; seeds many, subrotund, pedicellate. This is evidently a description of *Anemopsis californica* (Nutt.) Hook. & Arn. Bot. Beech. Voy. 390. 1841; see also *Saururus cernuus*.


Localities cited: Querétaro, Querétaro ["ad marginis Queretarensium rivulurum sic"]; and in Virginia. Ic. Fl. Mex. 411, presumably represented by no. 0747 in the Torner Collection, which bears the number “411" [and "334"], which I cannot explain] and an annotation by de Candolle, "Thermogent flagellare". It was reproduced in full color, reduced to ca. 13.8 by 10 cm, by McCaugh (1998, fig. 7, p. 145). Almost identical, but lacking floral details, is an original painting at MA, which bears the number “52" and the hand-printed name "Saururus Cernuus." It was listed by name, with description, and identified as RJB Lám. 66 in the *Catálogo de las Láminas del Real Jardín Botánico* (RJB 1987, p. 333). It was well reproduced in color, nearly full size at ca. 28 by 18.5 cm, and identified as RJB Lámina 66 (RJB 1987, p. [245]). It is no. 52 of a manuscript list by Mociño, and no. 70 of Ramírez (Anales Inst. Méd.-Nat. México 6, pt. 1: 81. 1903). The plant depicted is *Anemopsis californica* (Nutt.) Hook. & Arn. Bot. Beech. Voy. 390. 1841, a species not represented in the S. & M. herbarium, but evidently the one described in the Pl. Nov. Hisp. as *Saururus cernuus*. The same species is illustrated in DC. plate 1300 and DC. plate XIV [sketches only; Field Mus. neg. 30931].

**Saxifragaceae**

*Heuchera americana* [var.] γ foliosa Moricand ex Seringe in DC. Prodr. 4: 51. 1850.

Type-locality: Not stated. Type: "In herb. Moricand", not seen, presumably at G. In the text of *Heuchera americana* proper, the range is given as "à Nova-Ángliâ ad Carolinam, in regione Illinoiensis, in Novâ-Hispaniâ et in Peruviâ ex herb Moricandi." Moricand’s herbarium contains many of the Sessé & Mociño specimens distributed by Pavón, including some from Peru and many from "Nova Hispania."


Reported by Seringe (in DC. Prodr. 4: 52. 1830) as follows: "Iconem habeo plantae cujusdam circa Notkam à cl. Mocino observatam, hac descript. convenientem..." The basis for this report was DC. plate 424, labelled "Heuchera glabra". No equivalent painting has been found in the Torner Collection.

*Heuchera longipetala* Seringe in DC. Prodr. 4: 52. 1830, with citation of "Moc. pl. notk. ined. icon." as the basis for the name.

Type-locality: On the Pacific coast of North America ["in Americae bor. occid. ind."]. Type: The name seems to have been based wholly on DC. plate 423, as cited in Calques des Dessins (cf. Field Mus. neg. 30678). This is an uncolored outline copy derived from no. 0460 in the Torner Collection [which Seringe could not have studied], and which is without any inscription. Both the original and the sketch show the long petals from which the specific epithet was taken. Hemsley (Biol Cent. Amer. Bot. 1: 381–382. 1880) decided, after comparison of the de Candolle plate with more recently collected herbarium specimens, that the name *Heuchera longipetala* pertained to a Mexican species, not to any plant from the Pacific Northwest. Rydberg (N. Amer. Flora 22: 107. 1905) accepted this, but Rosendahl et al. (Minnesota Stud. Pl. Sci. 2: 42. 1936) treated *H. longipetala* as a synonym of *Heuchera micrantha* var. *diversifolia*, which is known from Vancouver Island. In the S. & M. herbarium a part of a mixed collection (no. 1330; CNHM neg. 48014) is referred tentatively to *Heuchera longipetala*.

"Mitella alternifolia".

A name not published by Sessé & Mociño, but used by de Candolle on no. 1964 of the Torner Collection. This is a sketch by Echeverría, annotated by de Candolle "Mitella alternifolia" and "Notka". The plant depicted is apparently *Tellima grandiflora* (Pursh) Lindl., which ranges from Alaska to California.

**Philadelphus** ("Phylladelphus") *coronarius* [L.] sensu Sessé & Mociño. Pl. Nov. Hisp. 82. 1888; ed. 2. 77. 1893.

Localities cited: "in Mexici circuitibus et Europa". Not described, but the character (quoted as if from "Duham. Arb. 2. t. 83") is identical with that in *Species Plantarum*. There is an observation, "Jasminum mexicanum vulgo prope odorium". Not found in the S. & M. herbarium, but very probably of this genus.

**Ribes**, see Grossulariaceae.

**Saxifraga** *stellaris* [var.] *vulgaris* Seringe in DC. Prodr. 4: 40. 1830. "S. Notkana Moç. ic. ined. t. 422." cited in synonymy by Seringe, Ic.

Type-locality [of *S. notkana*]: "in Americae bor. occid. prope Notka". The plate cited by Seringe, DC. plate 422, is an adequate copy, marked "Saxifraga notkana". It was derived from no. 1961 in the Torner Collection [which Seringe could not have studied] and is annotated by de Candolle "Saxifraga notkana". The plant is evidently a scapose species of *Saxifraga*, the petals carefully painted and apparently all quite alike, suggesting that the plant belongs with the group of species referred by Small to the genus *Micranthes* (N. Amer. Flora 22: 132 et seq. 1905). Abrams (Illus. Fl. Pacific States 2: 361. 1944) referred
Saxifragaceae


Scrophulariaceae


Locality cited: Mexico, D.F. ["In Europa et Mexici"]. Ic. Fl. Mex. 384; this is represented by no. 1563 in the Torner Collection, bearing the number "384", the name carefully hand-written [by Sessé], "Antirrhinum Elatine. Linn.", and an annotation by de Candolle, "Ustria rosea". DC. plate 942, unnumbered but with the name "Antirrhinum elatine Linn.", is based on a different model. In both icons the plant depicted is evidently a species of Maurandya. In the S. & M. herbarium, according to determinations by Standley, "Maurandya antirrhiniflora" Humb. & Bonpl. ex Willd. Hort. Berol. pl. 83, 1807, is represented by no. 2454 (CNHM negs. 48100-48102), and M. scandens (Cav.) Pers. Syn. Pl. 2. 160. 1807, by no. 2455 (neg. 48103). The latter, according to the label, bears the vernacular name "Trompillo", as reported for A. elatine in Pl. Nov. Hisp.


“Buchnera depressa”

A name never published by Sessé & Mociñ̃o, but listed under Ic. Fl. Mex. 382 in the list of icons 1–416, and among those obtained during the "Second Excursion", that to Guerrero in 1789 (MA, ms.). See also a mention by McVaugh (1980, p. 130). In the Torner Collection, no. 0399 bears the number "382" and the name carefully hand-written [by Sessé], "Buchnera Depressa. Sp. N.", DC. plate 952, an original painting, is a very similar but not identical copy, numbered (apparently by Mociñ̃o) "382" and annotated "Buchnera depressa". In the S. & M. herbarium no. 2381 (CNHM neg. 48136), labelled "Buchnera depressa N. icono [!] descript.," is according to Standley Silvia serpyllifolia (H. B. K.) Bentham.

I commented in an earlier paper (McVaugh 1980, p. 131) that the flowers in DC. plate 952 appear to be pinkish or lavender, not yellow as in Silvia serpyllifolia. After reexamination of the icons, 1 believe that the artist intended the flowers to be yellow, and that the illusion of a pinkish flower was caused by the addition of a touch of red or orange to the tips of the unopened buds. The open flowers appear to be clear yellow.


Type-locality [asiatica]: Mountains of Talpan, [south of Mexico]. D.F. ["in frigidis Sancti Augustini montibus prope Mexicum, Sina et Zeylania"]. Localities cited [fimbriata]: Cold mountains of San Agustín near México [City]; also China and Ceylon. Ic. Fl. Mex. 116, cited under both species, is represented in the Torner Collection by no. 1142, bearing the number "116", the hand-printed name ["Dodartia? americana. N. crossed out"], and in careful script [by Sessé], "Buchnera fimbriata". DC. plate 954, a nearly identical original painting but showing more plainly the fimbriation of the corolla-lobes, bears the number "116", the hand-printed ["Dodartia? Americana. N. crossed out"], and an annotation by de Candolle, "Buchnera fimbriata" (Field Mus. neg. 30808).

In the list of icons 1–187 (MA, ms.), no. 116 is listed as Dodartia americana N. A line in Fl. Mex. under Buchnera asiatica ["Cerrig ic et herb. ubi Dodartiae nomine reperitur"] is a reminder to correct this. In the S. & M. herbarium no. 2384 (CNHM negs. 48070–48075), labelled on two sheets "Buchnera fimbriata", represents Geradaria pedunculata Benth. Comp. Bot. Mag. 1: 209. 1835 [Agalinis pedunculata (Benth.) Pennell, Rhodora 20: 135. 1918]. The plate evidently represents the same species.


Localities cited [Pl. Nov. Hisp.]: Tixtla, Guerrero and South America ["in montibus frigidissimis Tixtae et America meridionali"]; [Fl. Mex.]: "in montibus frigidissimis Tixtae vicinis. Florét Augusto". Ic. Fl. Mex. 416, not cited in the published florae, but in the manuscript of Pl. Nov. Hisp., is represented by an original painting at MA that bears the number "31" and the hand-printed name "Buchnera Grandiflora". It was listed by name, with description, and identified as RJB Lám. 89 in the Catálogo de las Láminas del Real Jardín Botánico (RJB 1987, p. 338). It was reproduced in color, nearly full size at ca. 28 by 18.8 cm, and identified as RJB Lám. 89 (RJB 1987, p. [121]), and it was reproduced at ca. 18 by 12 cm by Maldonado Polo (1996, p. [325]). It is no. 31 of a list by Mociñ̃o (MA, ms.), no. 14 of Ramírez (Anales Inst. Méd.-Nac. México 6, pt. 1: 74. 1903), who correctly equated this with DC. plate 956, which is annotated by de Candolle “Escobedemia quinquervexia”. Copied from the same original, i.e., from no. 0722 in the Torner Collection, is DC. plate VII [Field Mus. neg. 30373; sketches only]. Torner 0722 bears part of a trimmed-off number at upper left, and de Candolle’s annotation, “Escobedemia quinquervexia”. The plant depicted is identifiable as Escobedemia longiflora Pennell. In the S. & M. herbarium specimens named Escobedemia longiflora by Standley were originally labelled as Buchnera.
grandiflora (no. 2379; CNHM neg. 48069, labelled on one
ticket “Buchnera grandiflora. ic. [descr.]” and on another
ticket “Buchnera grandiflora. 1201!”). The number “1201”
did not pertain to this particular specimen but was the one
assigned to this species in Madrid after 1800, during an
attempt to number the entire herbarium. In that system
most of what are now called Scrophulariaceae had numbers
between 1131 and 1167, or between 1201 and 1214 (cf.
“Sessé 2379” as “material tipo” of “Buchnera grandiflora
Sessé & Moc.”, which is inappropriate as no such name
exists.

**Buchnera longifolia** Sessé & Moc. Fl. Mex. ed. 2.
149. 1894. not of earlier authors.

*Type-locality:* “Juxta Lacum Mexicanum” [i.e., Lake
Texcoco, northeast of Mexico City]. In the S. & M.
herbarium no. 2380 (CNHM neg. 48068), labelled as
above, is according to Standley *Escobedea laevis* Schlecth.
& Cham. Linnaea 5: 108. 1830. According to Pennell
“probable isotype” is at BM, ex herb. Lambert, labelled
(presumably by Pavón) “Buchnera longifolia N E,” this is
cited by Pennell in the synonymy of *Escobedea laevis*.
Nelson (1997) designated “Sessé 2380” as “material tipo”
of *B. longifolia*.

**Buchnera pinnata** Sessé & Moc. Fl. Mex. ed. 2.
148. 1894.

*Type-locality:* Dry mountains between Texcoco
[“Texecuo”], [Edo. de México] and Calpullalpan
[“Capulalpa”], [Tlaxcala], where said to flower in June.
Not found in the S. & M. herbarium. This is apparently
the plant depicted in no. 1861 in the Torner Collection,
which bears the name neatly printed (apparently by the
artist), “Buchnera [Bipinnata cross sed]”, and an
annotation by de Candolle, “Buchnera ? multifida”. DC.
plate 951, annotated as “Buchnera multifida”, is an
original painting, a nearly identical copy. From the
paintings and the description, I take this to be a synonym
of *Silvia prostrata* (H. B. K.) Benth. in DC. Prodr. 10:
513. 1846.

**Buchnera pinnatifida** Sessé & Moc. Fl. Mex. ed.
2. 149. 1894. not of Linnaeus filius.

*Type-locality:* Not given; presumably Mexico see
below. Except for the coincidence in names there is no
wording in the protologue to suggest this is the same as
*B. pinnatifida* L.f. The authors of Fl. Mex. must have
been aware of the latter, which was treated by Palau (4:
852, 1786) along with *Buchnera grandiflora*, which they
did ascribe to Linnaeus. As noted below, however, a
specimen in the S. & M. herbarium is labelled “Buchnera
pinnatifida N,” which means they were thinking of it as
a new species.

The plant described, with yellow flowers, and
blackening in drying, is surely a species of *Seymeria*. In
the S. & M. herbarium no. 2377 (CNHM neg. 48142),
labelled “Buchnera pinnatifida. 1203,” and no. 2378 (neg.
48143), labelled on one ticket by Castillo “Buchnera
pinnatifida ?”, on a second ticket in another hand,
“Buchnera pinnatifida N,” and on a third “Buchnera
pinnatifida? ic. [descr.]”, are all according to Standley
*Seymeria virgata* (H. B. K.) Benth. in DC. Prodr. 10:
511. 1846. As one of the original labels on no. 2378 was
written by the botanist Castillo, the plant must have been
collected in Mexico before 1793, when Castillo died.
Nelson (1997) designated “Sessé 2377” as “material tipo”
of *B. pinnatifida*.

**Buchnera pusilla** H. B. K. Nov. Gen. & Sp. 2
[quarto]: 340. 1818.

In the S. & M. herbarium no. 2382 (CNHM neg.
48040) was determined by D. Philcox as *Buchnera pusilla*.
The original label, apparently in the hand of Ignacio León,
read “No. 109 [description]. La cogi en Tepeaca,
[Puebla]”.

Hisp. 98. 1889; ed. 2. 91. 1893; Fl. Mex. ed. 2. 145.
1894.

Localities cited: Apatzingán, Michoacán [“in Gracia,
Curassavica et Apatzingam, Floret Octobri”]. In the S. &
M. herbarium, some specimens are correctly named
“Capraria biflora”, but one number (no. 2359) so named is
associated with three different species. The sheet
associated with CNHM neg. 48139 is *Scoparia duleis* L.
Other sheets of the same number are *C. biflora* (necs.
48044–44046) or (numbered but not named, negs.
48047–48049) *Capraria saxifragifolia* Schlecth. & Cham.
All determinations are by Standley.

**Capraria durantifolia** [L.] sensu Sessé & Moc. Pl.
Nov. Hisp. 98. 1889; ed. 2. 92. 1893.

Localities cited: Cuernavaca, Morelos [“Habitat
Quauhnahuacae ad margines rivulorum et in Jamaica.
Floret Maii”]. Briefly described. In the S. & M.
herbarium nos. 2360 and 2566 (CNHM negs.
48147–48150) are all labelled “Capraria durantifolia”.
The original label with one sheet of no. 2360 bears, in
addition to the number, the number “1164” (for an
explanation of that number, see above under *Buchnera
grandiflora*). All the above specimens were determined
by Standley as *Stemodium durantifolia* (L.) Swartz.

**Capraria ternifolia** Sessé & Moc. Fl. Mex. ed. 2.
ternifolia: Pavon miss in herb.” cited by Minod, i.e.,
as the basis for *Stemodia ternifolia*.

*Type-locality* (Fl. Mex.): Mountains of Temascaltepec,
Edo. de México; [Minod, l.c., p. 37]: “Habitat novam
Hispaniam: Pavon! s. n. nec loco certius significato.
This refers to a sheet at G. ex herb. E. Boissier, which
bears a printed label “Nueva España Herb. Pavon!” and is
marked [by Boissier] “Capraria ternifolia herb. Pav.”
SCROPHULARIACEAE

The specimen is presumably the holotype of *Stemodia tenuifolia* Minot, the author of that name having misinterpreted the writing on the Boissier label. According to a manuscript at BM, a specimen of this species was included among the plants bought from Pavón's herbarium at the time of Lambert's sale in 1842, but I could not find this specimen in 1963. In the S. & M. herbarium no. 2363 (CNHM neg. 48019), labelled "Caparia tenuifolia N. 1167"; and on another ticket, "Caparia tenuifolia et Ruclia", is presumably the same species; it was determined by McVaugh in 1962 as *Lendneria* cf. *agratifolia* (Wright ex Sauv.) Pennell. Nelson (1997) designated the same specimen as "material tipo" of *C. tenuifolia*.

The number "1167", mentioned above, did not pertain to this particular specimen but was the one assigned to this species in Madrid after 1800, during an attempt to number the entire herbarium. In that system most of what we now call Scrophulariaceae had numbers between 1201 and 1214. No. 1167 fell between the modern Gesneriaceae and Bignoniaceae (cf. McVaugh 1990, p. 209).

**Caparia verticillata** Sessé & Moc. Pl. Nov. Hesp. 98. 1889; ed. 2. 92. 1893.

Type locality: Xochiltlán ("Xochistlani circuitibus ad fluminiis torrentes. Floret Octobri et Novembri"), Morelos. 1c. Fl. Mex. 113; this is represented by no. 0237 in the Turner Collection, which bears the number "113" and the hand-printed name "[Digitalis crossed out] [Caparia added in careful script, ?(by Sessé)] verticillata. N.". A closely similar copy is DC. plate 949, an original painting bearing the number "113" (apparently by Mociño) and the name "[also by Sessé]" "Caparia Verticillata Sp. N." (Field Mus. neg. 30807). The plant depicted in both copies is an unidentified species of *Russelia*, a genus not known to be represented in the S. & M. herbarium.


Localities cited [Pl. Nov. Hesp.; Fl. Mex. 139]: Mountains of San Angel near Mexico City; elsewhere in New Spain, and in South America. [Fl. Mex. 138]: Temperate and cold regions in New Spain. [Fl. Mex. 103, cited in Pl. Nov. Hesp., is represented by no. 0252 in the Turner Collection, which bears the number "103", the hand-printed name "Castilleja [fissifolia. Mutis. crossed out]", and an annotation by de Candolle, "Castilleja indensis". De Candolle plate 960 is a partial copy of Turner 0252. The name "Castilleja integrifolia" was applied by Sessé & Mociño to one or more of the group of long-flowered, half-shrubby species that includes *C. tenuiflora* Benth. Judging from the published texts, *C. integrifolia* of Pl. Nov. Hesp. and that of Fl. Mex. ed. 2. p. 139 are the same, but the *C. integrifolia* of Fl. Mex. ed. 2. p. 138, which is provided with a very full original description, may apply to a different species; see below.

No. 2537 of the S. & M. herbarium (CNHM neg. 48065), labelled "Castilleja integrifolia", is *C. tenuiflora* according to Standley. Another sheet is according to Standley correctly identified as *C. integrifolia* [L.f. Suppl. 293. 1782] (no. 2537; neg. 48058). Identifications in this group of species are to be accepted with some skepticism.

No. 1841 in the Turner Collection, fig. 2 bears the name carefully printed by the artist Echeverría, "Castilleja Integrifolia". The drawing is a colored sketch showing the tip of a branch with three open or nearly open flowers, but no stem or leaves, plus separate views of corolla and capsule. DC. plate 960* is a copy of this. The flowers are carefully drawn, and appear to be longer than, and differently shaped from, those in Turner 0252.

**Castilleja pinnata** Sessé & Moc. Pl. Nov. Hesp. 96. 1889; ed. 2. 89. 1893; Fl. Mex. ed. 2. 139. 1894.

Type locality [Pl. Nov. Hesp.]: Near Coyacán ("in saxosis Cuyacamii circuitibus"), south of México, D.F. In the S. & M. herbarium, no. 2545 (CNHM neg. 48064), labelled "Castilleja pinnata", is according to
Standley *Castilleja tenuifolia* Mart. & Gal. Bull. Acad. Roy. Sci. Bruxelles. 12, pt. 2: 30. 1845. This is presumably the plant described in the Pl. Nov. Hisp., as the leaves are said to be pinnate and capillary. Nelson (1997) designated "Sesse 2545" (neg. 48063) as "material tipo" of *C. pinnata*, although the specimen is labelled (as he noted), "Castilleja bipinnata. 1132"; it was determined by Standley as *C. tenuifolia*.

**Castilleja pulcherrima** Sessé & Moc. Pl. Nov. Hisp. 95. 1889; ed. 2. 89. 1893; Fl. Mex. ed. 2. 139. 1894.

Type-locality: Talpan ["in Sancti Augustini oppido prope Mexicum"] [south of México, D.F.; [Fl. Mex.: "in agris Sancti Augustini prope Mexicum. Floret Septembri". Ic. Fl. Mex. 104, cited in Pl. Nov. Hisp., is represented by no. 0228 in the Torner Collection, which bears the number "104" and the hand-printed name "Castilleja pulcherrima N.". A nearly identical copy is DC. plate 959, an original painting bearing the number "104", and the hand-printed name "Castilleja pulcherrima N." (Field Mus. neg. 30810). The *icones* depict a *Castilleja* of the arvensis–communis group. No. 2543 of the S. & M. herbarium (CNHM neg. 48051), labelled "Castilleja pulcherrima N." and on another ticket "Castilleja pulcherrima 1131", is according to Standley *C. arvensis* Schlecht. & Cham. Linnaea 5: 103. 1830. Nelson (1997) designated "Sesse 2543" as "material tipo" of *C. pulcherrima*.

**Chelone angustifolia** Sessé & Moc. Fl. Mex. ed. 2. 151. 1894, not of H. B. K.

Type-locality: Cold mountains, Toluca, Edno de Mexico, where said to flower in July. In the S. & M. herbarium, according to a determination by R. M. Straw, no. 2414 (CNHM neg. 48135), labelled "Chelone angustifolia N.", is *Penstemon apaticus* Straw, Bot. Soc. Bot. México 24: 42. 1959. A specimen in herb. Webb (Fl.), labelled "Chelone angustifolia", is a narrow-leaved species of *Penstemon* of this general group. Nelson (1997) designated "Sesse 2414" as "material tipo" of *C. angustifolia*, and noted that Straw had marked it as "Type of Chelone angustifolia S. & M. 1894 ?".


Type-locality: Mexico; flowered in Madrid at the 'hortum Regium Pharmaceuticum' from May to July 1794. Type: Not seen. Cavanilles later (Ic. 4: 71. 1798) stated that Née found this species at Regla (Hidalgo) and Chalma (Edno de Mexico). In the S. & M. herbarium nos. 2415 (CNHM negs. 48116–48118) and 2418 (negs. 48119–48120), all determined by Straw as *Penstemon barbatus*, were originally labelled "Chelone barbata [or barbata] N."


Type-locality: Mexico; flowered in the Madrid Botanical Garden in December [1790]. Type: Not seen. Specimens under this name in the S. & M. herbarium (no. 2417; CNHM neg. 48131) are according to Straw another species, *Penstemon geniatoides* (HBR.) Poir.

**"Chelone ("Chelonae") Integriolium"**

The above name appears on no. 1872 of the Torner Collection, carefully hand-printed by the artist Echeverría. The same sketch bears annotations by de Cardolle, "Chelone saponariaeolia" and "Notka". The illustration, evidently also the work of Echeverría, represents a red-flowered species of *Penstemon* with upright stems and entire leaves, superficially like several Mexican species. No floral details are shown.

**Chelone mexicana** Sessé & Moc. Fl. Mex. ed. 2. 150. 1894.

Type-locality: In the retreat of the Carmelite Fathers ["in Heremo P.P. Carmelitarum", i.e., El Desierto de los Leones, south-west of México, D.F.]; said to flower in July. Ic. Fl. Mex. 114, cited in Pl. Nov. Hisp. under *Chelone pentstemon*, is represented by no. 0028 in the Torner Collection, which bears the number "114" and the hand-printed name "Chelone Mexicana. N.". A nearly identical copy is DC. plate 837, an original painting bearing the number "114" and hand-printed name "Chelone mexicana. N." (Field Mus. neg. 30773). In practice, as stated in the description of *C. mexicana*, Sessé & Mocío distinguished this species from the one they called *Chelone pentstemon* by the absence of beard on the sterile stamen and by other features. In the Pl. Nov. Hisp., however, they combined the two under the name of *C. pentstemon*. Not found in the S. & M. herbarium.

This was apparently assumed to be the same as the species characterized (but not fully described) under the same name in *Guatemala Primia Flora* (Mocño 1993, p. 104) and in Maldonado Polo (1996, p. 269), where the locality is given as "Guatemala", *sensu latu* ("in temperatorium Guatimalae regionibus. Floret Octobri").


Type-locality: Cold mountains of San Angel near Mexico City, and in Virginia. Ic. Fl. Mex. 115 [114 also cited; see above under *Chelone mexicana*]. Ic. Fl. Mex. 115 is represented by no. 0664, bearing the number "115" and the hand-printed name "Chelone integerrima N.", the name under which it appears in a manuscript list at MA, of *icones* 1–187. A nearly identical copy is DC. plate 835 (Field Mus. neg. 30772), an original painting bearing the number "115" and the hand-printed name "Chelone integerrima N.".

In the S. & M. herbarium, the name *Chelone pentstemon* is applied to two species. No. 2421 (CNHM
SCROPHULARIACEAE

neg. 48123) is according to R. M. Straw Penstemon campanulatus (Cav.) Wild., no. 2423 (negs. 48127–48129) is Penstemon kunthii G. Don. No. 2422 (neg. 48121), labelled "Chelone integerrima N.", is according to Straw Penstemon barbatus (Cav.) Roth. Nelson (1997) designated "Sessé 2421" as "material tipo" of "Chelone pentosemion Sessé & Moc.". This is inappropriate, as no such name exists. The specimen is labelled "Chelone pensehimen 1212", without the "N.", that would mark it as new. For explanation of the number "1212", see above under Buchnera grandiflora.

This species is known only from a limited range in Guatemala and Chiapas. No. 1764 in the Torner Collection is a carefully detailed drawing of a flowering and fruiting branch, without inscription except for an annotation by de Candolle with an unpublished name, "Cobarrubia flavida". There are no clues on the painting itself as to its geographical origin, but it is included here because the narrow geographical range of the species makes it practically certain that the picture could have been painted only in Chiapas or Guatemala, by the artist Cerdita, during Mocío's travels to Central America, probably 1796–1798. In the de Candolle collection plate XXVIII (Field Mus. neg. 30345), also called "Cobarrubia", consisting of detailed sketches by the artist Noé-Véran, was derived from Torner 1764.


Type-locality: Mountains of San Angel, south of México, D.F.; and Yecapixtalatl "Ayacapixtla", Morelos; said to flower in September. The two names are equated as above because the treatments in the two florae are identical except in details of arrangement. Ic. Fl. Mex. 109 is cited in both florae. This is represented by no. 0686 in the Torner Collection, which bears the number "38" (which I cannot explain), the hand-written name "(by Sessé) "Stemodia humilis? N.", and an annotation by de Candolle, "Herpestis flava". DC. plate 934, an original painting, includes a drawing of a flowering plant nearly identical with that shown in Torner 0686, but fewer separate floral details; it is numbered "109", it bears the hand-written name "Stemodia humilis N.", and de Candolle's annotation, "Herpestis flava".

In the first listing of the Icones obtained in 1787–88, no. 109 was first entered as Stemodia humilis, but the name was later changed to Erinus humilis. In the list of plates obtained on the "Third Excursion", no. 458 is Erinus humilis. Probably Ic. Fl. Mex. 109 (i.e., Torner 0686 and DC. plate 934) was painted somewhere near Mexico City in 1787 or 1788. Finally it appears that on the "Third Excursion", somewhere in western Mexico in 1790–91, another painting of the supposed "Erinus humilis" was first numbered 458, later recognized as a distinct species but the plate number wrongly copied as 152 when it was transferred to Erinus portulacera, q.v.

The plant depicted in Ic. Fl. Mex. 109 is Bacopa procumbens (Mill.) Greenm. Publ. Field Mus. Nat. Hist., Bot. Ser. 2: 261. 1907, which seems also to have been the Erinus humilis of the Pl. Nov. Hisp., where the plant is described as a small glabrous procumbent herb with opposite ovate serratate subsessile leaves, and small solitary axillary yellow flowers; the latter are described in some detail. Nelson (1997) designated "Sessé 248" (CJNH neg. 48108) as "material tipo" of "Gratiola repens Sessé & Moc.", citing the correct place of publication of Gratiola Monniera repens of Fl. Mex., and transcribing the original label, which is in the hand of Mocío, and reads "Gratiola repens N. ic. No. 69. 2–1". The specimen is a mixture of Bacopa procumbens and a small yellow-flowered Oxalis. It is probable that if Sessé & Mocio had attended personally to the publication of this name, it would have come out as "Gratiola repens" or perhaps "Gratiola monniera".

Apparently Sessé & Mocio knew several quite different species under the names cited above and the name "Erinus portulacera", q.v. In the S. & M. herbarium no. 2354 (CJNH neg. 48155), labelled "Stemodia humilis 1162", is according to Standley Stemodia verticillata (Mill.) Sprague, Bull. Misc. Inform. Kew 1921: 211, 1921.


Type-locality: Near México, D.F. [Fl. Mex.]: "in humilis pratis et rivulorum marginibus propie Mexicum. Floret Octobri". The two names are equated as above because the treatments in the two florae are identical except in details of wording and arrangement. Ic. Fl. Mex. 152 was cited in Pl. Nov. Hisp., doubtless through inadvertence, as pointed out above under Erinus humilis, q.v., instead of 458. Ic. Fl. Mex. 152 is Pectis ciliaris [L.] sensu Sessé & Moc.

Probably Erinus portulacera is a synonym of Bacopa monnieri, as indicated by an original unnumbered painting at MA that bears the hand-printed name "Erinus Humilii." It was listed by name, with description, and identified as RJB Lám. 92 in the Catálogo de las Láminas del Real Jardín Botánico (RJB 1987, p. 339). It was no. 34 of Ramírez (Anales Inst. Méd.-Nat. México 6, pt. 1: 76. 1903). A nearly identical duplicate (with more numerous floral details) is no. 0122 in the Torner Collection, which bears the number "152" and an annotation by de Candolle, "Herpestis monnieri". The description is of a plant with opposite, ovate, succulent, nerveless, entire leaves and white flowers, i.e., also suggesting Bacopa monnieri. The plant depicted is apparently Bacopa monnieri (L.) Pennell, which appears in the S. & M. herbarium (nos. 1,
147, 247; negs. 48025–48027), under the name of "Gratiola monieria" [or "monieria" or "moniera"].

"Euphrasia Mexicana. ic. N."
In the S. & M. herbarium no. 2464 (CNHM neg. 48088), labelled as above, was determined by Standley as Lamourouxia rhinanthifolia H. B. K.

Type-locality [secundum]: San Angel, south of Mexico, D.F., where said to flower in July; [localities cited under capensis]: San Angel, and Ethiopia. The two names are equated as above because the treatments in the two florals differ only in minor details of arrangement and wording. The plant described is said to have sessile, villous-scarious, obtusely serrate leaves, of which the lower are subelliptic and the upper ovate; calyx lobes tomentose and dentate; two shorter filaments with spinulose anthers ["breviora antheris lobulo extimo spina acuminatatis"]. This suggests Lamourouxia rhinanthophila H. B. K. ic. Fl. Mex. 106, however, cited in both florals, appears to portray a different species, perhaps a form of Lamourouxia tenuifolia Mart. & Gal. It is represented by no. 0590 in the Torner Collection, which bears the number "106", the hand-printed name "Melamiprum sufruticosum N.", and an annotation by de Candolle, "Palafoxia angustifolia", DC. plate XXVII (Field Mus. neg. 30343), sketches of floral details annotated by the artist Noble-Veran, "Euphrasina angustifolia", was copied from Torner 0590. A nearly identical duplicate of Torner 0590 is DC. plate 968 (Field Mus. neg. 30814), an original painting bearing the number "106", and the hand-printed name "Melamiprum sufruticosum N.". In the S. & M. herbarium nos. 2461 and 2557 (CNHM negs. 48090–48092), labelled "Euphrasia" and "Melamiprum", respectively, with the epithet "fruticosum", are identical to the description of Standley Lamourouxia tenuifolia Mart. & Gal.

Locality cited: Along streams coming off the Volcano of Colima ["ad margines rillus ex Colimensi Vulcano effluvientium. Floret Februarii"]. In the S. & M. herbarium no. 249 (CNHM neg. 48077), labelled "Gratiola rotundifolia", is according to Standley Ilysanthes inequalis (Walt.) Pennell. The description seems to bear out this generic allocation. The generic name in current use is Lindernia.

"Genus. Gratiolis affinis. [description]. Jalapae in paludosus"
In the S. & M. herbarium no. 150 (CNHM neg. 43381), labelled as above, was determined by McVaugh as Micranthemum umbrosum (J. F. Gmel.) Blake.

Type-locality: San Felipe del Obraje, in the valley of Tojaca, Edo. de Mexico ["in agris Sancti Filipe del Obraje. Floret Augusti"]. The plant is apparently represented by DC. plate 963 (Field Mus. neg. 30813) and by an essentially identical drawing in the Torner Collection, no. 1836, no. 3, labelled "Limosella mexicana". Alicia Lourteig (Publ. CNFRA, Biologia 1: 165–172. pl. 1. Nov. 1964), in a study of the genus Limosella, reproduced DC. plate 963 as her plate 1A and cited (on p. 170) a Sessé & Moccino collection from San Antonio del Obraje as having been collected by Ruiz and Pavón.

Lourteig concluded that the Mexican and other American plants of this genus are all referable to Limosella australis R. Br. Prodr. Fl. N. Holl. 1: 443. 1810, and reduced L. acaulis to synonymy. The latter name, however, has been taken up in several current manuals, notably those dealing with the flora of California. L. O. Williams (Fieldiana, Bot. 34: 121. 1972) questioned Lourteig’s decision and took up the name Limosella acaulis in the Flora of Guatemala (Fieldiana, Bot. 24, pt. 9: 372. 1973), relegating to synonymy the name Limosella americana Gluck (Notizbl. Bot. Gart. Berlin-Dahlem 12: 75. 1934), a decision already implied but not implemented by Pennell (Monogr. Acad. Nat. Sci. Philadelphia 1: 164. 1935).

In the S. & M. herbarium no. 2356 (CNHM neg. 48097), labelled "Limosella acaulis. 1190", was determined by Standley as L. americana Gluck, i.e., L. acaulis Sessé & Moc. and sensu Williams, 1972. Nelson (1997) designated "Sessé 2356" as "material tipo" of L. acaulis.

Type-locality: Grown in an English garden, the original seeds collected at Jalapa, Veracruz, Mexico, by Schiede and Deppe. Type: Jalapa, Deppe & Schiede s.n., Sept. 1829, BM, designated as lectotype by W. J. Elsins (Syst. Monogr. 5: 74. 1985). The plant was originally distinguished from Lophospermum scandens D. Don, q.v. Bentham (in DC. Prodr. 10: 297. 1846) reported it from "Mexico" on the basis of a collection by Sessé & Moccino but did not state where he had seen the specimen. According to Bentham (i.e.) and Elsins (i.e.), this was also the plant described and figured by Don (in Sweet, Brit. Fl. Gard. 4: pl. 58. 1830) under the name Lophospermum scandens. According to the note accompanying this latter plate, "For the introduction [of this plant] the country is indebted to A. B. Lambert, Esq., who procured seeds out of his dried specimens that were collected in Mexico by the Botanists Sessé and Moccino, and liberally distributed them ...". Not found in the S. & M. herbarium. No. 0590 in the Torner Collection,
annotated by de Candolle as "Besleria oxycardia", perhaps represents a species of this genus.


Type-locality [D. Don]: Mexico; [Fl. Mex.]: Xochitlán ["Xochistlan"] and Cuernavaca, Morelos, where said to flower in September. Type: Not seen. Bentham (in DC. Prodr. 10: 338. 1846) indicated that he had seen authentic material ["ex specimen. fere destructo"] but referred **Lophospermum physaloides** to the synonymy of **Melasma hispidum** (Schlecht. & Cham.) Benth., based on **Lyneaca hispida** Schlecht. & Cham. Linnaea 5: 109. 1830. This is l.c. Fl. Mex. 374, represented in the Torner Collection by no. 0586, here designated as lectotype of **Buchnera physaloides**. It bears the number "374", the hand-printed name "[Scrophularia crossus] Physaloides. Sp. N.", and an annotation by de Candolle, "Leonia physaliodes". DC. plate 975 is a partial copy made from Torner no. 0586. In the S. & M. herbarium no. 2569 (CNHM neg. 48104), originally labelled "Scrophularia physaloides N.", is referable to the same specimen; another sheet (no. 4905; neg. 48105) is labelled "Genus . . . . . . ic. D . . . . [raedio] De la Punta" (this locality was probably in Veracruz; see discussion by McVaugh 1977, p. 175). In Melchior's revision of **Melasma** (l.c., pp. 119-127), he referred this, the only North American species of the genus, to a monotypic section **Lyneaca** (Schlecht. & Cham.) Melchior.


Type-locality: Mexico. Type: Sessé & Moccino in herb. Lambert, not seen. One of two specimens from Lambert's herbarium, now at G, marked "Mexico, Sessé and Mocinno", was designated by Elsins (1985, pp. 68, 70) as lectotype. The name was referred by Munz (Proc. Calif. Acad. Sci., ser. 4, 15: 394. 1926) to the synonymy of **Maurandya erubescens** var. **glabrata** I. M. Johnst. Proc. Calif. Acad. Sci., ser. 4, 12: 1164. 1924, a variety not accepted as significant by Elsins (1985). Not found in the S. & M. herbarium under the name of **Besleria scandens**, but specimens under the name of **Antirrhinum** with the same epithet represent what seems to be quite a different species, **Maurandya antirrhiniaflora** Humb. & Bonpl. ex Willd. (l.c., in the S. & M. herbarium no. 2454 (CNHM negs. 48100-48102), determined by


Type-locality [Ort.]: Mexico; grown in the Madrid Botanical Garden, "e seminis missis per D. Sessé"; [Cav.]: Mexico; flowered in the Archbishop's garden at Puzol, and in the Madrid Botanical Garden. Type: Not seen; unknown to Elsins (1985, p. 40). The new generic name **Maurandya** was proposed as a substitute for **Ustera Cav.**, that being a later homonym of **Ustera Willd**. Ortega evidently considered his plant to have been the same as that of Cavanilles, as he stated, "... tum Characterem genericum, tum etiam descriptionem specifciam ac incidem revocans reformavi". Cavanilles himself (Cav. Descr. 86. 1802) admitted the identity of **Ustera scandens** and **Maurandya semperflorens**. In the S. & M. herbarium no. 2455 (CNHM neg. 48103), determined by Standley as **Maurandya scandens**, was originally labelled as an **Antirrhinum**, with an unpublished epithet. In the Torner Collection, no. 1638, signed on the back by the artist, "Juan de D. Vizente de la Cerda", it is annotated by de Candolle "Ustera scandens". It is probably among the earliest drawings made by the artists, with the inscription "Num 9, 3" in one corner.

**"Melampyrum barbatum N."**

A name never published by Sessé & Moccino, but included as l.c. Fl. Mex. 108 in the list of **Icones** 1-416, and in those obtained during the "First Excursion in the vicinity of Mexico, D.F., in 1787-1788. See also a mention by Mc Vaugh (1980, p. 119). l.c. Fl. Mex. 108 is represented by no. 1095 in the Torner Collection, which bears the number "108", the hand-printed name "[Melampyrum barbatum N. crossed off]", and an annotation by de Candolle, "Riosia pubiflora". DC. plate 966, an original painting, is almost identical, bearin the number "108", the hand-printed name ["Eufrasia crossing out"], and the hand-written name ["by Sessé], "Melampyrum barbatum N.". DC. plate XXVII (Field
Scrophulariaceae

Mus. neg. 30342) consists of floral details probably copied from Torner 1095. The plant depicted in all the icons is a species of Lamourouzia, but in the S. & M. herbarium no. 2415 (CNHM neg. 48116), labelled "Melampirum barbatum N.", is according to R. M. Straw Penstemon barbatus (C. L. Rob. & Greenm."

"Melampyrum (Melampirum) Mexicanum".
In the S. & M. herbarium no. 2559 (CNHM neg. 48080), labelled as above, was determined by Standley as Lamourouzia exserta B. L. Rob. & Greenm.


Type-locality: Along streams, mountains of Unuapan, Michoacan ["in temperatis Unuapan Michoacanensis montibus ad margines rivulorum. Floret Septembri"]. Not located in the S. & M. herbarium. From the description evidently the same as Leucocarpus perfultatus (H. B. K.) Benth. in DC. Prodr. 10. 335. 1846.

"Mimulus notkana".
The above name appears on no. 1970 of the Torner Collection, hand-written by de Candolle, with the additional annotation, "Notka". It was reproduced in color, reduced to ca. 6.4 by 4.5 cm (RJB 1987, p. 123). The sketch, evidently the work of Echeverría, represents a species of Mimulus with large yellow flowers. I suppose it is Mimulus guttatus DC. No floral details are shown.


Localities cited: México, D.F. ("ad margines rivulorum sancti Augustini, prope Mexico, in Siberea, Austria et Helvetia. Floret Octobri"). Described. In the S. & M. herbarium no. 2430 (CNHM neg. 48112), labelled "Pedicularis incarnata. 1207", was determined by Standley as Pedicularis mexicana Zucc. For explanation of the number "1207", see above under Buchnera grandiflora.


Type-locality: [Pl. Nov. HISP.]: San Angel, D.F. ["in Sancti Angeli montibus prope Mexico"]; [Fl. Mex.;] in montibus Sancti Angeli. Floret Augusto. The two names are equated as above because the treatments in the two floras, except for minor differences in wording, are identical. Ic. Fl. Mex. 107 [also cited in error, under Lantana bipinnatifida, q.v.] is represented by no. 0588 in the Torner Collection, which bears the number "107", the hand-printed name ["Melampyrum ppppinnatifatum. N. crossed out"], and an annotation by de Candolle. "Palafoxia multiflora. Nearly identical is DC. plate 972 (Field Mus. neg. 30815), an original painting numbered "107", bearing the hand-printed name "{Euphrasia bipinata crossed out}`, and the name written in ?[by Sessé].


Locality cited: Acuahuitzola, Guerrero ("in calidum Acuahuitzolae montibus, Jamaica, et Curassao, Floret Maio"). Briefly described. In the S. & M. herbarium nos. 505 and 636 (CNHM negs. 48137, 48138), labelled "Scoparia dulcis", were correctly named according to Standley. The original label with no. 505 also bears the notation "No. 306", for explanation of which see above under Buchnera grandiflora. The tetrandrous species of what are now called Scrophulariaceae, under the system employed, were assigned appropriate numbers in the same range as Rubiaceae (234-292) and Vitaceae (304-317).

"Scrophularia notkana".
The above name appears on no. 1952 of the Torner Collection, hand-written by de Candolle. The sketch, evidently the work of Echeverría, represents a species of Scrophularia with definitely maroon flowers. I suppose it is Scrophularia californica Cham. & Schlecht. No floral details are shown.


Type-locality: Desierto de los Leones ["in Heremo P.P. Carmelitanae. Floret Julio"], southwest of México, D.F. In the Torner Collection no. 1404, annotated by de Candolle "Sibbithorpa americana", and DC. plate 962, a copy labelled "Sibbithorpa americana", apparently represent Sibbithorpa pachinchenis H. B. K. Nov. Gen. & Sp. 2: 390. 1818. The same species, according to determinations by Standley, is represented in the S. & M. herbarium by nos. 2357 and 2579 (CNHM negs. 48144, 48145), both originally referred to the genus Sibbithorpa but not to S. americana. Another specimen, no. 2358 (neg. 48160), labelled "Sibbithorpa Americana. 1163", was determined by Standley as Vandellia diffusa L. Nelson (1997, p. 410) cited "Sibbithorpa diffusa Sessé & Moc. Fl. Mex. ed. 2. 145. 1894." without description and designated "Sessé 2358" [in the S. & M. herbarium at MA] as "material tipo" associated with CNHM neg. 48160. As far as I can determine, the name "Sibbithorpa diffusa" was never published by Sessé & Mociño, and perhaps Nelson intended to typify Sibbithorpa americana, which was indeed published on the page cited. In the Sessé & Mociño herbarium there is nothing labelled "Sibbithorpa diffusa". No. 2355 in the herbarium (CNHM neg. 48159), labelled "Vandellia diffusa. 1151" and on another ticket "Vandellia diffusa. i. e. d." are correctly named according to Standley. For explanation of the numbers "1151" and "1163", see above under Buchnera grandiflora.

I find no record that Browne's name was ever validly published. Minod included a long description, but cited no type. His new name was superfluous when published, as he cited *Caparia durantifolia* L. in synonymy, though giving place of publication as Ameon. Acad. 5: 379. 1788 instead of the original publication in Syst. Nat. ed. 10 (1759). He mentioned a collection supposedly from Mexico ("*Nueva España [Pavon, s. n.]*") I presume he saw this at Geneva (G), but I have not seen the specimen and cannot confirm upon its identity.


Type-locality and type: "*Nueva España [sic]: [Pavon, s.n.]*". The specimen is at G, ex herb. E. Boissier, bearing a printed label "*Nueva España Herb. Pavon*", marked [by Boissier] "*Stemodia humilis herb. Pavon*" (not "Caparia humilis" as reported by Minod; see also below, under *Stemodia verticillata*). Compared by Minod to *Stemodia palmeri* A. Gray, but said to have smaller leaves and flowers.

**Stemodia lanata** "Ruiiz et Pav." ex Benth. in DC. Prodr. 10: 383. 1846, with citation "ex herb. DC. mss." as the basis for the name.

Bentham (i.e.), in proposing this name, cited "Erinus tomentosus Mill. dict." in synonymy, and mentioned two specimens, viz. "Schiede" and "Berlandier 208". The basis for his reference to "Ruiiz et Pav." is presumably the Berlandier specimen (in G-DC), which is labelled "*Stemodia lanata Ruiiz et Pav. ined.*". Another specimen at G, ex herb. Moricand, is marked by Moricand "*Mexico, Mr. Pavon 1827*", and by Pavón "*Stemodia lanata Peru*". In the S. & M. herbarium no 2565 (CNHM neg. 48152), determined by Standley as *Stemodia lanata*, was originally named "*Stemodia maritima*", then "*lanata N*". Minod in his revision of American *Stemodia* (Univ. Genève Inst. Bot. Thèse 606. 29–30. 1918) cited a "*Pavon*" specimen [G, ex herb. E. Boissier] from New Spain, at the same time taking up for this species the same in eastern Mexico and southern Texas; cf. Pennell, in Monogr. Acad. Nat. Sci. Philadelphia 1: 103. 1935, who cited a specimen labelled by Pavón at OXF. In the same place Pennell included a note on the sale of Sessé & Mocíño plants by Pavón and the subsequent confusion as to the source of these specimens.


Type-locality and type (Minod, i.e., p. 46): "*Nueva España [sic]: [Pavon, s.n.]*". The specimen is at G, ex herb. E. Boissier, bearing a printed label "*Nueva España Herb. Pavon*" and an original ticket in the hand of Sessé, including a description of the plant but no name (Field Mus. neg. 8546). Compared by Minod to *Stemodia jorullenensis* H. B. K., but said to differ in several particulars from that species.

**Stemodia pusilla** Sessé & Moc. Pl. Nov. Hist. 98. 4. 1889; ed. 2. 91. 1893; Fl. Mex. ed. 2. 144. 1894, not of Bentham.

Type-locality: Apatzingán, Michoacán. Not found in the S. & M. herbarium. Described as an erect villous herb 6 inches high, the leaves in 3's ("*tenua*"), ovate, doubly serrate, villous, petiolate; flowers purple, axillary, solitary, the pedicels longer than the petioles; corolla and stamens like those of *Stemodia sililquosa* i.e., *Schistophragma pusilla* Bentham. Not identified, but presumably of this family, and possibly the same as *Stemodia pusilla* Bentham. Bot. Voy. Sulphur 144. 1844.

**Stemodia sililquosa** Sessé & Moc. Pl. Nov. Hist. 98. 1889; ed. 2. 91. 1893; Fl. Mex. ed. 2. 144. 1894.

Type-locality: Apatzingán, Michoacán ("in oppido Apatzingam. Floret Octobri"). Ic. Fl. Mex. 420, represented by DC. plate 974, an original painting bearing the number "420" and annotated "*Stemodia sililquosa*" (Field Mus. neg. 30816). The same plant is illustrated in DC. plate VII (Field Mus. neg. 30372), sketches only, with annotation by the artist Nide-Vérao, "Emu ... geria Sililquosiformis". No comparable illustration has been found in the Torner Collection. The plant depicted is evidently *Schistophragma pusilla* Bentham in DC. Prodr. 10: 392. 1846 [Conobaea pusilla (Benth.) Benth & Hook. f. Gen. Pl. 2: 915. 1876]. In the S. & M. herbarium the same species is labelled "*Stemodia sililquosa*" (no. 2352; CNHM neg. 48066). A specimen at G, ex herb. E. Boissier, bears a printed label "*Nueva España Herb. Pavon*" and is marked [by Boissier] "*Stemodia sililquosa herb. Pavon*". Nelson (1997) designated "Sessé 2352" as "material tipo" of *S. sililquosa*.

This was apparently assumed to be the same as the species characterized (but not fully described) under the same name in *Guatimalensis Prima Flora* (Mocín 1993, p. 103) and in Maldonado Polo (1996, p. 267), where the locality is given as San Salvador ("prepo Servatopolosm Floret Marto").

Scrophulariaceae


Localities cited: México, D.F. ("in agris cultivoribus Europaeae ac hortis S. Angeli prope Mexicium. Floret Julio"). Not described, but its medicinal properties discussed at length. In the S. & M. herbarium no. 364 (CNHM neg. 48163), labelled "Veronica arvensis. No. 20", was determined by Standley as Veronica polita Fries. For explanation of "No. 23", see above under Buchnera grandiflora. Numbers between 20 and 23 were assigned to the species of Veronica and other genera with diandrous flowers, belonging to the Linnaean Dianthus monogynia.

Veronica beceabunga ("Becabunga") [L.] sensu Sessé & Moc. Fl. Mex. 5. 1892; ed. 2. 4. 1894.

Locality cited: Desierto de los Leones ("montibus Sancti Eremi PP. Carmelitarum. Floret Julio"). [southwest of México, D.F.] Very short description. In the S. & M. herbarium no. 367 (CNHM neg. 48161), labelled "Veronica Beceabunga. No. 21" and on another ticket, "Veronica Beceabunga. N E" in the manner of Pavón, was determined by Standley as Veronica americana (Raf.) Schwein. Nelson (1997) designated "Sessé 367" as "material type" of "Veronica beceabunga Sessé & Moc.", which is inappropriate as no such name exists.

Veronica crenulata Sessé & Moc. Fl. Mex. 5. 1892; ed. 2. 4. 1894, not of Hoffmann.

Type-locality: Desierto de los Leones ("montibus Sancti Eremi PP. Carmelitarum. Floret Junio et Julio"). [southwest of México, D.F.] In the S. & M. herbarium no. 366 (CNHM neg. 48164), labelled "Veronica crenulata N. No. 23", is according to Standley Veronica serpillifolia L. Sp. Pl. 12. 1753. Perhaps some error of labelling or identification is involved, as typical V. serpillifolia is mostly an introduced species in America. According to Pennell (Rhodora 23. 17. 1921), however, the montane plant that he called Veronica serpillifolia var. humifusa (Dickson) Vahl is known from Popocatépetl and Ixtacchualitl and is "to be expected on all high cordilleras of Mexico and Central America". It may have been the plant described by Sessé & Mociño. From the description of Veronica crenulata, however, Pennell (loc. cit., p. 20) referred it provisionally to the synonymy of Veronica polita Fries, Novit. Fl. Suec. 65. 1819, which he stated to be "well-established in Mexico". For explanation of "No. 23", see above under Veronica arvensis and under Buchnera grandiflora.


Localities cited: San Nicolás, D.F., and Europe ["ad margines aqueductum sicic Praedi Sancti Nicolai et in Europa austriahi. Floret Junio"]. "Sancti Nicolai" is presumed to have been San Nicolás Totolapa, more than two leagues SSW of San Angel (cf. McVaugh 1977, p.180). Short description. In the S. & M. herbarium no. 365 (CNHM neg. 48162), labelled "Veronica Romana?".
was determined by Standley as Veronica peregrina var. xalapensis (H. B. K.) Pennell.

**Veronica rotundifolia** Sessé & Moc. Fl. Mex. 5. 1892; ed. 2. 4. 1894, not of earlier authors.

**Type-locality:** Desierto de los Leones ["in Eremo PP. Carmelitarum. Floret Julic"]. [southwest of México, D.F.]. Not found in the S. & M. herbarium. Described as a slender, procumbent villous herb with alternate, petiolate, ovate-subrotund, villous, obtusely serrate leaves; filiform axillary pedicels about as long as the leaves, reflexed in fruit; flowers blue; capsule didymous, rounded at apex, small, compressed. Not identified; the mention of reflexed pedicels suggests that a plant of some other genus, e.g., Lindernia, may have been described. From the same description, however, Pennell (Rhodora 23: 21. 1921) inferred that the name “apparently” applied to Veronica persica Poiret. Encycl. 8. 542. 1808.


**Localities cited:** “in agris Europae frequentissimique [sic] in satia Mexico vicinis. Floret Junio”. Not described except for a comment on the variability of the plant. Not found under this name in the S. & M. herbarium, but see Veronica crenulata.

### Picramniaceae

**Picramnia fessonia** DC. in DC. Prodr. 2: 66. 1825. "Fessonia dependens fl. mex. ic. ined.", cited in synonymy by DC., i.e., as the basis for Picramnia fessonia.

**Type-locality:** Mexico. Lectotype: In the Torner Collection, no. 0946, without inscription except for the number "234" (which I cannot explain) and an annotation by de Candolle, "Fessonia dependens". DC. plate 194, not cited in Calques des Dessins (Field Mus. neg. 30581), is an adequate but incomplete copy of no. 0946. DC. plate XXX [sketches only; Field Mus. neg. 30349] is based on the same model. Regarding by Standley (Contr. U. S. Natl. Herb. 23: 542. 1923) as a doubtful species. From the painting, which is drawn in some detail, I suppose the plant is Picramnia antidesma Sw. Prodr. 27. 1788. The panicles are simple and spike-like, the flowers are three-merous and the stamens are long-exserted. In the S. & M. herbarium nos. 4625 and 4626 (CNHM negs. 48165, 48166), thought by the collectors to represent a new genus, are apparently also referable to Picramnia antidesma.


**Localities cited:** [Pl. Nov. Hisp.]: “in Surianm, et Coahuayana [Michoacán]. Floreti Jannuario”. Ic. Fl. Mex. 300, represented in the Torner Collection by no. 1765, which bears the number "300" and an annotation by de Candolle "Quassia amara ?". It was reproduced in full color, reduced to ca. 13.8 by 10 cm, by McVaugh (1998, fig. 8, p. 149). Essentially identical (except that one open flower is shown tightly closed) is an original painting at MA, which bears the number "84" and the hand-printed name “Quassia Amara.” It was listed by name, with description, and identified as RJF Lám. 76 in the Catálogo de las Láminas del Real Jardín Botánico (RJB 1987, p. 335). It is no. 84 of a list by Mocifio (MA, mss.), no. 61 of Ramírez (Anales Inst. Méd. Nat. México 6, pt. 1: 80. 1903). In the S. & M. herbarium no. 1042 (CNHM neg. 48167) represents this species, correctly named by the collectors.

**Recchia mexicana** DC. Syst. 1: 411. 1817, with citation of “Sessé et Moc. [sic] fl. mex. ic. ined.” as the basis for the name.

**Type-locality:** Mexico. Lectotype: In the Torner Collection, no. 1865, annotated “vide Curatellaun” and (by de Candolle) “Recchia decandra”. DC. plate 4, not cited in Calques des Dessins, was missing from the Candollean collection when inventory was taken about 1873. Drawn from the same model is DC. plate XXXI B, as cited in Calques des Dessins [sketches only; Field Mus. neg. 30355]. [On the right side of neg. 30355 is depicted a flowering branch of Curatella (the source of which is unknown) and on the left side, apparently copied from Torner 1865, are floral details and the tip of a flowering branch of Recchia]. Not found in the S. & M. herbarium. A little-known species stated by Standley (Contr. U. S. Natl. Herb. 23: 541. 1923) to range from Colima to Oaxaca.

### Solanaceae

**"Atropa arborea." [description]. Jalapae**.

In the S. & M. herbarium no. 3555 (CNHM neg. 48261), labelled as above, was determined by C. V. Morton as *Soracha procumbens* (Cav.) Ruiz & Pavón. [= *Jaltomata procumbens* (Cav.) J. L. Gentry, Phytologia 27: 287. 1973].


**Locality cited:** [Pl. Nov. Hisp.]: “Habitat Mattri in Regio Horto et in agris Chilapae. Floret Julio”. [Pl. Mex.]: México, D.F., cultivated ("in Horto Botanico Mexicano"). In the S. & M. herbarium no. 1494 (CNHM neg. 48241), labelled “Atropa Physaloides”, was determined by Standley as *Nicandra physalodes* (L.) Gaertn.

Type-locality: Mexico; flowered and fruited in the Madrid Botanical Garden in October 1790. Type: Not seen. Not found under this name in the S. & M. herbarium; see Atropa umbellata.

Atropa umbellata Sessé & Moc. Fl. Mex. ed. 2. 54, 1894, not of Ruiz & Pavón.

Type-locality: Near the dwelling "[domum Praedi Mazatlani]" at Mazatlán, Guerro, and in the garden of the Hacienda "[Praedi]" de la Huerta near Tolua, Edo. de México. Described as a much-branched, glabrous, fistulose, dichotomous herb 2 feet high with nodding axillary umbels, a monophyllous spreading persistent calyx, pale green flowers and cherry-like subacid fruit. This appears to be the plant found in the S. & M. herbarium under the name of Saracha umbellata (no. 5370; CNHM neg. 48262), which according to C. V. Morton is Saracha procumbens (Cav.) Ruiz & Pavón [=Jalomea procumbens (Cav.) J. L. Gentry, Phytologia 27: 287. 1973]. The plant labelled "Atropa umbellata N." in the herbarium (no. 5335; neg. 48189) is according to Morton Capsicum stramonifolium (H. B. K.) Standl.

Bouchetia erecta DC. ex Dunál in DC. Prodr. 13, part 1: 589, 1852. "Maleolaria lanceolata Pav. in h. Boiss." cited in synonymy by Dunál, l.c., as one of the bases for Bouchetia erecta.

Type-locality: Mexico. Syntypes: Wright (G-DC) and "Pavon" (G-Del ex herb. E. Boissier, with original S. & M. label, "5-1. Maleolaria lanceolata. ic."). The "icon" is presumably represented by DC. plate 921 (Field Mus. neg. 30802), annotated "Bouchetia erecta" and cited by Dunál, l.c. This is an indifferent copy of no. 0581 of the Torner Collection, which bears the hand-printed name "Ititzicipili. Hern. F. 381" but lacks any inscription except for the number "80," which I cannot explain. Almost identical with Torner 0581 is Torner 0663, except that the root is differently drawn, there are more numerous floral details drawn separately, and there is an annotation "[by de Candolle], "Bouchetia erecta." Neither of these species nor the next seems to be present in the S. & M. herbarium.

Bouchetia procumbens DC. ex Dunál in DC. Prodr. 13, part 1: 589, 1852.

Type-locality: Mexico. Type: DC. plate 920 (Field Mus. neg. 30801), cited by Dunál and in Calvies des Dessins, apparently an original painting bearing the artistically hand-printed (with leaning letters) name, "Dumerila procumbens," and an annotation, "Bouchetia procumbens Dunal in DC. prodr. ...". Not exactly duplicated in the Torner Collection, but no. 0422 is an "improved" and considerably modified version based on the same model, signed "Atanasio Echeverria y Godoy, fct."

"Dumerila procumbens", in block letters and an annotation "Bouchetia procumbens" [by Dunál]. It was reproduced in full color at ca. 22.8 by 16.5 cm and identified as an "Illustración original de la Flora Mexicana" by Lozoya (1984, p. [208]). DC. plate X [sketches only; Field Mus. neg. 30276] was apparently adapted from Torner 0422. Not found in the S. & M. herbarium.


Locality cited: "Habitat in America. Floret Junio". Not described. In the S. & M. herbarium the specimens now referred to the genus Capsicum were originally assigned to Atropa, Saracha, or Solanum. No. 1547 (CNHM neg. 48333), originally labelled "Capsicum frutescens", was determined by C. V. Morton as "Solanum refractum" Hook. & Arn., var."


Type-locality: "In Mexico?". Type: "Pavon in h. Boiss.". The specimen is at G, ex herb. E. Boissier, marked by Pavón "Cestrum Sp. Nova de Mexico". A note by Dunál on the Pavón label says: "Ce n'est peut-être pas l'etiquette de cette plante; le coup de vent qui a bousillé les Cestrum peut l'avoir déplace". According to Francey (Candollea 6: 156. 1936), this name is a synonym of Cestrum gardneri Sendtn., a Brazilian species.


Locality cited [Pl. Nov. Hisp.]: Cuba, Chile, and Mexico ("in Havana, Chilen Provincia et Americanae montibus, ubi inter indigenas Pipilloxiuil. nuncupatur. Floret Septembris"), with an added comment, "Mexican tota planta boves necari credunt"; [Fl. Mex.]: "in insula de Puerto Rico". Short description. In the S. & M. herbarium specimens labelled "Cestrum diurnum" were referred by C. V. Morton to Cestrum laurifolium L. Hér. (nos.1448, 1563, 5397; CNHM negs. 48205-48207), and no. 1358 (neg. 48213) was determined by Standley as Cestrum thyrsoides B. K. H. C.

Ic. Fl. Mex. 41, cited in Pl. Nov. Hisp. under Cestrum nocturnum, was initially used for what may have been another species. The number was included under the name of Cestrum diurnum among the images obtained during the "First Excursion", in the region of México, D.F., in 1787–88, but under the name of C. nocturnum among those obtained on the "Second Excursion" in 1789, and subsequently. In the Torner Collection two essentially identical paintings showing a flowering branch but no fruits, the illustrations from their style evidently among some of the very early ones produced, originally bore the hand-printed names "Cestrum diurnum Linn." and "Pipilloxiutil. Mexican.". One of these, no. 1151, bears the hand-printed comment, "Boves necari assurint". The other, no. 0427, bears the number "41" and the epithet..."
“diurnum”, which has been crossed off and replaced, apparently by Sessé, with “Nocturnum”. See further under Cestrum leucocarpum, below.

Cestrum leucocarpum Dunal in DC. Prodr. 13, pt. 1: 630. 1852. “C. nocturnum Mosch. et Sessé ms. lce. pict. sed e fig. stamin. edentulis ?” fide Dunal, l.c.

Type: Based on Cestrum nocturnum Lam., pro parte. Dunal’s reference to Mocío and Sessé is based on DC. plate 911, an original painting unnumbered by Moción, labelled “Cestrum nocturnum”, not listed in Calques des Dessins. Dunal (l.c., p. 631) described the fruit in some detail, adding “An species diversa?”. No. 0571 in the Turner Collection is a nearly identical copy but includes somewhat less of the twig from which the illustration arises. It represents l.c. Fl. Mex. 41, as cited in Pl. Nov. Hisp. under C. nocturnum [L.]. It bears the number “41” [replaced, evidently through misinterpretation, as “47”] and the hand-printed names “Cestrum Nocturnum. Linn.” and “Pipiloixihu. Mex.”. According to Franey (Candollea 7: 67. 1936), C. leucocarpum is a synon of C. nocturnum. L. Sp. Pl. 191. 1753. In the S. & M. herbarium nos. 1556 (CNHM neg. 48172), labelled Cestrum nocturnum, is according to Stendley C. thyrsoideum H. B. K. Nov. Gen. & Sp. 3: 63. 1818.

Cestrum macrostemon Sessé & Moc. Fl. Mex. ed. 2. 49. 1894; ed. 1. 54. 1895.

Type-locality: Mountains of Yauco, Puerto Rico, where said to flower in May and June. Referred by Urban (Symb. Antill. 4: 545. 1911) and by Franey (Candollea 7: 87. 1936) to the synonymy of Acnistus arborescens (L.) Schlecht. Linnaea 7: 67. 1832. In the S. & M. herbarium nos. 1447, 1557, and 5396 (CNHM negs. 48184–48186), labelled Cestrum macrostemon, are according to C. V. Morton Acnistus arborescens.


Localities cited: New Spain; the province of Chile; and Jamaica. l.c. Fl. Mex. 41; this is presumably represented by no. 0571 in the Turner collection (or DC. plate 911), as described above under C. leucocarpum, or Turner no. 0427, q.v. under C. diurnum. See also under C. paniculatum.

Cestrum paniculatum Sessé & Moc. Fl. Mex. ed. 2. 49. 1894; ed. 1. 54. 1895, not of H. B. K.

Type-locality: New Spain. This is described as a glabrous shrub, the corolla pale green with slender elongate tube, the stamens without teeth. At the end of the published description are the words “Corage Nocturnum”; these words were added to the manuscript of the Flora Mexicana apparently as an afterthought by Sessé. It may be inferred that this is a new name for a plant formerly known to Sessé & Mociño as Cestrum nocturnum, but the description differs in many details from that of C. nocturnum in Pl. Nov. Hisp. In the Fl. Mex. Cestrum paniculatum is said to have “stamina absque dente”. In the S. & M. herbarium, however, nos. 1554 and 5394 (CNHM negs. 48195 and 48196), labelled “Cestrum paniculatum N.”, are according to Morton Cestrum dumetorum Schlecht. Linnaea 7: 61. 1832, a species in which the filaments are appressed. Franey (Candollea 7: 86. 1936) did not know the identity of C. paniculatum.

Cestrum pedunculare Dunal in DC. Prodr. 13, pt. 1: 618. 1852, with citation of “Pavon in h. Boiss.” as the basis for the name. “Cestrum pedunculare Sessé & Moc. Fl. Mex. ed. 2. 49. 1894; ed. 1. 53. 1895.

Type-locality [Dunal]: Mexico. Holotype: At G, ex herb. E. Boissier, marked by Pavón “Cestrum pedunculare Mexico”, and determined by Franey in 1933 as Cestrum aurantiacaum Lindl., var. varscweczii (Kl.) Francey; cf. Francey in Candollea 6: 103. 1936. In the S. & M. herbarium no. 1556 (CNHM neg. 48172) is marked by Pavón “Cestrum pedunculare N E”; according to Morton it is C. aurantiacaum var. varscweczii, and an isotype of C. pedunculare Dunal. Sessé & Mociño no. 5393 (neg. 48189), marked Cestrum pedunculare N., is according to Morton Cestrum diurnum. L. Sp. Pl. 191. 1753, and the probable type of Cestrum pedunculare Sessé & Moc. The type-locality of the latter was not stated. The identity of the plant was unknown to Franey (Candollea 7: 86. 1936). In the protologue it was said to be related to Cestrum diurnum ("Affinis Diurno"). Not found in the S. & M. herbarium under this name.

Cestrum terminale [var.] parvifolium Dunal in DC. Prodr. 13, pt. 1: 609. 1852. “C. angustiflorum Pav. in h. Boiss. si schedula non mutata est”, a comment by Dunal, l.c.

Type-locality: Mexico. Type: At G, ex herb. E. Boissier, marked by Pavón “Cestrum angustiflorum Mexico”, and annotated by Franey in 1933 as Cestrum alternifolium (Jacq.) O. E. Schulz in Urban, Symb. Antill. 6: 270. 1909; cf. Francey in Candollea 6: 212. 1936. In the S. & M. herbarium nos. 1550 and 5398 (CNHM negs. 48171 and 48182, respectively), both labelled “Cestrum angustifolium N.”, are according to Morton Cestrum alternifolium.


Locality cited [Pl. Nov. Hisp.]: “In urticae Americae”. l.c. Fl. Mex. 42, cited in the manuscript of Pl. Nov. Hisp. but not in the printed version. This is represented by DC. plate 912, cited by Dunal, an original painting bearing the number “42", the hand-printed name “Cestrum purpureum N., crossed out”), “tomentosum” written in apparently by Sessé, and an annotation, “Cestrum purpureum”? [by de Candolle]. Essentially identical is no. 1074 in the Turner

Evidently the plant depicted in loc. Fl. Mex. 42 was first known by Sessé & Mocíño under the name of Cestrum purpureum. The icon was included under that name among those obtained during the “First Excursion”, in the area of México, D.F., 1787–88, but in the final numbering of the series it appeared under the name of C. tomentosum.


Locality cited: “Habitat in Xochiltlan. Flor: Octobri.”. Not described, but said to differ from its congeners only in the different inflorescence, and the edentate stamens. Xochiltlán; Morelos, is about 5 km E of Yecapixtla (McVaugh 1977, p. 189). In the S. & M. herbarium no. 1357 (CNHM neg. 48199), labelled “Cestrum Vespertinum”, was determined by Standley as C. lanatum Mart. & Gal.


Type-locality: [Pl. Nov. Hisp.]; Cuernavaca, Morelos [“ad torrentes fluminis Quahuanahuacae”]; [Fl. Mex.]; “ad torrentes fluminis Quahuanahuacae. Florentem Decembri reperimus, nec ullah speciei mat conforme judicamus”. This is one of the few instances in which Sessé & Mocíño spell out their feeling that the new species should be recognized as such. The epithet “viridiflorum” in Pl. Nov. Hisp. was evidently a mistake for “viridiflorum”, as that spelling was used in the Fl. Mex.; and the flowers are described as “viridi albae” in the Pl. Nov. Hisp. The species was unknown to Francey (Candollea 7: 86. 1936).


Datura ceratocaula Ort. Dec. 11. 1797.

Type-locality: Mexico [not Cuba, as erroneously supposed by Ortega]; grown in the Madrid Botanical Garden, “ò seminibus missis per D. Sessé”. Type: not seen. At G, ex herb. E. Boissier, is a specimen from Pavón’s herbarium, said to have come from the Madrid Botanical Garden, and so perhaps a part of the original culture. In the Torner Collection no. 0507, with no inscription, is referable to D. ceratocaula. In the S. & M. herbarium no. 5334 (CNHM neg. 48216), determined by Standley as Datura ceratocaula, was originally labelled “Ceratocaula [sic] Orteg.”, and, in another hand, “Datura [unpublished epithet referring to the tomentose leaves, a feature stressed by Ortega]”. W. E. Safford (J. Wash. Acad. Sci. 11: 181. 1921) referred Datura sinuata Sessé & Moc. to the synonymy of D. ceratocaula, but see under D. sinuata.


Locality cited: Near Guanajuato [“prope Guanaxautum. Flor: Julio”], Guanajuato. Ic. Fl. Mex. 244, cited in Pl. Nov. Hisp., represented by no. 1639 in the Torner Collection, which bears the number “244” but no other annotation. It is identifiable by the fruit, which shows the spines summis maximis” mentioned in the description. There appears to be no corresponding painting among those now at MA, although one is listed (as no. 16) by Mocíño among those sent there in 1791 (MA, mss.).

Not found in the S. & M. herbarium. Not identified. Ic. Fl. Mex. 244 is listed among the icons obtained on the “Third Excursion”, i.e., in 1790–91, between México, D.F. and Guadalajara, so perhaps it actually came from Guanajuato.


Type-locality: New Spain, in hot regions. Ic. Fl. Mex. 207, cited in Pl. Nov. Hisp., listed among the icons obtained on the “Second Excursion”, i.e., probably in Guerrero in 1789 (MA, mss.). This is represented by no. 0210 in the Torner Collection, which bears the number “207”, the hand-printed names “Datura Maxima. Linn.” and “Tecomaxochitl. Herrn. F. 408”, and an annotation in a hand unknown to me, “Solandra grandiflora”. It was elegantly reproduced in full color at 22.8 by 16.5 cm by Lozoya (1984, p. 81). A nearly identical picture of a flowering branch and detached flower, with additional drawings of fruit and a cross-section of the same, is no. 0593 in the Torner Collection. The name “Datura Maxima. Sp. N.” and the reference to Hernández have been written in, apparently by Sessé. The vernacular name is quoted by Sessé & Mocíño (with a reference to Hernández, Thesaurus 408, 1651) as “Tecomaxochitl”. The
illustration of Hernández cited by Sessé & Mociño represents a species of Solandra, which is certainly the plant described in the Pl. Nov. Hisp. In the S. & M. herbarium five specimens, nos. 929, 1363, 1570, 1574, and 5336 (CNHM negs. 48263–48267), are all referred by Standley (and Morton) to Solandra nitida Zucc. in Roem. Cell. Bot. 128, 1809. The first three of these numbers were labelled “Datura maxima”, and no. 5336 was labelled “Teecomaxochitl Hern” and “Datura [unpublished epithet referring to the scandent stems]”. Dunal (in DC. Prodr. 13, pt. 1: 536. 1852) listed “Datura maxima Moc. & Sessé fl. mexic. ic. mss. Candoll.” in the synonymy of Solandra guttata D. Don. That species was described by Don as “copiously pubescent, but the original description of D. maxima does not confirm this.


Type-locality [Dunal]: Mexico; [Pl. Nov. Hisp.]: “in plerisque Novae Hispaniae, Asiae et Africae locis”.
Holotype [Dunal]: DC. plate 919, as cited in the protologue and in Calques des Dessins (Field Mus. neg. 30800, published in Rhodora 46: pl. 838. 1944) and in Bot. Mus. Leafl. 18: pl. 50 [p. 249]. 1959. DC. 919 is an adequate copy of no. 0556 in the Torner Collection, a painting without any annotation.

Joseph Ewan (Rhodora 46: 317–323. 1944) correctly pointed out that Datura meteloides was not (as had been supposed by Asa Gray and others) the same as Datura wrightii Regell, a plant of the southwestern United States; but Ewan still, for want of what seemed sufficient evidence to the contrary, took up the name meteloides. In 1959 Fosberg (Taxon 8: 55–56) and Barclay (Bot. Mus. Leafl. 18: 245–255) independently pointed out that Datura meteloides was a synonym of Datura inoxia Mill. Gard. Dict. ed. 8. Datura no. 5. 1768. In the S. & M. herbarium no. 1572 (CNHM neg. 48217), labelled “Datura Metel N.”, is according to Standley D. inoxia Mill. A duplicate of no. 1572 (at F, no. 847215) was illustrated by Barclay and wrongly cited by him as an isotype of D. meteloides (i.e., pp. 250, [251]).


Type-locality: Near Querétaro ["in inundatis Queretarii circuitibus. Floret Maior"] Querétaro. In the S. & M. herbarium nos. 1571 and 5335 (CNHM negs. 48219, 48220), labelled Datura sinuata N.”, are according to C. V. Morton Datura quercifolia H. B. K. Nov. Gen. & Sp. 3: 7: 1818. Safford, on the other hand (J. Wash. Acad. Sci. 11: 181. 1921), referred Datura sinuata to the synonymy of D. ceratocaula Ort., q.v., presumably because of the reference in the protologue of the former to “pericarpiis ... glabris” and “foliis oblongis, sinuatis”, and because the plant was said to grow in “inundatis”. The protologue of D. sinuata is so brief as to be quite inconclusive.


Localities cited: “in Ixtacalco prope Mexicum et in Europa. Floret Novembri”. Not described, but its medicinal properties discussed at length. Not found in the S. & M. herbarium, but presumably correctly named.

Jaborosa longiflora Dunal in DC. Prodr. 13, pt. 1: 481. 1852, with citation of “Moç. et Sessé. ic. Mex. apud DC. t. 906” as the basis for the name.

Type-locality: “In Mexico”. Type: DC. plate 906, as cited in the protologue and in Calques des Dessins (Field Mus. neg. 30794), labelled ?[by Pavón “Jatropha ovalsis N E”]. This is a somewhat incomplete copy of no. 0905 in the Torner Collection, which is labelled by de Candolle, “Jaborosa longiflora”. Torner 0905 was reproduced in full color under the name of Jaborosa longiflora by Grobert (1922, 14th plate following p. 64), and in black-and-white (half-tone) at 11 by 7.5 cm under the name of “Loborosa longiflora” by Lozoya (1953, p. 72). A specimen at BM, ëx herb. Lambert, has been determined (by someone unknown to me) as Jaborosa integrifolia Lam. and is marked by Pavón “Datura ovalsis N E”. The source of the painting is quite unknown to me, but I doubt that it was painted from a Mexican plant; the artist's style suggests rather some of the plates that were made during the later years of the Expedition, in Central America or the West Indies.

The plant depicted certainly suggests in appearance Jaborosa integrifolia, but neither that species nor any other member of the genus is known from Central America, Mexico or the West Indies, or indeed except from extra-tropical South America, and the basis of the plate remains a mystery. Apparently the genus is not represented in the S. & M. herbarium.
Juanalloa elliptica Dunal in DC. Prodr. 13, pt. 1: 530. 1852, with citation of "Ruiz et Pav. ind. in h. Boiss;" as the basis for the name.

Type-locality: Mexico. Type: "spec. pessim" [?], now at G, ex herb. E. Boissier, bearing a printed label "Nueva España Herb. Pavon", and an original S. & M. label "5-1. Juanalloa elliptica: ic: ineota sp. nov.". This name was erroneously attributed to Ruiz & Pavón and should be cited as Juanalloa elliptica Dunal in DC. There seems to be no material of it in the S. & M. herbarium. It was treated by Standley (Contr. U. S. Natl. Herb. 23: 1278. 1924) as a synonym of Juanalloa mexicana (Schlecht.) Miers, Ann. Mag. Nat. Hist., ser. 2, 4: 188. 1849, a species of eastern Mexico.


Type-locality: Mexico. Holotype: DC. plate 914, as cited by Dunal and in Calques des Dessins (Field Mus. neg. 30798). This is a fair but incomplete copy of no. 1678 in the Torner Collection, a painting without inscription except for the annotation "Lycium triandrum" [by Dunal]. According to Hitchcock (l.c., p. 241), Pringle's no. 4174, from Lake Cuitzeo, Michoacán, "matches the plate well, and is good representative material of this well-marked variety." Miers (Illus. S. Amer. Pl. 2: 128-129, 1857) had already referred Lycium quadrifidum to the synonymy of L. carolinianum but apparently had seen no specimens of the former. Not found in the S. & M. herbarium.


Dunal first (p. 453) referred DC. plate 917 to Margaranthus solanaceus without any question or qualification. The plate is an incomplete copy taken from no. 1849 in the Torner Collection. It is annotated "Physalis urceolata" and "Margaranthus solanaceus Schlecht." The original, Torner 1849, is a partly colored sketch annotated "Physalis urceolata" (in a hand unknown to me). The illustration depicts an annual plant with a physalis-like calyx, and strongly inflated urceolate reddish corollas.

Apparently not sure of the connection between the "icon", and the specimens bearing the same name, Dunal based his "Salpichroma ? urceolatum" on a specimen collected by "Pavon", "in Mexico", questioning the conspecificity of these specimens and the Sessé & Mociño painting.

In 1963 I could not find the cited specimens at G, but in the S. & M. herbarium nos. 1497 and 5374 (CNHM negs. 48239, 48240), labelled "Physalis urceolata [sic] N.", are according to Morton Margaranthus solanaceus Schlecht. and are to be regarded as isotypes of Salpichroma ? urceolatum Dunal. No. 5374 bears the notation "Communicata a D. Cal." For a note on Antonio Cal y Bracho, see McVeagh (1977, p. 110).


Represented in the de Candolle collection by plate 922, as cited by Dunal, and by plate XXXIII [sketches only; Field Mus. neg. 30361]. These are incomplete copies of no. 1440 in the Torner Collection, which is without inscription except for the annotation by de Candolle, "Montagna mirabilis". The new genus mentioned by Dunal was presumably intended to honor Montaña or Montañas, as indicated by the legend on the painting. A specimen of this plant at BM, ex herb. Lambert, is marked by Pavón "Atropa ? de Mexico". Not found in the S. & M. herbarium. Not further identified.

Nicotiana ipomopsiflora Dunal in DC. Prodr. 13, pt. 1: 559. 1852, with citation of "Dun. in Moç. et Sess. icon. Mex. t. 909 collect. transl. Candoll." as the basis for the name.

Type-locality: Mexico. Type: "Descr. ex ic. cit. i.e., DC. plate 909, as cited by Dunal (l.c.) and in Calques des Dessins (Field Mus. neg. 30796). The painting is an incomplete copy of no. 0870 in the Torner Collection, which is without inscription except for an annotation [by Dunal], "Nicotiana amplexicaulis". Nicotiana ipomopsiflora is often treated as a taxonomic synonym of Nicotiana trigonophylla Dunal (l.c., p. 562), which was based on Hartweg 205, from Aguaescalientes, Asgs. Asa Gray (Syn. Fl. 2, pt. l. 242. 1878) took up trigonophylla, with the statement: "N. ipomopsiflora, Gray, Proc. Am. Acad. v. 166, and perhaps of Dunal, i.e., but the figure in Muçino & Sessé, l.c. Fl. Mex. ined. t. 909, represents a more funnelform corolla." This can not be regarded as an unqualified relegation of ipomopsiflora to the synonymy of trigonophylla. Hemslay (Biol. Centr. Amer. Bot. 2: 434. 1882), on the other hand, took up ipomopsiflora without any qualification, citing trigonophylla in synonymy and referring to Gray's earlier use of ipomopsiflora as a valid one. Under current rules of nomenclature it would seem that Hemslay's choice has to be followed unless an earlier combination of the two species under the name trigonophylla can be found. In the S. & M. herbarium no. 5340 (CNHM neg. 48249), originally labelled "pusilla" and then with an unpublished epithe, is according to Morton Nicotiana trigonophylla.
**Nicotiana longiflora** Cav. Descr. 106. 1802.

Originally supposed to be a South American species, this was reported from Mexico by Dunal (in DC. Prodr. 13, pt. 1: 566. 1852), with a reference to "Moç. et Sess. ic. Mexic. coll. transl. Cand. v.10. t. 907, flore luteo". This is of course a reference to DC. plate 907, which falls in the tenth volume as the plates are arranged in the Candollean library. It is an incomplete copy derived from no. 0150 in the Torner Collection, which is without inscription except for the annotation by de Candolle, "Nicotiana longiflora". Torner no. 0150 was reproduced in full color at ca. 22.8 by 16.5 cm and identified as an "Ilustración original de la Flora Mexicana" by Lozoya (1984, p. [133]). Not found in the S. & M. herbarium under this name, but a specimen at G, ex herb. E. Boissier, is marked by Pavón “Nicotiana longiflora NE”.

**Nicotiana minor** Sessé & Moc. Fl. Mex. 41. 1893; ed. 2. 37. 1894.

Type-locality: Tepic, Nayarit ["Habitat Tepici. Floret Januario"]; described as two feet high, with villous ovate-lanceolate, sub-undulate, sessile and decurrent leaves that are scabrous on the veins beneath; flowers green with purplish and very acute lobes. The note “an varietas pusillae?” follows the description. In the S. & M. herbarium nos. 1492 and 5339 (CQHM negs. 48245, 48246), labelled "Nicotiana minor N.", are according to Morton *Nicotiana plumaginifolia* Viviani, q.v. and type-material of *N. minor* Sessé & Moc. A plant at G, ex herb. E. Boissier, currently determined as *Nicotiana plumaginifolia*, bears a printed label "Herb. Pavon" and is labelled by Pavón "Nicotiana minor M[exi]o". Another sheet at G is marked by Pavón as from Mexico with an unpublished binomial.


Localities cited [Fl. Mex.]: México, D.F. ["in Horto Regio Mexicana et Peru"] Briefly described. Not found in the S. & M. herbarium. Not identified. The two names are equated as above, as the treatments (except for editorial changes and the difference in names) are identical.

Neither of the above seems to have been intended as a new name, since the primary character in each was quoted from "Mill. Dict. n. 9" and a secondary character from "Gou. Hort.". The character is not the same as that in Linnaeus (Sp. Pl. 180. 1753), as the description of the flowers in the latter is "floribus paniculatis: tubis clavatis", whereas that in Pl. Nov. Hisp. and Fl. Mex. reads "floribus racemosis, secundis, subrhegntibus".


Type-locality [Prodr]: Mexico. Holotype [Prodr]: "Descr. ex icat.", i.e., DC. plate 910, as cited in Calques des Dessins (Field Mus. neg. 30797). The type is an original painting, annotated by de Candolle "Nicotiana plantaginea", and bearing the number "230", this represents i.e. Fl. Mex. 230, cited in the Fl. Mex. but not in the Pl. Nov. Hisp., and listed among the plates obtained on the "Second Excursion", that to Guerrero in 1789 (MA, mss.). The copy in the DC. collection is almost identical with no. 1106 in the Torner Collection, which bears the number "230" and the hand printed name "Nicotiana Pusilla Linn." In the Pl. Nov. Hisp. the localities cited under *Nicotiana pusilla* are "in Veracruz..."
alissique calidis Novae Hispaniae regionibus”, but the reference to Veracruz is not because of any connection Sessé & Mocíño may have had with that locality; it is merely a citation of the original locality as cited by Linnaeus.

In the S. & M. herbarium the epithet “pusilla” seems to have been applied at one time to *Nicotiana trigonophylla* Dunal, and in the final arrangement of the herbarium to two other species. No. 5537 (CNHM neg. 48243) was identified by Morton as *Nicotiana plumaginifolia* Viviani, q.v. Morton added that this specimen is to be considered a type specimen of *Nicotiana plantaginea* Dunal, and that it presumably represents the *Nicotiana pusilla* of the Pl. Nov. Hisp.


Type-locality: Of garden origin, the native country unknown. Type: Not seen. Dunal’s reference was based on a plant “ex herb. Pav. in h. Boissier”. This specimen, now at G ex herb. E. Boissier, is labelled, apparently by Lagasca, “Habitat in Cuba insula. Colitur in R. H. Matr. ab anno 1802”.


Type-locality: Havana, Cuba, near San Juan de la Punta [“ad lite Maris Habinae, prope S. Juan de la Punta. Florer toto anno”]. Described as an herb a foot and a half high, glabrous, with sub-rugose basal leaves; cauline leaves amplexicaul, lirate or panduriform; corolla white with very long slender tube and acute spreading lobes. According to Morton, this is probably *Nicotiana repanda* Willd. ex Lehm. Nicct. 40. pl. 3. 1818, represented in the S. & M. herbarium by nos. 1493 and 5338 (CNHM negs. 48247, 48248), and originally labelled with another binomial referring to the pandurate leaves.


Localities cited: “Habitat Mexici et in Europa. Florer Junio”’. Not described, but with comments on medicinal value, and the use of the fruit in preparation of a condiment, *mole*. There is a note that this is the “Tomatl” (of Hern. Mex. 295), and that this is corrupted to “Tomate” by the Mexicans. In the S. & M. herbarium no. 1495 (CNHM neg. 48257), labelled “Physalis angulata”, was determined by Standley as *P. pubescens* L.


Type-locality [Prodr.]: “In Mexico, locis temperatis”; [Pl. Nov. Hisp.]: near México, D.F. (“Mexici, in Virginia ac India Orientali”). Holotype: DC. plate 916, as cited in Calques des Dessins (Field Mus. neg. 30799). This represents Ic. Fl. Mex. 48; it is an original painting bearing this number, and labelled “Physalis pubescens, Linn.” and “COZOMATIL. HERANDES. F. 203”, and annotated “Physalis coztomati”. The *icon* is a nearly identical duplicate of no. 0595 of the Torner Collection, which bears the number “48”, the hand-printed names “Physalis pubescens Linn.” and “COZOMATIL. HRZ. 203”, and an annotation “Phys. coztomati” [by Dunal]. In the S. & M. herbarium nos. 1346 and 1437 (CNHM negs. 48253, 48254), labelled “Physalis pubescens”, are according to Morton *Physalis mollis* Nutt. var. cinerascens (Dunal) A. Gray, Proc. Amer. Acad. Arts, n.s. 10: 66. 1874.

Physalis curassavica [var.] β integrifolia Dunal, in DC. Prodr. 13, pt. 1: 438. 1852. “Physalis integrifolia Pav.”, cited in synonymy by Dunal, i.e., as the basis for [var.] integrifolia.

Type-locality: “? In Mexico”. Type: “Pavon”, in herb. Boissier. The specimen, at G ex herb. E. Boissier, bears a printed label “Nueva España Herb. Pavon”, and is marked by Pavón “Physalis integrifolia M[exico]”. In the S. & M. herbarium nos. 1499 and 5375 (CNHM negs. 48258, 48259), labelled “Physalis integrifolia N.”, are according to Standley *Physalis subintegra* Fernald, Proc. Amer. Acad. Arts, n.s. 35: 507. 1900. Morton, who examined these plants, concurred in the determination and regarded the specimens as isotypes of *Physalis curassavica* β integrifolia.

Physalis dentata Dunal, in DC. Prodr. 13, pt. 1: 441. 1852, with citation of “Pav. ined.” as the basis for the name.

Type-locality: Mexico. Presumed holotype: “Pavon” in herb. Boissier. The specimen, now at G ex herb. E. Boissier, bears a printed label “Nueva España Herb. Pavon” and is marked by Pavón “Physalis dentata M[exico]” (Field Mus. neg. 34135). In the S. & M. herbarium nos. 1500 and 5376 (CNHM negs. 48251, 48252), labelled by the collectors “Physalis dentata N.”, are according to Standley (and Morton) correctly named.


Type-locality: Mexico. Holotype: DC. plate 918, as cited by Dunal; not cited in Calques des Dessins (photograph McVaugh). The plate is annotated “Physalis parviflora”. It is a very incomplete copy of no. 0958 in the Torner Collection, which is without inscription except for an annotation [by Dunal], “Physalis parviflora”. Not found in the S. & M. herbarium.


Saracha alata Dunal in DC. Prodr. 13, pt. 1: 431. 1852. “Solanum filiforme Pavon in h. Boiss.” cited in synonymy by Dunal, i.e., as the basis for Saracha alata.

Type-locality: Mexico. Type: Collected by Tate, not seen. Probably also seen by Dunal in Lambert’s herbarium, as a specimen from "Pavon’s herbarium" was acquired for the British Museum at Lambert’s sale in 1842 (BM, nss.). Reported by Dunal on the basis of a collection by “Pavon” in the Boissier Herbarium; this I have seen at G, ex herb. E. Boissier, labelled by Pavón “Datura maxima de Mexico”; see Datura maxima.

Solanum: A note. Michel-Félix Dunal, a friend and student of A. P. de Candolle, early in life became a recognized authority on the Solanaceae and especially on Solanum. He prepared a thesis on Solanum and related genera that seems to have been completed and in the press before the Sessé & Mocino paintings came to his notice, as none is mentioned in the published work, which appeared in print on 19 March 1813. He must have seen and studied the paintings about this time or before, as in the 3rd volume of Poiret’s Supplément à Lamarck’s Encyclopédie (dated 1813, but the relevant pages actually published 3 September 1814), he proposed twelve new species of Solanum, all the names of which were based, certainly or probably, on Sessé & Mocino material. In 1816 he published in Montpellier a small volume of more than 50 pages (cited below as Solan. Syn.), which has often been referred to, somewhat inaccurately, as the "second edition" of his 1813 work. It comprises a list of all the species known to the author at this later date, including those published in Poiret’s Supplément in 1814, and is clearly not intended as a complete second edition of the earlier Historia, but, as the title-page says, a summary statement: “Solanorum generumque affinitates synopsis seu Solanorum historiae editionis secundae summarii”. In Dunal’s last major work on the Solanaceae, his treatment of the family in de Candolle’s Prodromus (Dunal, 1852), he published additional comments and new names based on Sessé & Mocino material.

In the following pages several references are made to the numbers present on specimens in the S. & M. herbarium, and superficially appearing to be collection numbers. They are in fact the numbers that were assigned to individual species during a reorganization of the entire herbarium, in Madrid after 1804. The numbers were assigned in order according to the Linnean system. In what is now called Solanaceae, there were apparently two or more competing systems that are not fully understood. Most of the Solanaceae, including Solanum, were given numbers between 521 and 571, but the numbers assigned to species of Cestrum were 260–270 (duplicating some numbers assigned to Rubiaceae), and at least 25 numbers assigned to species of Solanum were in the range from 191 to 195, or from 219 to 263, partly also in the range of the Rubiaceae. For further comment, see McVaugh 1909, p. 209.

Type-locality: Acayucan, [southern] Veracruz ["in Acayuces circuitibus. Floret Augusto"]. Not found in the S. & M. herbarium. Described as an erect glabrous herb at least a yard and a half high ["sesquialnum ampliusque longus"], reddish woody; leaves entire, lanceolate, obtuse and acuminate, scabrous above, woolly ["lanuginosa"] beneath, very short-petiolate; panicles terminal, dichotomous, shorter than the leaves, densely woolly; pedicels subdressed, the flowers nodding, sordid white. Not identified.

Locality cited: Near Queretaro, Queretaro, where said to flower in June. Moderately described. Not found in the S. & M. herbarium. Not identified.

Type-locality: Mexico. Type: “Pavon in h. Boiss.”. This is a specimen at G, ex herb. E. Boissier, with printed label “Nueva España Herb. Pavon”, labelled by Pavón
“Solanum de Mexico” (Field Mus. neg. 34108).

 Apparently not represented in the S. & M. herbarium.

**Solanum anoplocladum** Dunal in DC. Prodr. 13, pt. 1: 346. 1852. “Solanum stramonifolium Pav.”, cited in synonymy by Dunal, l.c., as the basis for *S. anoplocladum*.

 Type-locality: Mexico. Type: “Pavon in h. Boiss.”. This is a specimen at G, ex herb. E. Boissier, with printed label “Nueva España Herb. Pavon”, labelled [by Sesse] “Solanum stramonifolium N.” (Field Mus. neg. 8577). In the S. & M. herbarium no. 5361 (CNHM neg. 48348), labelled “Solanum stramonifolium N.”, is according to Standley *Solanum torvum* Sw. Prodr. 47. 1788.


 Type-locality: Between México and Acapulco, near Puerto de Dios (“v.s. h. [numb]olt et B [onpland]”). Cited: “Dun. Sol. ed. 2. incd. tab. 84”. The specimen reported by Dunal in 1852 is at G, ex herb. E. Boissier, with printed label “Nueva España Herb. Pavon”, and labelled by Pavón “Solanum repens M[ex]ico”. In the S. & M. herbarium nos. 5322 and 5364 (CNHM negs. 48270, 48344) are labelled “Solanum repens N.”. Correll (Contr. Texas Res. Found., Bot. Stud. 4: 86. 1962) reported these same herbarium numbers (citing them from “P”) as *Solanum appendiculatum*.


 Dunal (in DC. Prodr. 13, pt. 1: 185. 1852) reported this species from México, on the basis of a collection by “Pavon in h. Boiss.”. The specimen at G, ex herb. E. Boissier, bears a printed label “Nueva España Herb. Pavon” and is labelled by Pavón “Solanum bahamense M[ex]ico”. In the S. & M. herbarium no. 1531 (CNHM neg. 48271), labelled “Solanum bahamense”, is according to Standley correctly identified. This species was reported in Fl. Mex. from seashores near Havana, Cuba, and it may be that the above specimen is West Indian in origin. In the Pl. Nov. Hisp. *Solanum bahamense* was reported from “Nova Hispania” only, and almost certainly the reference was to a Mexican, not a West Indian, species. In the S. & M. herbarium no. 1406 (neg. 48304), labelled “Solanum bahamense”, is according to Standley *S. lanceaefolium* Jacq. Coll. Bot. 2: 286. 1788, which specimen may be either Mexican or West Indian in origin; see also *Solanum pavoii*.


 Type-locality [Cav.]: Unknown to Cavanilles; flowered and fruited in the Madrid Botanical Garden in July and August, the year not stated. Cavanilles later [Deser. 110. 1802] stated “Se cree natural de la Nueva España”; this was presumably an error, as the species is Brazilian. Cavanilles on two occasions (l.c. 6: 82. 1801; Deser. 110. 1802) stated that his *Solanum betaceum* and *Solanum crassifolium* Ort. were the same. Type-locality [Ort.]: Unknown to Ortega; flowered in the Madrid Garden in July, August, and September, from seeds “communicatis à D.D. praehundtum Pourret”.

**Solanum bicorné** “Pavon” ex Dunal in DC. Prodr. 13, pt. 1: 232. 1852.

 Type-locality: “In Nová Hispaniá”. Holotype: “Pavon in h. Boiss. sub nom. *S. bicorné*”. This specimen at G, ex herb. E. Boissier, bears a printed label “Nueva España Herb. Pavon” and is labelled by Pavón “Solanum bicorne N.E.” (Field Mus. neg. 34109). The name “Solanum bicorné” apparently does not appear in the S. & M. herbarium, but no. 1409 (CNHM neg. 48339), determined by Standley (and by Morton) as *Solanum refractum* Hook. & Arn. Bot. Beech. V. 304. 1838, is labelled “Solanum Dicomum N.E.”. I suspect that this is a slip of the pen for “dichotomum”, an epithet which is associated with nos. 1540 and 5348 (negs. 48340, 48342; see *Solanum refractum* [var.] *S. angustifolium*). In any event the type of *S. bicorné* Pavon ex Dunal is apparently a form of *Solanum refractum* with broad and nearly entire leaves up to at least 20 cm long. The taxonomy of the group that includes *Solanum refractum* (with leaves said to be all or mostly pinnate-lobate) and *Solanum oaxacanum* Dunal (with leaves entire) needs study. In the vicinity of the Isthmus of Tehuantepc, where the type of *oaxacanum* was collected, the plants tend to have smaller, petiolate, relatively broad and entire leaves. In many parts of western México, however, plants with larger leaves are common, and the same plant may bear both broad entire leaves and deeply pinnatifid ones.


 Described in Pl. Nov. Hisp. as a spiny scandent shrub, the leaves lanceolate, crowded at the apices of the branches, tomentose beneath, subseisile, armed with recurved spines on the midvein beneath; racemes dichotomous; flowers white. Without much question this
is the plant described by Dunal and shown in neg. 34110; it is a fairly common form of what I take to be *Solanum refractum* Hook. & Arn.

In the S. & M. herbarium no. 1409 (CNHM neg. 48339), labelled "Solanum Dicomum [sic] N., and no. 1540 (neg. 48340), labelled "Solanum dichotomum N.", were determined by C. V. Morton as *S. refractum* Hook. & Arn. No. 5348 (neg. 48342), "Solanum dichotomum N.", is according to Morton a mixture of *Solanum refractum* and the Cuban *S. boldense* A. DC. The letter "N." (for "Nova") appended to the specimens is a clear indication that the authors intended to describe the species as new.

Morton (in herb., ined.) suggested that no. 1540 of the S. & M. herbarium be taken as the "type" of *Solanum dichotomum* Sessé & Moc. and as an isotype of *S. bicorne* B. angustifolium. 51. 1894, not of earlier authors.

Type-locality: Dry fields, San Martín Texmelucan, Puebla, where said to flower in December. Not found in the S. & M. herbarium. Described as a spiny shrub with oblong-lanceolate, sub-sinuate, angulate-determinate or repand leaves, these more densely tomentose beneath, spiny on the midvein beneath; spines tomentose except at tips, subcuneate; racemes bifid, tomentose, unarmored; flowers secund, whitish, the calyx unarmored, tomentose.

According to a determination by Morton, this name is to be typified by nos. 1519 and 5383 of the S. & M. herbarium (CNHM negs. 48308 and 48307, respectively), originally identified as "Solanum canescens N.", the oldest name for the species is *Solanum laurifolium* Mill. Gard. Dict. ed. 8. *Solanum* no. 20. 1768. See also *Solanum mexicanum* Dunal, to which these same specimens were at one time referred.


Type-locality: Mexico. Type: "Dun. Suppl. Sol. t. 29 — Moz. Plant. mexic. tab. pict.". Cited [in Solan. Syn.]: "Moz. et Sessè Plant. Mex. ined. ic. pict. — Dun. ed. 2. ined. tab. 29*". Dunal later (in DC. Prodr. 13, pt. 1: 678.). Alphonse de Candolle stated "Ecón Mocino et Sessé apud Dunal nec in coll. DC. remanet." It is probable that all or many of the Mexican paintings pertaining to Solanaceae were loaned to Dunal by the elder de Candolle at an early date, and it appears that some were never returned. Whether Dunal's "*ic. ined. t. 31*" is the original plate brought to Montpellier by Mociño or a copy made for Dunal, I have not been able to ascertain. See *Solanum mexicanum* Sessé & Moc.

In the absence of a proper type, the identification of *Solanum bulbocastanum* has been uncertain. Correll (Contr. Tex. Res. Found., Bot. Stud. 4: 255. 1962) found that in a specimen in the S. & M. herbarium (no. 1515, cited as from "F"), the styles were longer than the stamens as described by Dunal in the Prodrumus. Because of this and other features, Correll based his concept of *bulbocastanum* partly on the Sessé & Mocino specimen. In the same publication he cited (Correll 1962, p. 258) nos. 1515 and 5362 (CNHM negs. 48273, 48274), which had already been determined by Standley as *Solanum bulbocastanum*. These were originally labelled "Solanum simplicicaule N.". The same numbers, and their duplicates at F, were cited by Michael Nee (Fl. Veracruz 72: 38. 1993) as probably authentic representatives of *S. bulbocastanum*. A specimen at G, ex herb. E. Boissier, with printed label "Nueva España Herb. Pavon", is marked by Pavón "Solanum simplicicaulis M[é]xico"; this specimen is the type of *Solanum symphysiacaulis* Dunal, q.v.; it is annotated by Bitter as *Solanum bulbocastanum* Dunal. Nee (I.e., p. 39) agreed that the name *S. symphysiacaulis* is to be treated as a synonym of *S. bulbocastanum*.

*Solanum californicum* Dunal in DC. Prodr. 13, pt. 1: 86. 1852. "S. microphyllum herb. Pavon in h. Boissier" cited in synonymy by Dunal, i.e., as part of the basis for *S. californicum*.

Type-locality: California ("Nova California"). Lectotype: Douglas, pl. exsic. h. soc. hort. Lond. 1833, in G-DC (cf. Intern. Doc. Cent. microfiche DC. 2068). Also at G, ex herb. E. Boissier, is a specimen determined by Dunal in 1835, bearing an original Sessé & Mociño label "5-1. Solanum microphyllum N. No. 231..." At the final enumeration of the S. & M. herbarium (soon after 1800), the number 547 was assigned to *Solanum microphyllum*, but the plant so-called was apparently *Solanum dasyadenoides* Bitter (see below under *Solanum nigrum*) During an earlier enumeration, however, the Solanaceae were assigned numbers in the 200's. No. 231 is not identified in the S. & M herbarium, and the specimen with original label at G may have been a unique; apparently there is no other specimen of *S. californicum* in the collection. The name is now usually referred to the synonymy of *Solanum umbelliferum* Eschsch., var. incaenum Torrey, a plant of the southern Coast Ranges of California.


Type locality: Mexico. Holotype: "Pavon in h. Boiss.\n\n"; this specimen, at G, ex herb. E. Boissier, determined by Dunal in 1845, bears a printed label "Nueva España Herb. Pavon" and is marked by Pavon "Solanum flexuosum Mexica.\n\n". A specimen at BM, ex herb. Lambert, is marked by Pavon "Solanum flexuosum E.\n\n" and "[by D. Don] Solanum mucianinum Dunal.\n\n". In the S. & M. herbarium nos. 1526 (CNHM negs. 48224) and 5345 (neg. 38231), labelled "Solanum flexuosum N.\n\n", are according to determinations by Morton referable to Solanum munitum Kunze ex Schlecht. Linnacea 19: 306. 1847. On that basis, Solanum campylocladum is to be regarded as a synonym of S. munitum.


Type locality: New Spain; grown in the Madrid Botanical Garden, presumably from seeds sent by Cervantes. Type: Not seen. Probably authentic is a specimen at G, from the herbarium of E. Boissier, ex herb. "Pavon", labelled "Solanum microcarpon D. Cervantes Mexico, R. Jardin 1804\n\n". Commonly accepted as a valid species of Mexico and Central America under the name of S. cervantesii, but it is a later synonym of S. puberum Dunal, as noted by Nee (Fl. Veracruz 72: 113. 1993); see also Solanum lepianthus and S. puberum.

It is well represented in the S. & M. herbarium, e.g., by no. 1524 (CNHM neg. 48277), determined by Standley, originally named "Solanum microcarpon N.\n\n" (see also "Solanum microcarpon Pav." in the synonymy of S. lepianthus). Apparently the plant was known to Sessé & Mociño also by the name of Solanum undulatum; there are specimens so named in their herbarium (nos. 1506 and 5358; negs. 482767, 48279); at BM, ex herb. Lambert, labelled by Pavon "Solanum N.\n\n"; and at G, ex herb. E. Boissier, also labelled by Pavon.


Type locality: Mountains of Córdoba, Veracruz, where said to flower in August. Not found in the S. & M. herbarium. Rather briefly described as an unarmed shrub 5 feet high, tomentose, with ova-tate-lanceolate long acuminate leaves, simple subsessile tomentose umbels among the leaves; and white flowers. Morton, on the basis of general similarity to specimens in the S. & M. herbarium, identified this with Solanum luridum Dunal, q.v., and Nee (Fl. Veracruz 72: 47. 1993) concurred.


Type locality: "Ex Brasilîa", the source not stated. Reported by Dunal (in DC. Prodr. 13. pt. 1: 328. 1852) from Mexico, on the basis of a collection by "Pavon in h. Boiss.\n\n". This specimen at G, ex herb. E. Boissier, bears a printed label "Nueva España Herb. Pavon", is determined by Dunal, and marked by Pavon "Solanum de Mexico.\n\n". In the S. & M. herbarium, according to determinations by Standley, nos. 1542 and 5357 (CNHM negs. 48283, 48284) are Solanum cornutum: they were originally labelled as a new species.


Type locality: Mexico; grown in the Madrid Botanical Garden, "é semina mis missis per D. Sessê. Type: Not seen. Dunal (in Poir. Encycl. Suppl. 3: 768. 3 Sep 1814 (1813)\n\n" relegated Solanum cymosum Ort. and his own S. macrophyllo to the synonymy of Solanum operinum Willd. Enum. 1: 238. 1809. Later (in DC. Prodr. 13. pt. 1: 347. 1852) he took up the name macrophyllo for the same plant. Cavannilles (Descr. 115. 1802) relegated Solanum cymosum to the synonymy of his own Solanum lanceolatum, q.v. Standley (Contr. U. S. Natl. Herb. 23: 1301. 1924) referred all the above (Solanum cymosum, S. macrophyllo, and S. lanceolatum), as well as "Solanum mexicanum Moc. & Sessê; Dunal in Poir. Encycl. Suppl. 3: 700. 1813", to the synonymy of Solanum turrifolium Mill. Gard. Dict. ed. 8. Solanum no. 20. 1768. This species is represented in the S. & M. herbarium by several specimens; see under Solanum mexicanum.

Solanum declinatum Sessé & Moc. Fl. Mex. ed. 2. 54. 1894.

Type locality: "In montibus caldís Teuítlan. Floret Augusto" (i.e., Texuitlán, Puebla). Not found in the S. & M. herbarium. Described as suffruticosus, much branched, declined, tomentose, the joints thickened; leaves in pairs ("énomina"), lanceolate, entire, tomentose, one of each pair smaller; flowers axillary, often in 3’s; calyx 10-12-13-fid, the teeth terminate, subulate, very tomentose; flowers white; fruit cherry-like. This is presumably one of the woody members of Lycianthes.


Localities cited [Pl. Nov. Hisp.]: Cuernavaca, Morelos ("Quahunahaca, Floret Aprili"; [Fl. Mex.]; Southeastern Mexico ("in Tuxtlae ac Alhualulec sylvis. Floret Junio"). Described. In the S. & M. herbarium the name "Solanum diphyllum" appears on four specimens, nos. 1403, 1502, 1510, and 5346 (CNHM negs. 48329,


No. 1503 of the Torre Collection, a painting without any annotation, somewhat suggests in appearance the specimen no. 550. In the S. & M. herbarium nos. 1418 and 5363 (CNHM negs. 48317, 48321), labelled “Solanum sarmentosum N.”, were determined by C. V. Morton as Solanum dulcamaroides Dunal.

The number “550” that appears on specimens cited above was not the number of any particular specimen, but that of a species. In the final enumeration of the S. & M. herbarium (soon after 1800), the species Solanum sarmentosum was assigned the number 550, and the supposedly related species Solanum scandens (cf. Fl. Mex. 58; ed. 2. 53) the number 549. In the S. & M. herbarium the number 550 does not appear, but a collection labelled “Solanum scandens [.] in Hav[a]n[a] et Queretaro” also bears the number 549; according to Morton this is Solanum boldense A. DC. (no. 1503; CNHM neg. 48318), see Solanum scandens. In the same herbarium nos. 1418 and 5363 (negs. 48317, 48321), now referred by Morton to Solanum dulcamaroides, were originally labelled “Solanum sarmentosum N.”. The description of S. sarmentosum in the Fl. Mex. is evidently of the same plant. There seems to be no doubt of the identity of S. macrantherum Dunal, which is an illegitimate substitute for the earlier dulcamaroides.


Type-locality: “In America calidior”; cultivated at the Madrid Botanical Garden. Cavanilles later (Lc. 4: 71. 1798) stated that Née found the species “iiuixa urbem Coquimbo in regno Chilense”; and still later (Descr. 115. 1802) he said “Es natural de Chile, nació en el Jardín de semillas traídas por D. Luis Née; florece por Agosto, y se conserva en el invernáculo”. Type: Not seen. The species is often stated to be a native of Chile; it is also abundant in many parts of the uplands of Mexico. It was reported from Mexico by Dunal (in DC. Prodr. 13, pt. 1: 290. 1852) on the basis of a collection by Pavón in h. Boiss.”. The specimen at G, ex herb. E. Boissier, bears a printed label “Nueva España Herb. Pavon” and is marked by Pavón “Solanum incanum”. In the S. & M. herbarium, according to determinations by Standley, Solanum elaegnifolium is represented by nos. 1532 and 5382 (CNHM negs. 48292, 48293); no. 1532 is labelled “Solanum incanum N.”, and no. 5382, “Solanum [incanum crossed out] canescens N.”. The epithet “incanum” is also applied in the S. & M. herbarium to a species of the Lycianthes group; and see also Solanum pyriforme [var.] b. uniflorum.

Solanum enophyalis Dunal in DC. Prodr. 13, pt. 1: 222. 1852.


Solanum ensifolium Dunal in DC. Prodr. 13, pt. 1: 186. 1852. “Solanum longifolium Pav. in h. Boiss.” cited in synonymy by Dunal, i.e., as the basis for S. ensifolium.

Type-locality: “Mexico” [i.e., probably Puerto Rico]. Type: “Pavon in h. Boiss.”. This is a specimen at G, ex herb. E. Boissier (Field Mus. neg. 34117), determined by Dunal in 1845, bearing a printed label “Nueva España Herb. Pavon”, and an original ticket in the hand of Sessé, “Solanum longifolium N. V. Rubias”. Pavon has added to the ticket, “de Mexico”. As suggested by the vernacular name “Rubias”, this is probably a Puerto Rican plant. In fact appears to be a species of Solanum persicifolium Dunal, Hist. Sol. 185 (“persicifolium”). 19 Mar. 1813, an Aulacanthus species. A specimen of the same species, according to a determination by Standley, is no. 5387 of the S. & M. herbarium (CNHM neg. 48338), labelled “Solanum igneum ... olis longifolium ... P10, Rico”. This plant

Localities cited: "Habitat Mexici et Malabar. Floræ Væri". There is no mention of any earlier author, but the inclusion of "Malabar" as one of the localities evidently constitutes a reference to the Linnaean publication. Not identified, but from the detailed description probably recognizable to anyone with a good knowledge of the genus.


Type-locality: Cuba; grown at the Madrid Botanical Garden, "e seminibus missis per D. Espinosa". Type: Not seen. Espinosa, who was not a member of the Royal Botanical Expedition, sent some material to Gómez Ortega from Cuba, and it may be supposed that the published locality for this species is the correct one. Referred by Dunal (in Poir. Encycl. Suppl. 3: 771. 1814, et in DC. Prodr. 13, pt. 1: 260. 1852) to the synonymy of Solanum torvum Sw. Prodr. 47. 1788. According to Dunal (in DC. Prodr. 13, pt. 1: 350. 1852), Solanum ficifolium of "Pavon’s" herbarium is another species, Solanum zucchianum Dunal, known only in cultivation.


Locality cited. Near Havana, Cuba ["Incolit. rupeis prope Antrum de Tagama, haud procul ab Havana"].

Description. In the S. & M. herbarium nos. 5391 and 1504 (CNHM negs. 48294, 48295), labelled "Solanum Havanaense", were named by Standley as S. havanaense Jacq.


Cf. Fl. Mex. 204, cited in Pl. Nov. Hisp., is presumably represented by no. 0589 in the Torner Collection, which bears the number "204", the hand-printed names "Solanum Capense. Linn." and "Huitzotmatzin. Hern." F. 108, and an annotation [by Dunal], "Solanum Hernandesii". Perhaps this is a duplicate of the type of Solanum hernandesii, which is presumably to be seen at Montpellier. An almost identical duplicate of the illustration in Torner no. 0589 is that in no. 0778, but except for the picture of the plant, there is no inscription.

In the S. & M. herbarium nos. 1408 and 1534 (CNHM negs. 48296, 48297), labelled "Solanum capense", are according to Standley Solanum hernandesii; Morton confirmed this and suggested that these be considered typo-types. A Cuban plant identified by Morton as Solanum hernandesii (in the S. & M. herbarium no. 5351; neg. 48347) was labelled "Solanum Capense N." and, on another ticket, "Solanum N. ic. olim capense [description] ... Havana[a]. Yerba pendejeira". Nee (Fl. Veracruz 72: 47. 1993) suggested that the correct name for the plant now called Solanum chrysotrichum Schlecht. (Linnaea 19: 305. 1845) may possibly be Solanum hernandesii.


Dunal (in DC. Prodr. 13, pt. 1: 275–276. 1852) cited this Peruvian species from "Mexico" on the basis of collections by "Pavon" in the Boissier Herbarium, saying "Specimina Mexicana, forsan speciee distinctae different folii supra velutinis nec stellato-asperis et corymbris minoribus". One specimen at G, ex herb. E. Boissier, bears a printed label "Nueva España Herb. Pavon" and is marked by Pavón "Solanum de M[ex][i]co"; see also Field Mus. neg. 34118. I do not know the identity of the specimen. Standley (Contr. U. S. Nat. Herb. 23: 1300. 1924) admitted Solanum hispidum to the flora of Mexico, but questioned its occurrence in Peru.

Reported from Mexico by Dunal (in DC. Prodr. 13, pt. 1: 298. 1852) on the basis of a collection by “Pavon, in h. Boiss.”. The specimen at G, ex herb. E. Boissier, bears a printed label “Nueva España Herb. Pavon’ and is marked by Pavón “Solanum de Mexico”. Not identified as such in the S. & M. herbarium.


In the S. & M. herbarium no. 5387, labelled as above, was determined by C. V. Morton as Solanum drymophilum O. E. Schulz. See also Solanum longifolium Sessé & Moc.

Solanum lanceolatum Cav. Ic. 3: 23. pl. 245. 1795.
Type-locality: Mexico; cultivated at the Madrid Botanical Garden. Type: Not seen. Cavanilles later (Descr. 115. 1802) in relegating Solanum eymosum Ortg. (q.v.) to the synonymy of Solanum lanceolatum, said of the latter that when he first described and sketched it, the plant was still young and all the leaves were lanceolate, but that as the plant grew older, the lower leaves were often lobed and only the upper ones lanceolate [“enviejado despues, y arrojo muchas con senos en la parte inferior, siendo siempre lanceoladas en la superior”].


Solanum lanceolatum Sessé & Moc. Fl. Mex. ed. 2. 53. 1894, not of earlier authors.

Type-locality: Tuxtla [presumably San Andrés Tuxtla], Veracruz. (“cum praecedenti”, i.e., S. verbascifolium”). Not found in the S. & M. herbarium. Briefly described as a glabrous flexuous shrub, unarmed, with lanceolate, entire leaves; and lateral, about 5-flowered, umbels. The description suggests something like Solanum dphylilum L.; the plant is certainly not Solanum lanceolatum Cav., q.v., which belongs to quite a different group of species.

This was apparently assumed to be the same as the species characterized (but not fully described) under the name “Solanum nicaraguense” in Guatimalensis Prima Flora (Mociño 1993, p. 41) and in Maldonado Polo (1996, p. 184), where the locality is given as Leon, Nicaragua (“in Legionis Nicaraguenesis suburbii. Floret Octobri”). In a prefatory note introducing the genus Solanum in the above works, the author lists by name twenty species that he has seen previously, then concludes with the comment that he is adding here some species that he has observed, subsequent to his travels through southern coastal Veracruz (“His tamen addenda veniunt subsequentia a nobis per australia Veracruceës litora peregriinati obscura”). A further note is added under “Solanum nicaraguense”, commenting upon the change of name from lanceolatum, which he had used for the same plant when traveling by Tuxtlas of Veracruz (“Speciem hanc per Veracruceinum Tuxtlas iter facientes lanceolatum triviale nomine nuncupaveraus, quae quam diversa omnino sit ab ea, quam Lanceolati vocablo dignoscimus, Nicaragurese consulto adpellavimus”). See also Solanum falcatusense and S. texensis.


Type-locality: Near Orizaba, Veracruz, where said to flower in June. Not found under this name in the S. & M. herbarium. Described as an unarmed shrub 8 feet high, with rather scabrous and very tomentose branches; lanceolate, entire, long-acuminate leaves that are rather scabrous above, tomentose on both sides with rigid, slender stellate hairs; long-pedunculate tomentose terminal panicles, white flowers and cherrylke fruit; the whole plant said to have a very foetid, narcotic odor. In the S. & M. herbarium nos. 1505 and 5386 (CNHM negs. 48352, 48353), labelled “Solanum foetidum N.”, are according to Morton Solanum umbellatum Mill. Gard. Dict. ed. 8. Solanum no. 27. 1768, and probably also to be considered as type-material of Solanum lacinifolium Sessé & Moc. On the basis of the description and the epithet “foetidum” applied to the above specimens, this appears a reasonable assumption.

Solanum lentum Cav. Ic. 4: 4. pl. 308. 1797.
Type-locality: Mexico, grown at the Madrid Botanical Garden where it flowered in September and October 1794, the source not stated. Type: Not seen. Generally regarded as a valid and wide-spread species in Mexico; maintained by Bitter as Lycianthes lenta (Cav.) Bitter, Abh. Naturwiss. Vereins Bremen 24: 364. 1919. Not found in the S. & M. herbarium under this name.


Type-locality: Mexico. Syntypes: Two specimens at G, ex herb. E. Boissier, each with a printed label “Nueva españa Herb. Pavon”, one marked by Pavón “Solanum decemfidiium”, the other “Solanum echinatum M[exico]”. In the S. & M. herbarium no. 1525 (CNHM neg. 48223), labelled "Solanum reclinatum N.", is according to Morton a probable iso-synotype of S. lentum [var.] B. echinatum, the epithet "reclinatum" evidently having been misread and wrongly copied by Pavon as "echinatum". A second iso-synotype is no. 5349 (neg. 48226), labelled "Solanum


**Solanum lineatum** Sessé & Moc. *Fl. Mex.* ed. 2. 51. 1894, not of Ruiz & Pavon, nor of *Fl. Mex.* ed. 2. 53. 1894. Type-locality: San Angel. [south of México, D.F.]; and other cold places in New Spain. Said to flower in August. Not found in the S. & M. herbarium. Described as a glabrous unarmed shrub 5 feet high, with entire lanceolate leaves, supra-axillary dichotomous panicles, white flowers and smooth black fruit the size of a cherry. Not identified.

**Solanum lineatum** Sessé & Moc. *Fl. Mex.* ed. 2. 53. 1894, not of Ruiz & Pavón, nor of *Fl. Mex.* ed. 2. 51. 1894. Type-locality: Tliapan ["S. Augustini"] near [south of] México, D.F. Said to flower in May. Not found in the S. & M. herbarium. Described as an unarmed shrub 3–4 feet high; leaves lanceolate, entire, subvillous, obliquely lined; flowers in compound racemes opposite the leaves, the ultimate branchlets about 5-flowered, umbellate; pedicels filiform, pointed at base; flowers white, small; fruit like that of *Solanum nigrum* but a little larger. Not identified.

**Solanum longifolium** Sessé & Moc. *Fl. Mex.* ed. 2. 51. 1894, not of Dunal. Type-locality: Gardens in México, D.F., where said to flower in September. Said to be called "Melón de China". Described as a glabrous herb a foot and a half high; leaves oblong, acute, entire, subvillous, twice as long as the pedicels; pedicels supra-axillary, corysote; pedicels filiform, thicker at apex; corolla violet, small for the genus; fruit ovate, smooth, the size of an apple, fragrant, acid and a little sweet. Not identified. Material under the name of *Solanum longifolium* in the S. & M. herbarium is referable to at least three species, none of which seems to be the one described above. The little-known *Solanum calycinum*, q.v., is described as having a fruit the size of a small apple, but seems to differ in other ways from *S. longifolium*.

**Solanum luridum** [attributed to Pavon by] Dunal in DC. *Prodr.* 13, pt. 1: 113. 1852. Type-locality: Mexico. Type: "Pavon" in "h. Boiss." The specimen at G, ex herb. E. Boissier, bears a printed label "Nueva España Herb. Pavon" and is marked by Pavón "Solanum luridum" (Field Mus. neg. 34122). In the S. & M. herbarium nos. 1518 and 5342 (CNHM negs. 48315, 48316), labelled "Solanum luridum N.," are according to Standley *Solanum luridum* Dunal. These specimens were re-examined by Morton, who concluded that they represent not only isotypes of *Solanum luridum*, but also the little-known *Solanum cordovense* Sessé & Moc., q.v. Nee (Fl. Veracruz 72: 47. 1993) treated *S. cordovense* (1894) as a valid name and *S. luridum* (1852) as a synonym, without any explanation.

**Solanum mammosum** L. *Sp.* Pl. 267. 1753. Dunal in (DC. *Prodr.* 13, pt. 1: 250. 1852) reported this from Mexico on the authority of "Moc. et Sessé" but did not state whether he had seen a specimen or a painting from these collectors. The species is reported by Sessé & Mocíño (Fl. Mex. ed. 2. 53. 1894) as cultivated in Havana, Cuba. Specimens in the S. & M. herbarium (no. 1535; CNHM neg. 48322), correctly labelled as "Solanum mammosum", are presumably from Cuba, not from Mexico, and the report by Dunal was presumably based on a mistaken idea of the source of the material that he saw.


Cited [in Solan. Syn.]: "Moq. et Sessé Pl. mex. ic. Dun. Sol. ed. 2. ined. t. 56". In the Torner Collection no. 0058, labelled "Solanum mexicanum" [by Dunal], is perhaps the plant described by Dunal in Sol. Syn. 34. 1816. Dunal (in DC. Prodr. 13. pt. 1: 344. 1852) placed Solanum mexicanum next to S. lanceolatum Cav.; both of them, according to Standley (Contr. U. S. Natl. Herb. 23: 1301. 1924) are synonyms of Solanum laurifolium Mill. Gard. Dict. ed. 8. Solanum no. 20. 1768. In the herbarium at G. ex herb. E. Boissier, is a sheet named by Dunal "mexicanum" and marked by Pavón "Solanum canescens M[exi]co". In the S. & M. herbarium nos. 5383 and 1519 (CNHM negs. 48307, 48308, respectively), labelled "Solanum canescens N.", are according to Standley Solanum lanceolatum Cav.; according to re-determinations by Morton, these represent forms of Solanum laurifolium Mill. A second sheet at G, ex herb. E. Boissier, also named mexicanum by Dunal, bears a printed label "Nueva España Herb. Pavon" and is marked by Pavón "Solanum cinereum [not cincrasen as reported by Dunal] M[exi]co". In the S. & M. herbarium nos. 1539 and 5350 (negs. 48312, 48313), labelled "Solanum cinereum N.", are according to both Standley and Morton Solanum laurifolium Mill. It seems clear that the Solanum mexicanum of Dunal's treatment in the Prodr. was the same as Solanum laurifolium, and I know of no reason to suppose the original plate represented a different plant. Nee (Fl. Veracruz 72: 82–82. 1993), however, treated Solanum mexicanum Dunal as a synonym of S. lanceolatum Cav.


Type-locality: Tepetla near San Angel ["in Tepetlapac sic montibus prope Sancti Angeli oppidum"], [south of México, D.F.]. Not found in the S. & M. herbarium. Ic. Fl. Mex. 46 was cited in the manuscript of Pl. Nov. Hisp., but not in the published volume. Not surely identified. In the Torner Collection no. 0261 bears the hand-printed name "Solanum Mexicanum N." but no other inscription. The plant depicted has a bulbous root, and in general fits the description (in Dunal, Sol. Syn. 8. 1816) of Solanum "bulbo-castanum". Described in Pl. Nov. Hisp. as an unarmed herb two feet high, from a globose tuberous root, with simple hirsute stem, undulate, short-petiolate, pilose, ovate-lanceolate leaves, nodding simple terminal umbel, and white flowers. This can hardly be the same as Solanum mexicanum Dunal (=S. laurifolium Mill.), but the description applies in all discernible details to the plant depicted in Torner 0261, which looks like a small plant of some species of wild potato. Apparently not noted by Correll (1952, 1962) in his accounts of Solanum, sect. Tuberarium.


Type-locality: Tuxtla [i.e., probably San Andrés Tuxtla, Veracruz]; "[in Tuxtlae confiniis. Floret Junio]". Not found in the S. & M. herbarium. Described rather briefly as a glabrous unarmed shrub about a yard and a half high, the leaves oval or often lanceolate, entire, lustrous, subsessile, often in unequal pairs; peduncles axillary, lateral and terminal, 1- or several-flowered, shorter than the leaves. Not identified, but perhaps a species of Lycianthes.


E. A. Dean (Brittonia 49: 193. 1997) designated, as lectotype of Solanum mozinianum Dunal, no. 0121 in the Torner Collection, which is without inscription except for an annotation [by Dunal], "S. mozinianum". The painting agrees well enough with the description by Dunal of Solanum mozinianum in Sol. Syn. 23. 1816. It shows an annual leafy plant with a terminal open flower, on one side a lateral bud and on the other side a pendulous fruit; it also depicts a detached fruit enlarged and a cross-section of the same. Nos. 0025 and 0641 of the Torner Collection are faithful copies taken from no. 0121, of the upper part of the plant, including the open flower and the lateral buds, except that the lateral fruit is replaced by a second bud. The base of the plant and the detached drawings of the fruit are not shown. Both icons bear the number "45" (for Ic. Fl. Mex. 45); both are without further inscription except a hand-printed name. In no. 0641 this name is "Solanum pauciflorum N.", and in no. 0025 it is "Solanum [pauciflorum crossed out] [uniflorum written in, apparently by Sessé] N.". The name "Solanum pauciflorum" was not published by Sessé & Mocino, but it was included as "pauciflorum" under no. 45 of the icons obtained during the "First Excursion", in the region of Mexico City, 1787–88. Apparently that epithet was abandoned in favor of "uniflorum" before 1791, when the manuscript of Pl. Nov. Hisp. was completed. A number of existing specimens also attest the relationship between Solanum mozinianum and S. uniflorum. Dean (1997, p. 195) designated no. 0025 of
the Torner Collection as lectotype of *Solanum uniflorum* Sessé & Mocino.

At G, ex herb. E. Boissier, a folder containing three specimens with one determinavit slip by Dunal includes a specimen marked by Pavón "Solanum uniflorum M[ex]icano". At BM, ex herb. Lambert, a specimen determined [by D. Don] as *S. moccinianum* Dunal is labelled by Pavón "Solanum uniflorum N.E.". In the S. & M. herbarium nos. 1529 (CNHM negs. 48221, 48228) and 5389 (neg. 48222), all labelled "Solanum uniflorum N.", are according to Morton *Solanum moccinianum*. Morton suggested also that no. 1529 (neg. 48228) be designated as the type of *Solanum uniflorum* Sessé & Moc.

The epithet is often spelled "moccinianum", as by Dunal himself in his later publications and by Bitter. The original spelling was "moccinianum"; as the person it was intended to honor mostly spelled his own name Mozío at least in his earlier years, the epithet as originally published was quite correct in form, and there seems no reason to change it.


Type-locality [Lag.]: New Spain; grown at the Madrid Botanical Garden, where "Intro. ann. 1804 ex seminibus per D. Sessé missis". Type: Not seen. Lagasca described the corolla as "helvola". The names proposed by Roemer and Schultes and by Dunal were intended simply as replacements for *Solanum uniflorum* Lag. I have never seen a yellow-flowered form of *Solanum moccinianum*; it may be that some error of identification or interpretation is involved.


Type-locality: Peru. Known in cultivation from Guatemala southward in the Andes. Correll (Agric. Monogr. U.S.D.A. 11: 52. 1952) cited under this name no. 1407 of the S. & M. herbarium, from the herbarium at F. The same number in the collection at MA (CNHM neg. 48326), originally labelled "Solanum Chinense N.", was determined by Standley as *Solanum muriicatum* Aiton. The name "Solanum Chinense" was not published by Sessé & Mocín.


Locality cited: "Habitat Mexici et in Europa". Judging from the published character, the plant was herbaceous, unarmed, with ovate angulate-dentate leaves and "distichous" nodding racemes. Not otherwise described, but the medicinal properties of the plant enumerated, and the vernacular name given as "yerba mora". In the S. & M. herbarium the evidence suggests that the authors were not entirely sure of the delimitation of the species. No. 5341 (CNHM neg. 48328), determined by C. V. Morton as *Solanum dasycadenium* Bitter, was originally labelled "Solanum nigrius No. 230", but bears a second contemporary ticket. "Solanum microphyllum. N. No. 547", Herbarium no. 1511 (neg. 48327), also called *S. dasycadenium* by Morton, was originally labelled "Solanum nigrius No. 546".

The numbers "230", "546", and "547" did not pertain to these individual specimens but were those assigned to species in Madrid after 1800, during an attempt to number the entire herbarium. In that system most of what are now called Solanaceae had numbers between 521 and 571 (cf. McVaugh 1990, p. 269). See also a comment on "230" under *Solanum californicum*, above.


Locality cited: In Surinam and the city of Querétaro. The treatment of *Solanum scadens* in the Pl. Nov. Hisp. includes merely the short citation of localities in addition to the character quoted verbatim from the younger Linnaeus. The character and the reference to Linnaeus are repeated in Fl. Mex., and a few words of description are added. Evidently the epithet "nutans" was merely intended to replace "scadens" and so was superfluous when published as well as a later homonym. The plant described by Sessé & Mocín may have been *Solanum dulcamaroides* Dunal, q.v. No. 5381 of the S. & M. herbarium, a mixed collection labelled "Solanum

Type-locality: Mountains of Ahualulco, ?Tabasco ["in Ahualulco montibus. Florat Octobri"]). From the epithet it may be supposed that this species came from a place or region called Ocoapan; I can find no such locality in Mexico except in western Tabasco, near Mecatepec and Huimanguillo. Not found in the S. & M. herbarium. Described as a spiny, rusty-tomentose herb a yard and a half high, with ovate, entire, repand or trilobed, veiny-reticulate tomentose leaves that are pale green above and paler beneath; spines stipular and cauline, very small; peduncles "subpetiolar", sometimes in pairs, 2-flowered or the flowers racemose, rusty-woolly; flowers reddish, purple like the calyx and petiole. Not identified.


Type-locality: Mexico. Type: "Pavon, in h. Boiss.". This specimen at G, ex herb. E. Boissier, bears a printed label "Nueva España Herb. Pavon" and is marked by Pávón "Solanum de México" (Field Mus. neg. 34126). This species was placed by Dunal in his subsection Euteleostemon. A probable isotype, according to a determination by Morton, is no. 1406 of the S. & M. herbarium (CNHM neg. 48304), originally described as "Solanum bahamense", but in fact referable to Solanum lanceaefolium Jacq. Coll. Bot. 2: 286. 1788, sens. lat. The synonymy between S. lanceaefolium and S. pavonii was accepted by Nee (Fl. Veracruz 72: 80. 1993).

Solanum porphyranthum Dunal in DC. Prodr. 13, pt. 1: 244. 1852.

Type-locality: Mexico. Type: "Pavon in h. Boiss.". The type at G, ex herb. E. Boissier, was named by Dunal in 1846; it bears a printed label "Nueva España Herb. Pavon" and is marked by Pávón "Solanum de México" (Field Mus. neg. 34127). This was the only specimen cited by Dunal, although he suggested that his plant might be the same as Solanum macranthum of Martens and Galcotti and of Schlechtendal. In the S. & M. herbarium, according to determinations by Morton, nos. 1411, 1417, 1536, and 5347 (CNHM negs. 48280-48282, 48323) are probable isotypes of Solanum porphyranthum. No. 1411 is labelled by Pávón "Solanum N.E.". Morton also stated that S. porphyranthum is a synonym of Solanum chloropetalum Schlecht. Linnaea 19: 291. 1846. Nee (Fl. Veracruz 72: 93-94. 1993) treated S. macranthum, S. chloropetalum, and S. porphyranthum all as synonyms of Solanum myriacanthum Dunal, Hist. Solanum 218. pl. 19. 19 Mar. 1813.


Locality cited: Tuxtla (i.e., probably San Andrés Tuxtla, Veracruz) ["in Tuxtlae montibus. Florat Julio"]). Described. In the S. & M. herbarium no. 1517 (CNHM neg. 48303), labelled "Solanum pseudocapsicum N.", was determined by C. V. Morton as Solanum hygrophilum Schlecht.


Type-locality: Mexico; grown in the Botanical Garden at Montpellier. Type: A cultivated plant from the Montpellier Garden. Plate 6, cited in the protologue, is not duplicated in the Torner Collection. In 1816, however, Dunal cited "Dun. Sol. p. 160. t. 6. — Moz et Sess Pl. Mexic. ic. pict.,", a painting I have not yet located. George Don (Gen. Hist. 4: 415. 1838) referred Solanum cervantesii Lag. (1816) to the synonymy of S. pubigerum, and Dunal (in DC. Prodr. 13, pt. 1: 103. 1852) took up the name cervantesii, relegating to synonymy his own, published 3 years earlier. In this course he has been followed generally by all those working on American plants; the name Solanum cervantesii is in general use, but if Dunal correctly understood the plants involved the name pubigerum must be taken up for this species, as was done by Nee (Fl. Veracruz 72: 113. 1993). Another name with priority over Solanum cervantesii, and presumably for the same species as currently interpreted, is Solanum leptanthum Dunal, q.v.


Type-locality: Mexico. Type: "Pavon in h. Boiss.". The specimen at G, ex herb. E. Boissier, bears a printed label "Nueva España Herb. Pavon" and is marked by Pávón "Solanum incanum". In the S. & M. herbarium nos. 1532 and 5382 (CNHM negs. 48292, 48293), originally labelled "Solanum incanum N.", are according to Standley Solanum elaeagnifolium Cav., q.v. Morton, who confirmed the identifications, suggested that Dunal's pyriforme [var.] uniflorum may also have been a synonym of S. elaeagnifolium; confirmation of this must await re-examination of the type.


Type-locality: Mexico; grown at the Montpellier Botanical Garden, the original source not stated. Type: Not seen, derived from a plant in the Montpellier Garden. Plate 24, cited in the protologue, is not duplicated by any painting in the Torner Collection. In 1816, however, Dunal stated "Hab. in Mexico ... Moz et Sessè (v. v. h. M[onsp.]""). Dunal later (in DC. Prodr. 13, pt. 1: 329. 1852) cited "Moc et Sessè, ic. pict.". Perhaps this is no.
0683 of the Torner Collection, a painting with no
inscription except for an annotation, "Sol. rostratum" [by
Dunal]. Apparently this species is not represented in the
S. & M. herbarium.

**Solanum rubrum** [L.] sensu Sessé & Moc. Fl.
Mex. ed. 2. 52. 1894.
Locality cited: Tuxtlas (presumably San Andrés Tuxtla,
Veracruz) ["in Tuxtlae montibus. Floret Julio").
Protologue consists of a diagnosis: "Solanum caule
inermne, subperennante; folis geminis, ovatis, integerrimis, glabris, altero breviore, pedunculis
subumbellatis. F. M.". Not found in the S. & M.
herbarium. Not identified.

**Solanum rude-pannum** Dunal in DC. Prodr. 13,
pt. 1: 264. 1852.
Type-locality: Mexico. Type: "Pavon in h. Boiss.").
The specimen at G, ex herb. E. Boissier, bears a printed
label "Nueva España Herb. Pavon" and is marked by
Pavón "Solanum de Mexico" (Field Mus. neg. 34128).
Not recognized in the S. & M. herbarium. A little-used
name, not noted by Standley in the *Trees and Shrubs of
Mexico* (1924) but accepted by Nee (Fl. Veracruz 72: 119.
1993) to replace the better-known names *Solanum
diversifolium* Schlecht. (non Dunal), 1846; and *S.
ochraceo-ferrugineum* (Dunal) Fernald (1902).

**Solanum sanctum** [L.] sensu Sessé & Moc. Fl.
Nov. Hisp. 35. 1888; ed. 2. 33. 1893.
Locality cited: Cuernavaca, Morelos ("Habitat
Quahuanahuacae et in Palestina. Floret toto anno.").
Described. In the S. & M. herbarium no. 5367 (CNHM
neg. 48269) was originally labelled on one ticket
"Solanum sanctum. [description]. No. 243 [No. 558
"crossed out]. On another ticket the binomial was replaced
by "Solanum polygamum N.". According to C. V.
Morton, the specimen represents *Solanum trilobatum
Dunal.
For explanation of the numbers "243" and "558", see a
note in the introduction to the genus *Solanum*, above.

**Solanum scandens** [L.f.] sensu Sessé & Moc. Fl.
nutans*.
Locality cited: Gardens, Havana, Cuba ["in Havanna
coritius, vulgo Jazmin de Italia appelatur. Floret tota aestate
ete auumto"). Described as a glabrous twining shrub climbing
by the petiolar leaflets; ovate, ovate, entire; panicles terminal, nodding; calyx campanulate,
5-toothed; corolla violet, with odor of jasmine; fruit
cherry-like, scarlet. In the S. & M. herbarium no. 1503
(CNHM neg. 48318), labelled "Solanum scandens... in
Havanna et Queretaro", according to Morton the Cuban
species *Solanum boildense* A. DC. in DC. Prodr. 13,
pt. 1: 678. 1852, and also probably the plant described from
Cuba in the Fl. Mex. under the name of *Solanum
scandens*. See also *Solanum dulcamaroides*, with which
this species was confused by Sessé and Mocino.

**Solanum stoloniferum** Schlcht. Linneae 8: 255.
1833.
Type-locality: Veracruz. Correll (1952, p. 196) referred
to this species a collection [or two] from the S. & M.
herbarium, as follows: "Sessé, Mocino, Castillo, and
Maldonado 241 (1523) (CM)"). The "CM" refers to the
herbarium of the Chicago Natural History Museum. "F"
In the S. & M. herbarium at MA, no. 1523 (CNHM neg.
48314) was originally labeled "Solanum tuberosum. No.
241”. It was determined by Correll as *S. stoloniferum
Schlecht. The number "241" is not the collection-
number, as Correll apparently supposed, but the number
assigned to the species *tuberosum* during the final attempt
at reorganization of the herbarium in Madrid after 1803.
For further comment on the numbering system, see
above, a note introducing the genus *Solanum*.

**Solanum symphyscaulis** Dunal in DC. Prodr.
13, pt. 1: 106. 1852, with citation of "Pavon herb." as
the basis for the name.
Type-locality: "in regno Mexicano". Type: "Pavon,
herb. in h. Boiss."). The specimen at G, ex herb. E.
Boissier, annotated by Dunal, bears a printed label "Nueva
España Herb. Pavon" and is plainly labelled by Pavon
"Solanum simplicicaulis M[exico]"). That the epithet
"symphyscaulis" resulted from no simple typographical
error is indicated by Dunal’s explanation of it: "Caulis
praetatis sulcis bifiarium bidivios, unde nomen Pavoni".
As the epithet was certainly published by Dunal with
intent it should not be changed, even though it resulted
from an egregious mishap in the ticket written by Pavón.
The above specimen was annotated by Bitter as
*Solanum bulbocastanum* Dunal, q.v. In the S. & M.
herbarium nos. 1515 and 5362 (CNHM negs. 48273,
48274), originally labelled "Solanum simplicicaulis N.",
are according to Standley *Solanum bulbocastanum*; this
determination was confirmed by Morton, who added that
these are probable isolates of *Solanum symphyscaulis.
Apparently the latter may confidently be considered a
synonym of *S. bulbocastanum*. Correll, in his studies of the Sect. *Tuberarium*, seemingly did not account for *S.
symphyscaulis*.

**Solanum tabascense** Sessé & Moc. Fl. Mex. ed. 2.
52. 1894.
Type-locality: In woods, Ahualulco, [?Tabasco] ["in
Ahualulco sylvis. Floret Septembri"]. Not found in the S.
& M. herbarium. Described as a flexuous unarmed shrub
more than 3 yards long; stems roughened with minute
tubercles; branches opposite; leaves opposite or rarely in
3’s, obovate or obovate, acuminate, entire, veiny, glabrous,
very short-petiolate; racemes "subpetiolares", simple,
short, about 7-flowered; pedicels filiform; flowers purple.
Not identified, but if the branches and leaves are correctly
described as opposite, perhaps not a *Solanum*.
Solanum fructo-tetrico Cav. ic. 4. 5. pl. 309. 1797.
Type-locality [Cav.]: Mexico; flowered at the Madrid Botanical Garden in the autumn of 1796. Type: Not seen. The protologue reads “In Imperio Mexicano. Culto in R. H. M. ex seminibus inde missis”, suggesting that the seeds may have been sent by Cervantes or Séssé about 1795, not brought to Spain by Née in 1794. Not found in the S. & M. herbarium.

“Solanum tehuanense. No. 19”.
In the S. & M. herbarium no. 1520 (CNHM neg. 48309), labelled as above, and labelled on another ticket: “Solanum longifolium. No. 191”, was determined by C. V. Morton as Solanum laurifolium Mill.”, with the annotation “mixture”. It seems unlikely that this is Solanum longifolium Séssé & Moc., q.v. The cited locality, with the number “191”, suggested that this was one of the collections sent to Séssé from Puebla by Ignacio León (cf. McVaugh 1990, p. 208).

Solanum tlacotalpense Séssé & Moc. Fl. Mex. ed. 2. 52. 1894.
Type-locality: On the banks of the Río Tuxtica, [presumably near Tlacotalpán, southern Veracruz], ["ad fluviorum Tuxtelentium ripas. Floret Junio"], In the S. & M. herbarium no. 5390 (CMHM neg. 48334), originally labelled “Solanum Tlacotalpense”, is according to Morton a form of Solanum refractum Hook. & Arn. Bot. Beech. Voy. 304. 1838. The original description of tlcatalpense confirms this disposition of the name. According to Nee (Fl. Veracruz 72: 153 1993), however, S. tlacotalpense is a synonym of Solanum wendlandii Hook. f. Bot. Mag. 113: 5. 69:14. 1887. Nee remarked that the long anthers and the long, paniculate inflorescences suggest a relationship with S. refractum, which he treated as a species “del oeste de México”.

This was apparently assumed to be the same as the species characterized (but not fully described) under the same name in Guatimalensis Prima Flora (Mocioño 1993, p. 41) and in Maldonado Polo (1996, p. 183), where the locality is given as Nicaragana (“ad fluviorum ripiplas in Nicaraugensi provinciav Floret Junio”). See a note above under Solanum lanceolatum, relative to the Central American Solanums included in the two above works.

Solanum totonacum Séssé & Moc. Fl. Mex. ed. 2. 53. 1894; ed. 1. 58. 1895.
Type-locality: Hot mountains of Tenampulco [“Tenampulici in the first edition]. Puebla; ["in calidis Tenampulici montibus; fructibus praecumas on suum Octobri reperimus”]. Not found in the S. & M. herbarium. Described as herbaceous, 6 feet high, spiny, tomentose; leaves in unequal pairs, lanceolate, sinuate-angulate, tomentose, the veins spiny on both surfaces; spines glabrous, recurved; racemes sparse, simple; calyx tomentose and spiny; fruit red, cherrylike. Not identified.

Cited [in Solan. Syn.]: “Moz. et Sessé, Pl. mex. ic. pict. — Dun. Sol. ed. 2. ined. t. 41”. In the Torner Collection no. 0461, a painting without any inscription except for an annotation [by Dunal] “Sol. tricolor”, adequately fits the description in Sol. Syn. 24. Oct. 1816. Solanum tricolor was said by Dunal to be related to Solanum lumnenum Cav. In a later publication (DC. Prodr. 13. pt. 1: 169. 1852), Dunal again cited the Sessé & Mocíno plate ["fig. pictam apud DC.”] and stated that he had seen the plant living, but cited no additional herbarium specimens. He cited a locality, presumably taken from a Sessé & Mocíno manuscript, viz. “In Mexico, circa oppidum vulgo dicturn la Boca del Rio, a Verdi Cruce leuas duas distantientes”. I have not been able to trace the manuscript nor the original plate. In the S. & M. herbarium nos. 1528 and 5344 (CMHM negs. 48232, 48233), originally labelled with an unpublished epitaph, are according to Morton Solanum tricolor.

Cited [in Solan. Syn.]: “Dun. Sol. ed. 2. ined. t. 75. Moc. et Sessé. Pl. mex. ic.„”. Nee (Fl. Veracruz 72: 139. 1993) indicated that he had seen “Dunal ined. 75” at Paris (P). In the Torner Collection no. 0674, a painting without any inscription except for an annotation [by Dunal] “Solanum tridynamum”, adequately fits the description in Sol. Syn. 35: 36. Oct. 1816. In a later publication (DC. Prodr. 13. pt. 1: 333. 1852), Dunal attributed the type-plate to “Moc. Sess. et Cerv.”, but cited no actual specimens, stating only that the description was “e figurâ pictâ Moc. et Sessé”. According to a determination by Morton, no. 1538 of the S. & M. herbarium (CNHM neg. 48268), and the right-hand plant of no. 5367 (neg. 48269), both labelled “Solanum polygonum N.”, are all Solanum tridynamum Dunal; Morton stated further that this is the same as Solanum amazonum Ker, Bot. Reg. pl. 71. 1815, for which Solanum tridynamum is therefore the older name, as noted and accepted by Nee (1993, l.c.)

Type-locality: Mexico. Type: “Pavon in h. Boiss.”. The specimen at G, ex herb. E. Boissier, bears a printed
label “Nueva España Herb. Pavon” and is marked by Pavón, “Solanum polygamum M[ex]i[col]o”. In the S. & M. herbarium, according to a determination by Morton, the left-hand plant of no. 5367 (CNHM neg. 58269) is to be regarded as an isotype of Solanum tridynamum [var.] B stylorum; it was originally labelled “Solanum polygamum N.”. Morton stated this is “a minor form with smaller leaves”. See also above under Solanum tridynamum.

**Solanum triquetrum** Cav. ic. 3: 30. pl. 259. 1795.
Type-locality: New Spain; flowered in the Madrid Botanical Garden in September 1794. Type: Not seen. A species of western Texas and northern Mexico, not found in the S. & M. herbarium under this name.

**“Solanum tubulosum”**
A name not published by Sessé & Mocíno, but included as ic. Fl. Mex. 272 in a list of icones obtained during the “Second Excursion”; that to Guerrero in 1789, and included under the same number among icones 1-416 (MA, mss.). No. 0591 in the Torner Collection bears the number “272”, the hand-printed name “Solanum Tubulosum”, and the hand-written addition ![by Sessé], “Sp. N.”. A nearly identical original painting is DC. plate 913, which also bears the number “272” but lacks the hand-printed name below. McVeagh (1980, p. 126) suggested that DC. plate 913 may represent ic. Fl. Mex. 272. The plant depicted is apparently Saracha procumbens (Cav.) Ruiz & Pavón [=Jaltomata procumbens (Cav.) J. L. Gentry, Phytologia 27: 287. 1973].

C. V. Morton, after study of the Solanaceae of the S. & M. herbarium, suggested that no. 1405 (CNHM neg. 48260), labelled “Solanum tubulosum”, should be referred to Saracha procumbens.

**Solanum tuxtlense** Sessé & Moc. Fl. Mex. ed. 2. 52. 1894.
Type-locality: Suburbs of Tuxtla [i.e., probably San Andrés Tuxtla, Veracruz], where said to flower in October. Not found in the S. & M. herbarium. Described as a glabrous, unarmed, fistulose herb about 10 feet high; leaves in unequal pairs, ovate, acute, subdentate, very short-petiolate; peduncles axillary, solitary, filiform, erect, 1-flowered; flowers purple. Not identified.
This was apparently assumed to be the same as the species characterized (but not fully described) under the same name in Guatimalensis Prima Flora (Mocíno 1993, p. 41) and in Maldonado Polo (1996, p. 183), where the locality is given as San Salvador (“Habitat Servatorpoli. Floret Decembris”). See a note above under Solanum lanceolatum, relative to the Central American Solanums included in the two above works.

**Solanum ulmoides** Dunal in DC. Prodr. 13, pt. 1: 130. 1852.
Type-locality: Mexico. Type: “Pavon in h. Boiss. [anno] 1845”. The specimen at G, ex herb. E. Boissier, determined by Dunal in 1845, bears a printed label “Nueva España Herb. Pavon” and is labelled by Pavón, “Solanum triquetum M[ex]i[col]o” (Field Mus. neg. 34130). In the S. & M. herbarium no. 1416 (CNHM neg. 48351), identified by the collectors to genus only, is according to Morton a probable isotype of Solanum ulmoides Dunal, which is in turn a synonym of Solanum hygrophilum Schlecht. Linnaea 8: 254. 1833. Another probable isotype is no. 1517 (neg. 48303), originally labelled “Solanum pseudocapiscum”, determined by both Standley and Morton as Solanum hygrophiilum.

**Solanum urceolatum** Pers. Syn. Pl. 1: 223. 1805
A Peruvian species, reported from Mexico by Dunal, i.e., on the basis of a collection from “h. Pav. in h. Boissier”. This specimen at G, ex herb. E. Boissier, annotated by Dunal as Solanum urceolatum, bears a printed label “Nueva España Herb. Pavon” and is labelled by Pavón “Solanum oppositifolium de Mexico”. I cannot comment upon the correctness of the identification by Dunal.

Locality cited: Tuxtla [presumably San Andrés Tuxtla, Veracruz], “cum praecedenti”, i.e., S. miltomaiae]. Diagnosis provided, no description. The name seems to have been used for at least two species in the S. & M. herbarium. No. 1533 (CNHM neg. 48336) was determined by Standley as Solanum ochraceo-ferrugineum (Dunal) Fernald. No. 5342 (neg. 48316), labelled “Solanum [Verbascifolium crossed out]”, was determined by Morton as S. luridum Dunal.

Locality cited: New Spain, and Virginia. Described only in two diagnoses that may have been taken directly from Palau (2: 327. 1785). Ic. Fl. Mex. 47, cited in Pl. Nov. Hisp., was listed among the icones made on the “Second Excursion”, that to Cuernavaca and Guerrero in 1789 (MA, mss.). This icon is apparently represented by two essentially identical paintings in the Torner Collection. One (no. 0260) is without inscription except for the hand-printed name “Solanum Virginianum. Linn.”. The other (no. 0026) bears the number “47”, an original hand-printed name “Solanum spinosum. Linn.”, in which “spinorum” has been crossed out, “vignianum” written in and crossed out, and “Sodomeum” written in. The illustration depicts a small apparently annual plant with deeply and irregularly pinnatifid leaves, spiny stems, yellow flower that apparently include two anthers much larger than the others. The aspect is that of Solanum rostratum, perhaps not well drawn.
Solanum heterodoxum Dunal, q.v., is a species found in the S. & M. herbarium under the name of Solanum virginianum, but in that the flowers are purple, not yellow.

Solanum volubile Sessé & Moc. Fl. Mex. ed. 2. 51. 1894, not of Swartz.
Type-locality: Mountains of Espinal, Veracruz ["in calidissimis montibus del Espinal. Floret Augusto."] The locality is about 20 km SSW of Papantla (cf. McVaugh 1977, p. 162). Not found in the S. & M. herbarium. Described as a glabrous, suffruticose unarmed twiner; leaves in unequal pairs, oval-lanceolate, entire, short-petiolate; peduncles axillary, umbellate, nodding; calyx with 10 terete teeth; fruit the size of a cherry. This suggests a species of Lycianthes, not further identified.

Solanum sp. ("Solanum caule inermi, suffruticoso, folis ovato-lanceolatis, integerrimis, glabris; umbellis sparsis") Sessé & Moc. Fl. Mex. ed. 2. 51. 1894.

"Solanum spp."
Grobet (1882, 15th plate following p. 64) reproduced Torner no. 1471 in full color with the caption "Solanum spp." The plant depicted is a woody species of Solanum, perhaps a woody vine, with shallowly pinnatifid leaves, apparently few and rather large pale purplish flowers that are darker at the center, long anthers, and obovate greenish to yellowish fruit perhaps the size of a plum. It has been suggested that the picture represents Solanum wendlandii Hook. f., but I have not verified this. The icon was probably made during the later years of the expedition, in the West Indies or Central America, or lowland Mexico from Veracruz southward, where S. wendlandii might be found in cultivation.

Staphyleaceae
Staphylea brachiata Sessé & Moc. Fl. Mex. ed. 2. 77. 1894.
Type-locality: Not stated. Not found under this name in the S. & M. herbarium. Not identified. Briefly described; the description of the flowers could be that of a species of Staphylea. The plant called "Staphylea pinnata" in the S. & M. herbarium, according to determinations by Standley, is Turpinia paniculata Vent.

Turpinia paniculata Vent. Chois. Pl. pl.31. 1803.
De Candolle (in DC. Prodr. 2: 3. 1825) reported this species from Mexico on the basis of "Moc. et Sessé fl. mex. ["mec."] icon ined.", This was a reference to no. 1654 in the Torner Collection, a painting without inscription except for an annotation by de Candolle, "Staphylea paniculata". DC. plate 164, annotated "Staphylea paniculata", is a copy derived from Torner.

1654. In the S. & M. herbarium nos. 716 and 717 (CNHM negs. 48354-48358), labelled as a species of Staphylea, are according to Standley Turpinia paniculata.

Sterculiaceae
Reported from "Nueva España" by Cristóbal (Opera Lilloana 4: 54. 1960) on the basis of a specimen at G, "Herb. Pavón". I have not seen the specimen and cannot comment upon its identity.

Type-locality: [DC.]: "In Mexici montosis"; [Pl. Nov. Hisp.]: Chilpancingo ["in Chilpantzingi montibus, (etc.). Floret Julii"], Guerrero, also Jamaica, Cumara [sic, =Cumaná], and Peru. Type [DC.]: Lectotype, DC. plate 105, as noted in Calques des Dessins (Field Mus. neg. 30520). This is an original painting, bearing the number "325", i.e., it represents L. Mex. 325, as cited in Pl. Nov. Hops. DC. 105 is nearly identical with no. 1108 in the Torner Collection, which bears the number "325" and the hand-printed name "Avena pusilla Linn.", the epithet then crossed out and "cordifolia" added by de Candolle. In the S. & M. herbarium no. 4483 (CNHM neg. 48364), labelled "Avena pusilla", is according to Standley Avenia pusilla L. Syst. Nat. ed. 10. 1247. 1759. The identity of Avenia cordifolia was considered doubtful by Standley (Contr. U. S. Nat. Herb. 23: 813. 1923) and by Cristóbal (Opera Lilloana 4: 224. 1960).

Reported by Cristóbal (I.c., p. 61) from "Nueva España" on the basis of a specimen at F (Sessé et al. 4479), which I have not seen. The specimen at F was presumably a duplicate of no. 4479 at MA (CNHM neg. 48371), labelled "Avena sp. nova N E", which Standley determined as Bytniera aculeata Jacq.

Localities cited: Mountains of Chilpancingo, Guerrero ["cum praecedenti", i.e., Avenia pusilla]; also Jamaica, Cumara [sic] and Peru. Lc. Fl. Mex. 299, represented in the Torner Collection by no. 0635, which bears the number "299", the hand-printed name "Avena [Magna, Linn. crossed out]", and the epithet added by de Candolle, "cardiopetala". DC. plate 104, a nearly identical original painting bearing the number "299", was annotated by de Candolle "Avenia cardiopetala" and so cited by him (I.c.)
in the synonymy of A. magna L. In the S. & M. herbarium no. 3310 (CNHM neg. 48362), labelled
"Ayenia magna", is according to Standley a variety of
1899. A sheet referred doubtfully to A. magna is
according to Standley A. berlandieri S. Wats. (no. 4481;
neg. 48359).

Ayenia ovata Hemsl. Biol. Centr. Amer. Bot. 1:
135. pl. 11. 1879.
Reported from "Nueva España" by Cristóbal (Opera
Lilloana 4: 98. 1960) on the basis of a specimen at G,
"Herb. Pavón". I have not seen the specimen and cannot
comment upon its identity.

154. 1890; ed. 2. 144. 1893; Fl. Mex. ed. 2. 207. 1894.
Type-locality [Pl. Nov. Hisp.]: Mountains between
Tezapalpan and Coahuaya, Michoacán ["in hortis (sic)
ab oppido Tezapalpan in Coahuayan interjectis. Floret
Jannuario"] [Fl. Mex.]: "in montibus ab oppido
Tezapalpanque...". Described as a subshrub, glabrous,
with tiny purplish flowers and pedicellate capsule; not
precisely identifiable from this account. Not located in the
S. & M. herbarium. Cristóbal (Opera Lilloana 4:
224. 1960) was uncertain of the identity of this plant.

Bot. 1: 135. pl. 11. 1879.
Reported from "Nueva España" by Cristóbal (Opera
Lilloana 4: 100. 1960) on the basis of a specimen at G,
"Herb. Pavón". On the same page Cristóbal cited as
Ayenia rotundifolia no. 4482 of Sessé et al. (F). That
specimen was presumably thought to be a duplicate of one
of the two sheets with the same number at MA. Both
were named Ayenia fruticosa Rose (Contr. U. S. Natl.
Herb. 5: 195. 1899) by Standley. One (CNHM neg.
48360) was originally labelled "Ayenia ferruginea N.
description"; the other one (neg. 48361) was labelled
"Ayenia fruticosa N. [description]."

Brotera ovata Cav. Ic. 5: 20. pl. 422. 1799.
Type-locality: Guanajuato, Guanajuato; flowered and
fruited in the Madrid Botanical Garden in September 1798.
Type: Not seen. According to Freytag (Ceiba
1: 216. 1951), this is a synonym of Guazuma ulmifolia
Lam. Encycl. 3: 52. 1789. Judging from Cavanilles’
description, which refers to the leaves as "pagina superiore
nitida et scabriuscula", the plant he had was G. ulmifolia
in the sense of Freytag, and not the common Mexican
species G. tomentosa H. B. K. Cavanilles noted in 1798
(Ic. 4: 71) that Née found this species on Taboga Island
(Panama), and between Guayquil and Guaraunda (Ecuador);
the presumption is that the material grown at Madrid came
from Central or South America, not from "New Spain".

Bytneria lanceolata DC. in DC. Prodr. 1: 487.
1824, with citation of "fl. mex. i.e. ined. " as the basis for
the name.
Type-locality: "In Mexici montibus", but see below
under B. scabra. Type: Lectotype in the Torner
Collection, no. 0719, without inscription except for an
annotation by de Candolle, "Buttneria lanceolata". This is
a near-duplicate, apparently an "improved" later copy of
Torner no. 1121. That is a picture of a flowering branch
that bears the number "266", the hand-printed name
"Ayenia [Scabra. Linn. crossed out], and "lanceolata"
added by de Candolle. DC. plate 103, cited as type in
Calque de Dessins (Field Mus. neg. 30519), is an
adequate copy of Torner 1121. Neither no. 1121 nor DC.
103 is eligible as lectotype, as neither includes the
spinosus fruit that is depicted in no. 0719 and was
mentioned by implication in the protologue, where the
phrase "cetis purpurei" seems to refer to the setae on the
fruit of no. 0719. Standley (Contr. U. S. Natl. Herb. 23:
813. 1923) referred B. lanceolata and B. scabra to the
76. 1763. In the S. & M. herbarium nos. 847, 881 and
1434 (CNHM negs. 48367, 48369, 48370), originally
named as Bytneria scabra, all belong, according to
Cristóbal, to the complex of B. aculeata Jacq.; no
specimen named B. lanceolata was found in the herbarium.

Hisp. 39. 1888; ed. 2. 37. 1893.
Locality cited: "In uarque America". Ic. Fl. Mex. 266,
evidently is represented by nos. 0719 and 1121 in the
Torner Collection, which see under Bytneria lanceolata,
above. In the list of Icones obtained during the
"Second Excursion", that to Guererro in 1789 (MA, mss.),
Ic. 266 is listed under the name of "Bytneria scabra".
Most of the other Icones between 250 and 270 represented
species that were reported from near Mazatlán, Guererro,
and probably no. 266 came from that vicinity also. For
herbarium specimens of B. scabra sensu Sessé & Moc.,
see B. lanceolata.

Guazuma polymorpha Cav. Ic. 5: 51. pl. 299.
1796.
Type-locality: New Spain; grown at the Madrid
Botanical Garden, where said to flower in August and
September. Type: Not seen. According to Freytag (Ceiba
1: 216. 1951), this is a synonym of Guazuma ulmifolia
Lam. Encycl. 3: 52. 1789. Judging from Cavanilles’
description, which refers to the leaves as "pagina superiore
nitida et scabriuscula", the plant he had was G. ulmifolia
in the sense of Freytag, and not the common Mexican
species G. tomentosa H. B. K. Cavanilles noted in 1798
(Ic. 4: 71) that Née found this species on Taboga Island
(Panama), and between Guayquil and Guaraunda (Ecuador);
The presumption is that the material grown at Madrid came
from Central or South America, not from "New Spain".

210. 1894.
Type-locality: Hot places, New Spain, where said to
flower in July. Long description. In the S. & M.
herbarium no. 4490 (CNHM 48383), labelled "Helietes
bisflora N. i.e.", is according to Standley H. guazumaeofolia
Locality cited: Puerto Rico ["in litore maris totius Insulae de Porto Rico. Floret Augusto et Septembris"].
Description. The name, according to determinations by Standley, was applied in the S. & M. herbarium to Helicteres guazumaefolia (no. 4489; CNHM neg. 48380), and H. jamaicensis Jacq. (no. 4487; negs. 48384, 48385).
Not further identified.

The report by de Candolle was based upon no. 0705 in the Torner Collection, a painting without any inscription except for an annotation by de Candolle, "Helicteres rubriflora." DC, plate 115 (Field Mus. neg. 30528) is a copy derived from Torner 0705. The plant depicted is apparently Helicteres guazumaefolia H. B. K., to which H. mexicana was referred by Standley (Contr. U. S. Natl. Herb. 23: 797. 1923). It is possible that this painting is the one cited above under Helicteres biflora.

Locality cited: Chilpancingo, [Gro.] ["in Chilpantzingo montibus et Capite Bonae Speci. Floret Junio"].
Description. In the S. & M. herbarium no. 3322 (CNHM neg. 48386), labelled "Hermania bisserrata. [descr.] 1256. 16-2," was determined by Standley as a mixture of Hermannia inflata Link & Otto (3322A) and Melochia hirsuta Cav. The number "1256" did not pertain to this particular specimen but was the one assigned to this species in Madrid after 1800, during an attempt to number the entire herbarium. In that system most of what are now called Malvales, including the Sterculiaceae, has numbers between 1250 and 1315 (cf. McVaugh 1990, p. 209). Nelson (1997) designated "Sessé 3322 [A]" as "material tipo" of "Hermania bisserrata Sessé & Moc.", which is inappropriate as no such name exists.

Type-locality: Not stated. Not recognizable from the brief description. Not found in the S. & M. herbarium.

Riedelia corymbosa DC. in DC, Prodr. 1: 491. 1824, with citation of "fl. mex. ic. ined." as the basis for the name (Herman[n]ia corybosa Sessé & Moc., as to ic. and herbarium specimens, not as to description). Physodium spp. of authors, Melochia sect. Physodium (Presl) A. Goldberg, Contr. U. S. Natl. Herb. 34: 344. 1967.

Florae Decembri"); [Fl. Mex.: "prope Oppidum Tepalcatepec. Floret Decembri"]; ic. Fl. Mex. 280 (cited in Fl. Mex. and in the manuscript of Pl. Nov. Hisp. but not in the published version of the latter). Probably two species were included in the concept of Hermania corymbosa Sessé & Moc.; a manuscript list at MA shows that Fl. Mex. 280 was painted during the "Second Excursion", that to Guerrero in 1789, whereas the plant described from Tepalcatepec must have been seen on the "Third Excursion", late in 1790. The respective species in question are apparently Melochia rhodocalyx C. Koch & Boué (Index. Sem. Hort. Berol. 14. 1854) and Melochia adenodes A. Goldberg (Contr. U. S. Natl. Herb. 34: 346. 1967).
The Hermania corymbosa of Fl. Mex. was apparently assumed to be the same as the species characterized (but not fully described) under the same name in Guatimalensis Prima Flora (Mocinò 1993, p. 109) and in Maldonado Polo (1996, p. 279), where the locality is given as El Salvador ("prope Coixtepecum. Floret Novembris").
The plant described by Sessé & Mocinò from Tepalcatepec, in which the petals were characterized as "vix calice longioribus", was presumably Melochia adenodes, which with two varieties ranges widely from Sinaloa to Oaxaca. This species was misinterpreted by Standley (Contr. U. S. Natl. Herb. 23: 802. 1923) as Physodium corymbosum Presl. I have not been able to locate any herbarium material referable to M. adenodes, nor to P. corymbosum Presl.
The second "Hermania corymbosa", not described but depicted among the icons obtained in 1789, and apparently collected for the herbarium in the same year, is represented by ic. Fl. Mex. 280, cited in Fl. Mex. and in the manuscript of Pl. Nov. Hisp. but not in the published version of the latter. ic. 280, is exemplified by DC, plate 93, an original painting (here designated as lectotype of Riedelia corymbosa DC.), bearing the number "280" and indicating by the long-exserted petals that it represents Melochia rhodocalyx (Field Mus. neg. 30524). A near-duplicate is no. 0255 in the Torner Collection, labelled "280", bearing a contemporary hand-printed name "[Hermania crossed out] Corymbos. Sp. N.", and an annotation "Melochia" by de Candolle.
In the S. & M. herbarium nos. 3316 and 3323 (CNHM negs. 48406-48410) are according to Standley Physodium dabiwm Hems. (for which read Melochia rhodocalyx). No. 3323 is labelled "Hermania corimbosa N.", but one sheet of no. 3316 (neg. 48407) is labelled "Hermania tomentosa N." and "H[abitat] in mon[tibus] Xo[c?] sitepec". This latter locality is not far from Cuernavaca, Morelos, where the expedition worked for a time in 1789, and perhaps ic. Fl. Mex. 280 was based on material from there. At BM, ex herb. Lambert, are three fruiting specimens labelled by Pavón "Hermania tomentosa sp nova de Mexico" and two flowering specimens labelled "Hermania corymbosa de Mexico". I should refer all these, chiefly on the basis of the long petals, to Physodium rhodocalyx.

Type-locality: Hot mountains of Tepic, i.e., Nayarit ['in calidis Tepici montibus. Floret Julio']. Not found in the S. & M. herbarium. Described as suffrutescens, a foot and a half high, leaves alternate, ovate, unequally serrate, glabrous above, villous on the veins beneath; flowers axillary, sessile, the lowermost solitary, the upper in pairs or the uppermost in a crowded interrupted spike; calyx semi-globose, channelled, with 4 or 5 stipe-like bracts; corolla purple, erect. From the description it seems possible that this is represented by no. 0475 in the Turner Collection, a painting without inscription except for the numbers "16-2" at the top and an annotation by de Candolle, "Melochia?". Not further identified.


Type-locality: Mazatlán ['in calidis Mazatlami circuitibus'], Guerrero. Ic. Fl. Mex. 354; this is represented by no. 0390 in the Turner Collection, which bears the hand-printed name "Melochia [Concanetana ? crossed off]" and "conglobata" added by de Candolle. DC. plate 92 is a nearly identical original painting bearing the number "354" and an annotation by de Candolle. Melochia nodiflora Sw. (Field Mus. neg. 30510). In the S. & M. herbarium no. 3288 (CNHM neg. 48391), labelled "Melochia conglobata N.", is according to Standley Melochia nodiflora Sw. Nelson (1997) designated "Sessé 3288" as "material type" of M. conglobata.


Localities cited: Gardens in Cuernavaca, Morelos ("in hortis Quauhatlanensis et in Brasilia. Floret Maio"). Described. In the S. & M. herbarium nos. 3286 (CNHM neg. 48394) and 3287 (negs. 48395, 48397), all labelled "Melochia pyramidata", were correctly named according to Standley.


See Grossulariaceae.


Type-locality: "In Mexico montibus calidis", i.e., probably in Morelos or Guerrero; see Herman[n]ja corymbosa. Lectotype: DC. plate 93, not noted in Calques des Dessins (Field Mus. neg. 30524), an original painting bearing the number "280" and indicating by the long-exserted petals that it represents Melochia rhodolcalyx C. Koch & Bouche. It is a near-duplicate of no. 0255 in the Turner Collection. Both represent Ic. Fl. Mex. 280, q.v. under Herman[n]ja corymbosa. The transfer of de Candolle's name to Physodium is prevented by the existence of P. corymbosum Presl. For further discussion and citation of specimens, see Herman[n]ja corymbosa.

Sterculia oblongifolia DC. in DC. Prodr. 1: 482. 1824, with citation of "fl. mex. ic. ined." as the basis for the name.

Type-locality: "In Mexico". Lectotype: In the Turner Collection, no. 0985, bearing the number "220" (which I cannot explain) and an annotation by de Candolle, "Sterculia? oblongifolia". It was well reproduced in color, at ca. 22.8 by 16.5 cm, and identified only as an "Ilustración original de la Flora Mexicana" by Lozoya (1984, p. [204]). DC. plate 106, as cited in Calques des Dessins (Field Mus. neg. 30521), is a partial copy of Turner 0985. The name was referred by Bennett and Robert Brown (Pl. Jav. Rar. 237. 1844) to the synonymy of Cola acuminata (Beauv.) Benn. & R. Br., i.e., an African tree which according to Standley (Contr. U. S. Nat. Herb. 23: 795. 1923) is sometimes cultivated in tropical America but was not known to him from Mexico. Not found in the S. & M. herbarium.

Sterculia punctata DC. in DC. Prodr. 1: 483. 1824, with citation of "fl. mex. ic. ined." as the basis for the name.

Type-locality: "In Nová Hispaniá". Lectotype: In the Turner Collection, no. 0162, annotated "Sterculia?", "Tab. 2. by Sessé, and "Sterculia [helicteris Pers. (?)partly erased]" by de Candolle. DC. plate 107, as cited in Calques des Dessins (Field Mus. neg. 30522), is an adequate copy of Turner 0162. The name was referred by Standley (Contr. U. S. Nat. Herb. 23: 795. 1923) to the synonymy of Sterculia apetala (Jacq.) Karst. Fl. Columb. 2: 35. 1869. A specimen at BM, ex herb. Lambert, received from Pavón as "Sterculia punctata", has been identified as S. carthagenensis Cav. (=S. apetala). Not found in the S. & M. herbarium.

Theobroma angustifolium ['"angustifolia"] DC. in DC. Prodr. 1: 484. 1824, with citation of "fl. mex. ic. ined." as the basis for the name. Theobroma simiarum Mociño, Guat. Prima Flora 12, nom. ined. 1993.

Type-locality [DC.]: "Mexico"; [Mociño]. "Spontanea in Nicaraguae praeidis, ubi vulgo caaco de mico appelatur". Lectotype [DC.]: In the Turner Collection, no. 0459, a painting without inscription except for an annotation by de Candolle, "Theobroma angustifolia". DC. plate 112, as cited in Calques des Dessins (Field Mus. neg. 30527), is a partial copy of Turner 0459.

According to Cuatrecasas (Contr. U. S. Nat. Herb. 35: 526-534. 1964), this species is primarily Central American rather than Mexican. It is probable that the "icon", and the original herbarium specimens, were obtained by Mociño in Nicaragua. Cuatrecasas (i.e., p. 533) cited as "holotype" of T. angustifolium, no. 3618 of the S. & M. herbarium (CNHM neg. 48411), labelled [by Mociño] "18-1. Theobroma Simiarum N. ic.". The "18-1", it may be noted, is not a collection number, but the number
of the Linnaean class and order as Mocíño understood it (Polyadelphia pentandra). The epithet *simiarum* is derived from Mocíño's translation of the vernacular name "cacao de mico", often reported from Central America for this species. The Mocíño specimen properly speaking may be a typoype of the name *Theobroma angustifolium*, but not the holotype or lectotype, which is clearly the *icon* cited above. The name *T. simiarum* Mocíño cannot have a type, as it was not validly published [no type was mentioned and it was not accepted by the publishing authors, who stated (i.e., p. 141), "Este volumen carece de novedades nomenclaturales"].


Localities cited: In moderately hot places in New Spain; and in Jamaica. "Fl. Mex. 219, cited in Pl. Nov. Hosp., was obtained on the "Second Excursion", that to Morelos and Guerrero in 1789 (MA; ms.). It is represented by no. 0630 in the Torner Collection, which bears the number "219"; the hand-printed legend, "*Theobroma Guazuma ? Uel Bystrenia."", and an annotation by de Candolle, "Guazuma mexicana". A nearly identical original painting is DC. plate 114, which bears the number "219" and the hand-printed name "*Theobroma Guazuma. [sic] Linn.". The plant depicted is apparently *Guazuma tomentosa* H. B. K. Nov. Gen. & Sp. 5: 320. 1821. The same species is in the S. & M. herbarium under the name of *Theobroma guazuma* (no. 3616; CNHM negs. 48373–48376).


Type-locality: "Mexico"; [Mocíño]: "in Nicaraguae praedicta". Lectotype [DC.]: In the Torner Collection, no. 1708, a painting without inscription except for an annotation by de Candolle, *"Theobroma ovatifolium"*. DC. plate 113, as cited in Calques des Dessins (Field Mus. neg. 30525), is a partial copy of Torner 1708. The name *T. ovatifolium* was referred by Standley (Contr. U. S. Natl. Herb. 23: 808. 1923) and by Cuatrececas (op. cit. 35: 460. 1964) to the synonymy of *Theobroma bicolor* Humb. & Bonpl. Pl. Acquin. 1: 104. 1806. Cuatrececas (i.e.) noted that that species is primarily Central American and South American in distribution. Presumably the *icon*, and the original herbarium specimens of *T. ovatifolium*, were obtained by Mocíño in Nicaragua. Cuatrececas (i.e., pp. 463–464) cited as "holotype" no. 3620 of the S. & M. herbarium (CNHM neg. 48412), originally labelled [by Mocíño] "*Theobroma Patatele* L. N. B.". The Mocíño specimen properly speaking may be a typoype of the name *Theobroma ovatifolium*, but not the holotype or lectotype, the latter of which is clearly the *icon* cited above. The name *T. patatele* Mocíño cannot have a type, as it was not validly published [no type was mentioned and it was not accepted by the publishing authors, who stated (i.e., p. 141), "Este volumen carece de novedades nomenclaturales"]). For citation of additional specimens at F, G, and BM, the reader is referred to the paper by Cuatrececas.

*Waltheria Mexicana*.

In the S. & M. herbarium no. 3314 (CNHM neg. 48429), labelled as above, was identified by Standley as *Waltheria pringlei* Rose. Another ticket on no. 3314 read, "[?Waltheria] Mexicana N [description].".

**Styracaceae**


Type-locality: Mountains, Temascaltepec, Edomex, Mexico, where said to flower in July. Not found in the S. & M. herbarium. Described as a tree 15 feet high with alternate leaves and branches: tomentose branches; lanceolate entire, obliquely veined glabrous leaves that are whitish beneath; pedicels nodding, thickened toward the apex; calyx farinaceo-tomentose, 5-toothed with alternating shorter teeth; corolla with 5 linear-oblong petals adnate below the middle to the "nectary", this forming a tube bearing the 10 sessile anthers on terminal teeth; petals "subrosetae, subericereae"; style 1, stigma simple; seed an ovate-oblong nut.

This evidently refers to some species of *Styrax*, a genus not represented in the S. & M. herbarium. When the type-region becomes better known botanically it may become possible to identify the plant from the description in the Fl. Mex. Very probably it is the species depicted in no. 1698 in the Torner Collection, without inscription except for an annotation by de Candolle, *"Styrax dependens"*. DC. plate 157, also annotated as *"Styrax dependens"*, is a good copy of Torner 1698. Almost certainly representing the same species, but a different drawing, is no. 1770 in the Torner Collection, bearing the number "99" (which I cannot explain) and de Candolle's annotation, *"Styrax racemosum"*. Alphonse de Candolle, who prepared the treatment of Styracaceae for the *Prodromus*, seems not to have noted these *icones*.

*Styrax argentatus* Presl, Rel. Haenk. 2: 60. 1836.

Reported by Alphonse de Candolle (in DC. Prodr. 8: 265. 1844) as follows: "Specimen vidi, ex Pavon, in h. Bois... e Mexico dictum". The specimen at G, ex herb. Barbey-Boissier, determined by A. de Candolle, is labelled [by Pavon] "Foveolaria de Mexico". Apparently there is no specimen of *any Styrax* in the S. & M. herbarium, but see *Melia simplicifolia* (Melieaceae). above.
Symlocaceae

**Hopea martinicensis** Sessé & Moc. Fl. Mex. ed. 2. 176. 1894.

Type-locality: Edo. de México ["in montibus del Valle jurisdictiorum Temascaltepec. Floret Junio"]). This is evidently the same plant as that described on the same page of Fl. Mex. (and in Fl. Nov. Hisp.) as *Symlocos martinicensis* Jacq., sensu Sessé & Moc. The descriptions of the two species are directly comparable, phrase for phrase, and differ only in details of wording. It may be argued that *Hopea martinicensis* was a new combination based on *Symlocos martinicensis* Jacq., as Sessé & Mocín were evidently well aware of the existence of the latter and were describing what they thought was the same plant and giving it the same epithet but transferring it to a new genus. In the S. & M. herbarium nos. 3610 and 3611 (CIHM negs. 48442 and 48444, respectively), named "Symlocos martinicensis" with a reference to the name "Hopea", are according to Standley *Symlocos prionophylla* Hems. Biol. Centr. Amer. Bot. 2: 302. 1881. See below under *S. martinicensis*.

No more than a single species of *Symlocos* is known to occur in the uplands of west-central Mexico, including Michoacán and Mexico. It has been found for more than a century under the name of *S. prionophylla*. The much older name *Symlocos" ("Symlocos") citrea Lexarza, in Llave & Lex. Nov. Veg. Descr. 1: 22. 1824, with cited type-locality near Morelia, Michoacán ("in montibus propé Vallisceleum, juxta Chaqueo; florerque autumno"), for want of a type-specimen had not been satisfactorily identified until recently, though it was treated as a distinct entity by Brand (in Das Pflanzenreich, 1901) and by Standley (Contr. U. S. Natl. Herb. 23: 1132. 1924), who erroneously supposed the type-locality to be in Oaxaca. H. Díaz-Barriga and M. Chávez, in connection with the ongoing flora of the Bajío, studied the occurrences of the genus *Symlocos* near Morelia, and found that the common (and only) species there, growing in abundance at "Chaqueo" (now known as Ichaqueo), was that known as *S. prionophylla*. They designated a neotype of *S. citrea* (Acta Bot. Mex. 23: 43. 1993), viz. Michoacán, Mpio. Morelia, Ichaqueo, Díaz-Barriga 7260, IEB, and formally relegated *S. prionophylla* to the synonymy of *S. citrea*. The latter name was accepted by Díaz-Barriga in the same year in her treatment of *Symlocaceae* (Fl. Bajío 19: 2. 1993).


Locality cited: Puerto Rico ("in montibus de Toa Alta. Floret Aprili. Vulgo Acentuno"). Description, followed by "Usus. Decoctum totitus plantae colore luteo splendenti tingit". Although there is no reference to Linnaeus in the protologue, I would argue that the authors were using the Linnaean name, not proposing a new one. The Linnaean name was available to Sessé & Mocín in Palau's Spanish translation (5: 765, 1786) (which they used throughout their stay in America; see McVaugh 1990, pp. 189, 196). The diagnosis in Fl. Mex. reads "Hopea foliis ellipticis, nitidis, subseriatis". There was no diagnosis (character) as such in the account in the *Mantissa*, but the short description of the leaves began "Folia... oblonga... subseriata, nuda...". An additional point is that on the original labels in the S. & M. herbarium, noted below, the binomial is not followed by the usual "N." to indicate a new species.

In the S. & M. herbarium no. 3608 (CIHM neg. 48435) is labelled "Hopea tinctoria. ic. V. [ulg] Azeztunillo", and no. 3609 (neg. 48436), "Hopea tinctoria. ic. d.". Both were identified by Standley as *Symlocos limonello* Humb. & Bonpl. Nelson (1997) designated "Sessé 3608" as "materialo tipo" of "Hopea tinctoria Sessé & Moc.", but this is inappropriate if the authors were not in fact proposing a new name.


**Symlocos hartwegii** A. DC. in DC. Prodr. 8: 252. 1844.

Reported by A. de Candolle (i.e.) from Mexico, on the basis of a collection by "Pav. in h. Boiss.". The specimen at G, ex herb. Barby-Boissier, is marked by Pavon "Hoppea [sic] lancifolia N E!" and by A. de Candolle, "Voyez le Symlocos Hartwegii qui est dans notre herb. — je crois que c'est le même". In the S. & M. herbarium nos. 3607 (CIHM negs. 48437–48440), labelled "Hopea mexicana"; and 3610 and 3611 (negs. 48442, 48443, respectively) are all according to Standley *Symlocos prionophylla* Hems. (= *S. citrea* Lexarza); no. 3610 is labelled "Hopea lancifolia". Presumably the collection seen by de Candolle represents the same species; *Symlocos hartwegii* is a Guatemalan species.


Reported with some reservations from Mexico by A. de Candolle (in DC. Prodr. 8: 250. 1844), who wrote "in Mexico (h. Boiss.) ex sp. Pav. qui saepê errat in loc. nat."). Apparently the basis for this report was a sheet at
Theaceae


Type-locality: Mexico. Type: At G, the specimen in "herb. Pavón" cited above, not seen. Said by Choisy to be comparable to *Cleyera integrifolia*, but differing in its pubescent calyx and serrulate leaves. Upheld by Kobuski (J. Arnold Arbor. 22: 407. 1941) as a valid species, known definitely from Veracruz and Hidalgo only. Kobuski cited a Sessé & Mocío collection at F, concluding that it was a part of the gathering distributed by Pavón as "Ternstroemia serrulata". In the S. & M. herbarium no. 2331 (CNHM ngs. 48452, 48453), labelled "Ternstroemia serrulata" and on another ticket "Ternstroemia parviloba N." (these names also noted by Kobuski), was identified by Kobuski about 1958 as *Cleyera serrulata* Choisy.
of México are a good match for the type cf. *C. siphilitica*, which he referred to the synonymy of *C. integrifolia*.

**Ternstroemia sylvatica** Choisy, Mém. Soc. Phys. Genève 14: 104. 1855, “vix Schlecht. et Cham.”. “*T. elliptica* Pavon! mss.” cited in synonymy by Choisy, i.e., as part of the basis for *T. sylvatica*.

Type-locality: Mexico. Type: Three collections are cited, including the one by “Pavon”. I have not seen the latter, nor do I find any reference to it among Kobuski’s papers. A specimen in the S. & M. herbarium, no. 2332 (CNHM negs. 48447), labelled “*Ternstroemia eliptica*”, was left unidentified by Kobuski, with the remark that it was “depaupeurate”.

**Ternstroemia verticillata** Sessé & Moc. Fl. Mex. ed. 2. 128. 1894, not of Wawra.

Type-locality: Mountains of Arecibo, Puerto Rico. Urban (Symb. Antill. 4: 410. 1910) referred this provisionally to the synonymy of *Ternstroemia brevipes* DC., q.v. As the latter is South American in distribution, some other species was probably meant. Not further identified; apparently not noticed by Kobuski in his papers on the American species of *Ternstroemia*.

**Theophrastaceae**

**Jacquinia armillaris** [L.] sensu Sessé & Moc. Pl. Nov. Hisp. 29. 1888; ed. 2. 27. 1893; Fl. Mex. 47. 1893; ed. 2. 43. 1894.

Localities cited: New Spain (“in calidioribus Novae Hispaniae regionibus”). I.e. Fl. Mex. 401 was cited in Pl. Nov. Hisp., so presumably was Mexican in origin. The number was included in the list of *icones* 1–416 (MA, mss), but not listed among those obtained on either the “Second Excursion” or the “Third Excursion”. In the Torner Collection there are three pictures that apparently represent species of *Jacquinia*, but none was named or numbered by them. No. 0458 seems to fit best the description of *J. armillaris* of Pl. Nov. Hisp. It is without inscription except for an annotation by de Candolle, “Lavosseria fasciculata”. DC, plate XXXIII (sketches only, Field Mus. neg. 30358), derived from Torner 0458, is “Jacquiniola fasciculata”. In the S. & M. herbarium nos. 1565 and 5115 (CNHM negs. 48461, 48462), labelled “Jacquinia armillaris”, are according to Standley *Jacquinia aurantium* Ait. Hort. Kew. ed. 2. 2. 6. 1811.

**Jacquinia linearis** [Jacq.] sensu Sessé & Moc. Fl. Mex. 47. 1893; ed. 2. 44. 1894.

Locality cited: Seashores, Cuba (“Habitat maris Insulam Cubae abluentis litora, Floret Martio”). There is no reference to the work of Jacquin, but this was almost certainly not intended as a new name, for the character is certainly based on that in Jacq. Sel. Stirp. Amer. 54. 1763, the latter was known to them via the work of Palau.
THEOPHRASTACEAE

(2: 349. 1785), and the binomial written on each of the labels in the S. & M. herbarium is followed by a period, without the letter "N." that commonly signifies "new." In the herbarium nos. 1566 (CNHM neg. 48463), labelled "Jaccubia linearis," and no. 5115 (neg. 48464), labelled "Jaccubia linearis. ic. [descr.]", are according to Standley J. ruscifolia Jacq. Enum. Carib. 15. 1760. Nelson (1997) designated "Sessé 5113," identified as Jacqubia aculeata (L.) Mez, as "material tipo" of "Jaccubia linearis Sessé & Moc.,” which is inappropriate as no such name exists.

Jacquisia racemosa A. DC. in DC. Prodr. 8: 150. 1844.

Type-locality: Mexico. Mez (Pflanzenreich IV. 236a [Heft 15]: 41.1903) and Standley (Contr. U. S. Nat. Herb. 23: 1106. 1924) give the locality as "Tampico, Tamaulipas," presumably because Berlandier 459 was one of the two specimens cited in the protologue. The label on this specimen in G-DC reads "Entre Tampico et Real del Monte." Lectotype: Berlandier 459, as cited by Mez (i.e.). De Candolle also cited "ic. mexic. med.,” which is a reference to DC. plate 745 (Field Mus. neg. 30752), which in its turn was a copy derived from no. 0966 in the Torner Collection.


Reported by Alphonse de Candolle (in DC. Prodr. 8: 151. 1844) from Havana, "et forsae in Mexico ex ic. med. Mex." This is apparently a reference to DC. plate 745, which depicts a species of Jacquisia; see below under J. umbellata. The plant shown in the painting probably came from Cuba, not from Mexico.


Fl. Mex. 48. 1893; ed. 2. 44. 1894.

Type-locality: Hot mountains, Coamo, Puerto Rico, where said to flower in April. In the S. & M. herbarium nos. 1335, 1567, and 5112 (CNHM negs. 48465–48467), labelled "Jacquisia ruscifolia", are all according to Standley Jacquisia umbellata A. DC., q.v., a Puerto Rican species. Nelson (1997) designated "Sessé 5112" as "material tipo" of "Jacquisia ruscifolia Sessé & Moc.,” which is inappropriate as no such name exists.

Jacquisia umbellata A. DC. in DC. Prodr. 8: 150. 1844.

Type-locality: Puerto Rico. Type: Bertero in G-DC. De Candolle said also "nec non fortasse in Mexico (ex ic. mexic. med. pessimi)." Mez (Pflanzenreich IV. 236a [Heft 15]: 38. 1903) pointed out that two species of this genus, the Puerto Rican jacquisia umbellata and the Cuban Jacquisia aculeata (L.) Mez. are actually painted on the same plate in the De Candolle collection; he designated these as nos. 7452 and 7451, respectively. The numbers on the plates are 744 ("1"), J. umbellata, and 745 ("2"), J. aculeata (J. ruscifolia, sensu A. DC.). The icons are copies based on no. 0981 in the Torner Collection. The upper drawing in the DC. plate is copied from the upper one (which is numbered "2") in Torner 0981, and the lower drawing in the DC. plate is copied from the lower one (which is numbered "1") in Torner 0981. In any event it seems clear that the reference to Mexico was an error. For citation of specimens, see under J. ruscifolia sensu Sessé & Moc.

Thymelaeaceae


Locality cited: Cuernavaca, Morelos ["in Quaquahuaecae agris et capite Bonae Spei, Floret Aprili"]. Described as a tree 15 feet high with opposite, obovate, entire, glabrous, short-petiolate leaves; setaceous bracts; flowers terminal, aggregated, subumbellate, 5-merous; involucres obsolete, "germinace". Not found in the S. & M. herbarium. Not obviously related by description to the species of Daphne described in the same work. Not identified.


Localities cited: Cuernavaca, Morelos, and Europe. Diagnoses only. On the same page in Fl. Mex. is the description of a so-called dioecious form: "variant floribus dioicis", with the diagnosis "Daphne racemis axillaribus, lateralibus umbellatis, foliis oblongo-lanceolatis, glabris, floribus dioicis"; the locality was also given as Cuernavaca ["in Quaquahuaecae agris, praecipue ad rivulorum margines. Floret Decembri"]. In the S. & M. herbarium no. 5319 (CNHM neg. 48471), labelled "Daphne laureola", was determined by Standley as Daphnopsis salicifolia (H. B. K.) Meissn.

Nos. 5318 and 5319 (CNHM negs. 48470, 48471), both of which I should refer to Daphnopsis americana subsp. salicifolia (H. B. K.) Nevl. Ann. Missouri Bot. Gard. 46: 310. 1959, were originally labelled "Daphne laureola"; no. 5318 is labelled on one ticket "Daphne umbellata" and "Daphne [laureola crossed out] obovata".


Locality cited: San Angel near México, D.F., where said to flower in August. This was presumably not intended as a new species, although neither character nor description seems to have been derived from the Species Plantarum. "Fl. Mex. Vid. ic. 156", as printed in the treatment of this species, seems to refer to a plate of the Flora Mexicana, but lc. Fl. Mex. 156, as cited elsewhere (in Fl. Nov. Hisp.), represents quite a different species. I have not seen any icon that might have represented "Daphne pontica", nor any specimens referred to that species, and do not know what plant may have been meant; but see Perdicium decurrens of the Compositae, and Fuchsia thymifolia of the Onagraceae. Sessé &
Mociño were familiar with the genus *Daphnopsis*, which they called *Daphne*, and it may be that “Daphne monicat” was a name applied by them to some early collections of *Daphnopsis*. See *Daphne laurifolia*.

**Tiliaceae**


Type-locality: None stated, but presumably supposed to be Mexico. Lectotype: In the Torner Collection, no. 0558, without inscription except for the number “139” (which I cannot explain) and an annotation by de Candolle, “Alegria candida”. It was reproduced in full colour at ca. 22.8 by 16.5 cm and identified as an “Ilustración original de la Flora Mexicana” by Lozoya (1984, p. [132]). DC. plate 102, as cited in Caldes des Dessins (Field Mus. neg. 30518), is a fair copy of Torner 0558. DC. plate 11B [sketch only; Field Mus. neg. 30283] consists of drawings from the same model. Not found in the S. & M. herbarium. For dates of issue of the work of Martius in which the name *Luehea candida* was published, see J. Bot. Brit. & For. 46: 197–198. 1908.


Type-locality: Mountains of Chilapa, Guerrero. Described as a sub-shrub 4 feet high, with the aspect of *Melochia*; leaves alternate, cordate, acuminate, serrate, petiolate, rarely sub-trilobed; racemes axillary and lateral, very short, about 5-flowered; sepal linear, glabrous, pale yellow, longer than the yellow petals. This description, as far as it goes, is surely based on the plant found under the name in the S. & M. herbarium (no. 3309; CNHM neg. 48504) and at BM, ex herb. Lambert (“Connarus simplicifolia de Mexico”). The two specimens are evidently from the same gathering; the plants represent the species now known as *Triumfetta hintonii* Sprague, Bull. Misc. Inform. Kew 1937: 294. 1937. The ovary bears approximately 40 short straight spines; the stamens are about 15, glabrous; the style is 5–6 mm long, and in other more obvious ways the plant corresponds to *T. hintonii*, for which the correct name is evidently *Triumfetta simplicifolia* (Sessé & Moc.) Fryxell, in Diversity & Taxon. Trop. Fl. Pl. 187. Calicut, P. Mathew and M. Sivadasan (eds.) 1998. Nelson (1997) designated “Sessé 3309” as “material tipo” of *C. simplicifolius*, and noted its identity with *T. hintonii*.

*Corchorus biflorus* Sessé & Moc. Fl. Mex. ed. 2. 131. 1894.


Locality cited: Seashore, Puerto Rico (“in arenosa litoral Insulae de Puerto Rico. Fieri tototo veere”). Description. In the S. & M. herbarium no. 2273 (CNHM neg. 48480), labelled “Corchorus [hirtus crossed out] Longifolius. 1067”, was identified by Standley as *Corchorus orthocenos* H. B. K. The number “1067” was not assigned to this particular specimen, but to the species. In the final attempt at organization of the herbarium, in Madrid after 1804, each species was assigned a number. Those applied to what would now be called Tiliaceae were mostly between 922 and 947 (cf. McVeagh 1990, p. 209).


Localities cited: Mazatlán [“in Mazatlani circuitibus”, Guerrero, and “in America Meridionali”. Ic. Fl. Mex. 286. cited in Pl. Nov. Hisp., is represented by two nearly identical paintings in the Torner Collection, each bearing the number “286”. No. 0600, apparently the earlier copy, seems to have been numbered by Mociño, and bears the hand-printed name [“Corchorus Trinervis. Sp. N. crossed off”. No. 0030, somewhat more precisely drawn, bears the hand-printed name “Corchorus Siliquosus. Linn.”. The reference to *Corchorus secundiflorus* by de Candolle presumably was based on no. 0078 in the Torner Collection, which bears no inscription except for the annotation by de Candolle, “Corchorus secundiflorus”. DC. plate 116 (Field Mus. neg. 30529) is a copy derived from Torner 0078. In the S. & M. herbarium no specimen was found with the epithet “secundiflorus”, but two species are associated with “siliquosus”. No. 2270bis (CNHM neg. 48479) is *Corchorus hirtus* L. according to Standley, and nos. 2270 and 2271 (negs. 48481–48483) are *C. siliquosus* L. Sp. Pl. 529. 1753. Perhaps one of these is the *Corchorus siliquosus* [L.] sensu Sessé & Moc. Fl. Mex. ed. 2. 131. 1894, where the locality is given as Espinal, [Veracruz], and this observation is made: “Corchorus nostrum Aestuamian in herbario et iconis”.


Type-locality: “In Nova Hispania”. Type: In G-DC, “comm à cl. Lagasca”. The specimen is a good flowering example, marked “no. 86” and “Lagasca 1807” (cf. Intern. Doc. Cent. microfiche DC. 216). There is no direct evidence that Lagasca’s specimen came from Sessé, but it
may well have been a garden specimen grown at Madrid from Mexican seeds contributed by the Expedition Real.


Locality cited: "Habitat in Veracruz, calidissique alius Novae Hispaniae regionibus. Floret Septembris." The reference by Sessé & Mociño to "Veracruz" is presumably not to one of their own collecting localities, but to the type-locality of *Heliocarpus americana* L.; the original material of the latter came to Linnaeus from Philip Miller, who in turn obtained it from Veracruz. Sessé & Mociño (l.c.) cited Ic. Fl. Mex. 371 in Pl. Nov. Hisp., represented by two essentially identical paintings in the Torner Collection. No. 1155 bears the number "371" and the hand-printed name "Heliocarpus Americana. Linn.;" no. 1631 is without inscription except for an annotation by de Candolle, "Heliocarpus americana." The original was painted, according to a manuscript list at MA, during the "Second Excursion" (that to Guerrero in 1879).

In the S. & M. herbarium, material under the name of *Heliocarpus americana* is (according to Standley) a mixture; nos. 1830 and 2260 (CNHM negs. 48487–48492) represent *Heliocarpus reticulatus* Rose, whereas no. 1829 (negs. 48493–48496) represents *H. velutinus* Rose. These two species were referred by Ko Ko Lay (Ann. Missouri Bot. Gard. 36: 513, 515, 1949) to the synonymy of *Heliocarpus terebritinaceus* (DC.) Hochr. and *H. pallidus* Rose, respectively. Either one of these might have served as the basis for Ic. Fl. Mex. 371.


Locality cited: Near the ocean at Coahuayana, Michoacán ["in Coahuayanæ præculis Occaeano vicinis et in Jamaica. Floret Octobri"]. Ic. Fl. Mex. 370, cited in Pl. Nov. Hisp., represented by no. 0752 in the Torner Collection, which bears the number "370" and an annotation by de Candolle "Muntingia calabura.". Almost identical is an original painting at MA that bears the number "80" and the hand-printed name "Muntingia Calabura." It was listed by name, with description, and identified as RJB Lám. 86 in the Catálogo de las Láminas del Real Jardín Botánico (RJB 1987, p. 337). It was reproduced in full color by Maldonado Polo (1996, p. 324). It is no. 80 of a list by Mociño (MA, mss.), and no. 49 of Ramirez (Anales Inst. Méd.-Nae. México 6, pt. 1: 79, 1903). The paintings unquestionably represent this species, as does no. 2247 (CNHM negs. 43351–43353) of the S. & M. herbarium, correctly named by the collectors. Probably the same species is described under the same name in Fl. Mex., where the locality is given as Huehueta, [Puebla], with the comment, "ubi Tototonaci Palman adpellant baccas quas edunt. Floret Septembris." The genus has often been referred to the family Elaeocarpaceae.

**Triumfetta** ["Triumpheta"] *bartramia* [L.] sensu Sessé & Moc. Pl. Nov. Hsp. 76. 1888; ed. 2. 71. 1893; Fl. Mex. ed. 2. 120. "[Triumfetta bartramiana]". 1894.

Locality cited: Ayahuatempa, near Chilapa, Guerrero (Pl. Nov. Hsp.: "in Ayahuatempam prope Chilapam et in India Orientali""); Fl. Mex.: "in montibus de Ayahuatempam jurisdictionis de Chilapa. Floret Augusto"). The description of this species without much question applies to *Triumfetta polyandra* DC., q.v., which is in the S. & M. herbarium with the label "Triumfetta Poliandria Sp. N." (no. 1839; CNHM neg. 48513). The icon cited as *T. bartramia* in the Pl. Nov. Hsp. (Ic. Fl. Mex. 335), however, represents *Triumfetta oxyphylla* DC., q.v., and the icon that really represents *T. polyandra* (Ic. Fl. Mex. 347) was never cited in publication although it was listed under this name among the paintings obtained on the "Second Excursion", that to Guerrero in 1789. In the manuscript of the Pl. Nov. Hsp., the icon numbers were written in by Mociño after the preparation of the rest of the text, and the number "335" probably was intended to accompany one of the other species in that text. Judging from the description, Ic. Fl. Mex. 335 applies to *Triumfetta cordifolia*, q.v.

**Triumfetta cordifolia** Sessé & Moc. Pl. Nov. Hsp. 77. [as "Triumpheta"]. 1888; ed. 2. 72. [as "Triumfetta"]. 1893; *Triumfetta cordifolia* Sessé & Moc. Fl. Mex. ed. 2. 120. 1894, not of A. Richard.

Type-locality: Cuernavaca, Morelos, where said to flower in October. Apparently not noted by Ko Ko Lay in his revision of *Triumfetta*. Not found in the S. & M. herbarium. The original description is very much generalized, but may well apply to the plant shown in Ic. Fl. Mex. 335, which is the type of *Triumfetta oxyphylla*, q.v. As noted above under *T. bartramia*, this plate was wrongly cited in Pl. Nov. Hsp.

**Triumfetta oxyphylla** DC. in DC. Prodr. 1: 508. 1824, with citation of "fl. mex. ic. ined." as the basis for the name. *Triumfetta cordifolia* Sessé & Moc., q.v.

Type-locality: Mexico. An appropriate lectotype would be DC. plate 119, not cited in Calques de Dessins (Field Mus. neg. 30531). This is an original painting, bearing the number "335" and marked by de Candolle "Triumfetta acuminata." It is nearly identical with no. 1117 of the Torner Collection, which was designated as "Type" by Fryxell (1998, p. 187), and which also bears the number "335", the hand-printed name, "Triumfetta [Bartramia ? crossed out]", and the annotation added by de Candolle, "Triumfetta acuminata." This is Ic. Fl. Mex. 335, erroneously cited in the Pl. Nov. Hsp. under *Triumfetta bartramia*, q.v., but, as indicated by the description of "follia subordata, acuminata, inaequaliter serrata", "pedunculi axillares, laterales, op[positiolari] vix petioli longiores, subquinquefolii", "pedicellis subverticillatis", and "flores parvi", the plant depicted is probably *Triumfetta cordifolia* Sessé & Moc., q.v. Ko Ko Lay.
Tiliaceae

(Ann. Missouri Bot. Gard. 37: 373. 1950) referred Triumfetta oxyphylla without comment to the synonymy of T. semitriloba Jacq. Sel. Stirp. Amer. 147. 1763, but the leaves as shown in the drawing of oxyphylla are not very similar to the usually lobed and less prominently serrate leaves of T. semitriloba.

Triumfetta polyandra DC. in DC. Prodr. 1: 508. 1824, with citation of “fl. mex. ic. ined.” as the basis for the name.

Type-locality: Mexico [i.e., presumably Ayahualtepa, Guerrerro; see above under T. barramia]. An appropriate lectotype would be DC. plate 117, not noted in Calques des Dessins (Field Mus. neg. 30530). This is an original painting, bearing the number “347” and the hand-printed name “Triumfeta Polyandra Sp. N.” It is nearly identical to no. 0584 in the Torner Collection, which was designated as “Type” by Fryxell (1998, p. 185), and which also bears the number “347” and the hand-printed name “Triumfeta [sic] fructibus” added by Sessè Sp. N.”, and the annotation by de Candolle, “Triumfeta? grandiflora.” The icons represent. I.e. Fl. Mex. 347, as discussed above under T. barramia, q.v. for citations. This is one of the few species for which it can be convincingly demonstrated that de Candolle took up unchallenged a name applied to a plant by Sessè & Mociño.

Triumfetta semitriloba [Jacq.] sensu Sessè & Mociño. Fl. Mex. ed. 2. 72. 1893; I.e. Fl. Mex. ed. 2. 120. 1894.

Locality cited: Cuernavaca, Morelos [Pl. Nov. Hissp.] “in Quauhnahua ca alisique alioris Americae locis. Floret Septembris”. The character “Triumfeta [sic] fructibus calculitis, folis semitrilobis” is attributed to “Jacq. Amer. 147”. Locality cited [Fl. Mex.]: “in Quauhnahua ca circuitibus. Floret Augusto.”. There is no reference in Fl. Mex. to Jacquin, but the first two paragraphs (diagnoses) are identical with those published by Palau (4: 27. 1786) for the same species. Described at some length. According to Standley’s determinations in the S. & M. herbarium, at least two species of Triumfetta were called T. semitriloba by the collectors.

Tropaeolaceae


Localities cited [Pl. Nov. Hissp.]: in the Indies, and in Europe “[in utraque India et Europa”]; [Fl. Mex.]: Peru, and all provinces of New Spain. I.e. Fl. Mex. 72, cited in Pl. Nov. Hissp., is represented in the Torner Collection by no. 0200, which bears the number “72” and the hand-printed names “Tropaeolum majus. Linn.” and “Pelomon mexiquiln Hrz. 161”. In Pl. Nov. Hissp. there is also a reference to Pelonomexiquiln of Hernández (Thesaurus 161, 1651), and the plant illustrated there does indeed appear to be a species of Tropaeolum. It is said by Hernández to have been introduced from Peru (thus presumably by the middle of the 17th Century); as he says, “Translatum quoque est ad Mexicanos, quorum viridarium septa, & fenestras exorat.” A comment in Pl. Nov. Hissp. reads, “Planta ... non nullibi in acetaria usitata”. Not found in the S. & M. herbarium.


Localities cited [Pl. Nov. Hissp.]: Mexico; and Europe; [Fl. Mex.]: Peru; and New Spain. I.e. Fl. Mex. 73, cited in the manuscript of the Pl. Nov. Hissp. but not in the printed version, is represented in the Torner Collection by no. 0203, which bears the number “73” and the hand-printed name “Tropaeolum peregrinum. Linn.”. Not found in the S. & M. herbarium. A comment in Pl. Nov. Hissp. reads, “Plantae hujus flores passu vellus sustentare multo Mexicana adpairivae.”

Turneraceae


Locality cited: Luquillo, Puerto Rico (“in agris de Sequillo. Floret Augusto”). Rather briefly described. In the S. & M. herbarium nos. 1336 and 5090 (CNHM negs. 48533, 48534), labelled “Turnera cistoides”, were determined by Standley as Piriqueta cistoides (L.) G. F. W. Meyer. This is apparently the plant depicted in no. 1479 of the Torner Collection, an unlabelled painting showing a branch with small yellow flowers and a detailed drawing of the ovary with six styles.

Turnera coerulea DC. in DC. Prodr. 3: 346. 1828, with citation of “fl. mex. ic. ined.” as part of the basis for the name.

Type-locality: Mexico. Type: De Candolle cited no specimen, saying merely “v. in h. Moricid.”. The specimen at G-DEL, ex herb. Moricand, is not annotated by de Candolle; it is marked by Moricand “Nouvelle Esp. Mr. Pavon 1827”. De Candolle’s “fl. mex. ic. ined.” is a reference to no. 1481 of the Torner Collection, an icon with no inscription. DC. plate 386, as cited in Calques des Dessins (Field Mus. neg. 30675), is a partial copy of Torner 1481. A different and much better drawing, likewise without any inscription, is Torner 1672. In the S. & M. herbarium nos. 751 and 5087 (CNHM negs. 48529, 48530) are apparently referable to Turnera coerulea [=T. ulmifolia var. coerulea (DC.) Urban, Jahrb. Königl. Bot. Gart. Berlin 2: 144. 1885]. No. 751 is labelled “Turnera coerulea” and no. 5087 with another epithet recalling the violaceous color.
**Umbelliferae**

*Ulmaceae*

**Celtis epiphylladina** Ortt. Dec. 79. 1798.

Type-locality: Cuba, grown at the Madrid Botanical Garden from seeds sent by Espinosa. Type: Not seen.

This is an illegitimate name, superfluous when published, stated to be the same as "Rhamnus ignaeus Cav." i.e., *Rhamnus ignaeus* Jacq., or *Celtis ignea* (Jacq.) Sarg. Silva N. Amer. 7: 64. 1895. Probably Ortega's material came from Cuba as he stated, as the range of the species includes the West Indies, and he is known to have received other Cuban material from Espinosa.

**Celtis occidentalis** L. sensu Sessé & Moc. Pl. Nov. Hisp. 174. 1890; ed. 2. 162. 1892.


**Umbelliferae**

**Ammi copticum** L. sensu Sessé & Moc. Pl. Nov. Hisp. 46. 1888; ed. 2. 43. 1893.


**Bupleurum tuberosum** Sessé & Moc. Fl. Mex. ed. 2. 75. 1894.


**Eryngium aquaticum** L. sensu Sessé & Moc. Pl. Nov. Hisp. 45. 1888; ed. 2. 42. 1893.

Locality cited: "Habitat Mexici et in Virginia. Floret Septembri". Not described. Attributed to "Mll. Dict. n. 5". The character is taken from that of the *Species Plantarum*, with the additional words, "caule simplici". In the S. & M. herbarium no. 695 (CNHM neg. 48566), labelled "Eryngium aquaticum", was determined by Mathias and Constance as *E. pectinatum* Presl. No. 1484 (neg. 48565), labelled "Eryngium aquaticum. [description]. 555", was determined by the same authors as *E*. 529
longifolium Cav. For explanation of the number “555”, see the following species, Eryngium foetidum.


Locality cited: Havana, Cuba ["in Havanense Urbe, insulae Cubae. Floret Julio, et vulgo Culantro de Cartagena adpeltatum"). Described at length. In the S. & M. herbarium no. 1479 (CNHM neg. 48561), labelled “Eryngium [sic] foetidum. [description].” Sessé and Mocón were simply expressing their opinion that what they took to be the same plant was called Culantro in Puerto Rico. The number “561” did not pertain to this particular specimen but was the one assigned in Madrid after 1800 to this species, during an attempt to number the entire herbarium. In that system numbers assigned to the Umbelliferae ranged from 555 to 573, overlapping the series assigned to Solanaceae (cf. McVean 1996, p. 209).

Nelson (1997) designated “Sessé 1479” as “material type” of **Eryngium foetidum** Sessé & Moc., but that is inappropriate as no such name exists.


Described [in Fl. Mex.]. In the S. & M. herbarium no. 1482 (CNHM neg. 48559), labelled “Eryngium planum”, was determined by Mathias and Constance as a mixture of **Eryngium bonplandii** Delar. and **E. gracilis** Delar.

**Hydrocotyle erecta**. [description]. Porto-rico.

In the S. & M. herbarium no. 1487 (CNHM neg. 48553), labelled as above, was determined by Mathias and Constance as **Centella erecta** (L.) Fernald.

**Hydrocotyle? grumosa** DC. in DC. Prodr. 4: 70. 1830, with citation of “fl. mex. ic. ined.” as the basis for the name.

Type-locality: Mexico. Lectotype: DC. plate 426, as cited in Calques des Dessins (Field Mus. neg. 30680).

This is a good copy of no. 1507 in the Torner Collection, a painting without any annotation. Referred by Mathias and Constance (N. Amer. Flora 28B: 59. 1944) to the synonymy of **Micropleura renfoltia** Lag. Obs. Umbell. 15. 1826. The latter species occurs in the S. & M. herbarium, labelled “Hydrocotyle asiatica”, and on one ticket (perhaps erroneously), “Porto-rico” (no. 1489, CNHM neg. 48576; determined by Mathias and Constance).

**Hydrocotyle racemosa** DC. in DC. Prodr. 4: 70. 1830, with citation of “fl. mex. ic. ined.” as the basis for the name. **Hydrocotyle verticillata** Thunb., var. racemosa (“Sessé & Moc.”) Mathias, Brittonia 2: 204. 1936.

Type-locality: Mexico. Lectotype: DC. plate 425, as cited in Calques des Dessins (Field Mus. neg. 30679).

This is an original painting, unnumbered, marked by Sessé “Hydrocotyle”, and by de Candolle “Hydrocotyle racemosa”. In the Torner Collection no. 0509, a painting without any annotation, is a somewhat better version of the same painting. According to an identification by Lincoln Constance in 1963, DC. 425 represents **Hydrocotyle verticillata** var. **triadiata** (A. Rich.) Fernald, to which H. racemosa DC. was referred by Mathias and Constance in the *North American Flora* (vol. 28B: 54. 1944). A statement in the *North American Flora* under var. **triadiata**, “Type locality: Mexico, Sessé & Mocón”, seems to have been modified and carried over [verbatim] from the earlier treatment by Mathias (i.e.), where under var. racemosa appears the line: “Type specimen: Sessé and Mocón, Mexico”. This last statement seems to be in error on one or two points: the varietal name is based directly on *H. racemosa* DC., and is therefore to be typified by DC. plate 425, not by a specimen; if such a specimen exists (and none under this name was found in the S. & M. herbarium). Mathias did not identify “type specimen” further, nor say where it was to be found. In the S. & M. herbarium nos. 1490 and 1491 (CNHM negs. 48572, 48573), originally identified under names not published by Sessé & Mocón in this genus, are according to Mathias and Constance **H. verticillata** var. **triadiata**.

**Hydrocotyle spicata** Sessé & Moc. Fl. Mex. ed. 2. 75. 1894, not of Lamarck.

Type-locality: Wails of the church at Tumaco (=Humaaco, according to Urban), Puerto Rico ("ad radices partium Eelestae de Tumacae et inter ripum fissuras. Floret toto vere"). In the S. & M. herbarium no. 1488 (CNHM neg. 48570), labelled “Hydrocotyle spicata N.” and "Porto-rico", is according to Mathias and Constance **Hydrocotyle hirsuta** Sw. Prodr. 54. 1788; the same authors later (N. Amer. Flora 28B: 58. 1944) referred the name **Hydrocotyle spicata** Sessé & Moc. to the synonymy of *H. hirsuta*.


**Umbelliferae**

**Micropleura renifolia** Lag. Obs. Umbell. 15. 1826.

Type-locality: "In Chiloe insula." According to Mathias and Constance (N. Amer. Flora 28B: 60. 1944), this species ranges from Sinaloa and Nayarit to Guatemala, and the locality as cited by Lagasca must have been an erroneous one. As neither the date of receipt nor the collector is known, it must be considered unlikely (though possible) that Lagasca received specimens from Sessé. This species occurs in the S. & M. herbarium, listed as a species of *Hydrocotyle*; cf. *H. grumosa*.


**Urticaceae**

**Parietaria microphylla** Sessé & Moc. Fl. Mex. ed. 2. 236. 1894; not of Linnaeus.

Type-locality: Arid mountains of Metztitlán, Hidalgo ("inter rupes aridorum montium Meztitlán. Floret Augusto"). The character is not like that of *Parietaria microphylla* L. in the *Species Plantarum*, and there is no reference to the work of Linnaeus, but as Sessé & Mocíño were familiar with the species *Plantarum* and the name *Parietaria microphylla* was available to them in Palaud's version (1: 762. 1784), it is unlikely that they intended to publish it as a new name. I can only suggest that the account in Fl. Mex., including the comment "Flor. Mex. N[ovai]," was originally written in the field when the plant was indeed new to them, and never meant to be published. The plant in their herbarium under this name, according to determinations by E. P. Killip, is the true *Parietaria microphylla* L. [=Pilea microphylla (L.) Liebm. Kongel. Danske Vidensk. Selsk. Skr., Naturvidensk. Math. Afd., ser. 5. 2. 296. 1851] (nos. 3823, 4547; CNHM negs. 48604, 48605).

**Pouzolzia latifolia** Weddell in DC. Prodr. 16, pt. 1: 234. 1869.

Type-locality: Mexico. Type: "Herb. Pavon in h. Boiss.", not found at G in 1963. Standley (Contr. U. S. Natl. Herb. 23. 221. 1922) said "Its description suggests *P. nivea* [S. Wats. Proc. Amer. Acad. Arts, n.s. 22: 453. 1887]." In the S. & M. herbarium no. 4531 (CNHM neg. 48615), labelled "Urtica tomentosa" and "Urtica fruticosa", is according to Killip *Pouzolzia nivea*. If Standley’s suggestion is the correct one, the name *Pouzolzia latifolia* has priority over *P. nivea*.

**Sponia micrantha** (L.) Decne., forma B, sensu Planchnon in DC. Prodr. 17: 203. 1873.


**Sponia micrantha** (L.) Decne., forma D, sensu Planchnon in DC. Prodr. 17: 204. 1873.

Reported by Planchnon from Mexico on the basis of a collection by "Pavon in h. Boiss..". I have not seen this specimen; see above under another "form" of this species.


Localities cited: Tonila, Jalisco [Pl. Nov. Hisp.]. "Tonila prope Colimensem Vulcanum. Floret Februario" ("Januario" in Fl. Mex.). Description. In the S. & M. herbarium nos. 4531 and 4550 (CNHM negs. 48617, 48618), labelled as above, were determined by E. P. Killip as *Ureca baccifera* (L.) Gaudichaud.


Localities cited: Puerto Rico ["in Insula de Porto Rico"]. Description. The character (diagnosis) is the same as in the first *Urtica baccifera*, but the description differs, and evidently a different plant from the Mexican one is being described.

**Urtica biserrata** Sessé & Moc. Fl. Mex. ed. 2. 214. 1894.

Type-locality: Tlaltan ["S. Augustini"] near México, D.F., where said to flower the whole spring. Described as an herb a foot and a half high; the stems and leaves clothed with pale rigid setaceous spines arising from tubercle-like bases; leaves opposite, ovate-subrotund, often subcordate, acuminate, biserrate; petales very long; racemes axillary, short; pistillate flowers fewer than the staminate, above them in the same racemes. Not identified. Apparently there is no material of the genus *Urtica* in the S. & M. herbarium.

**Urtica capitata** Sessé & Moc. Fl. Mex. ed. 2. 214. 1894; not of Linnaeus.

Type-locality: Wet places in the mountains of Toa Alta, Puerto Rico, where said to flower in April. Description. Referred by Urban (Symb. Antill. 4. 202. 1905) to the synonymy of *Pilea semidentata* (Juss.) Wedd., var. *minor* (Wedd.) Urban, Symb. Antill. 1: 297. 1899. In the S. & M. herbarium nos. 4523 and 4552 (CNHM negs. 48613, 48614), the former originally
Urticaceae


Although the name *Urtica capitata* L. presumably was known to Sessé & Mociño at least through the work of Palau (7:114. 1787), the account in Fl. Mex. seems to have been prepared independently, and it is likely that it was written in the field and not meant to be published; see comments above under *Parietaria microphylla*.

**Urtica chichicaztl Sessé & Mocc. Pl. Nov. Hisp. 160. 1890; ed. 2. 149. 1893; Fl. Mex. ed. 2. 213. 1894.**

Type-locality: Cuauhnahuac (“in Quauhnahuacae agris”), Morelos; and elsewhere in New Spain; Fl. Mex.: “Habitat Quauhnahuaca, ubi alius Chichicaztl, sive urtica ferex; vulgo *Mala Mujer* audit ... Floret Junio”). Not found in the S. & M. herbarium under this name; described as a small tree with dichotomous-subcymose inflorescence, and cordate, acute, serrate leaves, the plants dioecious. Evidently this was a species of *Urena*; it was referred by Standley (Cond. U.S. Nat. Herb. 23: 219. 1922) to the synonymy of *Urena caracasana* (Jacq.) Griseb. Fl. Brit. W. Ind. 154. 1859. This species is well represented in the S. & M. herbarium under a variety of epithets in the genus *Urtica*.

**Urtica ciliaris* [L.] sensu Sessé & Mocc. Fl. Mex. ed. 2. 214. 1894.**

Locality cited: Puerto Rico (“in agris de Toa Alta inter ruptes”). Short description. In the S. & M. herbarium no. 4546 (CNHM neg. 48609), labelled “Urtica ciliaris.”, and no. 4551 (neg. 48610), labelled “Urtica ciliaris. d.”, were both determined by Killip as *Pilea parietaria* (L.) Blume.

**Urtica dioica* [L.] sensu Sessé & Mocc. Fl. Mex. ed. 2. 214. 1894.**

Locality cited: Near the mines of Temascaltepec, Edo. de México (“in Oppido Sancti Francisci, justa Fodinas Temascaltepec. Floret totac ver”). No reference is made to the work of Linnaeus. Description. A square-stemmed herb 2 feet high, with the pistillate spikes in a distinct plant. Not found in the S. & M. herbarium. Not identified.

**Urtica japonica* [L.] sensu Sessé & Mocc. Pl. Nov. Hisp. 160. 1890; ed. 2. 149. 1893; Fl. Mex. ed. 2. 214. 1894.**


**Urtica longifolia* Sessé & Mocc. Fl. Mex. ed. 2. 214. 1894, not of earlier authors.**

Type-locality: Tlahpan [“S. Augustini”] near México, D.F., where said to flower in May. Described as dioecious, herbaceous, 2 feet high, villous with setaceous spines that are conic at base; leaves opposite, oblong, serrate, two inches long, subrugose, unarm [l]; racemes axillary, compound, the staminate spreading, the pistillate nodding. Not found in the S. & M. herbarium under this name; not identified. No. 1378 in the Torner Collection, a painting without any inscription except for an annotation by de Candolle, “Urtica longifolia”, represents a species of *Urtica*. DC. plate 1158, labelled “Urtica longifolia”, is presumably equivalent.

**Urtica rotundifolia* Sessé & Mocc. Fl. Mex. ed. 2. 214. 1894, not of Savigny.**

Type-locality: Among rocks, Toa Alta, Puerto Rico [“cum praeceptd = U. capitata”]. Description. Referred by Urban (Symb. Antill. 4: 204. 1905) to the synonymy of *Pilea nummularifolia* (Sw.) Weddell. Ann. Sci. Nat., Bot., ser. 3. 18: 225. 1852. In the S. & M. herbarium nos. 4542 and 4549 (CNHM negs. 48606, 48607), labelled “Urtica rotundifolia N.”, are according to Killip *Pilea nummularifolia*. No. 4542 was designated by Killip in the herbarium as the “type” of *Urtica rotundifolia* Sessé & Mocc., and Nelson (1997) designated “Sessé 4542” as “material tipo” of *U. rotundifolia*.

**Urtica spicata* Sessé & Mocc. Fl. Mex. ed. 2. 215. 1894, not of Thunberg.**

Type-locality: Orizaba, Veracruz [“in Orizava, saepibus inservicis. Floret Junio et Julio”]. In the S. & M. herbarium nos. 4521 and 4548 (CNHM negs. 48591–48593), labelled “Urtica spicata”, are according to Killip *Boehmeria cauliflora* Sw. Prodr. 34. 1788. No. 4521 was designated by Killip in the herbarium as the “type” of *Urtica spicata* Sessé & Mocc. The description in Fl. Mex. seems to confirm this disposition of the name.

Valerianaceae


Locality cited: San Nicolás, D.F. ["ad marginis rivulorum Prædii S. Nicolæ ubi masculus tantum flores Junio mense vidimus"]'). The exact location of San Nicolás is unknown; it was not mentioned in Pl. Nov. Hisp., but there are several references to it in Fl. Mex. It was probably San Nicolás Tecoalapa, near Contreras, D.F., and more than two leagues SSW of San Angel (cf. McVaugh 1977, p. 180). Not described except for two introductory diagnoses. There seems to be nothing under the name of Valeriana dioica (nor dissecta) in the S. & M. herbarium. Not identified.

Superficially this seems to have been intended as a new species, Valeriana dissecta, but the character is cited from plate 687 of the Flora Danica, which represents Valeriana dioica L. In the manuscript of the Fl. Mex., the epithet is written "dioica", so the published "dissecta" may be dismissed as a printer's error.


Locality cited: Mazatlán, Guerrero ["Habitat Monspleii, in Mazatlan. Floret Octobri"]'). Scarcey described except for an introductory diagnosis. Not found in the S. & M. herbarium. Not further identified.


Locality cited: Europe. and Tlalpan ["frigidis Sancti Augustini montibus, Mexico vicinis"]'). Not described except for introductory diagnoses. Not found in the S. & M. herbarium. Not further identified.


Locality cited: Ayahuatlapa, near Chilapa, Guerrero ["in montibus Ayahuatempan, et in Europa. Floret Septembris"]'). Scarcey described except for an introductory diagnosis. In the S. & M. herbarium no. 402 (CNHM neg. 48629A), labelled "Valeriana officinalis. No. 192", was determined by F. G. Meyer as Valeriana sorbiloba H. B. K. Mixed with the last, in the same paper, was a specimen (neg. 48629B) determined as V. densiflora Benth. The number "192" was not assigned to any particular specimen, but to a species. During a final attempt to organize the herbarium, in Madrid after 1804, each species was assigned a number according to its place in the Linnaean system. The numbers assigned to species of Valeriana ranged from 190 to 199. (cf. McVaugh 1990, p. 209).


Type-locality: Guanajuato ["in montibus Guanaxuatii. Floret Junio"]'). Guanajuato. F. G. Meyer (Ann. Missouri Bot. Gard. 38: 483. 1951) was unable to identify this from the description but suggested it might be Valeriana ceratophylla H. B. K., q.v. In the S. & M. herbarium no. 404 (CNHM neg. 48627), determined by Meyer (after the publication of his paper) as V. ceratophylla H. B. K., was originally labelled with an epithet recalling the "subbipinnate" leaves ["folia pinnata foliis ramosis in laevis foliis multifarius divis"].


De Candolle's reference was based on no. 1047 of the Torner Collection, a painting without inscription except for an annotation, in a hand unknown to me, "Valeriana volubilis". DC. plate 505, a sketch, is a copy derived from Torner 1047. Apparently the epithet "volubilis" does not appear with any of the Valerianas in the S. & M. herbarium, although specimens of two different species originally were labelled "Valeriana scandens".

Verbenaceae


Mexico, "ad ripas fl. Alvaradi (Mocinno)", according to Schauer in DC. Prodr. 11. 700. 1847. This report is evidently based on DC. plate 1016, which is accompanied by a manuscript description by de Candolle and the note "ad Alvaradi fluminis ripas fl. junio"). DC. 1016 is a partial copy derived from no. 1515, a painting without inscription except for an annotation by de Candolle,
"Avicennia nitida". Presumably this icon was painted in 1793 or 1794, when Mociño traveled with an artist in southern Veracruz, but the format and meticulous detail in Torner 1515 are those of the many West Indian subjects done by the artist Echeverría in 1795–96. In the S. & M. herbarium no. 2188 (CNHM neg. 48645–48647), one sheet of which is labelled "Avicennia tomentosa," has been identified by H. N. Moldenke as Avicennia nitida Jacq. Enum. Carib. 25. 1760; Sel. Stirp. Amer. 177. 1763. In the Floras Mexicanas, Avicennia nitida is described twice, once from Havana, Cuba, "in Havanen suburbiis del Hortico dicta ad Bahiae margines paludosas. Vulgo Mangue negro. Floret Junio"); the second time from Veracruz, "ad Alvaradi fluminis ripas. Floret Junio") (Fl. Mex. ed. 2. 142. 1894).

**Callicarpa americana** Sessé & Moc. Fl. Mex. 18. 1893; ed. 2. 17. 1894, not Callicarpa americana L. Type-locality: El Espinal, Veracruz, "in oppido de El Espinal ubi Patzahumacaechil, totonaci dicent, sive grana sabei. Floret Augusti") The locality is about 20 km SW of Papantla. Sessé and Castillo passed here, Aug.–Oct. 1792. In the S. & M. herbarium no. 519 (CNHM neg. 48657), labelled "Callicarpa americana," is according to Moldenke Callicarpa pringlei Brq. Bull. Herb. Boissier 4: 345. 1896. Although Sessé & Mociño were well acquainted with the works of Linnaeus, there seems to be nothing else to suggest that Callicarpa americana Sessé & Mociño is based on C. americana L. The plant described in Fl. Mex. is perhaps the same one illustrated in no. 1505 of the Torner Collection, a painting without inscription except for an annotation by de Candolle, "Callicarpa laxiflora." DC. plate 1025 is a partial copy derived from Torner 1505.


Type-locality [of C. affine]: Mexico. Localities cited [Pl. Nov. Hisp.]: Pátzcuaro and Coahuayana, Michoacán ["in montibus Patzuaro vicinis, Martiniea, et Coahuayana, ubi vulgo Chachalaca dicitur"]). Type [of C. affine]: "Sessé et Mocino...v. s. sp. in Herb. Lamberti"); not seen. Not found in 1963 at BM, G, or OXF. In Phytophylia 6: 279. 1958, the type of Citharexylum affine is said to be Andréus 135, but this was apparently a lapis machirae; Andréus 135 is the only specimen cited by Schauer in DC. Prod. 11: 611. 1847, so the error is perhaps a natural one.

l.c. Fl. Mex. 417, cited in Pl. Nov. Hisp., is represented by no. 1726 in the Torner Collection, which bears the number "417" and an annotation by de Candolle, "Citharexylon quadrangulare L."). Almost identical (but lacking the fruiting branch at left) is an original painting at MA that bears the number "48" and the hand-printed name "Citharexylum Quadrangulare." It was listed by name, with description, and identified as RJB Lám. 90 in the Catálogo de las Lámimas del Real Jardín Botánico (RJB 1987, p. 338). It was reproduced in full color by Maldonado Polo (1996, p. 1326). It is no. 48 of a list by Mociño (MA, mss), and no. 21 of Ramírez, Anales Inst. Méd.-Nac. México 6, pt. 1: 75. 1903. This icon according to Moldenke depicts a plant of Citharexylum affine.

In the S. & M. herbarium no. 2371 (CNHM neg. 48658), labelled "Citharexylum quadrangulare sive cinereum ict;", is according to Moldenke (Phytologia 6: 280. 1958) the "type" of "Citharexylum quadrangulare Sessé & Mociño."). Another specimen, also named C. affine by Mociño, was named by the collectors "Citharexylum cinereum" and later "Pazquarense" (no. 2372; neg. 48659). A sheet at G. ex Herb. Pavón, with locality Pátzcuaro ["Pazguaren"]) was cited by Moldenke (Phytologia 6: 282. 1958) and is presumably of this same gathering.

Apparently Sessé & Mociño confused two or more species under the name of Citharexylum quadrangulare. In their herbarium no. 2374 (neg. 48660), so named, is according to Moldenke C. berlandieri B. L. Rob. (cf. also Phytophylia 6: 292. 294. 1958). No. 2373 (neg. 48674), also so named, is according to Moldenke C. sessaei D. Don (cf. also Phytophylia 7: 28. 1959).

DC. plate 1035 (Field Mus. neg. 30833), according to an accompanying manuscript in the hand of de Candolle, was based on "Citharexylum quadrangulare Moc. et Sessé pl. mex. ined.;" and the source was given by de Candolle as "in Servatoropolis montibus ll. martio"); exactly the same wording is used in the published version of Mociño’s Guatimalensis Prima Flora 104. 1993 (that is to say, flowering in March in the mountains near the city of San Salvador in the Republic of El Salvador). The plant shown in DC. 1035, however, is a copy of no. 1511 in the Torner Collection, which is one of Echeverría’s elegantly drawn and colored compositions, depicting what seems to be Citharexylum fruticosum, a common plant of the lowlands of Puerto Rico.


Apparently Sessé & Mociño, at one time or another, referred plants of two or more additional species to C.

Type-locality [all species]: Mexico. Type [ellipticum]: “Sessé et Mocinno... (v. s. sp. in Herb. Lamb[ert])”. A sheet that may be that is by type is at OXF, ex herb. Fielding; it is not annotated by Don, but is marked by type “Citharexylum ellipticum”. Type [lucidum]: “Citharexylum cinereum Sessé et Mocinno MSS. non L.”, “(v. sp. in Herb. Lamb[ert])”. At OXF in 1963 I could find nothing marked “lucidum”, but a sheet from Fielding’s herbarium marked by Pavón “Citharexylum cinereum N.E.” may be the type. Type [scariosum]: “Sessé et Mocinno... (v. s. sp. in herb. Lamb[ert])”, not found at OXF. In the S. & M. herbarium no. 2366 (CNHM neg. 48662), labelled “Cytarexylum ellipticum”, is according to Moldenke the type of “C. ellipticum Sessé & Moc.” (cf. also Phytologia 6: 342, 344, 345. 1958). No. 2368 (neg. 48663), labelled “Citharexylum scariosum”, is according to Moldenke (in herb. et l.c., p. 345) C. ellipticum. Apparently C. lucidum, as such, is not now in the S. & M. herbarium.

Citharexylum incanum D. Don, Edinburgh N. Philos. J. 10: 238. Jan.–Mar. 1831, with citation of “Sessé et Mocinno MSS.” as the basis for the name. Citharexylum scabrum D. Don, l.c., with citation of “Sessé et Mocinno MSS.” as the basis for the name.

Type-locality [both species]: Mexico. Type [incanum]: “Sessé et Mocinno... (v. s. sp. in Herb. Lamb[ert])”. A sheet at OXF, ex herb. Fielding, not annotated by Don but named by Pavón “Citharexylum incanum”, may be the holotype. Type [scabrum]: “Sessé et Mocinno in herb. Lamb[ert]”. A sheet at OXF, not annotated by Don but marked by Pavón “Citharexylum scabrum”, may be the holotype. In the S. & M. herbarium no. 2367 (CNHM neg. 48671), labelled “Citharexylum incanum”, is according to Moldenke the type of that name (cf. also Phytologia 7: 22, 23. 1959). No. 2369 (neg. 48672), first labelled “Citharexylum cincanum”, then “scabrum”, is according to Moldenke the type of C. scabrum “Sessé & Moc. ex Don” (Phytologia 7: 22, 23. 1959). Moldenke (l.c., p. 21) took up the name Citharexylum scabrum and relegated C. incanum to synonymy. Standley (Contr. U. S. Natl. Herb. 23. 1239. 1924) regarded the two as conspecific, but took up incanum in favor of scabrum.


Type-locality: Mexico. Type: “Sessé et Mocinno... (v. s. sp. in Herb. Lamb[ert])”, not seen. This was treated by Moldenke (Phytologia 6: 456–458. 1959) as a valid species. He cited as the “type” of the name no. 2364 of the S. & M. herbarium [CNHM neg. 48665]; this sheet is marked by Pavón “Citharexylum N.E.”. It is probably more than a coincidence that Rauwolfia lycioides Lag. & Rodr., q.v., is also a species of Citharexylum; the latter was referred somewhat hesitantly by Moldenke (Phytologia 7: 20. 1959) to the synonymy of C. rosei var. durangense Moldenke. The holotype of Rauwolfia lycioides Lag. & Rodr. (Field Mus. neg. 29221, MICH neg. 1700), which I have seen at MA, should be examined by someone with knowledge of the plants concerned. The young branchlets were described by the authors as “algo vellosos”, and the leaves as “con algun vello en el enves”. If the specimen proves to represent the same species as Citharexylum lycioides Don, then a pantain may question whether the Code of Botanical Nomenclature will permit transfer of R. lycioides to Citharexylum, as there already exists a Citharexylum lycioides based on a different type.


Type-locality: Mexico. Type: “Sessé et Mocinno... (v. s. sp. in Herb. Lamb[ert])”, not seen. In the S. & M. herbarium four sheets of no. 2375 (CNHM negs. 48666–48669), one sheet of which is labelled “Citharexylum tomentosum N.” (neg. 48666), are all according to Moldenke C. mocinii D. Don (cf. also Phytologia 6: 470, 471. 1959, where no. 2375 is cited as the “type” of the name).


Type locality: Parangueo ["in haerediate Parangues, prope Salamantica. Floret Julio" or (in Fl. Mex. "Parayuyo")], south of Salamanca, Guanajuato. Ic. Fl. Mex. 418, cited in Fl. Nov. Hisp., represented by no. 0470 in the Torner Collection, which is without inscription except for the number "53" at lower left and the number "418" at upper right. Essentially identical is an original painting at MA, which bears the numbers "48 crossed off and replaced by 55" and the hand-printed name "Cytarexylum Racemosum." It was listed by name, with description, and identified as RJB Lám. 91 in the Catálogo de las Láminas del Real Jardín Botánico (RJB 1987, p. 338). It was reproduced in full color by Maldonado Polo.

Schauer (in DC. Prodr. 11: 613. 1847) referred C. scariosum D. Don, q.v. above under C. ellipticum, to the synonymy of this species.


Type locality: Mexico. Type: Sessé & Mocíño in herb. Lamberti. A sheet at OXF, not annotated by Don, but marked by Pavón “Citharexylum quadrangularis N E”, may be the holotype. Upheld as a valid species by Moldenke (Phytologia 7: 27–28. 1959), who cited as “type” no. 2273 [correctly 2373] in the S. & M. herbarium (CNHM neg. 48674), originally labelled “Citharexylum quadrangularis”.


Type-locality: Sandy shores, Mexico (“in mexicanis arenosis litoribus. Floret Novembri”). See also Mocíño in Guat. Prima Flora 105. 1993 and Maldonado Polo (1996, p. 270), where the description from Fl. Mex. is repeated verbatim and the locality is given as San Salvador (“Habitat Servatoropolis montibus. Floret Martii”). No. 1991 of the Torner Collection represents this name. It is one of Echeverría’s carefully drawn and colored sketches, inscribed by Sessé “Tab. 25” and by de Candolle, “Clerodendron cirium”. DC. plate 1024 is a copy derived from Torner 1991 (Field Mus. neg. 30831). Not found in the S. & M. herbarium. According to

Moldenke (Resumé Verb. etc. of the World 262. 1959), this is a synonym of Clerodendrum ligustrinum (Jacq.) R. Br. in Aiton, Hort. Kew. ed. 2. 4: 64. 1812.


Locality cited: Tehuacan, Puebla (“in Tehuacani agris. Floret Junio”). Long description. In the S. & M. herbarium no. 2182 (CNHM negs. 48676, 48677) was determined by Moldenke as Clerodendrum ligustrinum (Jacq.) R. Br. No. 2182 is labelled (neg. 48676) “Clerodendrum fortunatum. lc. d. 3. p. [descr.]”. The other sheet has no original label. Nelson (1997) designated “Sessé 2182” as “material type” of Clerodendron fortunatum Sessé & Moc., but that is inappropriate because no such name exists.


Type locality: Hot regions of New Spain. In the S. & M. herbarium no. 2571 (CNHM neg. 48794), labelled “Cornutia pentaphylla N.”, is according to Moldenke Vitex hensleyi Briot. Bull. Herb. Boissier 4: 347. 1896. This synonymy was confirmed by Moldenke in Phytologia 5: 393. 1956. Although the name Cornutia pentaphylla is the oldest available one for this species, its transfer to Vitex is prevented by the existence of V. pentaphylla Merrill (1909), a Philippine species. The geographical range of V. hensleyi is from Michoacán to Oaxaca.


Type locality: Cucuruxac专门 [in calidis Quauhnahuaeaeae circuitibus], Morelos. i.e. Fl. Mex. 218, cited in Pl. Nov. Hisp., represented by no. 0204 of the Torner Collection, which bears the number “278” (evidently added erroneously in place of a trimmed off “218”), the hand-printed name “Cornutia ternata. Sp. N.”, and the annotation by de Candolle, “Vitex ? ternata”. A nearly identical original painting is DC. plate 1026 (Field Mus. neg. 30832), which bears the number “218” (apparently in the hand of Mocíño), and attached notes by de Candolle, including “Vitex [mexicana crossed off] ternata” and “Cornutia ternata Moc. et Sessé pl. mex. ined. i.e. Vitex ternata id. mss.”, and the locality “Quauhnahuacae calidis circuitibus fl. maio” as in the protologue of Cornutia ternata in Pl. Nov. Hisp. There is also in de Candolle’s hand the additional locality, “in calidis Guatimalae regionibus fl. juliio” [a direct quote from the published version of Mocíño’s Guatimalensis Prima Flora 104. 1993]. The name was referred by Moldenke (Phytologia 5: 476. 1957) to the synonymy of Vitex mollis H. B. K. Nov. Gen. & Sp. 2. 245. 1818. In the S. & M. herbarium no. 644 (CNHM neg. 48795), labelled “Cornutia ternata N.”, is according to Moldenke Vitex mollis. Moldenke also cited (Phytologia 5: 478. 481. 1957) additional specimens from the herbarium as the
“types” of several unpublished names of Sessé & Mocío. He recorded in the same place a “Pavon” specimen from “Perú”, the “type” of *Vitex tomentosa* Pavón. I have not seen this specimen, but it is almost certainly one of the Sessé & Mocío collections, probably the same one that they themselves labelled “Vitex tomentosa” (no. 2183; neg. 48796). According to Moldenke, the authenticated range of *Vitex mollis* is from Baja California to Oaxaca.


Type locality: Mexico. Type: “Maceria DC. in fl. mex. inc. ined. (non F. Mey.)”. This is a reference to no. 0756 in the Torrón Collection, a painting without inscription except for the annotation by de Candolle, “Macarea verbenacea”. DC. plate 833; not cited in Calques des Dessins (Field Mus. neg. 30771), is a copy. DC. plate VII [sketches only; neg. 30377] is derived from the same original.

I have not located the specimen of “Pedalium filiforme” cited by de Candolle. The new genus *Ischnia* was assigned by de Candolle to the Sesamaceae (Pedaliaceae), but Schauer (in DC. Prodr. 11: 529. 1847) doubtfully referred *Ischnia verbenaceae* to the synonymy of *Tamonoea scabra* Schlcht. & Cham. (Verbenaceae), a name now generally relegated to synonymy under *Ghinia curassavica* (L.) Millsp. In the S. & M. herbarium no. 2190 (CNHM negs. 48684, 48685), determined by Moldenke as *Ghinia curassavica*, were originally referred by the collectors to *Pedalium* with an unpublished epitype.


Locality cited: “Habitat in Nova Hispania. Floret toto fere anno”. In the S. & M. herbarium no. 2199 (CNHM neg. 48692), labelled “Lantana aculeata. ic. d.”; no. 2200 (neg. 48693), without label; and neg. 48694, labelled “Lantana aculeata. 1145”, were all determined by Moldenke as *Lantana hirta* H. B. K. No. 0419 in the Torrón Collection, signed “Pedro Oliver f.t.”, and annotated by de Candolle “Lantana aculeata L.”, is executed in the style that indicates it was one of the very earliest paintings made for the Expedition. Torrón 1330, made in exactly the same style, but not an exact duplicate, is without inscription except for the same annotation by de Candolle.

Nelson (1997) designated “Sessé 2199” as “material type” of "Lantana aculeata Sessé & Moc.", which is inappropriate as no such name exists.


Locality cited (Pl. Nov. Hisp.): “in calidis Americae regioibus”; [Fl. Mex.]: Cuernavaca, Morelos. The name *Lantana bipinnatifida* is illegitimate because it was superfluous when published; the treatment of *Lantana annua* in the Pl. Nov. Hisp. and that of *Lantana bipinnatifida* are identical, even to the references to Linnaean and pre-Linnaean literature. In Fl. Mex. 107 is cited under *Lantana bipinnatifida*; this painting actually represents *Rhianthus bipinnatifidus* (Scrophulariaeaceae) and is cited under that species. It may be that it was cited here again under *Lantana* because of some trick of association of the specific epithets. The herbarium of S. & M. contains no material under the names listed above. Moldenke (Resumé Verben. World 303. 1959) referred *Lantana bipinnatifida* to the synonymy of *Lantana trifolia* L. Sp. Pl. 626. 1753.


Localities cited: Shores of Lake Chapala, [Michoacán or Jalisco] (“in Americae calidioris regionibus et temperatis Chapalae maris littoribus. Floret Februario”). Not found in the S. & M. herbarium. From the description probably a species of *Lantana* or *Lippia*.


Locality cited: Cuba, cultivated (“in Havaianae hortis, ad ornamentum exculta: Filigrana vulgo dicta”). In the S. & M. herbarium no. 2201 (CNHM neg. 48696), labelled “Lantana involucrata. ic. V[ulgar] filigrana.”, was determined by Moldenke as *Lantana odorata* L. Nelson (1997) designated “Sessé 2201” as “material type” of “Lantana involucrata Sessé & Moc.”, which is inappropriate because no such name exists.


Localities cited: Tepotlán, [Morelos], and Sayula, [Jalisco] (“in calidis et temperatis Tepotlani et Sayulae circuitibus. Floret quolibet anni tempore”). In the S. & M. herbarium a specimen, labelled “Lantana mixta. 1143” and on another label “Lantana mixta. [descr.]” (no. 2198; CNHM neg. 48702), was determined by H. N. Moldenke as *Lantana velutina* Mart. & Gal. Nelson (1997) designated “Sessé 2198” as “material type” of “Lantana mixta Sessé & Moc.”, which is inappropriate as no such name exists. The number “1143” did not pertain to this particular specimen but was the one assigned in Madrid after 1800 to this species, during an attempt to number the entire herbarium. In that system numbers assigned to the *Lantana-Lippia* group ranged from 1143 to 1149 in the same series with Scrophulariaceae (cf. McVaugh 1990, p. 209). Numbers assigned to the genus *Verbena* ranged at least from 79 to 102.
Type locality: Near Veracruz, Veracruz. According to Moldenke (Resumé Verben. World 307. 1959), this is a synonym of Phyla nodiflora (L.) Greene, var. reptans (H.B. K.) Moldenke, Torrey 34: 9. 1934. Material in the S. & M. herbarium, identified by Moldenke as Phyla nodiflora, was originally referred by the collectors to the genus Lippia, or to Verbena nodiflora L. (no. 2212; CNHM neg. 48730). This and the following species are included (with descriptions but without citation of definite localities) in Mocío’s Guatimalensis Prima Flora (p. 101), with a note that apparently was intended to refer to an earlier manuscript on the Flora Mexicana: “Species olim descriptis, quae quidem omnes in Guatimalensibus provinciis reperiuntur, sequentes adiciendae veniant,” that is to say in free translation, “the following species, formerly described but all indeed found in the Guatemalan Provinces, are to be added”.

Type locality: Tuxtla [i.e., probably San Andrés Tuxtla, Veracruz]. Not found in the S. & M. herbarium. According to Moldenke (Resumé Verben. World 308. 1959), this is a synonym of Lantana hispida H. B. K. Nov. Gen. & Sp. 2: 260. 1817. See a note under Lantana repens as to the occurrence of this species in Guatemala.


“Lippia arborea N.”
A name never published by Sessé & Mocío, but apparently applied to them to two different species of Lippia. In the S. & M. herbarium no. 2217 (CNHM neg. 48713), labelled “Phryma” [this crossed out] and “Lippia arborea N.”. The plant, according to H. N. Moldenke, is Lippia calicarpifolia H. B. K. No. 2218 (neg. 48721), labelled “Lippia arborea N. ic.”, is according to Moldenke Lippia umbellata Cav. Ic. 2: 75. pl. 194. 1793. See also Phryma arborea.

Lippia cuneifolia Sessé & Moc. Fl. Mex. ed. 2. 139. 1894, not of earlier authors.
Type locality: On the land (“Praedio”) of José García, along the road from Toa Alta to Aibonito (“Salinanito”), Puerto Rico. Referred by Urban (Symb. Antill. 4: 532, 1911) to the synonymy of Lippia micromera Schauer, and by Moldenke (Resumé Verben. World 312. 1959) to Lippia micromera var. helleri (Britton) Moldenke, Rev. Sudam. Bot. 5: 2. 1937. In the S. & M. herbarium no. 2214 [CNHM neg. 48717], determined by Moldenke as var. helleri, was labelled by the collectors “Lippia cuneifolia N. Vlulg Oregano”. In the herbarium Moldenke marked this specimen as “type” of L. cuneifolia. Nelson (1997) designated “Sessé 2214” as “material type” of L. cuneifolia.

Lippia longifolia Sessé & Moc. Fl. Mex. ed. 2. 139. 1894.
Type locality: “In Oppido del Cerro”, near Havana, Cuba, where said to flower in March, April, and May, Referred by Moldenke (Resumé Verben. World 314. 1959) to the synonymy of Phyla stoechadifolia (L.) Small, Bull. Torrey Bot. Club 36: 162. 1909. In the S. & M. herbarium no. 2213 [CNHM neg. 48732], marked by the collectors “Lippia longifolia”, is according to Moldenke Phyla stoechadifolia.

Lippia obovata Sessé & Moc. Fl. Mex. ed. 2. 140. 1894.
Type locality: Not stated. Said to be very similar to Lippia crenata Sessé & Moc., q.v., and to have the vernacular name “oreganum”. Not identified; apparently not represented in the S. & M. herbarium. Listed by Moldenke (Resumé Verben. World 37. 1959) as an accepted species, endemic in Mexico.

Lippia umbellata Cav. Ic. 2: 75. pl. 194. 1793.
Type locality: Mexico; introduced into the Madrid Botanical Garden in 1790 or 1791 (“biennio iam introduculta”). Type: Not seen. Not found in the S. & M. herbarium under this name. Reported by Cavanilles (Ic. 4: 71. 1798) from Acapulco and Atocongo on the basis of reports by Nee, but the original introductions may have been as seeds supplied by Cervantes or Sessé, as Nee was not in Mexico before 1791.

Type locality: Dry fields, Alfajayucan, Hidalgo. In the S. & M. herbarium no. 2535 (CNHM negs. 48642-48644), labelled “Mentha disperma N.”, is according to Moldenke Alyssum ligustroides (Lag.) Small, Fl. Southeast U.S. 1013. 1903. The description is of subshrub 5 feet high, glabrous, with small entire subsessile elliptic leaves acute at both ends, loose axillary filiform spikes, densely villous calyces which are deeply 4-toothed, white corollas with filiform tube longer than the calyx; stamens 2. Except for the stated number of
stamens, this applies well enough to *Aloysia ligustrina*. Nelson (1997) designated “Sessé 2525” as “material tipo” of *M. disperma*. He mentioned the three negative numbers cited above; presumably he had in mind as “material tipo” no. 48644, which is the only one bearing an original label, which is “Mentha disperma N. 1109. 14–1”. The number 1109 was among those assigned to species of Labiatae, when after 1800 an attempt was made to number the entire herbarium (McVaugh 1990, p. 209).


Locality cited: “Habitat inter Tehuacan et Oaxacam prope iter”. Long description, of a “sarmentose” shrub with long pendent racemes of large blue flowers. In the S. & M. herbarium no. 2225 (CNHM negs. 48726, 48727), labelled “Petraea volubilis”, were correctly named according to Moldenke. No. 1946 in the Terence Collection bears annotations [by Sessé], “Petrea volub.”, “fol. 116”, and “Tab. 16”, and an annotation by de Candolle, “Petraea axillaris”. The painting is apparently one of Echeverriasa, done in the West Indies or in the lowlands of eastern Mexico.

**Phryma arborea**.

A name never published by Sessé & Mocínó, but in a list of *icones* obtained during the “Second Excursion”, that to Guerrero in 1789 (MA, mss), in Fl. Mex. 375 is listed as “Phryma arborea”, as it is also in a list of *icones* 1–416 (MA, mss). In the Terence Collection no. 0227 bears the number “375”, the hand-printed name “[Phryma crossed out and Lipia written in] Arboraea. Sp. N.”, and an annotation by de Candolle, “Lantana polycosphalh”. McVaugh (1980, p. 130) suggested that DC. plate 1017 may represent lc. Fl. Mex. 375. That plate is a copy derived from Torner 0227; attached are a series of notes by de Candolle, including “Lantana polycosphalh” and “Lippia arborea Moq. et Sessé pl. mex. ined. ic.”. I take it that the *icones* represent a species of *Lippia*. See *Lippia arborea*, above.

The number “375” was written also on another painting, apparently also from Mocínó, in the belief that Torner 0227 and Torner 0149 represented the same plant. No. 0149 bears the number, the hand-printed word “Varietas.”, and an annotation by de Candolle, “Lantana horminoides”. DC. plate 1018 is a partial copy. The plant depicted is also a species of *Lippia*, perhaps a different species, with broader leaves and more conspicuous involucral bracts.


Locality cited [Fl. Mex. p. 8]: “in humidis et umbrosis calidarum Noua Hispania locis. Floret Septembris”. In the S. & M. herbarium no. 18 (CNHM neg. 48788), labelled “Salvia purpurea [descr.]”, was identified by L. M. Perry as *Verben a recta* H. B. K. Nelson (1997) designated “Sessé 18” as “material tipo” of the above “Salvia purpurea”. He quoted from the original label, “Salvia purpurea tetrandra”. I believe he was in error in supposing that this particular specimen was the basis for the Sessé & Mocínó name; see the comments under *Salvia purpurea* (Labiatae), above. Sessé & Mocínó were well acquainted with the genus *Salvia*, and it seems more likely that the misidentification of one specimen was a slip made in haste and never corrected.

**Salvia purpurea** Sessé & Moc. Fl. Mex. 9. 1893; ed. 2. 8. 1894, not of Cavanilles, 1793.

Locality cited: Cuba [in Guanabacoa allisique Insulae Cubae locis, ubi ulugo Yerbabuena cinarrona, in locis audit. Floret Februario:]. Evidently not the same species as that described in Fl. Mex. 8. 1892. See more extended comment under *Salvia purpurea* (Labiatae).

**Stachytarpha** sp.

An original drawing at MA, identified as “[Moronia] RJF Lámima 16”, was beautifully reproduced in color, nearly full size at ca. 28 by 20.5 cm (RJB 1987, p. 140). It bears no significant inscription. It is cited and briefly described in the catalogue of the same publication (RJB 1987, p. 321). It is one of the paintings that were sent from Guadalajara to Madrid in 1791, and it was photographed there by Altamirano in 1898. The base of the plant is shown, and a leafy branch bearing a long spike of pink to rose-colored flowers. I take it that the plant depicted is a species of *Stachytarpha*.

**Tetraeclea coulteri** A. Gray, Amer. J. Sci. Arts, ser. 2. 16: 98. 1853.

In the S. & M. herbarium no. 2567 (CNHM neg. 44197) was determined by McVaugh as *Tetraeclea coulteri*. It was originally labelled “Genus . . . . [description]”. Habitat in Tehuacan circuitibus. Floret Octobri”. This appears to have been one of the collections sent to Sessé from Puebla by Ignacio León (cf. McVaugh 1990, p. 208).


Locality cited: “in Carolina et Nova Hispania, praeipue in Mexici circuitibus. Floret Maio”. Not described except for the comment, “statura verbenae officinalis, ab illa tantum differtis foliiis integris”. In the S. & M. herbarium no. 36 (CNHM neg. 48757), labelled “Verben caroliniana [description]”, was determined by L. M. Perry as *V. carolina* L., as was also no. 128 (neg. 48759), labelled “Verba Carolina. No. 88”. On the other hand, nos. 101 and 106 (negs. 48778, 48779), labelled “Verbena caroliniana”, were determined by Perry as *V. litoralis* H. B. K.

In the S. & M. herbarium nos. 93, 97, 104, 110, 111 (CNHM negs. 48761, 48763, 48765, 48767, 48769), named by the collectors “Verbena laciniatia”, are according to L. M. Perry **Verbena ciliata**. No. 93 is also labelled “ic.[on] D.[escript]”. The names of nos. 97, 104, and 111 include the letter N.[ova]. The name “Verbena laciniatia” was never published by Sessé & Mociño but was included as “Verbena laciniatia N.” under Ic. Fl. Mex. 15 in a list of **icones** painted in the vicinity of México, D.F. during the “First Excursion, 1787–88”. The heading of the list says specifically, “Lítera N novas indicat”. Ic. Fl. Mex. 15 is represented by two **icones** in the Torner Collection, each with the number “15” and de Candolle's annotation, “Verbena multifida fl. per.”. Torner no. 0001 bears the hand-printed name “Verbena laciniatia N.”, and no. 0640 the name “Verbena Laciniatia N. Sp.”.


Type locality: Cuba; grown at the Madrid Botanical Garden, “e seminibus missis per D. Sessé”. Type: Not seen. Moldenke transferred Ortega’s name to *Priva* without comment; later (Resuim Verben. World 340. 1959) he stated that it was the plant that had been passing as *Priva rhinanthifolia* (Mart. & Gal.) Kobuski, Ann. Missouri Bot. Gard. 13: 17. 1926, a species known only from the uplands of Mexico. Perhaps Ortega erred in supposing Sessé’s material to have come from Cuba.

**Verbena grandiflora** Sessé & Moc. Pl. Nov. Hisp. 6. 1887; ed. 2. 6. 1893, not of Gómez Ortega.

Type locality: Mountains of Puruándiro, Michoacán. Ic. Fl. Mex. 24, cited in Pl. Nov. Hisp., represented by no. 0799 in the Torner Collection, which bears the number “24”, and de Candolle’s annotation, “Verbena rosea”. A copy at MA bears the number “7” and the hand-printed name “Verbena Grandiflora.” It was identified as RJL Lám. 20 in the Catálogo de las Láminas del Real Jardín Botánico (RJLB 1887, p. 322). This is no. 7 of a list by Mociño (MA, mss.), no. 80 of Ramírez (1903, p. 82), who correctly equated it with DC. plate 1030, which is a partial copy of Torner 0799.

In the S. & M. herbarium nos. 91, 112, 113, and 114 (CNHM negs. 48752–48753) were determined by L. M. Perry as *Verbena amoeoa* Paxton, Mag. Bot. 7. 3. 1840. No. 91 was originally labelled “Verbena grandiflora N. Ic. No. 99”. Perry (Ann. Missouri Bot. Gard. 20: 341. 1933) referred *Verbena grandiflora* to the synonymy of *V. amoeoa* and cited “Sessé & Mocio No. 99” (MA) as the “type” of *V. grandiflora* Sessé & Moc. The 99 was not a collection-number but the number assigned to that species during the final organization of the herbarium after 1804 (McVaugh 1990, p. 209). R. E. Umbre (Syst. Bot. 4: 101. 1979), without mentioning *V. amoeoa*, provided a new combination, *Glandularia amoeoa* (Paxton) Umbre, and without comment designated Sessé & Mocio 99 at MA as holotype of that name. B. L. Turner (Lundell 2: 60. 1999) accepted Umbre’s view on typification. Paxton designated no type of *V. amoeoa*, saying merely, “We have every reason to think it a native of Mexico.”

**Verbena integrifolia** Sessé & Moc. Pl. Nov. Hisp. 6. 1887; ed. 2. 6. 1893.


Localities cited: “Habitat Mexici omnibusque Hispániae locis. Floris tota aestate”. Not described. In the S. & Herbarium no. 116 (CNHM neg. 48786), labelled “Verbena officinalis. No. 97”, was determined by Perry as *V. menzhefotia* Benth. For explanation of the number “97”, see above, under *Lantana mista*.

**Verbena spuria Linn.”**

A name not used in publication by Sessé & Mociño, but applied to herbarium specimens and one of the **icones**, probably one that was executed during the “First Excursion”, in the region of Mexico City, 1787–88. In
the herbarium, no. 118 (neg. 48704) and 118 (neg. 48787), both labelled “Verbena Spuria,” were determined by L. M. Perry as *Verbena menthaefolia* Benth. The ticket on no. 118 includes the notation “No. 96,” which is the number assigned to that species during the final organization of the herbarium in Madrid after 1804 (McVaugh 1990, p. 209).

No. 0651 in the Torner Collection bears the numbers “(probably 6, in ink, the top cropped off),” “[13 crossed off],” and “49,” the hand-printed name “Uerba Spuria. Linn.,” and an annotation by de Candolle, “Verbena pinnatifida Lam.”

I suspect that the numbers in ink in the upper-left-hand corner, like the supposed “6” in this example and “7” for “Verbena lapulacea,” are part of the earliest attempt to list the *icones* by number. Apparently this series was soon replaced by the series that includes the “13” in this example and the “14” for “Verbena lapulacea.” Some of these, including the “14,” were maintained through the final numbering of the *Icones Florae Mexicanae*.


Localities cited: “Habitat Mexici et in Hispania. Floret toto anno.” Not described but its medicinal qualities mentioned. In the S. & M. herbarium no. 117 (CNHM neg. 48649), labelled in the hand of Mosco “Verbena supina. No. 98,” was determined by H. N. Moldenke as *Bouchea dissecta* L. Wats. For explanation of the number “98”, see above under *Lantana mista*.


Locality cited: None. Rather long description, which seems to fit the plant depicted in no. 1480 of the Torner Collection, a painting without any inscription except for an annotation by de Candolle, “Volkmneria aculeata L.” The drawing is one of Echeverría’s sketches, mostly drawn in Puerto Rico, with skillfully drawn and colored flowers and fruits. In the S. & M. herbarium no. 2181 (CNHM neg. 48675), labelled “Volkmneria aculeata. ic. V[phil]o Cuentas de Oro. 14-2,” was determined by Moldenke as *Clerodendrum aculeatum* (L.) Schlecht. Nelson (1997) designated “Sessé 2181” as “material tipo” of “Volkmneria aculeata Sessé & Moc.,” which is inappropriate as no such name exists.


Locality cited: Tehuacan, Puebla (“in aridis Tehuacani agris. Floret Junio”). Long description. The odor of the flower is said to be like jasmine and like that of *Clerodendron fortunatum*. No. 1776 of the Torner Collection, without inscription except for an annotation by de Candolle, “Volkmneria dentata,” is an excellent likeness of what I take to be *Tetractea couleri* A. Gray. In the S. & M. herbarium no. 2180 (CNHM neg. 44198), labelled “Volkmneria? inermis. ic. 14-2,” was determined by McVaugh as *Tetractea couleri* A. Gray. Nelson (1997) designated “Sessé 2180” as “material tipo” of “Volkmneria inermis Sessé & Moc.,” which is inappropriate because no such name exists.

**Violaceae**

*Calyptrion berterii* [var.] *B. mexicanum* Gingsins in DC. Prodr. 1: 289. 1824. “Viola cunculata fl. mex. inc. ined.”, cited in synonymy by Gingsins, i.e., as the basis for *var. mexicanum*.

Type locality: Mexico. Type: “In Mexico. Moc. et Sessé v.s. comm. a cl. Lamb[ert],” not seen. The reference to *Viola cunculata* is based on DC. plate 38, as cited in Calques des Dessins (Field Mus. neg. 30469), an original painting, or a nearly completed copy, and perhaps based on DC. plate XVIII [sketches only; Field Mus. neg. 30303]. Nearly equivalent to DC. plate 38 is no. 1692 in the Torner Collection, labelled by de Candolle “Hybanthus reticulatus.” No. 1692 was reproduced in full color under the name of “Hybanthus reticulatus” by Grobet (1862, 16th plate following p. 64). The plant depicted is *Corynopsis arborea* (L.) Blake, Contr. U. S. Natl. Herb. 23: 837. 1923. The same species, as identified by Standley, is no. 3590 of the S. & M. herbarium (CNHM 48810), originally named *Viola cunculata*.

*Hybanthus? mexicanus* Gingsins in DC. Prodr. 1: 312. 1824.

Type locality: Mexico. Lectotype: “Moc. et Sessé fl. mex. inc. ined. icon.” The reference is to DC. plate 57, as cited in Calques des Dessins (Field Mus. neg. 30468), which is a fair copy of no. 1028 in the Torner Collection, a painting without inscription except for an annotation by de Candolle, “Ioniidum trisperrumn.” The plant depicted is evidently a species of *Hybanthus*. It is shown as a thorny shrub or tree, with flowers in small fascicles, axillary, or terminal on short branches, or terminal on short leafless axillary peduncles. The illustration is one of Echeverría’s careful pencil sketches with representative parts of inflorescences, and usually many floral details, colored. Most of these came from Puerto Rico, or from the lowlands of eastern Mexico.


Type locality: [Prodr.]: “in Mexico. Moc. et Sessé”; localities cited [Pl. Nov. Hisp.]; Mazatlán, Guerrero; and Cuamana. Lectotype [Prodr.]: DC. plate 35, as cited in Calques des Dessins (Field Mus. neg. 30466), an original painting, nearly identical with no. 0577 in the Torner Collection, which bears the number “259,” the hand-printed name, “Viola [Diformis Sp. N. crossed out]”.

541
**VIOLACEAE**


Specimens of that species in the S. & M. herbarium, named by Morton, are no. 4088 (CNHM negs. 4881-48812), originally referred by the collectors to *Viola*, with an epithet referring to the serrulate leaves.

**Ioniocium gracile** Gingins, in DC. Prodr. 1: 309. 1824, with citation of "Moc. et Sessé fl. mex. ined. ic." as the basis for the name.

Type locality: Mexico. Lectotype: In the Torner Collection, no. 0961, without inscription except for an annotation by de Candolle, "Ioniocium gracile". DC. plate 36, as cited in Calques des Dessins (Field Mus. neg. 30467), is an adequate copy of no. 0961. The name was referred by Morton (Contr. U. S. Natl. Herb. 29: 76. 1944) to the synonymy of *Hybanthus verticillatus* (Ort.) Baillon, Hist. Pl. 4: 345. 1873. See *Viola verticillata* Ort. for citation of specimens.

**Ioniocium ? longifolium** Gingins, in DC. Prodr. 1: 311. 1824 (not of Roemer & Schultes), with citation of "Moc. et Sessé fl. mex. ined. ic." as the basis for the name.

Type locality: Mexico. Lectotype: In the Torner Collection, no. 1676, without inscription except for an annotation by de Candolle. "Ioniocium longifolium". DC. plate 34, as cited in Calques des Dessins (Field Mus. neg. 30465), is a fair copy of no. 1676. The name was referred by Morton (Contr. U. S. Natl. Herb. 29: 78. 1944) to the synonymy of *Hybanthus oppositifolius* (L.) Taub. in Engl. & Prantl, Natürl. Pflanzenfam. 3, pt. 6: 333. 1895.

In the S. & M. herbarium no. 4104 (CNHM neg. 48816), labelled by the collectors "Viola longifolia N.", is according to Morton *Hybanthus oppositifolius*.

**Ioniocium polygalaeifolium** Ventenat, Jard. Malm. pl. 27. 1803.

"Nova Hispania. Moc. et Sessé", according to Gingins in DC. Prodr. 1: 309. 1824. I do not know the basis for this report. In this same publication (Gingins, l.c.), *Viola verticillata* Ort. is correctly stated to be a synonym of *Ioniocium polygalaeifolium*, but the later name, that of Ventenat, is taken up. The synonymy was confirmed by Morton (Contr. U. S. Natl. Herb. 29: 76. 1944), who took up the name *Hybanthus verticillatus* (Ort.) Baillon. See *Viola verticillata* for citation of specimens.

**Viola dichotoma** DC. in DC. Prodr. 1: 297. 1824, with citation of "fl. mex. ic. ined." as the basis for the name.

Type locality: Mexico. Lectotype: In the Torner Collection, no. 0445, without inscription except for an annotation by de Candolle, "Viola dichotoma". DC. plate 33, as cited in Calques des Dessins (Field Mus. neg. 30464), is a partial copy of Torner 0445. De Candolle (loc.) also wrote of this painting "an eadem ac V. scandens Ruiz et Pav. in herb. Lamb[ert] ?". I have not seen the specimen from Lambert's herbarium, but it may well have been Mexican in origin. The *icon* represents a stemmed violet with corolate-ovate leaves and large fringed stipules, superficially similar to plants determined by Becker as *Viola scandens* Willd. ex Roem. & Schult. Syst. Veg. 5: 391. 1819.


Type locality: "Cuba"; grown at the Madrid Botanical Garden, "et seminibus missis per D. Sessé". Type: Not seen. Probably this is a Mexican, not Cuban, species; Ortega wrongly supposed much of Sessé's Mexican material to have come from Cuba. Not identified further.

**Viola lutea** Sessé & Moc. Fl. Mex. ed. 2. 199. 1894, not of earlier authors.

Type locality: Mountains of San Nicolás, near México, D.F., not precisely located but thought to have been San Nicolás Totolapán, near Contreras, D.F., and a little more than two leagues south-southwest of San Angel. Said to flower in July. Described as a weak branched herb with alternate ovate leaves, filiform peduncles longer than the leaves, and sparse flowers. The flower color was not stated. In the S. & M. herbarium no. 4103 (CNHM neg. 48807), labelled "Viola lutea N.", represents some as yet unidentified species of *Viola*.


Localities cited: In cold mountains, Guanajuato, Guanajuato, and El Desierto de los Leones, D.F. ("in frigidis Guanaxuati et Carmelitarum Mexicanorum Eremit montibus. Floret Vere et Aseaste"). In the S. & M. herbarium, specimens labelled "Viola odorata" represent an unidentified species of *Viola* (nos. 4089, 4089bis, CNHM negs. 48800, 48801).

**Viola umbellata** Sessé & Moc. Fl. Mex. ed. 2. 198. 1894.

Type locality: Not stated. This name was attached in manuscript to an unfinished description in the nature of a memorandum not intended for publication. The entire published description is as follows: "Viola caerulea fruticoso, foliis alternis, oblongis, floribus umbellatis. Frutex octopetalis". Not found in the S. & M. herbarium. Not identified.

Type-locality: Nova Hispania; grown at the Madrid Botanical Garden, “a seminibus missa per D. Sessé”.
Type: Not seen. In the S. & M. herbarium this is represented by at least five specimens, under as many different names, all originally referred to Viola.

Viola sp. ("—Viola, [very long description of a vining shrub with alternate leaves and white inodorous flowers]") sensu Sessé & Moc. Fl. Mex. ed. 2. 198. 1894.
Locality cited: [Chiapas] ["ad fluviorum ripas in Tuxtlae Provincia. Floret Septembri"]).

Locality cited: [Veracruz] ["Habitat in Praedio de la Punta. Floret Augusto"]). Not identified.

Locality cited: [Veracruz] ["Habitat in Praedio de la Punta. Floret Augusto"]). Not identified.

Vitaceae

Cissus mexicana DC. in DC. Prodr. 1: 631. 1824, with citation of “fl. mex. inc. ined.” as the basis for the name.

Type-locality: Mexico. Lectotype: In the Torner Collection at the Hunt Institute, no. 0685, without any inscription except for an annotation by de Candolle, “Cissus angulata”. DC. plate 145, not cited in Calques des Dessins, is an adequate copy derived from Torner 0685, also annotated by de Candolle, “Cissus angulata”. Both agree precisely, as far as can be determined, with the description in the protologue. Leaves palmately 5-foliolate, glabrous, the leaflets petiolate, oblong-lanceolate, serrate.

J. A. Lombardi (Taxon 46: 427. 15 Aug. 1997) accepted this as a valid species, citing the holotype as an “[unpubl. icon copy from] Sessé & Moño, l.c. Fl. Mex. (G.’).”. The copy at Geneva cannot be the holotype, as de Candolle studied and annotated both copies, and the one in the Torner Collection is an original. The illustrations suggest Parthenocissus quinquefolia (L.) Planchon in DC. Monogr. Phan. 5: 448. 1887. In the S. & M. herbarium no. 496 (CNHM neg. 48829), which I should refer to Parthenocissus quinquefolia, was newly labelled by Mocíño during the final re-arrangement of the herbarium after 1804, “Cissus pentaphylla N.i. No. 317”. The number “317” does not pertain to a particular specimen, but to that species (cf. McVagh 1990, p. 209).


There is an apparent discrepancy here, which could readily be disposed of by examination of the above photographs, as both C. trifoliata and C. “salutaris” are distinctive in habit, foliage, and inflorescence. In the protologue the flowers of C. obtusifolia are described as white (not red as in C. erosa var. salutaris), and the plant is compared by Sessé & Mocíño with “Cissus trifoliatae nostrae”. The Cissus trifoliata of Sessé & Mocíño, as shown by the names on specimens in the herbarium, was not C. trifoliata L., but what Standley identified as Cissus rhombifolia Vahl.

Cissus rhombifolia Vahl, Eclog. Amer. 1: 11. 1796.

Reported from “Nouvelle Espagne” (“herb. Pav. in herb. Boissier, avec l’étiquette C. trifolia”) by Planchon in DC. Monogr. Phan. 5: 545. 1887. In the S. & M. herbarium nos. 495, 498, and 632 (CNHM negs. 48834–48839), labelled Cissus trifoliata, are according to Standley Cissus rhombifolia Vahl. One sheet (no. 495) bears in addition to the “trifoliata” label, a new label by Mocíño with the number 315 and the name Cissus rhombifolia. Although the descriptions are inadequate for identification, it is probable that this is the species included in the Pl. Nov. Hisp. 18. 1888, and ed. 2. 17. 1893; Fl. Mex. 28. 1893, and ed. 2. 26. 1894, as Cissus trifoliata [L.]. The specimens should be re-examined, as the true Cissus rhombifolia is not common in Mexico. Most of the specimens so-named represent C. cieciubitina Standl.


Locality cited [Pl. Nov. Hisp.]: “prope Quauhnahuacum, Floret Junio”; [Fl. Mex.]: Cuernavaca, Morelos ["Nascitur Quauhnahuacae, Floret Maior”]. Short description [Fl. Mex.] following two quoted diagnoses: “Scandit et superat arbores; flores rubri; baccæ nigres”. Neither the large vines nor the red flower suggest the true
trifoliata. In the S. & M. herbarium specimens labelled 'Cissus trifoliata' (nos. 495, 498, and 632; CNHM negs. 48834, 48836, and 48839) were determined as Cissus rhombifolia Vahl, q.v., a primarily South American species. The specimens should be reexamined; the description also suggests Cissus cucurbitina Standl., another vigorous red-flowered species that is common in south-central Mexico, the type from near Cuernavaca.


Type locality: [DC.]: "in Nova Hispania." Localities cited [S. & M.]: New Spain, and in Jamaica. Lectotype [DC.]: DC. plate 146, not noted in Calques des Dessins (Field Mus. neg. 30552). Lombardi (Taxon 46: 430. 15 Aug. 1997) cited this same painting as the holotype of C. tuberosa, at the same time referring the plant depicted to Cissus tiliae DC. 146 is an original painting, bearing the number "320." It cannot be treated as a holotype, as it was evidently drawn from the same specimens (but with some details changed as no. 0391 of the Torner Collection, which bears the hand-printed name "Cissus [Sicyoides Linn. crossed out]" and the annotation, "Cissus tuberosa", by de Candolle. These paintings represent Ic. Fl. Mex. 320, cited in Pl. Nov. Hism., and listed among the icons obtained on the "Second Excursion" (MA, mss.), that to Guerrero in 1789. In the S. & M. herbarium nos. 503, 647, and 1396 (CNHM negs. 48844-48847), labelled "Cissus sicyoides", are according to Standlee C. sicyoides L. Syst. ed. 10. 897. 1759. By Standlee (Conrr. U. S. Natl. Herb. 23: 732. 1923), this was upheld as a valid species contrasted with Cissus trifoliata by its deeply 5-lobate leaves. The plant carefully described by de Candolle from the painting had, however, as he stated "foliis obvatis...grosse serratis...jugis trifidis"). Assuming that Ic. Fl. Mex. 320 was based on material identified by Sessé & Mocín as Cissus sicyoides, then on the basis of recently determined herbarium material from their collections, I should assign C. tuberosa DC. to the synonymy of C. sicyoides L., a course indeed suggested tentatively by de Candolle himself.

"Cissus Tuxtlensis. Desc. fol. 12," a name not published by Sessé & Mocín, is found in their herbarium. No. 501 (CNHM neg. 48842), labelled as above, was determined by Standlee as Cissus sicyoides L.


Localities cited: "in Cuaximitlapa montibus et in India. Floret Maio". Not described. Not found in the S. & M. herbarium. Not identified. The locality, Quaxiniquila, Guerrero, was between Acapulco and Chilpancingo; see a note in McVaugh (1977, p. 176).


Localities cited [Pl. Nov. Hism.]: "Habita Mexici et in Europa"; [Fl. Mex.]: Cuernavaca, Morelos ("Habitat Quaunhauacae. Vulgo Uva cinamomaria"). Not described. In the S. & M. herbarium no. 870 (CNHM neg. 48849), labelled "Vitis labrusca", was determined by F. A. Barkley as Vitis tilifolia Humb. & Bonpl. It is interesting to note that the "wild grape" was confidently identified in Fl. Mex. with Vitis labrusca.


Localities cited: "Habita Mexici ac in temperatis omnibus terrae clymatibus". Not described in general terms, but the qualities of the fruit discussed at length. Not found in the S. & M. herbarium, but presumably correctly identified.

Winteraceae


Type-locality: Mexico. Type: "v. ic. pict."; lectotype in the Torner Collection, no. 0859, annotated "Drimys mexicana" by de Candolle. DC. plate 5, as cited in Calques des Dessins (Field Mus. neg. 30444), is a fair but incomplete copy of no. 0859. Not found in the S. & M. herbarium. The range of this variety, according to Smith (l.c.), is from Veracruz to Costa Rica.

Xyridaceae


Type locality: Ahuatlulco, [Tabasco]; ["in Aihuatluciapricis. Floret Septembri"]). It is clear from the account in Fl. Mex. that a Xyris, not a member of the Xyridaceae, was described. Furthermore, DC. plate 1084, labelled "Erioaulon anceps", is a well-colored painting of the head and a single flower of a species of Xyris, as is a nearly identical copy, no. 1975 of the Torner Collection.


H. N. Moldenke (erroneously, as it now appears) referred the name Erioaulon anceps Sessé & Moc. to the
Zingiberaceae

Alpinia bicalculata Sessé & Moc. Fl. Mex. 3. 1891; ed. 2. 3. 1894.

Type locality: New Spain and the Antilles ["cum praecedenti", i.e., Alpinia raccmosa"]. Not found in the S. & M. herbarium. "Ic. 7" is cited in the protologue; this numbering is in accord with a new system that was begun soon after 1800 for the entire herbarium and the collection of icones, but never put into use except for the first seven numbers. Alpinia bicalculata was described as similar to the preceding species [i.e., probably the species now known as Renialbia exaltata L.f., called "Alpinia racmosa"], but differing in having a simple subscape raceme, calyx deciduous from the fruit, bracts not amplexicaul, and corolla white and four times as long as the fruit. Not identified.

Alpinia bisulcata Sessé & Moc. Fl. Mex. 4. 1891; ed. 2. 3. 1894.

Localities cited: Tenampulco [Puebla] and Espinal [Veracruz] ["in umbrosis et calidis montibus de Tenampulco et Espinal: Floret Augusto"]. In the manuscript of Fl. Mex., the specific epithet was corrected from "racmosa" to "biscalculata"; through a printer's error it was published as "bisulcata". Described as a plant with the habit of Canna indica; stem four feet high, tunicate, the petioles sheathing; leaves oblong-lanceolate, somewhat veiny, glabrous, with a membranaceous purplish margin; racemes radical, simple, a foot and a half high; bracts of the pedicels and those below the calyx membranous, flaccid-marcescent; "calyx" beneath the fruit tubular, colored, marcescent; calyx proper tubular-campanulate, trifid, colored like the corolla; corolla tri-petalous, ringent, the upper petal wider, the lower two approximate; nectary adnate to the corolla, bilabiata; anther oblong, bilobed; fruit fleshy; seeds roundish, numerous, with pulpy aril and filiform appendage. From the description, this is probably a Renialbia, perhaps R. aromatica (Aubl.) Griseb. Fl. Brit. W. Ind. 601. 1864. Not found in the S. & M. herbarium.

Alpinia racmosa [L.] sensu Sessé & Moc. Fl. Mex. 3. 1891; ed. 2. 3. 1894.

Localities cited: New Spain and the Antilles ["in calidioribus et umbrosis Novae Hispaniae Antillarumque locis. Floret Augusto et Septembri"]. In the protologue is the citation "Ic. 6; Herb. 7"; these numbers refer to the new system that was begun for the entire herbarium and the entire collection of plates, probably by Mocío after the Expedition returned to Spain; see above under Alpinia bicalculata. The icon numbers were never cited beyond No. 7; the text included the genera Amomum, Costus, Maranta and part of Alpinia (cf. McVaugh 1977, p. 117). In the S. & M. herbarium no. 73 (CNHM neg. 46964) is a specimen that I take to be Renialbia exaltata L.f. Suppl. 79: 1782; it is identified as "Alpinia racmosa" [without the "N." that would mark it as a new name] and labelled as No. 7. It is unlikely that this was intended as a new species, although neither the character nor the description agrees with that of the Species Plantarum.

Nelson (1997) designated "Sessé 73" as "material type" of "Alpinia racmosa Sessé & Moc.," but this is inappropriate because no such name exists.

Amomum bimaculatum, see Marantaceae

Amomum latifolium Sessé & Moc. Fl. Mex. 1. 1891; ed. 2. 1. 1894.

Type locality: Near Córdoba, Veracruz ["in praedio 'Ojo de Agua' proprie Corduvam: Floret Septembri"]. Long description. Not found in the S. & M. herbarium. Not identified.

Amomum trispicatum, see Marantaceae


Locality cited: New Spain. The citation "Ic. 1; Herb. 1," appears in the text; for a note on this numbering system see above under Alpinia raccmosa. In the S. & M. herbarium there are 5 sheets of what I take to be Zingiber officinale Roscoe, Trans. Linn. Soc. London 7: 346. 1807 (Amomum: zingiber L.); these are nos. 62-66 (CNHM negs. 48853-48857); no. 66 is labelled "Amomum Zingiber ic." and "N. 1").


Localities cited [Pl. Nov. Hisp.]: "In utraque India" (i.e., in the tropics of both Old and New Worlds); in the West ["in Occidentali"] [in Guerrero], "ad torrentes fluminis Quaxinipilaeae in iuniere Acanpulum versus ducenti. Floret Julio". Ic. Fl. Mex. 282, cited in Pl. Nov. Hisp., represented by two nearly identical paintings in the Torner Collection, each bearing the number: "282". Torner no. 0256 bears the hand-printed name "Costus [Arabicus. crocoss out] Linn.", and "Spicatus Swarts" added in a hand unknown to me. Torner 1772 is without inscription except for the number and the annotation by de Candolle, "Costus spicatus Sw.". Not found in the S. & M. herbarium. Surely a species of Costus, but not further identified.
ZINGIBERACEAE

Locality cited [Fl. Mex.]: New Spain ["in calidioribus et humidioribus Nauae Hispaniae regionibus. Floret Augusto"]. "ic. 4; Herb. 4"; for explanation of this system of numbering see above under Alpinia racemosa. Presumably "ic. 4" is a reference to what was called "ic. 282" in Pl. Nov. Hesp. In the protologue of Costus spicatus sensu Sessé & Moc. no mention is made of Swartz, but it is probable that Moçinó (who wrote the new manuscript for this part of Flora Mexicana) had access to the Prodrumus of Swartz. The character published in Fl. Mex., "Costus folii utrinque glabris; spica oblonga, arcte imbricata", is surely derived from "C. folii utrinque glabris, spica multiflora subovata, arcte imbricata" as Swartz expressed it. In the S. & M. herbarium no. 72 (CNHM neg. 48860), labelled "Costus spicatus N. 4", is according to Standley Costus spicatus (Jacq.) Sw.

ZYGOPHYLLACEAE

Chitonia mexicana DC. in DC. Prodr. 1: 707. 1824, with citation of "Fl. mex. ic. ined." as the basis for the name. Morkilla mexicana (DC.) Rose & Painter, Smithsonian Misc. Collect. 50, part 1: 33. 1907.

Type locality: Mexico. Lectotype: In the Torner Collection, no. 1914 (in part), annotated (apparently by Sessé) "Antichorus", and by de Candolle, "Callispernum mexicanum". DC. plate 165, originally listed under the latter name, is missing from the de Candolle collection. DC. plate XXIV C [sketches only; Field Mus. neg. 30326], as cited in Calques des Dessins, seems to have been copied directly (but with the details differently arranged) from Torner 1914. It bears the printed name, presumably added by the artist Node-Véran, "Callispernum mexicanum", the generic name crossed out and replaced by de Candolle with "Chitonia". Not found in the S. & M. herbarium.


Localities cited: Apatzzingán, Michoacán, where said to flower in September; China and Ethiopia. Ic. Fl. Mex. 277, cited in Pl. Nov. Hesp., represented by no. 0499 of the Torner Collection, which bears the number "277" and an annotation by de Candolle, "Guaiacum acutifolium". It was reproduced in full color, reduced to ca. 13.8 by 10 cm, by McVaugh (1998, fig. 9, p. 159). Essentially identical is an original unnumbered painting at MA, which bears the hand-printed name "Guaiacum Afrum". It was listed by name, with description, and identified as RJF Lám. 75 in the Catálogo de las Láminas del Real Jardín Botánico (RJF 1987, p. 335). It was reproduced in full color by Maldonado Polo (1996, p. [322]). It is no. 39 of Ramírez (Anales Inst. Méd.-Nac. México 6, pt. 1: 77. 1903), who reported it as Ic. Fl. Mex. 279, but correctly stated that it is the same as DC. plate 160. DC. 160 is a copy, annotated by de Candolle "Guaiacum acutifolium" and "verticale Ort. Prodr. p. 707". In the S. & M. herbarium I found no specimen identified as Guaiacum by the collectors. Standley (Contr. U. S. Natl. Herb. 23: 523. 1923) stated that G. afrum sensu Sessé & Moc. is identical with Guaiacum coulteri A. Gray, Mem. Amer. Acad. Arts. ser. 2. 5: 312. 1855.


Type locality: New Spain; grown at the Madrid Botanical Garden, "a seminis missis per D. Sessé". Type: Not seen. According to Standley (Contr. U. S. Natl. Herb. 23: 522. 1923), Guaiacum verticale is a synonym of G. sanctum L. Sp. Pl. 382. 1753. The latter is a Caribbean species. If the type of G. verticale is extant, its identity should be carefully checked; most of the material that Sessé sent to Ortega was Mexican in origin, not Antillean.


Localities cited [Pl. Nov. Hesp.]: "in arenosis Acapulci, Zaylanique locis. Floret Novembri". The botanist Castille visited Acapulco in November 1789 and collected what he called "Tribulus lanuginosus" (Archive, MA, division 4, No. 14). There is a specimen under this name in the S. & M. herbarium, but neither collector nor locality is indicated (no. 1084, CNHM neg. 48869). It was determined by Standley as Tribulus cistoides L.


Locality cited: Cuernavaca, [Morelos], and Mazatlán, [Guerrero]; ["in calidis et aridis Quauidhuichaeae, Mazazlani et Jasmatiae locis. Floret Julio"]). In the S. & M. herbarium nos. 1034 and 1083 (CNHM negs. 48863, 48864), labelled "Tribulus maximus", both represent some species of the related genus Kallstroemia.


Type locality: Near Havana, Cuba; and in all hot regions of New Spain. Not found under this name in the S. & M. herbarium. The fruit is described as having "angulis tuberculatis". Presumably the plant was Kallstroemia maxima (L.) Torr. & Gray, Fl. N. Amer. 1: 213. 1838.


Type locality [DC.]: "in regno Mexicano". Lectotype: In the Torner Collection, no. 0116, without inscription except for an annotation by de Candolle, "Zygophyllum tridentatum". DC. plate 159, as cited in Calques des
Dessins (Field Mus. neg. 30560), is a fairly good partial copy of no. 0116. The plant depicted is the common cresote bush or "gobernadora" of the Mexican deserts. Moricand (i.e., p. 73) suggested that his Larrea mexicana was probably the same as Zygophyllum tridentatum DC. In the S. & M. herbarium the species is represented by no. 1018 (CNHM neg. 48866); the plant is referred to the genus Zygophyllum. The "gobernadora" was not treated in Pl. Nov. H isp., perhaps because the collectors had not seen the northern deserts before the spring of 1791 when the manuscript of Pl. Nov. H isp. was compiled. Why such a striking plant was not included among the descriptions that formed the Fl. Mex., we can only conjecture.

Pteridophyta


Locality cited: Cuba ["in flumine de Guantánamo Insulae Cubae"]. Description. Not found in the S. & M. herbarium. Maxon and Morton (Amer. Fern. J. 45: 152. 1955) speculated that the plants described probably were A. tenerum, which is common in eastern Cuba in the region of Guantánamo).


Type locality: Tlalpan, D.F. ["ad margines rivulorum Sancti Augustini prope Mexicum"]. Lectotype: No. 3849 of the S. & M. herbarium (CNHM neg. 48924), designated by Maxon and Morton, Amer. Fern J. 45: 152. 1955. In Fl. Mex. 187, this is represented by DC. plate 1301, an original painting bearing the number "187" and the name "Adiantum digitatum" (Field Mus. neg. 30882). An equivalent copy is no. 1110 of the Torner Collection, which bears the number "187", the hand-printed name "Adiantum digitatum. N.", and annotations by de Candolle "Pteris semisserrata" and "Mss. p. 389". The plant depicted is Pteris cretica L. Mant. 130. 1767.

"Adiantum pusillum N. [description]. Hav[anja] in ripis mariscinvisins".

In the S. & M. herbarium no. 3876 (CNHM neg. 48871) was determined by W. R. Maxon as Adiantum deltoideum Sw.


Locality cited: Santa Rosa, Guanajuato ["ad oppidum S. Rosae prope Guanaxauma"]. Short description. This may have been intended as a new name. The second treatment of A. trifoliatum on the same page is provided with a longer description, but no specific locality is cited. The diagnoses (characters) in the accounts differ from one another and from the one in Palau (7: 601. 1787), and there is no mention of any earlier author. Apparently nothing in the S. & M. herbarium is labelled "Adiantum trifoliatum", but Nelson (1997) designated "Sessé 3927" (CNHM neg. 48908) as "material tipo" of "Adiantum trifoliatum Sessé & Moc.". The specimen was labelled "Adiantum. 24–1". and it was determined by W. R. Maxon as Pellaea ternifolia (Cav.) Link.


No. 1646 in the Torner Collection was reproduced in full color as the frontispiece in Flora Novo-Gallicana, vol. 547
Type locality: New Spain, the original source not stated, and the plant perhaps known to Lagasca through herbarium specimens only. Not represented in the S. & M. herbarium.

"Lycopodium filiforme" Jalapa.
In the S. & M. herbarium no. 3882, so labelled, consists of a mixture of three species of lichens.

Lycopodium nidiforme Sessé & Moc. Fl. Mex. ed. 2. 239. 1894.
Type locality: Among rocks in many parts of New Spain. In the S. & M. herbarium no. 3906 (CNHM neg. 48927), labelled "Lycopodium nidiforme N.", is designated as "type" by Maxon and Morton (Amer. Fern J. 45: 155. 1955), who referred Lycopodium nidiforme to the synonymy of Selaginella pallasca (Pers.) Spring, in Mart. Fl. Bras. 1, pt. 2: 132. 1840. The same authors cited as "probable paratype" no. 3894 (neg. 48926), labelled "Lycopodium Nidus N.", in 1955 designated Sessé 3906 as "material type" of L. nidiforme.

Lycopodium repens Sessé & Moc. Fl. Mex. ed. 2. 239. 1894, not of Swartz.
Type locality: Among rocks in many parts of New Spain. Not found in the S. & M. herbarium. It was suggested by Maxon and Morton (Amer. Fern J. 45: 156. 1955) that this name was probably referable to Selaginella, subg. Euselaginella.

Locality cited: Tepelpa, D.F., 10–12 km SW of the center of present Mexico City ["in austris clivi Tepelpae prope Mexicoe alisque Americae locis"]. Not described. In the S. & M. herbarium nos. 3856 and 3861 (CNHM negs. 48917, 48918), labelled "Polypodium alatum", were determined by W. R. Maxon as Polypodium madrense J. Sm., and no. 3856 was reported under the same name by Maxon and Morton (Amer. Fern. J. 45: 153. 1955). In that same publication it appears that during the editorial process the heading for the paragraph on Polypodium alatum (p. 153) was replaced by the heading intended for Polypodium filic-mas, although the text of the paragraph dealt with P. alatum. The paragraph dealing with P. filamentum, with its own heading repeated, is on p. 154.


Polypodium furfuratum Sessé & Moc. Fl. Mex. ed. 2. 239. 1894.

Polypodium palmatum Sessé & Moc. Fl. Mex. ed. 2. 239. 1894, not of Blume.
Type locality: Cuba. Not found in the S. & M. herbarium. Unidentifiable, according to Maxon and Morton (Amer. Fern. J. 45: 154. 1955), who stated that the description of the fronds does not indicate an alliance with any known Cuban species.

Cited locality: In Nova Hispania et Jamaica. The entire protologue consisted of the name, the localities cited, and the diagnosis (character) quoted verbatim from Palau (7: 586. 1787). Nelson (1997) cited "Sessé 3854" at MA (CNHM neg. 48878) as "material type" of the Sessé & Mocino name, but this is inappropriate as no such name exists. Maxon and Morton (Amer. Fern. J. 45: 155. 1955) stated that the report of Polypodium pubescens was based on a misidentification, and that no. 3854 was referable to the genus Athyrium, "agreeing best with some of the Mexican forms that have been referred to Athyrium dombet Desvaux."
**Fungi**

As far as I am aware, there are no extant specimens of fungi in the S. & M. herbarium. The names of fungi published by Sessé & Mocíno include two (Agaricus clausus and Licopoderon americanum) that were apparently considered to represent new species. The others seem to have been taken directly from Palau’s *Parte Práctica*, with the diagnoses (characters) quoted *literatim* or somewhat modified. The principal sources of the names were in works listed by Palau (8: 63–68. 1788) as follows:

"Dalibard". *Flora Parisiensis*. *Parisiis*. 1749. **dud.**

"Flor. dan." Oederi et Mulleri Icones Florae danicae, cujus fasciculis XII, allegavi.


"Pall. it." F.S. Pallas Reise durch verschiedene Provinzen des russischen Reichs. *pars. I. III. Petersburg. 1771. 1776. in 4.*


Locality cited: "in Europae Novaevaque Hispaniae sitvis". Diagnosis only, quoted *literatim* from Palau 7: 882. 1787. Evidently not intended as a new name, though no reference was made to any previous publication.


Locality cited: México, D.F. ["in umbrosis praedii Sancti Nicolai montibus"]. Diagnosis only, derived from the one in Palau (see above), but modified.


Locality cited: "in umbrosis Sancti Eremiti montibus". Diagnosis and short comment. Not identified.


Locality cited [Fl. Mex.]: "Habitat in Xorulli praedcis", Diagnosis only, quoted *literatim* almost from Palau 7: 888. 1787. Not identified.


Locality cited: "in Eremon P.P. Carmelitarum". Diagnosis only. Not identified.


Locality cited: "cum praecedenti" = *P. igniarius* ["in Eremon P.P. Carmelitarum"]. Diagnosis only, quoted *literatim* from Palau 7: 895. 1787. Not identified.


Locality cited: "in Cordovae montibus". Diagnosis only, concluding with "Flor. Mex.". There is no reference to previous authors, but the character is very nearly identical with that in Palau 7: 911. 1787, where the name
is attributed to Dalibard (1749) and "Fl. dan. t. 857. f. 1".
Not identified.

**Clavaria pistillaris** [Pollich] sensu Sessé & Moc. Fl. Mex. ed. 2. 239. 1894.
Locality cited: "in Eremo P.P. Carmelitarum". Diagnosis only, concluding with "Flor. Mex.". There is no reference to previous authors, but the character, though only of four words, is apparently derived from that of three words in Palau 7: 910. 1787. Not identified.

**Licoperdon americanum** Sessé & Moc. Fl. Mex. ed. 2. 239. 1894.
Locality cited: "ad radices arborum Sancti Eremi P.P. Carmelitarum". Diagnosis only, concluding with "Flor. Mex. N.". The "N." may be interpreted as meaning, "Nova", i.e., a new species. Not identified.
Index to relevant names

Names in the index are those of plants and groups of plants, mostly those of species but also those of infra-specific ranks, and those of higher ranks, e.g., plant families. The one notable exception is the geographical name Nutka (or Notka), which is included because of its unique importance in the history of the Sessé & Mociño plants (see discussion under *Polygonatum nutkana*, page 441).

Parenthetical notations have been inserted throughout the index, either 1) to facilitate the location of an obscure name that appears in an unexpected place, e.g., as in "Achatocarpus nigricans (Myrt. racem.), 397", or 2) to list an alternative spelling or spellings, as in "Achimenes antirhina ("antirrhina")".

Abonia umbellata, 398
Abrus arborescens, 316
Abutilon, 378
amplexifolium, 377
andriueii, 376
mollicomum, 380
Acaena elongata, 455
Acacia
acanthocarpa, 324
aculeaticarpa, 324
amentacea, 289
angustissima, 325, 326
distachya, 289, 324, 325
esculent, 289
filicina, 326
filicoides, 325
lambertiana, 289
pedicellata, 321
penetral, 327
prosopoides, 325
quadriflora, 321
rotundata, 289, 328
tequitana, 326
villosa, 326
sp., an ant-acacia; (cf. Mimosa tenuifolia), 329
Acaciopsis amentacea, 289
Acalypha, 22
arborea, 22, 220
arvensis, 219
v. pavoniana, 219
brachyclada, 219
cineta, 219, 222
cordifolia, 219
depressa, 220
exilis, 220
glabra, 22, 220
hederacea, 220, 221
indica v. mexicana, 220, 222
interrupta, 222
laxiflora, 220
leptopoda v. glabrescens, 220
lindheimeri, 220

Acalypha
macroserma, 220
membranacea, 220
mexicana, 220
michoacana, 220
mollis v. polystachya, 220, 222
monostachya, 220, 221
cymoideae, 221
pastoris, 222
pauciflora, 221
cavoniana, 219
persimilis, 221
v. corchorifolia, 221
phleoides, 220, 221, 222
polystachya (polistachia), 221
racemosa, 221
rhombifolia, 219
rotundifolia, 221
schiedeana, 220
schlechtendaliana, 221
setigera, 221
setosa, 221
subtomentosa, 221
subviscida, 220, 221, 222
tetnonae, 221
tricholoba, 221
triloba, 221
unibracteata, 220, 221
villosa, 220, 222
virginica, 220, 222
sp. (see under monostachya), 220
Acanthaceae, 39–48
Acanthaceae? (indet.), 48
Acer, 48, 481
mexicanum, 48
negundo, 48
serratum, 48
ternatum, 48
trifolium (Thouinum), 48
Aeceraceae, 48
Achatocarpus nigricans (Myrt. racem.), 397
Achillea
milfoleifolium, 131
ptarmica, 131
Achimenes, 254
aauulis, 254
antirrhina ("antirrhina"), 256
longiflora, 253–254, 256
tenella, 254
sp. (Gesneria calcarata), 255; (Gesneria uniflora), 256
Achras, 34, 481, 483
acana, 481, 483
brevipes, 481
capivi, 11, 34, 483
duplicata, 481
mammosa (mamosa), 32, 481
microcarpa, 482
nitida, 482
olivacea, 482
prunifloris, 482
salicifolia, 483
sphaerocarpa (shorocarpa), 483
zapota, 481, 482
Achyronychia parryi, 123
Achyranthes
aspera, 49, 50
baccata, 51
conferta, 52
diotica, 50
glomerata, 49
lanata, 49
repens, 123
sarmentosa, 50
totonaca, 50
verticillata, 50; (cf. Cardionema), 121
sp. (Gomphrena), 52; (Hebanthe), 52
Achyrocliptus schuhiroides, 131
Acidanthera quadrata, 385, 388
Acmella leucantha (Osmites), 169
Acmisopus arborescens, 497
Acanthus
formosa, 132
formosa (Trixis corymbosa), 188
hebeclada, 132
mexicana, 172
sp. (Trixis), 188
Acroclidium salicifolium, 288
Actinocenta, 54
felicina, 53, 54
potentillifolia, 54
Actinonema
tetragonae, 132, 141, 148
tetraphea, 147
Adelia
bermardia, 222
decandra, 222
dodecandra, 222
glabra, 222
Adenaria floribonda, 354, 355
Adenopetalum ellipticum, 233
Adenophyllum, 133, 151
capillaceum, 132
coccineum, 132, 133, 191
glandulosum, 132, 133, 187, 191
porophyllum, 151
Adesmia
floribunda, 289
fruticulosa, 289–290
mimosoides, 290
Adiantum (Adiantum), 547
aethiopicum (ethiopicum), 547
cordifolium, 547
deltoidideum, 547
digitatum, 547
pulverulentum, 549
pusillum, 547
reniforme, 547
tenerum, 547
ternatum, 547
trapesiforme, 547
trifoliatum, 547
Adolphia infestta, 451, 452, 454
Aechmea
bernoulliana, 102
braeata, 102, 103
nudicaulis, 103
Aegoneta
longiflora (Ixora uniflora), 468
lutea (Hedyotis lutea), 467
sp. (Ixora uniflora), 468
Aegopogon, 258
cenchrif. 258
geminiflorus, 259
tenellus, 259
trisetus, 258
unisetus, 258
Aeschynome (Aeschynome, Eschynomone), 316
adscendens, 291
americana, 290
var. flabellata, 290
var. glandulosa, 316
amorphoides, 316
aspera, 290
elegans, 290
fascicularis, 290
fruticosa, 290
fruticulosa, 289, 290
indica, 290
longifolia, 290
mimosoides, 290
minata, 334
picta, 290
pumilla, 290–291
scabra, 291
villosa, 290
virgata, 291
Index

Aeschynomene (Aeschinomene, Eschynomene) sp. (Adesmia), 289
Aeschynomene, revision of (cf. Adesmia), 289
Agalinis peduncularis, 485
Aganippe bellidiflora, 133
Agaricus
  cinnamomeus, 549
clausus, 549
georgii, 549
quinquepartitus, 549
umbellifer (umbeliferus), 549
Agave, 341
  americana, 341
  brachystachya, 341, 346
  campanulata, 341
  fibrillosa, 346
  havanensis, 341
  monostachya, 341
  scabra, 341
  vinifera, 341
  vivipara, 341
Agdestis clematideae, 16, 430
Ageratum, 155, 156, 159, 170
coryzoides, 156, 179
corymbosum, 155, 179
febrifugum, 170
laciniatum, 133, 185
lineare, 133
maritimum, 156
 nudispermum, 156
obtusifolium, 179
paniculatum, 181
pedatum, 133–134, 274
pedatum (cf. Lorentea), 165
punctatum, 134, 182
purpureum, 134, 185
rivale, 134
[salicifolium] (cf. Stevia salicifolia), 185
striatum, 134
viscosum, 134–135, 184
sp., 135
Agonandra
  obtusifolia, 408
  racemosa, 125, 408
Agrimonia
eupatoria (eupatorium), 455
macarcarpa, 455
Agrostemma (Agrostemma) coronaria, 120
Agrostis
  indica, 257
  microsperma, 257
Aizoaceae, 48–49
Aizoencanariense, 48
Albatenia fruticosa, 46
Alchemilla
  folis trilobatis, 455
tormentillae, 456
vulgaris, 33, 456
Alchemilla sp. (Aphanes), 456
Alcinia
  ovalifolia, 135
  perfoliata, 135
Alegria candida, 526
Alisma
  flava, 49
  plantago-aquatica, 49
  verticillata, 49
Alismataceae, 49
Allamanda cathartica, 63
Allonia
  affinis, 398
  incarnata, 33, 398
  sp. (Quamoclidion), 401
Allium
  angulosum, 341
  odorum, 341
  schoenoprasum, 341
Alloispermum sebraum, 145
Allophyllus
  occidentalis, 479
  orientalis, 479
  zeylanicus, 479
Allopectus glaber, 254
Allowissadula sesseli, 380
Aloe
  variegata, 342
  viscosa, 342
Alomia (Tanacetum), 187
Aloysia ligustrina, 538
Alpinia, new numbering system for, 545
  bicalyculata (bicalyculata), 545
  bisulcata, 545
  racemosa, 382, 545, 546
Alsine
  aristata, 124
  cordata, 122
  molluginea, 120
  virgata, 122
Alstroemeria
  enneantha, 344
  polyantha, 344
  salsilla, 342, 344
Alternanthera
  axillaris, 50
  flavescens, 50
  laitifolia, 50
  obovata, 52, 53
  polygonoides, 52
Amaranthaceae, 49–53, 462
Amaranthus (Amaranthus)
cruentus, 50
polygonoides, 50, 53
spinosus, 50
verticillatus, 50
Amaryllidaceae, see Liliaceae
Amaryllis (Amarilis)
  biflora, 342
capensis, 342
cernua, 342
formosissima, 342
linearifolia, 343
nutans, 342
regina (reginae), 342
Amansonia integerrima, 39
Amblogyna polygonoides, 50
Amblyanthera andreuxii, 60
Ambrosia, 131
  absinthifolia, 135
  artemisifolia (artemisifolia, arthemisifolia), 135
  cumanensis, 135
  longifolia, 135, 159
  palustris, 135
  sp., 135: (Xanthium), 191
Amelanchier denticulata, 457
Amelus, 135, 146
  linearis, 135
  paniculatus, 135
  pedunculatus, 139
  repens, 135
Amicia zygomeris, 19, 291
Anamania (Anamania)
  auriculata, 354
  ramosior, 353
Anmni copticum, 529
Anomis caryophyllata, 396
Anomum (Anomum)
  bimaculatum, 382, 545
  latifolium, 382, 545
  trispicatum, 382, 545
  zingiber, 545
Anomum, new numbering system for, 545
Amoreuxia palmatifida, 87
Amorpha
  fruticosa, 292
  sp. (Atelcia), 292
Amphilophium
  paniculatum, 83
  var. molle, 83
  mutisii, 83
Amphiteca macrophylla, 85
Amyris (Amyris), see Burseraceae, 104
Amyris, 33
  acuminata, 105, 106
  ambrosiaca, 104, 105, 196
  angustifolia, 106
  bipinata, 104
  maritima, 105
  opobalsamum, 104
  reko, 477
  serrata, 105
  sylvatica, 104, 105
  tacamahaca, 104
  tecoma, 104
Anacardiaceae, 53–56
Anagallis arvensis (aruensis), 447
Anaphalis margaritacea, 160
Anatis rigida, 344, 345
Anchusa
  depressa, 89, 97
  incana, 89
  mexicana, 89
  tinctoria, 89–90
Andira inermis (Geoffroya), 315
Andromeda
  buxifolia, 218
  ciliaris, 219
  daboecia, 218
  glandulifera, 218, 236
Andropogon
  argenteus (argenteum), 257
  barbinodis, 257
  luguroides, 257
  saccharoides, 257
Androsclychnis
  lanceolata, 228
  rhombifolia, 228
Anellera
  greenmani, 131
  holosericea, 131
Anemia hirsuta, 547–548
Anemone sibirica, 447
Anemopsis californica, 484
Anguria
  diversifolia, 206
  trifoliata (trifolia), 206
  trilobata (triloba), 206
Anisacanthus
  insignis, 44
  pumilus, 44
  quadrifidos, 41, 44
  tulensis, 44
  virgularis, 41
Anisomeris
  barbata, 470
  protracta, 471
Anisophyllum concordus, 233
Anneslia
  hirsuta, 321
  strigillosa, 321
  tetraphylllla, 322
Annona
  biflora, 56
  fruticosa, 56
  globiflora, 56
  longifolia, 56
  muricata, 56
  praetermissa, 56
  purpurea, 56–57
  reticulata, 56
  squamosa (squammosa), 57
Annonaceae, 56–57
Anoda, 366, 377
   acerifolia, 366, 378
   crenataflora, 366
   cristata, 377
      var. albiflora, 366
dillenii, 366
extrema, 366
hastata, 377
parviflora, 366
pedunculosa, 379
pentaschista, 379
periptera, 367, 379
punicea, 366–367
urloba (Sida anoda), 377
Anoda, commentary by Sessé (Sida anoda), 377
Anotea flavida, 374
Anredera leptostachys, 79
Anthemis (Ferdinanda), 159, 160; (Spianthus), 179;
   (Tridax), 146
   americana, 135–136
   chia, 136
   chrysanth (chrysanta), 136
   crassifolia, 136
globosa, 136, 137
grandiflora, 136
   multiflora, 136
   orizavi, 136
   palustris, 136
   urloba, 136
   urloba ex Guanavacoa, 136
   trinervia (trinervata), 136–137
   valentina, 136, 137
   variabilis, 137
Anthericum, 343
   asphodeloides, 342
ciliatum, 342
contortum, 342
   graminifolium, 345
minimum, 343, 345
ossifragum (oxyfragum), 343
   ramosum, 343
reflexum, 343
   squamatum, 343
Anthisyzy aphilla, 104, 265
Anthurium schlechtendali, 68
Anthisl (Antilis), 307, 309
   tetraphylla, 291
Antichorus (Chitonia), 546
Antigonon
   cinerasca, 442
   leptopus, 442
Antiphytum
   floribundum, 96
   fruticosum, 90
   mexicanum, 90
oppositifolium, 90
Antirrhinum
   elatine, 485
Antirrhinum
   maculatum, 256
   majus, 485
   scandens, 491
   uniflorum (Gesneria), 256
   sp., 491
Antirrhoea
coriacea, 470, 476
dichotoma, 476
Aphanes uarvensis, 455–456
Aphanostephus humilis, 153
Aphelandra
   aurantiaca, 39
deppeana, 43
   gigantiflora, 39
   heydeana, 39
   scabra, 43
   sp. (Justicia teucriflora), 44
Apocynaceae, 58–67, 472
Apocynum (Apocinum), 58, 72
   amoenum, 67
   angustifolium, 58
   cannabinum, 61
      var. glaberrimum, 61, 63
cordifolium, 58
   fimbriatum, 58
   imbricatum, 58
   mexicanum, 58
   proliferum, 77, 78
tomentosum, 77, 78
   venenatum, 76
Apodanthera buratevi, 206–207
Aponogeton involucrata, 483–484
Apoleanesia paniculata, 335
Aptenia aphylla, 104
Aquilegia vulgaris, 447
Arabis pinnata, 205
Araceae, 68
Aralia, 68
   chilapensis, 68, 69
   fruticosa, 68, 69
   humilis, 68–69
   lobata, 69
   longifolia, 69
   ovata, 69
   pinnata, 69
   racemosa, 68
tuxilensis, 69
   sp., 69
Araliaceae, 68–69
Arbutus
   coccineus, 218
   ferruginea, 33, 218
   hirsutus, 218
   micronata, 218
   ovalifolia, 218
   salicifolia, 218–219
   unedo, 33, 219
Achibaecharis
  hieracioides, 158
  hirtella, 139, 153

Acrósthophylos
  arguta, 219
  longifolia, 218
  polifolia, 218
  pungens, 218

Ardisia
  bracteosa, 394, 395
  capollina, 394
  compressa, 394
  esculentata, 395
  revoluta, 394

Arémana
  dichotoma, 121
  lanuginosa, 124
  molluginea, 120
  multicaulis, 120
  pentagynta (pentagynia), 124
  repens, 120
  reptans, 120
  serpilfolia (serpilfolia), 120–121
  verna, 121
  vulcanica, 121

Argemone
  mexicana, 426
  platyceras, 426

Argithamnia
  fasciculata, 236
  sp. (Jatropha miltii), 237

Argyrocheta bipinnatifida, 191

Aristida
  divaricata, 257
  lagaseae, 257
  laxa, 257

Aristolochia, of Sessé & Mocíño, 69
  anguicida, 69, 70, 71
  bilahtata, 70
  bracteosa, 69–70
  brevipes, 71
  calceiformis, 70
  caudata, 70
  foetida, 69, 71
  glossa, 70
  grandiflora, 70
  indica, 70
  inflata, 69
  longa, 70
  longicaudata, 71
  longifolia, 70
  mexicana, 69
  microphyllo, 70
  obtusifolia, 70
  odoratissima, 70
  orbiculata, 70
  pavoniana, 70
  pentandra, 70, 71

Aristolochia
  pentandria, 71
  porphyrophylla, 71
  pringlei, 71
  procumbens, 71
  rotunda, 69
  sagittifolia (sagittifolia), 71
  sempervirens, 71
  taliscana, 70
  tigrina, 70
  velutina, 71

Aristolochiaceae, 69–71

Artemisia
  chinensis, 137
  douglasiana, 137

Artrostroma ciliatum, 384

Arctostemon hastatum, 228

Arum
  auritum, 68
  digitatum, 68
  divaricatum, 68
  repens, 68

Arundo phragmites, 257

Asarum mexicanum, 71

Asclepiadaceae, 71–79

Asclepias, 76
  amoena (amoena), 71–72, 73
  angustifolia Schweig., 73, 75
  angustifolia Sessé & Moc., 72, 73
  auriculata, 73
  contrayerba, 72
  cordata, 72
  curassavica, 72
  filiformis, 8, 73
  foetida, 72
  glaberrima, 72–73
  glauescens, 72
  grandiflora, 74
  incarnata, 8
  jaliscana, 72
  lanuginosa, 73
  latifolia, 73
  linaria, 8, 73
  longicornu, 72, 73
  longifolia, 73
  mazatlanensis, 72, 73
  mexicana, 73
  neglecta, 73, 74
  oenotheroides, 72, 73
  ovata, 72, 73
  pratensis, 73, 74
  purpurascens, 73
  repanda, 73–74
  scandens, 74
  setosa, 72
  subulata, 74
  syriaca (sirica), 73, 74
  undulata, 74
INDEX

Asclepias
verticillata, 73, 74
virgata, 72, 74–75
volubilis, 74
sp., 73
Acesyrum hypericoides (hypericoides), 260
Asimina, 57
Asperula, see Borreria haemkeana, 461
Aspicarpa
brevipes, 358, 360, 362
hirtella, 358
urens, 358
sp. (Banisteria), 358, 360
Aspilia purpurea (Helianthus), 161
Astephanus pubescens, 77
Aster
aurantius, 137
chinensis, 137, 138
diversifolius, 150
exilis, 152
glutinosus, 137
pinnatifidus, 137
pinnatus, 137–138, 162, 275
reptans, 138
scandens, 138
setiger, 138
spathulatus, 150
squarrosus, 138
tanacetifolius, 137
variabilis, 138
sp., 138
sp. N., 138; (Grindelia), 160
Asterohyptis
mociniana, 270, 271
stellulata, 270, 271
Astianthus, 83, 85
longifolius, 83, 85
viminalis, 83, 85
Astragalus, 291
ammodyes (Amodites), 291
astragatus, 291
carnosus, 316
chinensis, 291
contortuplicatus, 291
equidica, 291
formosus, 316
liquiritaefolius, 292
mexicanus, 291
mollissimus var. irostanus, 291, 292
niquiricaefolius, 291–292
orizabae var. irostanus, 292
stipulatus, 292
tomentosus, 292
sp. (Diphysa), 292; (Lonchocarpus), 323
Atelea
gummifera, 292
pierocarpa, 292
Athanasia, 139, 146
capitata, 138–139
dentata, 139
herbacea, 139
nudisperma, 139, 145
procumbens, 139, 145
pumilla, 139
ternifolia, 139
Athana coerulea, 155
Athyrium dombet, 548
Atirplex
linifolia, 125–126
monoica, 126
pacific, 126
pentandra, 126
polygama, 126
sp. (cf. Nolina), 345
Auropa
arborea, 193, 495
de Mexico (Nectouxia), 500
physalodes (physaloides), 495
procumbens, 496
umbellata, 496
sp. (Capsicum), 496
Avena
elator, 257
fatua, 257
Avicennia
nitida, 534
tomentosa, 533–534
Avenia
berlandieri, 517, 518
cardioptelata, 517
cordifolia, 517
deferruginea, 518
fruticosa, 518
jaliscana, 517
magna, 517–518
ovata, 518
parviflora, 518
pusilla, 517
rotundifolia, 518
sp. nova, 517
Azanza insignis, 367
Baccharis
denticulata, 139
glutinos, 177
heterophylla, 181
salicifolia, 177
thesioides, 158
trinervis, 146, 158
var. rhegioidea, 146
sp. (Pluchea), 160
Bacopa
monnieri, 489
procumbens, 489
Bactris pavoniana, 425
Badiera
cirrhosa, 83
congruata, 83
Balbisia elongata, 139
Baltota
migra, 268
parviflora, 268
repens, 270
suaveolens, 268
tomentosa, 270
sp. (Hypotis lilacina), 270
Banisteria, 358
acuminata, 361
brevipes, 358, 359
brevipes (Gaudichaudia webbiana), 362
eeneptera, 358
fulgens, 358, 359
hispida, 358–359, 362, 363
hispida (cf. Hiraea podocarpa), 363
laurifolia, 32, 359, 363
michoacanensis, 359
microphylla, 358, 359
muconatra, 359
nitida, 360
paniculata, 359–360
pentandra, 359, 360, 361
procumbens, 360
rotundifolia, 360, 364
scandens, 32, 359
scandens (cf. Rauwolfia nitida), 65
ternata, 360
umbellata, 360
varifolia, 360–361
virgata, 358
vitifolia, 360, 361
volubilis, 361
sp. (Thryallis hirsuta), 366
Barleria
micans, 42
oenotheroides, 42
sp., 39
Barroessa pavonii, 139–140, 155
Basellaceae, 79
Bastardia, 379
moehringioides, 123
viscosa, 381
Batatas quinquefolia, 197
Batidaceae, 79
Batis maritima, 79
Bauhinia (Bauhinia)
aculeata, 34, 292
cumanensis, 292, 293
diviridata, 293
leptopetala, 292–293
monopetala, 293
pes-caprae, 293
purpurea, 293
scandens, 292, 293
Bauhinia (Bauhinia)
spathacea, 293
subrotundifolia, 293
ungiuiculata, 293
ungulata, 293
Bdallophyton, 447
Begonia, 79, 80
angulata, 81
angustifolia, 79
angustiloba, 79, 81
balmisiana, 11, 79–80, 82
var. mitellifolia, 79, 80
barkeri, 81
biserrata, 79, 81
boissieri, 80, 82
bulbillifera, 80, 82
decandra, 80
dentata, 79
dipetala, 80
extranea, 80, 81
glabra, 81, 82
gracilis, 80
var. martiana, 80, 82
heracleifolia, 80
macrophylla, 79, 80–81
manicata, 81
monophylla, 81
monoptera, 79, 80, 82
neltumbifolia, 81
nudicaulis, 81
oaxacana, 81
palmaris, 79, 81
palmata, 79, 81
pelata, 81
populifolia, 79
pustulata, 81
religia, 81
reniformis, 80
repens, 81–82
suffruticosa (suffruticosa), 80
syphilitica (siphylitica, syphilitica), 34, 79, 82
tovarensis, 80, 82
tuberosa (tuverosa), 79, 80, 82
uruapensis, 31, 81, 82
Begonia of Sessé & Mocío, 80
Begoniaceae, 79–82
Bellis
annua, 140, 152
perennis, 140, 153
Bellucia macrophylla, 384
Belotia mexicana, 526
Berberidaceae, 82–83
Berberis
aquifolium, 82
pinnata Lag., 82–83
pinnata Sessé & Moc., 83
Bernardia
dodecandra, 222

INDEX

Bernardia
  interrupta, 222
  mexicana, 222

Bertolonia gueroides, 456

Besleria (Bestena)
  cristata, 254
  glabra, 254
  lutea, 254
  oxycardia (Lophospermum), 491
  resupinata, 254
  scandens (Loph.), 491

Betonica alopecurus, 268, 269
Betula alnus, 83
Betulaceae, 83

Bidens, 132, 140, 141
  aurea, 140
  crocata, 140
  cynapiifolia, 149
  ferulaefolia, 140, 141
  var. foeniculaefolia, 140
  foeniculifolia, 140
  guatimalensis, 140
  helianthoides, 140
  heterophylla (heterophilla, heterophilus), 140, 179, 180
  humilis, 140
  laevis, 140
  nivea, 140–141
  odorata, 141
  ostruthioides, 149
  pilosa, 141
  forma odorata, 141
  var. radiata, 149
  procera, 140, 141
  purpurea, 141, 149
  reptans var. urbani, 149
  sambucifolia, 141
  squarrosa, 149, 180
  tetragona (tetragonus), 132, 141, 148

Bignonia. 83, 86, 446
  aequinoctialis (equinoctialis), 83
  alata, 86
  argentea, 83
  brachiata, 83–84
  brevisiliqua, 85
  grandiflora, 84
  kerere, 84
  leucocoylon, 84
  linearis, 84
  macrophylla, 84
  martynoides, 86
  muricata, 54, 86
  nerioides, 85
  paniculata, 83
  pannonia, 84–85
  pentaphylla, 84
  pubescens, 85
  quinquefolia, 85
  salicifolia, 6, 83, 84, 85

Bignonia
  salicifolia (Portulaca patens), 446
  stans, 85
  tenemiosa, 87
  tubaeformis, 84
  verticillata, 85

Bignoniaceae, 83–87, 487

Biophytum dendroides, 425

Bivonaea multicaulis, 121

Bixa orellana, 87

Bixaeeae (Cochlospermaceae), 87

Blakea, 383
  laevigata, 383–384, 385
  macrophylla, 384
  mexicana, 384
  repens, 384
  trinervis (trinervia), 383

Blechum
  browni, 45, 47
  pyramidatum, 45, 47

Bletia
  adenocarpa, 409
  coccinea, 422
  reflexa, 422
  sp. (Bulbophyllum), 422

Bocconia
  arborea, 426
  cernua, 16, 426
  frutescens, 10, 31, 426
  var. cernua, 16, 426
  glaucifolia, 426
  integrifolia var. mexicana, 426
  laxiflora, 426

Boebera
  alterifolia, 151
  grandiflora, 151

Boeberoides grandiflora, 151

Boehmeria caudata, 532

Boerhavia (Boerhavia, Boerhavia, Boerhavia), 402
  aggregata, 401
  cariba, 399
  diffusa (difussa), 398–399
  erecta, 399
  gibbosa, 401, 402
  hirsuta, 399
  octandra, 401
  pentandra, 401, 402
  scandens, 399
  spicata, 399
  triandra, 399
  viscosa, 399
  sp. (Trinantia), 401

Boerhavia, numbers assigned to species, 399, 400

Boletus
  igniarius, 549
  luteus, 549

Bomarea hirtella (Alstroemeria), 342, 344

Bombacaceae, 87–88
Bromelia
  karatas, 102
  nudicaulis, 102
  pinguin, 102
Bromeliaceae, 102–104
Bromus
  laciniatus, 258
  pendulinus, 258
Brongniartia
  inconstans, 292
  lupinoideae (Harpalyce), 316
  podalyrioidae, 292
  sp. (Astragalus mexicanus), 291; (A. stipulatus), 292
Brongniartia
  spinosa, 250
Brotera ovata, not an American plant, 518
Broussonetia spiniflora, 293
Brya amorphoides, 316
Bryonia
  alba, 207
  americana, 207
  dioica, 207
  sagittata, 210
  tuxtensis, 207
Buchnera, 494
  asiatica, 485
  asiatica (Verbena scabrella), 494
  bipinnata, 486
  depressa, 28, 485
  erninflora (Verbena scabrella), 494
  fimbriata, 485
  grandiflora, 32, 485–486, 489, 492, 494
  longifolia, 486
  multifida, 486
  obliqua (Verbena scabrella), 494
  physaloides (physalodes), 491
  pinnata, 486
  pinnatifida, 486
  pusilla, 486
Buclida
  buceras, 128
  spinosa, 128
  umbellata, 128
Buddleja (Budleya, Budleia, Buddleia), 350
  americana, 33, 349–350
  cayolizan, 350
  cordata, 350
  occidentalis, 350
  perfoliata, 350
  sessiliflora, 350
  verticillaris (verticillata), 350
Buffonia (Bufonia) tenuifolia, 123
Bulbocodium stellatum (stelatum), 344
Bulbostylis
  cavaniellesii, 141–142
  veronicaefolia, 142
Bumelia, 482
  celastrina, 482
  dentiflora, 482
### Index

<table>
<thead>
<tr>
<th>Bumelia</th>
<th>Cacalia</th>
</tr>
</thead>
<tbody>
<tr>
<td>laetevirens, 482</td>
<td>nuts, 143, 144, 174</td>
</tr>
<tr>
<td>lycioides, 482</td>
<td>peltata, 143</td>
</tr>
<tr>
<td>spiniflora, 482</td>
<td>pinnatifida, 143–144</td>
</tr>
<tr>
<td>spinosa, 482</td>
<td>rotundifolia, 174–175</td>
</tr>
<tr>
<td>Bunchiosa, 361, 365</td>
<td>sarracenica, 144</td>
</tr>
<tr>
<td>lindeniana</td>
<td>sinuata, 143, 144</td>
</tr>
<tr>
<td>var. mexicana, 361</td>
<td>sonchifolia, 144</td>
</tr>
<tr>
<td>var. mexicana (Malp. spic.), 365</td>
<td>spathulata (spatulata), 144, 145, 165</td>
</tr>
<tr>
<td>sessilifolia, 361</td>
<td>tussilaginea, 143</td>
</tr>
<tr>
<td>Bunias orientalis, 205</td>
<td>tuberosa, 143, 144</td>
</tr>
<tr>
<td>Buphthalmum (Buphthalmum)</td>
<td>uniflora, 144</td>
</tr>
<tr>
<td>diversifolium, 142</td>
<td>viscosa, 144</td>
</tr>
<tr>
<td>helianthoides (helianthoides), 142, 146</td>
<td></td>
</tr>
<tr>
<td>procumbens, 142</td>
<td>Cactaceae, 106–111</td>
</tr>
<tr>
<td>scabrum, 142</td>
<td></td>
</tr>
<tr>
<td>Bupleurum tuberosum, 529</td>
<td></td>
</tr>
<tr>
<td>Burmanniaceae, 104</td>
<td></td>
</tr>
<tr>
<td>Bursera, 54, 105, 106</td>
<td>Cactus</td>
</tr>
<tr>
<td>bipinnata, 54, 104</td>
<td>canescens, 109</td>
</tr>
<tr>
<td>copallifera, 105</td>
<td>cassythoides, 111</td>
</tr>
<tr>
<td>fagaroides, 105, 106</td>
<td>cochenillifer, 109</td>
</tr>
<tr>
<td>galeottiana, 106</td>
<td>columnaris, 108</td>
</tr>
<tr>
<td>grandifolia, 106</td>
<td>cornigerus, 107</td>
</tr>
<tr>
<td>jorullensis, 105</td>
<td>coronatus, 109</td>
</tr>
<tr>
<td>lancifolia, 104</td>
<td>coronarius, 106</td>
</tr>
<tr>
<td>multijuga, 106</td>
<td>crispatus, 107, 108</td>
</tr>
<tr>
<td>penicillata, 105</td>
<td>cylindricus, 106</td>
</tr>
<tr>
<td>sarcopoda, 104, 106</td>
<td>fimbriatus, 110</td>
</tr>
<tr>
<td>serrata, 105</td>
<td>frutescens, 110, 111</td>
</tr>
<tr>
<td>tecomaca, 104, 105</td>
<td>geminiflorus, 110</td>
</tr>
<tr>
<td>Burseraceae, 91, 104–106</td>
<td>geminifolius, 110</td>
</tr>
<tr>
<td>Byrsonima, 361, 365</td>
<td>helicteres, 108</td>
</tr>
<tr>
<td>coriacea var. spicata, 365</td>
<td>lateriflorus, 111</td>
</tr>
<tr>
<td>crassifolia, 365</td>
<td>legionensis, 110</td>
</tr>
<tr>
<td>cumingana, 365</td>
<td>matiari, 110</td>
</tr>
<tr>
<td>pulchra, 361</td>
<td>multiangularis, 108</td>
</tr>
<tr>
<td>spicata (Malp. spic., Malp. undulata), 365</td>
<td>nudus, 109</td>
</tr>
<tr>
<td>Byttneria</td>
<td>obvallatus, 108</td>
</tr>
<tr>
<td>aculeata, 517, 518</td>
<td>opuntiaeflorus, 110</td>
</tr>
<tr>
<td>lanceolata, 518</td>
<td>oxypetalus, 107</td>
</tr>
<tr>
<td>scabra, 518</td>
<td>pereskia, 111</td>
</tr>
<tr>
<td>Cacalia</td>
<td>phyllanthoidea, 106</td>
</tr>
<tr>
<td>acuminata, 144</td>
<td>phyllanthus (phyllanthus), 106–107</td>
</tr>
<tr>
<td>albicans, 142</td>
<td>portulacifolius, 111</td>
</tr>
<tr>
<td>amplifolia, 143</td>
<td>quadrangularis, 107</td>
</tr>
<tr>
<td>atriplicifolia, 142</td>
<td>quadriflorus, 109</td>
</tr>
<tr>
<td>digitata, 143</td>
<td>rotundifolius, 110, 111</td>
</tr>
<tr>
<td>echinata, 143</td>
<td>speciosissimus, 107</td>
</tr>
<tr>
<td>ficoidea, 143</td>
<td>speciosus, 107</td>
</tr>
<tr>
<td>incana, 142</td>
<td>subquadriflorus, 109</td>
</tr>
<tr>
<td>jatrophioides, 143</td>
<td>subulatus, 109</td>
</tr>
<tr>
<td>linaria, 143</td>
<td>urinarius, 107</td>
</tr>
<tr>
<td>lobata, 174</td>
<td>zinniaeeflorus, 111</td>
</tr>
<tr>
<td>lyrata, 143</td>
<td></td>
</tr>
<tr>
<td>macrophylla, 143</td>
<td>Caelalpinia</td>
</tr>
<tr>
<td>megaphylla, 143</td>
<td>biquadrifijuga (biquadrifijuga), 16, 302</td>
</tr>
<tr>
<td>napellifolia, 144</td>
<td>bonduc (Guil.), 315</td>
</tr>
<tr>
<td></td>
<td>cacalaco, 294, 302</td>
</tr>
<tr>
<td></td>
<td>compressa, 294</td>
</tr>
<tr>
<td></td>
<td>coriaria, 335</td>
</tr>
<tr>
<td></td>
<td>exostemma, 294, 334</td>
</tr>
<tr>
<td></td>
<td>horrida, 302</td>
</tr>
</tbody>
</table>
Caesalpinia  
pulcherrima, 335  
sappan (sapan), 294  
vesicaria (vesicaria), 16, 294, 302  
sp. (Sophora), 338  
Cajanus bicolor, 303  
Caladium bicolor, 68  
Calamintha macrostema, 271  
Calandra  
caulescens, 444, 445  
micrantha, 445  
sp., 445  
Calathea  
alliouia, 382  
lutea, 382  
sp., 382  
Calceolaria  
mocinoana, 541  
sp. (cf. Pinguicula mex.), 340  
Calea, 139  
infrutescifolia (Verb. frut.), 189  
multiradiata, 136  
oppositifolia, 139, 144  
palmata (Verb. tr.), 190  
peduncularis, 139  
procumbens, 139  
sacra, 145  
var. longifolia, 139, 145  
var. peduncularis, 139  
sp. (Verb. mex.), 190  
Calhounia robinsonii, 164  
Callaeum macropterum, 359, 362  
Calliandra [group] Houstonianae, 321  
Calliandra, 289  
canescens, 322  
cruziana, 294  
emarginata, 294, 321  
formosa, 326  
hirsuta, 321, 325  
lambertiana, 289  
laxa, 289  
papillosa, 327  
tetraphylla, 322  
sp. (Mim. Octo.), 327  
sp. (Inga anom., Inga houst.), 321; (Inga tet.), 322  
Callicarpa  
americana, 534  
laxiflora, 534  
pringlei, 534  
Callichlamys latifolia, 84  
Callisia  
isinsignis, 129  
repens, 129  
Callispernum mexicanum, 546  
Callistephus chinensis, 137  
Calochortus  
barbatus, 344  
hartwegii, 344  
Calochortus, subsect. Barbatae, 344  
Calonyction acuteatum, 195  
Calophrantes maranthonis, 47  
Calophyllum  
brasilense var. reikoi, 260  
inophyllum, 260  
Calyphron  
longifolius, 139, 145  
scaber, 139, 145  
Calyptranthes pallens var. mexicana, 395  
Calyptropéteria var. mexicana, 541  
Calyxhymenia, 399  
aggregata, 399  
glabrfolia, 399–400  
Camerarea, 64  
dentiflora, 66  
lanceolata, 64  
latifolia, 58, 64  
Campanula  
penduliflora, 111  
rotundifolia, 111  
Campanulaceae, 111–114, 137  
Campelia zanonia, 130  
Canavalia, 294  
sensiformis, 294  
var. albida, 294  
maritima, 301  
obtusifolia, 301  
rutilans, 294  
villosa, 315  
sp., 315; (Dol. sp.), 312; (Dol. und.), 312; (Ononis), 330  
Canela winterana (winteriana), 114  
Canellaceae, 114  
Canna  
bimaculata, 382  
glauc, 114  
indica (Alpinia bisulc.), 545  
Cannaceae, 114  
Caperonia palustris, 226, 238  
Capparidaceae, 114–118  
Capparis  
amplissima, 114, 115, 116  
var. portoricensis, 114  
angulata, 115  
angustifolia, 114, 116  
asperifolia, 114  
badueca (badueca, baduec), 114, 115, 116  
brachyphalla, 114, 115  
brevissiliqua, 114  
breynia, 114, 116  
coccolobifolia, 115, 116  
cuneifolia, 114, 115  
cuneiformis, 114–115  
cyclophallodes, 115  
cyclophallophora (cyclophallophora), 114, 115, 116  
var. angustifolia, 116  
diversifolia, 115
INDEX

Capparis
terruginea, 115
textuosa, 114, 115, 116
frondosa, 114, 115
furfuracea, 16, 114, 115–116
gynandra, 116
hastata, 114, 115, 116
   forma coccolobifolia, 116
incana, 115
indica, 115, 116
jamaicensis, 116
lanceolata, 115
nitida, 114, 115, 116
ovata, 115
portoricensis, 115, 116
siliquosa, 116
tehuantepecensis, 116
umbellata (umbellata), 34, 116

Capra
biﬂora, 486
crustacea, 493, 494
durantifolia, 486, 493
humilis, 493
saxifragnolia, 486
tenuifolia, 486
ternifolia, 486–487
verticillata, 487

Caprifoliaceae, 118–119

Capsicum
frutescens, 496
stramoniifolium, 496
sp. (Lucuma salic.), 483

Cardionema multicaule, 121

Cardiospernum
halicacabum, 479
pubescens, 479

Carduus
eriophorus, 145
mitis, 150
nutans, 145
palustris, 145

Carica, 32, 120
boissieri, 120
cauliflora, 120
leptophylla, 33, 120
mexicana, 120
papaya, 33, 119–120
pentagona, 120
quinqueloba, 120

Caricaceae, 119–120

Carissa
longifolia (Echites undul.), 63
verticillata, 58

Carlowrightia
arizonica, 41
cordifolia, 40
glabra, 43
glandulosa, 43

Carlowrightia
linearifolia, 39–40
neesiana, 43
parviflora, 39

Carminatia tenuiflora, 145

Carolinea
fastuosa, 88
minor, 88
pompalis, 88
princeps, 88

Carphalea pubiflora, 461

Carthamus tinctorius, 145

Caryophyllaceae, 120–124, 261, 443

Casearia
aculeata, 247
arborea, 249
decandra, 248
dentata, 247, 248, 249
dubia, 247
guianensis, 248, 249
nitida, 247
obovata, 247, 249
sylvestris, 249

Cassia, 17, 18, 338; revision of, 295
abrus, 295
alta, 31, 295, 299
albida, 295
arborescens, 295, 300
armillaris, 297
atomaria, 32, 295, 298
   var. glabrata, 295–296, 298
axillaris, 296
bacillaris, 296
bicapsularis, 297, 338
biﬂora, 32, 296, 297
bonduc (Guil.), 315
brachystachya, 299
brevipes, 295
cericea (Senna lind.), 337
chamaecria, 296
corymbosa, 296
crocata, 296
crotalaroides, 337
diphyllo, 296; diphyllo (Ononis), 330
dulis, 296–297
elliptica, 297
emarginata, 297, 299
ferruginea, 338
fistula, 297
fistuloides, 297
flexuosa, 298, 300
floribunda, 296
foetida, 297
foetidissima, 297
fruticosa, 296
geminiflora, 296, 297
geniculata, 297–298

563
Cassia
grandis, 295, 298
holwayana, 300
kunthiana, 300
laevigata, 296, 300
leiophylla, 298
  var. pubescens, 298
leptadenis var. jaliscensis, 301
ligustrina, 298
lindheimeriana (lindheimeri), 337
marginata, 299
mexicana, 297
michoacanensis, 298
microphylla, 299
mimosoides, 298, 301
nicaraguensis, 337, 338
nuttans, 295, 296, 298
obovata, 338
obtusifolia, 298, 338
pallida, 296
parviflora, 298–299
patella var. glabrata, 301
pauciflora, 299
pilosa, 299
polyantha, 295, 299
polyphylla, 299–300
procumbens, 300
pubescens, 338
quadrijuga, 338
recurvata, 298
reticulata, 338
rufa, 296
septentrionalis (septentrionalis), 300
serpens, 301
simplex, 301
simulans, 297
speciabilis, 295
stenocarpa, 298, 301
tagara, 300
tenuissima, 299, 300
tomentosa, 295
tora, 300, 338
totonaca, 295, 300
tristicula, 296
undulata, 300
uniflora, 301, 338
variegata, 338
villosa (vilosa), 297, 337
viminea, 296, 300
vogeliana, 337
sp. (Ononis), 330
sp. nova, 297, 299
Cassinae, revision of, 295
Castilla elastica, 392
Castilleja
arvensis, 488
bipinnata, 488
communis, 488
Castilleja
fissifolia, 487
indivisa, 487
integrifolia, 487
lutea, 487
macrostigma, 487
pinnata, 487–488
pringlei, 487
pulcherrima, 488
tenuiflora, 487
fusca, 488
Catesbaca erecta, 462
Catharanthus roseus, 67
Cathartocarpus fistuloides, 297
Cataphora capitata, 273
Cattleya maxima, 408, 409, 410
Cayaponia attenuata, 206, 207
Ceanothus (Ceanactus), 451
africanus, 31, 451
americanus, 450, 451
azureus, 450, 451
caudatus (coruleus), 450, 451
granulosus, 452
gregii, 451
macrocarpus, 451
mocinianus, 451
pauciflorus, 451
Celea diversifolia, 391
Cecropia
mexicana, 392
obtusifolia, 392
penduliflora, 392
peltata, 392
Cedrela, monograph of, 389
angustifolia, 389
odorata, 389
Celba aesculifolia, 88
Celastraceae, 124–125, 408
Celastrus
bullatus, 125
mexicanus, 124
Celosia
alomiris (alomiris), 50
cristata, 50
digynia, 51
dioica, 51
niuida, 51
nudiflora, 52
paniculata, 51
sarmentosa, 50
tripetra, 51
virgata, 51
Celtis, 453
epiphylladenia, 529
iguanae, 453, 529
lima, 531
occidentalis, 529
pallida, 453
INDEX

Cenchrus granularis, 258
Centaurea
  americana, 145
  carthamoides, 147
  grandiflora, 145
  mexicana, 145
  patens, 145
  rothrockii, 145
Centaurium calycosum, 252
Centella erecta, 530
Centrosema
  plumieri, 301
  sp., 301
Centunculus
  minimus, 447
  sexangularis, 447
Cephalis
  cyanocarpa (cf. Xyris under Hibiscus virgin.), 371, 462
tomentosa, 462
Cephalanthus occidentalis, 462
Cerasium, 123
dichotomum, 121
lanuginosum, 121
nutans, 121
purpureum, 121
stellaroides, 121, 122, 124, 261
Cerasus
capollin, 456, 459
ferruginea, 456
Ceratocaulon [sic] (for Ceratocaulon) (Datura), 498
Cerbera
cuneifolia (cuneifolium), 58–59, 67
ovata, 59
theveta (tevethia), 59, 67
thevetioides, 67
ycotli (ycotli), 59
Cercidium praecox, 294
Cercocarpus fothergilloides, 456
Ceridia, 122
purpurascens, 121–122
virescens, 122
Cereus
  oxypterus, 107
  phyllanthoides, 106
  speciosissimus, 107
Cerinthe lanceolata, 90
Cestrum, numbering of species in, 503
  alternifolium, 497
  amygdalifolium, 496
  angustiflorum, 497
  aurantiacum var. warscewiczii, 497
  benthani, 497
diurnum, 496–497
dumetorum, 497
gardneri, 496
lanatum, 498
lauringulatum, 496
leucocarpum, 497
Cestrum
  macrostemon, 497
  nocturnum, 496, 497
  paniculatum, 497
  pedunculare, 497
  pedunculatum, 497
  purpureum, 497, 498
  roseum, 498
terminalis var. parvifolium, 497
  thyrsoides, 496, 497
tomentosum, 497–498
  vespertinum, 498
  viridiflorum (viridiflorum), 498
  sp. nova, 496
Chamaecrisa, 295, 300, 301
delicata, 301
desvauxii var. mollissima, 295
diphylla (Onon.), 330
flexuosa, 298, 300
kanthiana, 300
nictitans, 297, 298, 300–301
  var. glabrata, 299, 301
  var. jaiscensis, 301
pilosa, 299
rufa, 296
  var. rufa, 296
  serpens var. delicata, 301
  sp. (Cassia diphyllea), 296; (perennial), 299
Chamaecrisa sect. Chamaecrisa, 299
Chamaesyce
  berteriana, 232
  hirta, 233
  hyssopifolia, 231
  nutans, 231
  sp. (Eup. canes), 229; (Eup. caxig.), 230, (Eup. falc.), 230
Chamissona altissima, 50, 51
Chaptalia
  lyrata, 145
  nutans, 144, 145, 165
  spathulata, 165
Chayota edulis, 212
Chelidonium
  californicum, 427
  multifidum, 427
Chelone (Cheloneae)
  angustifolia, 488
  barbara (Barbatum), 488
  can pusulata, 488
  integerrima, 488, 489
  integrifolium, 488
  mexicana, 488
  pentstemon (pensibemon), 488–489
  saponariaefolia, 488
Chenopodiaceae, 125–126
Chenopodium
  ambrosioides, 126
  angustifolium, 125
Botanical Results of the Sessé & Mocínó Expedition — VII

Chenopodium
  cinereum, 126
  maritimum, 126
  murale, 126
  obcordatum, 126
  scoparia, 126
Chilopsis, 85
  linearis, 83, 84, 85
  saligna, 84, 85
Chimaphila umbellata, 219, 447
Chiococca (Choicocca)
  alba, 463
  axillaris (Margaris), 119
  nocturna (Pleurpetalum), 51, 463
  paniculata, 462
  racemosa, 119, 462–463
Chiranthodendron, at Tolucu, 35, under Cervantes
Chirimoya vulgo, 57
Chironia purpurea, 250
Chitonia
  macrophylla (macarophylla), 384
  mexicana, 546
Chloris
  inermis, 258
  polystachya, 258
  submutica, 258
Chlorophora tinctoria, 393
Choisya ternata, 476
Chondrilla (Chondryla)
  nudicaulis, 146
  pauciflora, 145–146
  sessacanus, 146
Chrysanthemum (Chrisanthemum), 146
  arvense (Xanthocoma), 191
  indicum, 136
  longifolium, 146
  montanum, 146
  procumbens, 142, 146, 188
Chrysocoma, 158
  suffruticosa, 146
  trinervata, 146
  sp., 146
Chrysophyllum
  caimito (caimito), 483
  oliviforme, 483
Ciccia peruviana, 222
Cichorium intybus, 146
Cineraria
  angustifolia, 175
  dracuncuoides, 175
  lobata, 173
  nutans, 173
  parviflora, 173
  petasitis, 146
  pinnata, 174
  praecox, 146–147, 174, 178
  punctata, 147
  salicifolia, 175
Cinnia, see Zinnia
Cirsium
  cernuum, 147
  heterolepis, 145
  nivale, 147
  raphilepis, 145
Cissampelos pareira, 391
Cissus
  angulata, 543
  cucurbitina, 543, 544
  crosa, 543
    subsp. erosa, 543
    var. salutaris, 543
  mexicana, 543
  obliqua (oblicua), 543
  pentaphyllea, 543
  rhombifolia, 543, 544
  salutaris, 543
  sicyoides, 544
  tiliacea, 544
  trifolia, 543
  trifoliata, 543, 544
  trifoliata L., 543–544
  trifoliata Sessé & Moc., 543
  tuberosa, 544
  tuxtensis, 544
Cistaceae, 126–127
Cistus, 127
  glomeratus, 126, 127
  mexicanus, 126, 127
  obcordatus, 126, 127
  palmata (Amoreuxia), 87
  rosmarinifolius, 127
  virginianus, 127
Citharexylum (Citarexilum, Cytarexylum, Citharexylon, Citharexilum, Cytherexylum), 65, 535
  affine, 534, 535, 536
  berlandieri, 534
  cinereum, 534–535
  ellipticum (elliptycum), 535, 536
  fruticosum, 534
  incanum, 535
  lucidum, 535
  lycioides, 535
  mocinii, 535
  quadrangulare, 534, 536
  racemosum, 535–536
  reticulatum, 536
  rosei var. durangense, 535
  scabrum, 535
  scariosum, 535, 536
  sessaei, 534, 536
  tomentosum, 535
Citrus decumanaus, 476–477
Clambus araneous, 222–223
Claronia runcinata, 147
Clavaria
  militaris, 549–550
INDEX

Clavaria
pistillaris, 550
Clavigera trifida, 139
Claytonia
alsinoides var. rosea, 444–445
parvifolia, 445
perfoliata, 445
petiolaris, 445
scapifera, 445
sibirica, 445
teretifolia, 445, 446
triandria (triandra), 445
tuberosa, 446
virginica, 445
sp., 444
Clematis
dioica, 447, 448
grossa, 448
mociniana, 447–448
pitcheri, 448
subtrioba, 448
viorna, 448
Cleome
aculeata, 117
cardinalis, 116–117
dodecandra, 117
gigantea, 116
guianensis, 117
gynandra, 117
monadelpha, 117
multicaulis, 117
ornithopodioides (ornitopodioides, ornithopodioides),
117
pachystigma, 117
penthaphylla, 117
siliculosa, 117, 118
speciosa, 117
stylosa, 117
subulata, 117
ungulata, 117
uniglandulosa, 117
Cleomella mexicana, 117–118
Clerodendron (Clerodendrum)
aculeatum, 541
culinarie, 536
fortunatum, 536, 541
ligustrinum, 536
Clethra (Cletra), 128
integrifolia, 127
mexicana, 127–128
ovalifolia, 128
Clethraceae, 127–128
Cleyera
integrifolia, 523, 524
serrulata, 523
siphilitica, 523, 524
Clidemia hirta, 386
Clinopodium
macrostenum, 271
Clinopodium
rugosum, 268
sp. (Orthosiphon), 273
Clitoria (Clytoria), 314
brasiliensis (brasilienensis), 301
guayanensis, 301
mariana, 314
plumieri, 301
racemosa, 301
rotundifolia, 301
virginiana, 301
Clomenecoma grandiflora, 151
Clusia, 260
alba (alva), 31, 260
flava, 260
parviceps, 260
salvinnia, 260
Clypeola (Clipeola) mexicana, 205
Cnicus
benedictus, 147
nivalis, 147
Cnidoscolus
acomitifolius, 240
angustidens, 240
herbaeus, 240
quinquelotus, 239
tubulosus, 239
sp. (Jat. urens), 239
Cobaera, type-species of, 437
scandens, 437
Cobarrubia flavida, 489
Cocccocypselum hirsutum, 470
Coccoloba
barbadensis, 442
laurifolia, 443
macrophylla, 443
punctata, 443
pyrifolia, 443
rugosa, 443
umbilicata, 443
uvifera (ubifera), 443
venosa, 443
sp. (fol. cordato-ovatis, cf. Cocc. barb.), 442
sp. (Polygon. indet.), 444
Cocculus, conserved over Cebatha, 391
diversifolius, 391
oblongifolius, 391–392
Cochlearia
coronopus, 205
trifoliata, 117, 118
Cochlospermaceae, 87
Cochlospermum
seratifoiliu, 87, 88
vititofiliu, 87
Cocos, see Palmæ, 425
iagua, 425–426
Coelostina ageratoides, 179
Coffea rosea, 463
BoTANICAL RESULTS OF THE Sessé & MOCINO EXPEDITION — VII

Coilanthe
  mocinni, 250, 251  sessaei, 250, 251
Coix lachryma-jobi (lachryma), 258
Cola acuminata, 520
Coladum vires, 68
Coleostemon (Meliosma), 479
Collotia
disperma, 451
infesta, 451
multiflora, 452
Collomia heterophylla, 437
Cologania
angustifolia (Galac. rad.), 314
sp. (Galac. tub.), 314; (Lotus), 323
Colubrina
ehrnbergii, 455
ferruginea, 453
glomerata, 452
granulosa, 452
macrocarpa, 451
mociniana, 451
triflora, 452
Comarostaphylis
discolor, 219
glaucescens, 218
longifolia, 218
Combretaceae, 128–129
Combretum
fruticosum, 128
laxum, 128
mexicanum, 128
odoratissimum, 128
secundum, 34, 128
Commelina, 129, 130
adscendens, 129
coelestis, 129
  var. bourgeaui, 130
communis, 129
cordifolia, 129
dianthifolia, 130
diffusa, 129, 130
erecta, 129, 131
  var. angustifolia, 130
geniculata, 129
graminifolia, 130
pallida var. parvifolia, 130
parviflora, 130
rubrosa, 129
tuxtlenis, 130
virginica, 131
Commelinaeae, 129–131
Commircarpus scandens, 399
Commiphora
sarcopoda, 104, 106
serrata, 105
tecomaca, 104, 105
Comocladia
acuminata, 53
dentata, 53
dodonaea, 53
glabra, 53
  var. acuminata, 53
illicifolia (illicifolia), 53
Comparettia falcata (Orch. pauc.), 421
Compositae, 21, 119, 131–192, 274, 286, 525
Compositae, see Spondias mombin, 56
Conalda mexicana, 454
Connaris simplicifolius (simplicifolia), 526
Conoeba pusilla, 493
Conocarpus
erecta, 128, 129
procumbens, 129
racemosa, 128, 129
Conopholis americana, 424
Conosiega, 384, 388
holosericea, 384
xalapensis, 384, 385, 386
Conradia
cuneifolia, 254–255
pedunculosa, 255, 256
Convallaria multiflora (Polianthes), 345
Convolvulaceae, 193–202
Convolvulus, 193, 196, 199
albus, 193
arboreus, 193, 196, 197
biflorus, 193
bracteiflora (bracteaeflorus, bracteiflorus, bractiflorus), 193–194, 195
brasiliensis, 194
brevipes, 198
cirrhosus, 196
digitatus, 194, 201
eriospermus, 198
hastatus, 199
hermanioides, 197
heterophyllus, 194
incanus, 199
jalapa (jalapa), 194
lividus, 196
longiflorus, 195
luteus, 194
marginatus, 194
maximus, 195
mazaltanensis, 195
michoacana (michoacanus, michoacana), 195, 200
mexicanus, 195
multiflorus, 198
muricatus, 195
niveus, 193
nutans, 199, 200
obscerus, 195
obtusifolius, 195
pedatus, 195
pentaphilus, 199

568
INDEX

Convolvulus
pilosiflorus, 195
purpureus, 195–196
quauhtzahuatl (quauhtzahuatl, quauhtzahuatl), 193, 196
queretarensis, 33, 196
quinquefolius, 196–197
rotundifolius, 197
sagittatus, 197
scammonia (scamonica), 197
sinuatus, 197, 199
spectivesalvia (Specie salvia), 197
sphaerostigma, 201
superbus, 197
trifolius, 197
tuxtensis, 197
umbellatus, 198
sp., 198, 201

Coryza
coronopifolia, 152
herbacea, 147
mexicana, 147
odorata, 147
procumbens, 147
sp. (Plucheas), 160

Corallorrhiza macrantha & Govenia (Epidendrum lamelhaum), 408, 412

Corchorus
aestuans, 526
biflorus, 526
hirtus, 526
longifolius, 526
orinocensis, 526
secundiflorus, 526
siliquosus, 526
trinervis, 526

Cordia
90, 92, 93, 100, 101
aggregata, 100
alliodora, 92, 101
bifurcata, 101
boissierii, 90
brevispicata, 92
callophexa (callococca, callococa, callococa), 90, 91
crenulata, 90, 93
crispiflora, 90–91
curassavica, 92, 101
dentata, 92
diversifolia, 91, 92
dodecandra (dodecandria), 91
eleaagnoides, 91
elliptica, 32, 91, 105
exsueca (exua, exuca), 91, 93
ferruginea, 90, 93
geleotitana, 93
geranacanthus (geraschantus, geresancthus), 32, 34, 91–92, 93
globosa, 92, 101
greggii, 91
var. palmeri, 91

Cordia
linearis, 92, 101
lineata, 93
longifolia, 101
macrophylla, 92
macrostachya, 101
nitida, 90, 91
nodosa, 92, 101
paniculata, 92
parviflora, 92–93, 101
parvifolia, 91, 93
pauciflora, 93
petiolaris, 93
podocephala, 101
polycephala, 93, 101
revoluta, 93
rotata, 93
sebestena, 34, 91, 93; (cf. Convul. dig.), 194
seleriana, 93
serratifolia, 92
spinescens, 90, 93
stellata, 100, 101
sutea, 92
tomentosa, 90
ulmifolia var. lineata, 93
sp., 93–94

Coreopsis
ala, 132, 141, 147
amplexicaulis, 176
angustifolia, 141
artemisiafolia (artemisiaefolia), 148
atrorubens, 148
aurea, 140
bertisilata, 149
chrysanthha (crisanta), 148
cordifolia, 148
coronata, 148
crassifolia, 148
crocata, 150
foeniculacea, 140
foetida, 148–149, 177
heterophylla, 149, 163
laceiniata [sic], 149
leucantha, 148, 149
lucida, 140
millefolia, 149
mutica var. leptomera, 148, 176
ovata, 149, 190
purpurea, 149
purpureus, 141
repens, 149
scandens, 149
serrata, 140
verticillata (bertisilata), 149

Coriaria, 202
atropurpurea, 202
cuneifolia (Saur. serr.), 33, 214
myrthifolia, 33

569
Coriaria
thymifolia, 202
Coriariaceae, 202
Cormonema biglandulosa, 453
Cornaceae, 202
Cornus, 202
alba, 202
capitata, 202
declinata, 202
disciflora, 202
excelsa, 202
mutkensis, 202
pubescens, 202
sanguinea, 202
„silvestris”, 202
sylvestris, 202
Cornutia
pentaphylla, 536
terna, 536–537
Coronilla valentina, 301
Corrigiola
andina, 122, 123
linearis, 122, 123
littoralis, 122
mexicana, 122
Corydalis notkana, 426–427
Corynstylis arborea, 541
Corypha, see Palmae, 425
Cosmos, 149
bipinnatus, 149
crithmifolius, 148, 149
modestus, 141, 149
purpureus, 141
var. bicolor, 141, 149
sulphureus, 148, 150
var. hirsuta caulis, 150
Costus, new numbering system for, 545
arabicus, 545–546
spicatus, 545, 546
Cotula pygmaea, 178
Cotyledon (Cotyledon), 204
cocinea, 203, 205
gibbiflora, 203
linguifolia, 10, 203
spatulata (spatulata), 10, 203
spicata, 203
subulatum, 203
teretifolia, 203
Couepia, 458
cxdecandra, 458
polyandra, 458
Coulteria mexicana, 16, 294, 302
Coureopsis nicaraguarenensis, 288–289
Coursea, revision of genus, 331
mollis (Orob. spin.), 331
Coutarea
flava, 463
flavescens, 463, 471
Coutarea
hexandra, 463, 471
latiflora, 463
pterospemina, 463
Cowania mexicana, 456, 457, 458
Cranioceras sylvestre, 411
Crassulaceae, 203–205
Crataegus, 456, 457
aria [var.] suecica, 457
crus galli, 456–457
douglasii, 456
indica, 457
inermis, 32; (Porophyllum macro.), 172; 457
mexicana, 457
minor, 32, 457
Crataeva
gynandra, 118
tapià, 118
Cremanthemum oligotrichum, 384
Cremonia oligotricha, 94
Crescentia (Crescentia)
aculeata, 85, 86
ala, 85, 86
cujete, 85
edulis, 85–86
pteropoda, 86
terna, 85, 86
Crinum
americanum, 343
erubescens, 343, 345
lineare, 343
sesse-mocinoi, 343
uniflorum, 343
Criticrya thyrsoidea, 157
Crocus, 145
Crotilaria, 323
altissima, 323
angulata, 302, 323
incana, 302, 324
lupulina, 302
mollicula, 323
procumbens, 323
pumila, 302, 303
rotundifolia, 302
setifera, 302, 324
triandra, 302–303
triflora, 302
Croton, 223, 226
acuminatum, 223
adspersus, 223, 227
aromaticum, 223, 224, 225
balsamiferum, 223, 225
betulaefolium, 226
bisserratum (bisserratum), 223, 225
ciliatoglaucesferum (-glanduliferum, -glandeligerus, -glandulosus), 54, 223, 225
cladotrichus, 223, 224
cordifolium, 223
INDEX

Croton
cortesianus, 226, 227
dentatum, 226
dioicum (dioicus), 223–224, 225
dracon, 224, 225, 227
elipicum, 225
eubrigum, 226
flavens, 223, 224
var. rigidus, 227
glandulosum (glandulosus), 219, 224, 225
var. genuinus, 224
var. hirtus, 224
gracilis (gracile), 224
var. genuinus, 224
var. longiradiatus, 224
humile, 223, 224–225
incaus, 225
lacciferum, 225, 227
lobatum (lobatus), 225, 226
var. seemanni, 225
lucidus, 223
macrodontus, 223, 224, 225
magnifolium, 224, 225
mexicanus (mexicanum), 224, 225
var. glabrescens, 225
var. glandulosus, 225
var. subintegrofilius, 225
morifolius, 223, 225
var. sphaerocarpus, 225
nitidum, 227
niveus (niveum), 226, 227
ovale, 224
palmatum, 226
palustre, 226, 238
palustris, 226
pastorile, 222
pedicellatus, 224
penicillatum, 225
pilosilanthus, 223
pseudochina, 226
pubiflorum, 226
racemosum, 221
repens, 226
rivinaefolius, 226
rotundifolium, 226
sohiman, 226–227
sphaerocarpus var. genuinus, 223, 225
splendens, 226
stipulaceus, 227
stilosus, 227
suberosus, 223, 224
subfragilis, 226, 227
tiglium, 223
tomentosum, 227
torreyanus, 225, 227
trifolium, 223
trilobatum, 225
tuxtlense, 226, 227

Croton
umbellatum, 227
venenatum, 226
verticillatum, 227
vulpinum, 4, 31, 223
xalapensis, 225, 227
sp., 225, 226, 227
Cruciferae, 205–206, 265
Cruciferae, American, of Sessé & Mocino, 37
Crusea, 475; revision of species, 475
brachyphylla, 475, 476
calocephala, 463, 475
coccinea, 463–464
crucigata, 475
diversifolia, 461
hispidz, 463, 475
longiflora, 475
setosa, 475
subulata, 461
Cryphiacanthus
barbadensis, 40
lacteus, 46
Cryptarrhena
lanata, 409
pallidiflora, 409
Cucumis
acutangulus, 210
crasseflorus, 207
crispus, 206, 207
fricatorius, 207, 210
odoratus, 211
odoratissimus, 211
triqeter, 32
sp. (Elat. dig.), 209; (Microechium), 210; (Sicyos
parv.), 212
Cucurbita moschata, 207
Cucurbitaceae, 206–213
Cunila, 269
fragrans, 268–269
mexicana, 269
piperita, 269
polyantha, 269
secunda, 269
Cupania
dentata, 479
sp. (Paul. arb.), 480
Cuphea, 14, 353, 354, 356, 357
aequipetala, 353, 354, 356, 357
angustifolia, 356
apaxaloea, 353
ascendens (adscendens), 354
boissieriana, 356
bracteata, 353, 357
coccinea, 353, 355
cordifolia, 353
cyanaea (cyanoea), 6, 15, 353
heterophylla, 353
jorullensis, 15, 354
Cuphea
  koehneana, 354
  lanceolata, 353
  laterifolia, 356
  leptantha, 353
  lobophora, 356
    var. hirsuta, 356
  micropetala, 353–354
  parsonsi, 357
  paucipetala, 354, 356
  procumbens, 354
  secundiflora, 354
  strumosa, 353
  tricolor, 15, 354
  tuxtensis, 353
  virgata, 354
  viscosissima, 356
Curatella americana, 213; (cf. Recchia), 495
Cuscuta
  macvaughii, 198
  racemosa, 198
Cyamopsis psoraloides, 324
Cyclanthera
  biglandulifera, 207–208, 209, 210
  brachystachya, 209
  dissecta, 208
  eremocarpa, 208
    var. genuina, 208
  integrifoliola, 208
    var. major, 208
  langae, 208
  naudiniana, 208
  pedata, 208, 209
  rhibiflora, 208
  tannoides, 208
  sp. (Elaterium), 210; (Phyllanthus cyclanthera), 242
Cyclostemon rubripes, 432
Cydista acquinactis, 84
Cymbidium
  anthericiflorum, 409
  imbricatum, 419
  limodoroides, 422
  luridum, 423
  palmifolium (Serap.), 422
Cymbopetalum penduliflorum, 57
Cynanchum ? proliferum, 78
Cynanchum, 75, 76
  campanulatum, 76
  erectum (cf. Stapelia), 78
  foetidum, 72, 77
  grandiflorum, 75
  hirsutum, 75
  ligulatum, 76
  maritimum (marytimum), 31, 75
  mexicoense, 75
  nigrum, 75
  pallidum, 75, 76
  parviflorum, 76
Cynanchum
  prostratum, 75
  punctatum, 75, 76
  rotatum, 75
  rotiforme, 75
  sessai, 75
  tabascense, 4, 75–76
  uniflorum, 76
Cynara cardunculus, 150
Cynoctonum mitreola, 351
Cynoglossum
  apenninum (appenninum), 89, 94
  pringlei, 94
Cynometra quapinolae, 319
Cynosurus
  gracilis, 258
  tenellus, 259
Cyperaceae, 213
Cyperus, 213
  acutiusculus, 213
  esculentus, 213
  ligularis, 213
  palustris, 213
Cyphocarpus, 358
Cyphomandra betacea, 504
Cyphomeris gyspophiloides, 401, 402
Cypripedium
  irapeanum (Satyrium turgidum), 408, 409
  turgidum, 409
Cytinus, 447
  hypocris, 447
  mexicanus, 447
Cytisus, 32
  atropurpureus (Lonch.), 322
  cajanu (cayanus), 303
  lanceolatus (Lonch.), 322
  major, 303
  membranaceus, 303
  nigricans, 303
  parviflorus, 322
  tetragonus, 303
Dahlia, 148, 150
  acutiflora, 150
  cardiophylla, 148
  cervantesii, 150
  coccinea, 148, 150
    var. steyermarkii, 148
  cordifolia, 148
  crocata, 150
  pinnata, 148, 150
  rosea, 150
  variabilis, 148
Dais cotinifolia, 525
Dalbergia
  brownei (Pierocarpus), 337
  ecostphyllum (Pierocarpus), 337
  monetaria (Drepan.), 312
Dalea (see also Psoralea), 303–304, 305, 306, 309, 336; revision of, 304
acutifolia, 304, 306, 309
alopecurus, 309
angustifolia, 304
argentea, 304, 310
astragalina, 306, 310
bicolor, 304, 307, 308, 310
var. bicolor, 304
citriodora, 304, 305, 307, 308
citrodora, 305
ciffortiana, 304
coeerulea var. longispicata, 306
coronilla, 308
diffusa, 305, 307, 336
dorycnioides, 305
flava, 306
flavo-rosea, 305
foliolosa, 305, 306, 311
var. citrina, 304, 336
fruticosa, 305–306, 336
gracilis, 309
herbacea, 304, 306, 309
humilis, 304, 306
hypoglossidea, 306, 310
inconsipicua, 306
laevigata, 304
lagopus, 306, 308, 336
lanata, 306, 307, 310
lateripes, 304, 305
leporina, 304, 305, 336
leptostachya, 306
longipes, 309
longispicata, 306
lutea, 306, 308, 311
luteola, 311
lutecens, 306
macrostachya (macrostachia), 306–307, 336
melilotoides, 307
mucronata, 307
mutabilis, 307, 336
mutissii, 306
nutans, 305, 307, 336
obovata, 307, 308
var. obovatifolia, 304, 307–308
var. uncifera, 308
onobrychooides, 310
ovalifolia, 306, 308
pectinata, 308
pendulina, 307
polystachya (polistachia), 308
procumbens, 308
prostrata, 308–309
pulchella, 309
pulcherrima, 307, 336
purpurea, 307, 336
reclinata, 307, 309

Dalea (see also Psoralea)
sericea, 309, 310
thouini, 310
tomentosa, 304, 309, 310
var. psoraleoides, 309
trifoliata, 308
trifoliolata, 308, 309
triphylla, 308, 309
tuberculata, 304, 307
uncifera, 308
unguicularis, 307
verbenacea, 310
verrucosa, 304
violacea, 307
virgata, 306, 310
zimapanica, 306, 308, 310–311
sp. nova (D. angust.,), 304; (D. frut.), 305; (D.
obovatif.), 308; (D. proc., D. seric.,) 309
Dalea, series Pectinatae, 308; series Tuberculatae, 305
Dalechampia scandens, 11, 227–228
Dalembertia, 228, 234
populifolia, 228
triangularis, 228, 234
Daphne, 525, 526
laureola, 525, 526
obovata, 525
pontica (Fuchsia thym.), 404, 525–526
umbellata, 525
Daphnopsis, called Daphne by Sessé & Mociño, 526
americana subsp. salicifolia, 525
salicifolia, 525
Dasyliion, 102
Daturia
ceratocaula, 54, 498, 499
fastuosa, 498
ferox, 31, 498
inoxia, 499
maxima, 498–499, 503
metel, 499
meteloides, 499
ovalis, 499
quercifolia, 499
sinuata, 498, 499
stramonium, 499
wrightii, 499
Daubentonia
punicia, 330, 334
virgata, 291
Davya (Saurauja), 214
Delima
dioica, 214
mexicana, 214
Delphinium
consolida, 448
staphisagria, 448
Demetria spathulata, 150
Dendropanax arboreus, 68, 69
Descliaea
  leucocarpa, 118
  margaritaria, 119
Desmanthodium fruticosum (=Viburnum), 119
Desmanthus virgatus var. depressus, 327
Desmodium,
  alamani, 311
  angustifolium, 317
  axillare, 318; (Orob. trif.), 331
  var. acutifolium, 318
  caripense, 317
  hartwegianum, 317
  var. amans, 318
  infractum, 311
  nicaraguense, 317
  painteri, 317
  pringlei, 317
  stipulaceum, 311
  tortuosum, 311
  triflorum, 318
  sp., 311; (Hedys.), 316, 317, 318
Diadenaria
  articulata, 228
  pavonis, 228
Dianthera
  coerulea, 40
  comata, 40
  repens, 40
  revoluta, 39
  sermentosa, 40
  sexangularis, 34, 40, 44
Diastatea micrantha (Compositae), 137
  micrantha, 112, 113
Diazeeus ? serrata, 150–151
Dicentra formosa, 427
Dichaea, 421
  muricata, 409
  squarrosa, 409, 421
  trichocarpa, 409
Dichondra argentea, 198
Diciplera, 41, 44, 46
  acutifolia, 44
  peduncularis, 40, 43, 44
  resupinata, 40, 43
Dictyonanthus pavonii, 75, 76
Didymaee
  alsinoidea, 474
  mexicana, 474
Dienia
  calycina, 409
  myurus, 409
Digitalis verticillata (Caparras vert.), 487
Digitaria sanguinalis (cf. Milium fil.), 259
Digitectalia jatrophioides, 143
Dilleniaceae, 213–215
Diodia, 464
  arenosa, 464, 475
  brasiliensis var. angulata, 464
Diodia
  declinata, 464
  erecta, 464
  maritima, 475
  rigida, 464, 475
  sarmentosa, 464, 476
  subulata, 461
  teres, 475
  villosa, 464
Dioscorea, 215, 216, 217
  aculeata, 215
  alata, 215
  composita, 215, 216, 217
  convolvulacea, 215
  cymosula, 215
  galeottiana, 216
  hastata, 216
  hirsuta, 215
  lobata, 215
  var. lasiophylla, 215
  macrostachya,
    var. sessiliflora, 215
  minima, 215
  multinervis, 215
  pumila (pumilla), 215
  reversiflora, 215, 216
  sativa, 216
  tepinapensis, 216
    var. aggregata, 216
  triandra (triandra), 216
  triangulopsis, 216
  trifida, 216
  tuxtlensis, 216–217
  villosa, 217
Dioscoreaceae, 215–217
Diospila sapotanigra, 217
Diospyros
  blepharophylla, 217
  ciliata, 217
  cuneifolia, 217
  ebenaster, 217
  obtusifolia, 217
  pavonii, 218
  texana, 217
  tilziapoli (tilziapoli, tilziapoli), 217
  sp., 34
Dithionae illoensis & Epidendrum anthropophorum, 408
Dithionae illoensis, 410
Diphysa
  floribunda, 292
  suberosa (Phaca), 331
  sp. (Orob.), 330
Diplocoma villosa, 151; (Heterotheca), 163
Dipsacaceae, 217
Dipsacus fullonum, 217
Dipteracanthus
  parviflorus, 43
INDEX

Dipteracanthus
   patulus, 46
   pilosus, 40
   viscidulus, 47
Dipterocarpus, 262
Discocactus ramulosus, 111
Distictis laxiflora, 83
Ditaxis guatemalensis, 237
Dodartia americana, 485
Dodonaea (Dodonaea)
   emarginata, 480
   serrulata (Celastraceae), 124–125
   tetrapetala, 480
   viscosa, 479–480
Dolichos (Dolychos), 312
   altissimus, 311
   arborescens, 311, 312
   ensiformis, 315
   fabaeformis, 324
   geminiflorus, 311–312
   lablab, 312
   macrostachys (Lup. alt.), 323
   mutabilis, 315
   obtusifolius, 312
   palmatilobus, 312
   sessei, 311, 312
   trilobus, 312
   uncinatus, 312
   undulatus, 312
   urens, 311
Dondisia
   integrifolia, 271
   serrata, 271
Doronicum, 151
   mexicanum, 151
   partdianches (pardalianca), 151
   villosum, 151
Dorstenia contrajervia (contrajerva, contrayerva), 392
   var. houstoni, 393
   crispa, 393
   cristata, 392
   drakenia (drakenia, drakenia, drachenia), 392–393
   houstoni, 392, 393
Doxantha unguis-cati, 83
Draba jorullensis, 205
Dracocephalum, 273
   lanceolatum, 273
   mexicanum, 271
   moldavica, 269
   pedunculatum, 269
   pinnatifidum, 269
   verticillatum, 269
Drepanocarpus cyathiformis, 312
Drimys
   granadensis var. mexicana, 544
   mexicana, 16, 544
Drymaria, 120, 122, 123, 124
   apetala, 122
Drymaria
   cordata, 122, 123
   fenzliana, 122
   molluginea, 120
   paposana var. weberbaueri, 122
   pauciflora, 123
   tenuis, 122
   var. genuina, 122
   villosa subsp. palustris, 123
   virgata, 122
Drymonia glabra, 254
Dryope lutosidea, 217
Dryopteris
   filis-mas, 548
   paleacea, 548
Drypetes glauca, 246
Dufourcea ? velutina, 200
Dugesia mexicana, 170
Dumerila procumbens, 496
Dumerilia humboldtii, 151; (Proustia), 172
Dyschoriste, 45, 46, 47
   angustifolia, 47
   hirsutissima, 47
   microphylla, 45
   ovata, 46
Dyssodia (Dysodia)
cavanillesii, 191
fastigiata, 151
glandulosa, 191
grandiflora, 151
integrifolia, 151
pinnata, 137, 151
porophylla, 132, 151, 172
   var. radiata, 151, 172
setifolia, 187
tagetiflora, 151–152
Ebenaceae, 217–218
Echeandia, see Anthericum, and Ornithogalum, 343, 345
   reflexa, 343
terniflora, 343
   sp. (Anthericum contortum), 342
Echeveria (Crassulaceae), 204
   coccinea, 203, 205
   gibbiflora, 203
   microcalyx, 204
   purpuris, 204
   teretifolia, 203–204
   sp. (Cot. lingu.), 203; (Sedum panic.), 204; (Sedum spic.), 205
Echeveria (Fouquieria)
   paniculata, 250
   spicata, 249
   sp., 249–250
Echinocactus
   cornigerus, 107
   crispatius, 107–108
   histrrix, 108
   melocactiformis, 108
Echinocactus
  obvallatus, 108
Echinocereus
  colunum, 258
  crus-pavonis, 259
Echinocystis
  coulteri, 208
  floribunda, 208
  gemella, 209
  longispina, 208
  torquata, 209
  wrightii, 209
Echinodorus, 49
Echinofossulocactus, 108
  crispatus, 108
  obvallatus, 108
Echinopepon
  longispinus, 208
  sp., 208
Echinoptryx eglandulosa, 366
Echites, 61
  acutiloba, 59, 60
  aggrutinata, 61
  annularis, 62, 64
  axillaris, 59
  barbata, 59
  campanulata, 59
  cimicida, 59, 64
  cimicifuga, 64
  conglobata, 64
  convolvulacea, 59–60
  cordata, 60, 62, 64
  coronata, 64
  exilicaulis, 60
  glaberrima, 60
  holosericea, 60–61
  hypoleuca, 61
  lanuginosa, 61
  lateriflora, 61
  longifolia, 61
  obovata, 61
  obtusifolia, 61
  parvisflora, 61
  quinqueangularis, 60
  revoluta, 33, 61–62, 63
  rotata, 63
  secunda, 60, 62
  secundiflora, 62
  subcordata, 59, 60
  subsessilis, 62
  torosa, 62
  torulosa, 59, 62
  tubulosa, 59, 60
  tussilensis Standl., 61
  umbellata, 62–63, 67
  undulata, 32, 63
  uniflora, 61, 63
  verticillata, 63

Eclipta
  alba, 152
  erecta, 152
  prostrata (postrata), 152
Egonia syphiultica (Begonia balmisiana), 79
Ehretia
  anacua, 95
  bourreria, 94
  cuneifolia, 94
  exsueca (exuca, exucca), 94
  lancifolia, 95
  latifolia, 95
  orgyalis, 101
  sordida, 94
  tinifolia, 95

Elaeocarpaceae (Muntingia calabura), 527
Elaeocarpaceae, 218
Elaphrium
  copaliferum (cf. Cordia ellip.), 91, 105
  penicillatum, 105
Elaterium (Elartherium), 210
  aculeatum, 208
  brachystachyum, 209
  caigua, 210
  cartaginea, 212
  digitatum, 208, 209, 210
  diversifolium, 208
  elata, 209
  gemellum, 209
  glandulosum, 22, 207, 209, 210
  hastatum, 208
  nicaraguense (cf. Melothria flum.), 209
  palmatum, 207, 210
  pedatum, 208
  pentaphyllum (5-phyllum), 208
  quadridium, 209
  torquatatum, 209
  trifoliatum, 210
  sp. nova, 208

Elephantopus, 34
  colimensis, 152
  glaber, 152
  littoralis (litoralis), 152
Eleutheranthera ruderalis, 180
Elleanthus capitatus, 408, 411, 417
Elytraria
  mexicana, 42
  sp., 41
Encelia
  amplexicaulis, 176
  halimifolia, 152
  mexicana, 149
INDEX

Encelia
baculus, 410
boothiana subsp. boothiana, 410
cochleata, 411
fragrans, 416
lancifolia, 412, 413
ochracea, 414
polybulbos, 414
pterocarpa, 414
spatella, 415
venosa, 416
vitellina, 416
Enslenia ligulata, 76
Entada patens (Mimos. sarr.), 328
Enterolobium cyclocarpum, 327
Epidendrum
acantheron (acantheron), 410, 419
acuminatum, 410
anceps, 413
anthropophorum, 408, 410
arbusculum, 408, 410, 416
auritum, 408, 410, 413
baculus, 410
bidentatum, 410
boothii, 410, 413
calcaratum, 411
capitatum, 408, 411 (2nd on page); (cf. Evelyina cyn.), 417
not an orchid, 411 (1st on page)
chlorops, 413
cochleatum (cochleatum), 411, 412
cornutum, 411, 414
corymbosum (corymbosum), 408, 413
criatatum, 415
crocceum, 416
crucifolium, 411
cuspidatum, 411
diffusum (diffusum), 408, 411, 413
dipterus (dipterus), 410, 411
emarginatum, 408, 410, 411
ensiformis, 411, 412
floribundum, 412
foricatum, 412
fragrantissimum, 412
fruticosum, 412
graminiformum (gramineum, gramineum), 408; (cf. Panosa), 422
grandiflorum, 408
gratifluffum, 412
guttatum, 412
havennse, 411
ibaguense, 414
imbricatum, 419
lamellatum, 408, 412
lancifolium, 412–413
lindleyanum, 408
lineare (1st on page), 408, 413, 418
lineare (2nd on page), 410, 413

Epidendrum,
liniflorum, 408
longiflorum, 413
luridum, 423
nervosum, 410, 413
sulfureum, 413
nutans, 413
obtusifolium, 415
ochraceum, 408, 414
ovatifolium, 413
paleaceum, 413
paniculatum, 408, 411, 412, 413
var. linearifolium, 412
parviflorum, 408, 414
pauciflorum, 424
pavonianum, 414
pentotis, 410
polyantherum, 414
polybulbos, 414
polystachyum, 414
pterocarpum, 408, 414
pulchellum, 414
pussillum (pussillum), 414
racemosum, 414
radiatum, 423
radicans, 414
raniferum, 414–415, 416
resupinatum, 409, 415
retusum (retusum), 415
rigidum, 408, 415
var. labello-subrotundo, 415
ruizianum, 415
secundum, 409
skinneri, 415
spatella, 408, 415
spathacum, 415
speciosum, 408
stenopetalum, 408, 415
tigrinum, 414, 415, 416
triglinum, 415, 416
tripetalum, 413, 416
truilla, 412
umbellatum, 410, 416
vaginatum, 416
vaginata (vaginata), 416
venosum, 416
verracruncus, 410, 416
vermitigrum, 416
virgatum, 408; (Ophr. spir.), 420
viridiflorum (1st on page), 410, 416; (2nd on page), 416
vitelliformum, 408, 416–417
sp. (Dichaea), 409, 417; (Pleurothallis stenostachya), 422
Epidendrum, species duplicated in Fl. Mex. & Fl. Guat., 410
Epiobium
angustifolium, 403
Epilobium
  hirsutum, 402
  lacustre, 402
  mexicanum, 402
  palustre, 402
  tetragonum, 402
  undulatum, 402-403
  sp. (Hauya), 405
Epiphoia
  recurvifolia, 103
  secundifolia, 103
Epiphyllum oxytetalum, 107
Eragrostis mexicana, 259
Eranthemum capense, 41
Erechtites, 147
  hieracifolia, 178
  runcinata, 144
  sp. (Cacalia albicans), 142
Eremogeton grandiflorus, 489
Ericaceae, 218-219
Erigeron, 146
  amplexicaule, 152
  annua, 140, 152
  carolinianum (carolinianum), 152
  delphinifolius, 153
  grandiflorum, 153
  lineatus, 153
  longipes, 138
  mexicanum, 153
  No. 2, 153
  perennis, 140, 153
  pinnatifidum, 153
  pubescens, 153
  rivale, 153
  tuxilense, 153
  undulatum, 153
Erinus
  humilis, 489
  portulacaster, 489-490
  tomentosus, 493
Eriocallcaeae, see Xyridaceae, 544
Eriocaulon, 545
  aniceps (Xyris), 544-545
  decangulare, 545
  ehenbergianum, 545
  sexangulare, 545
Erioceras (Eryceaphalus), 153, 171
  artemisifolius (arthemisifolius, antemisifolius), 153
  trinervatus, 153-154; (Polymnia), 171
Eriocora fragrans, 154
Eriophyllum stachidifolium, 154
Eriosema grandiflorum (Phaca), 331
Erythalis fruticos, 464
Enodea
  littoralis, 464
  mexicana, 464
Errazuriza, 304
Erycine oppositifolia, 142
Eryngium (Eringium)
  aquaticum, 529-530
  bonplandi, 530
  carlinae, 530
  foetidum, 530
  gracile, 530
  longifolium, 530
  pectinatum, 529
  planum, 530
Erythrina (Erithrina, Erithryna, Erythryna)
  americana, 312
  breviflora, 16, 312-313
  coralloidendron (coralloidendron, coralodendron), 16,
  312, 313
  coralloides, 16, 313
  crista galli (crista-galli), 313
  divaricata, 313
  enneandra, 312
  glauca, 313
  herbacea (herbacea), 31, 314
  horrida, 16, 313-314
  latiflora, 16, 312, 313
  leptorhiza, 314
  longipes, 314
  montana, 314
  patens, 313
  pita, 313
  variegata var. orientalis, 313
Erythrodos clavigera, 408, 421
Erythroxylaceae, 219
Erythroxylum (Erythroxylon, Erithroxylon), 219
  areolatum, 219
  havaense, 219
Escherscholia californica, 427
Escobedia
  laevis, 486
  longiflora, 485
  quinquevexa, 485
Euthula
  coculea, 155
  sp. (Oxylobus), 170
Euclenuus brevilabris, 417
Euclonde
  hirta, 349
  lobata, 349
  sinuata, 349
Eugenia
  acapulescis, 396, 398
  andina, 396
  capuli, 396
  conglobata, 395
  cotinifolia, 395
  fragrans var. sayardensis, 396
  karwinskyana, 395
  ligustrina, 396
  monticola, 395, 397
  origanoides, 395
  procera, 396, 397
INDEX

Eugenia
  pseudopsidium, 397
  tabasco, 395
  triflora, 395
  venezuelensis, 395
  sp. (Myrt. communis), 396; (Myrt. racemosa), 397

Eupatorium
  altissimum, 154
  angelicium, 154
  aromaticum, 154
  ashenbornianum, 158
  atropurpureum, 154
  axillare, 141
  canescens, 154–155
  coelestinum, 155, 156
  coeruleum, 155
  collinum, 157
  corymbosum, 158
  cubense, 154
  cuspidatum, 139, 140, 155
  daleoides, 154
  decurrens, 155
  deltoideum, 155
  dubium, 155
  glabratum, 156
  glechomaefolium, 142
  havanense, 154
  lanceolatum, 155
  leucocephalum, 155
  lucidum, 155
  mairetanum, 156
  mexicanum, 156
  micranthum (micrantha), 156
  morifolium, 158
  nandispernum, 156
  paleaceum, 156
  pazuarensis, 157
  petiolare, 156
  piperitum, 156
  pulchellum, 156
  quadrangulare, 157, 158
  rosmarinifolium, 155, 156
  scorodonioides, 154
  secundiflorum, 156
  serrulatum, 156
  sessile, 156–157
  settiferum, 139
  setigerum, 140
  sinaloense, 157
  solanifolium, 157
  squarrosum, 141, 157
  subulatum, 157
  suffruticosum, 157
  ternautum, 157
  thyrsoidem (thyrsoidem), 16, 157–158
  tomentosum (tomentoso), 158
  triangulare (triangular), 155
  trinervatum, 146, 158

Eupatorium
  umbellatum, 158
  uniflorum (vulniflorum), 158; (Monosis), 168
  verticillatum (probably not a Eupatorium), 158
  zibellinum, 158
  sp. (cf. Eup. lucidum), 155; (Gnaph. parv.), 160;
  (Phania), 170

Eupatorium sect. Eximbricata, 156

Euphorbia, 230, 232
  antisyphilitica, 228
  aphylla, 241
  ariensis, 228–229, 233
  berteriana, 232
  biformis, 233
  buxifolia, 232
  calcetiflora, 229
  calyciflora, 229
  ealyeulata, 229, 233
  campestris, 230
  canescens, 229
  capitata, 230
  chamaeysce, 243
  chapaenesis, 229
  colletioides, 232
  cotinifolia, 230
  cyathophora, 231
  delicatula, 229
  dioscoreoides, 229, 233
  subsp. dioscoreoides, 233
  edulis, 229–230
  elliptica (elliptica), 230, 233
  exigua, 230
  falcata, 230
  fastuosa, 230
  francoana, 230
  fulva, 229, 233
  furcellata, 230
  geniculata Ort., 230, 231
  geniculata Sessé & Moc., 230
  gracilis, 53
  graminea, 230
  heterophylla, 230, 231
  var. graminifolia, 229, 231
  hirta, 233
  hypericifolia (hypericifolia), 231
  hyssopifolia (hyssofolia), 231
  imbricata, 231
  josa, 232
  junciformis (inciformis, iunciformis), 231–232
  lacera, 232
  lancifolia, 229
  lathyris, 232
  ligustrina, 232
  linearis, 232
  litoralis (litoralis), 232
  macropus, 233
  maculata, 231, 232
  mariano, 228
Euphorbia
  mexicana, 232
  nutans, 231
  ocymoides, 232
  parasitica, 241
  parviflora, 232
  peganoides, 232
  peltata, 229, 233
  physalifolia, 233
  pilulifera, 233
  pithyusa, 229, 233
  pulchella, 228, 229
  pulcherrima, 230
  quinqueloba, 230
  rugosa, 230
  saccharata, 233
  schlechtendalii, 230
  scoparia, 232
  setacea, 230
  strigosas, 28, 233
  tanquahueta, 229, 233
  tepicensis, 28, 233
  tetlatzia (tetlatian), 229
  thymifolia, 233
  tithymaloidea Dill., 228
  tithymaloideas, 233–234, 241
  tresmariae, 232
  trichotoma, 231
  triflora, 233
  trifolia, 231
  triloba, 234
  urens, 229
  verticillata, 230
  vestita, 234
  sp. (Dalembertia), 228; (cf. E. exigua), 230

Euphorbia subg. Poinsettia, 229

Euphorbiaceae, 22, (Andromeda gland.), 218; 219–246;
  ("Dolichos"), 312; (Probosc. alth.), 383, (Rhamnus turb.), 455; (ignatia), 467

Euphrasia (Eufrasia)
  barbata, 491
  bipinnata (bipinata), 492
  bipinnatifida, 492
  fruticosum, 490
  mexicana, 490
  pinnata (pinnatifida), 492
  secunda, 490

Euphrosina angustifolia, 490

Euphrothone parthenifolia, 135, 158

Eurybia stapelaeoidea, 76

Eustoma exaltatum, 250, 252

Evadne geminiflora, 345

Evae tomentosa, 462

Evelynia cynaroccephala, 417

Evelynia melioides (Melia), 390

Evolvulus, 198
  alsinoideae, 198
  digynus, 198

Evolvulus nummularius (Conv. quin.), 196; 198
  renifolius, 198
  uniflorus, 198

Evonymus
  lanceolatus, 125
  michoacanensis, 125

Exacum
  humile, 250
  lanceolatum, 250

Exacarea biglandulosa forma oblongata, 245

Exogonium, 195, 201
  argentifolium, 197
  bracteatum, 194, 195
  curviflorum, 201
  crixospermum, 198
  umbellatum, 201, 202
  woronovii (= Ipomoea tubulata), 200

Exostemum mexicanum, 471

Eyssenhardtia polystachya, 305, 336, 339

Fagaceae, 246–247, 398

Fallugia paradoxa, 457, 460

Faramea occidentalis, 470

Ferdinanda
  augusta, 159
  eminens, 159

Fernandezia (Fernandezia de Mexico), 409, 421; (cf.
  Maxillaria), 418; (cf. Pachyphyllum), 421
  elegans, 419

Ferns, see Pteridophyta, 549

Ferocactus, 108

Histrix, 108

Lattispinus, 107

Meloactiformis, 108

Ferraria sp., 265

Fessonia dependens, 495

Festuca
  eliator, 258
  scabra, 258

Feuillea (Fevillea, Fevillae)
  cordifolia var. hederacea, 210
  triloba, 210

Ficus
  benghalensis (bengalensis), 393
  benjamina, 393
  brevifolia, 393
  nymphatoifolia, 393
  padifolia, 393
  pertusa, 393
  petiolaris, 393
  retusa, 393
  sycomorus, 393

Fischeria
  herbacea, 78
  pancololote, 78
  rufescens, 75
  sepium, 78
  tuberosa, 78
<table>
<thead>
<tr>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fischera</td>
</tr>
<tr>
<td>sp. (cf. Stapelia herbacea), 78</td>
</tr>
<tr>
<td>Flacourtiaeae, 247–249, 431</td>
</tr>
<tr>
<td>Flavaria (Milleria), 168</td>
</tr>
<tr>
<td>Flavaria, 159</td>
</tr>
<tr>
<td>angustifolia, 159, 168</td>
</tr>
<tr>
<td>integrifolia, 159</td>
</tr>
<tr>
<td>radians (radicans), 159</td>
</tr>
<tr>
<td>repanda, 159</td>
</tr>
<tr>
<td>trinervia, 159</td>
</tr>
<tr>
<td>Fleischmannia, 157</td>
</tr>
<tr>
<td>arguta, 158</td>
</tr>
<tr>
<td>rhodostylist, 158</td>
</tr>
<tr>
<td>Florestina</td>
</tr>
<tr>
<td>pedata, 133, 134, 159</td>
</tr>
<tr>
<td>simplificolia, 159</td>
</tr>
<tr>
<td>tripteris, 134, 159</td>
</tr>
<tr>
<td>Forsteronia pavonii, 63</td>
</tr>
<tr>
<td>Fouquieria</td>
</tr>
<tr>
<td>formosa, 249–250</td>
</tr>
<tr>
<td>macdougalii, 250</td>
</tr>
<tr>
<td>spinosa, 250</td>
</tr>
<tr>
<td>Fouquieriaeae, 249–250</td>
</tr>
<tr>
<td>Fourcraea hexapetala, 341</td>
</tr>
<tr>
<td>Foveolaria (Styrax arg.), 521</td>
</tr>
<tr>
<td>Fragosia</td>
</tr>
<tr>
<td>capitellata, 271</td>
</tr>
<tr>
<td>pedicellata, 270</td>
</tr>
<tr>
<td>Franseria ambrosioides, 135, 159, 191</td>
</tr>
<tr>
<td>Fraxinus ternata, 48</td>
</tr>
<tr>
<td>Freziera syphilitica, 523</td>
</tr>
<tr>
<td>Fritillaria</td>
</tr>
<tr>
<td>biflora, 343–344</td>
</tr>
<tr>
<td>camtschatensis, 344</td>
</tr>
<tr>
<td>lineata, 343</td>
</tr>
<tr>
<td>meleagris, 343, 344</td>
</tr>
<tr>
<td>Froelichia, 51</td>
</tr>
<tr>
<td>Fuchsia, 34, 403, 404; revision of genus, 404</td>
</tr>
<tr>
<td>alternans, 403, 404</td>
</tr>
<tr>
<td>arborea, 31, 403</td>
</tr>
<tr>
<td>arborescens, 403</td>
</tr>
<tr>
<td>biflora, 403</td>
</tr>
<tr>
<td>cordifolia, 403</td>
</tr>
<tr>
<td>fulgens, 403</td>
</tr>
<tr>
<td>gracilis, 403</td>
</tr>
<tr>
<td>hamelliioides, 403</td>
</tr>
<tr>
<td>michoacanensis, 31, 403</td>
</tr>
<tr>
<td>microphylla (Lythr. vuln.), 357; 403, 404</td>
</tr>
<tr>
<td>minutiflora (Lythr. vuln.), 357</td>
</tr>
<tr>
<td>ovata, 404</td>
</tr>
<tr>
<td>parviflora, 403, 404</td>
</tr>
<tr>
<td>racemosa, 33, 79, 403</td>
</tr>
<tr>
<td>thymifolia, 403–404, 525</td>
</tr>
<tr>
<td>uniflora, 404</td>
</tr>
<tr>
<td>Fumaria officinalis, 250</td>
</tr>
<tr>
<td>Fumariaceae, 250</td>
</tr>
<tr>
<td>Funastrum</td>
</tr>
<tr>
<td>bicolor, 58</td>
</tr>
<tr>
<td>cumanense, 58</td>
</tr>
<tr>
<td>Fungi, 549–550; sources of names of, 550</td>
</tr>
<tr>
<td>Galactia</td>
</tr>
<tr>
<td>multiflora (Vicia tri.), 339</td>
</tr>
<tr>
<td>radicata, 314</td>
</tr>
<tr>
<td>tuberosa, 314</td>
</tr>
<tr>
<td>sp. (Hedysarum vol.), 318</td>
</tr>
<tr>
<td>Galega</td>
</tr>
<tr>
<td>cathartica, 314</td>
</tr>
<tr>
<td>cinerea, 314–315</td>
</tr>
<tr>
<td>polygama, 315</td>
</tr>
<tr>
<td>Galeopsis tetrahit, 269</td>
</tr>
<tr>
<td>Galinsoga, 146</td>
</tr>
<tr>
<td>trilobata (triloba), 159–160</td>
</tr>
<tr>
<td>Galium (Gallium)</td>
</tr>
<tr>
<td>aparine, 464</td>
</tr>
<tr>
<td>boreale ( boreal), 464–465</td>
</tr>
<tr>
<td>diphllum (Rubia), 474</td>
</tr>
<tr>
<td>mexicanum, 465</td>
</tr>
<tr>
<td>repens, 465</td>
</tr>
<tr>
<td>uncinulatum, 465</td>
</tr>
<tr>
<td>sp., 465</td>
</tr>
<tr>
<td>Galphimia, 361; pending revision of, 361</td>
</tr>
<tr>
<td>glandulosa, 362</td>
</tr>
<tr>
<td>var. oblongifolia, 361–362</td>
</tr>
<tr>
<td>var. ovalifolia, 362</td>
</tr>
<tr>
<td>glauca, 361</td>
</tr>
<tr>
<td>gracilis, 361, 362</td>
</tr>
<tr>
<td>lanceolata, 361</td>
</tr>
<tr>
<td>ovalifolia, 362</td>
</tr>
<tr>
<td>Gardenia</td>
</tr>
<tr>
<td>laccifera, 465</td>
</tr>
<tr>
<td>mexicana, 464, 465</td>
</tr>
<tr>
<td>rotundifolia, 469</td>
</tr>
<tr>
<td>sp., 465</td>
</tr>
<tr>
<td>Garrisonia laurifolia, 250</td>
</tr>
<tr>
<td>Garraceae, 250</td>
</tr>
<tr>
<td>Gastronemia physaloides, 491</td>
</tr>
<tr>
<td>Gaudehaua (cf. Banisteria hisp.), 363</td>
</tr>
<tr>
<td>acuminata, 362</td>
</tr>
<tr>
<td>albida, 362</td>
</tr>
<tr>
<td>var. subtomentosa, 362</td>
</tr>
<tr>
<td>brevipes, 358</td>
</tr>
<tr>
<td>cycloptera, 360, 362</td>
</tr>
<tr>
<td>cyanhochoides, 361, 362, 363</td>
</tr>
<tr>
<td>mueronata (Hir. acum.), 362; 363</td>
</tr>
<tr>
<td>oxyota, 363</td>
</tr>
<tr>
<td>pentandra, 362</td>
</tr>
<tr>
<td>subsp. armottiana, 362</td>
</tr>
<tr>
<td>podocarpa, 363</td>
</tr>
<tr>
<td>webbiana, 362</td>
</tr>
<tr>
<td>sp., 358; (Hir. hisp.), 359; (Ban. pent., Ban. proc.), 360; (Ban. vol.), 361</td>
</tr>
<tr>
<td>Gaulenia</td>
</tr>
<tr>
<td>elegans, 344</td>
</tr>
<tr>
<td>minor, 344</td>
</tr>
</tbody>
</table>
Geranium
grossulatioides, 253
heinandezisi, 253
inquinans, 253
mexicanum, 253
potentillaefolium, 253
seemannii, 253
sibiricum (sibyricum), 253
Gerardia peduncularis, 485
Geaneria (Geaneria), revision of, 253
acaulis, 254
antirrhina, 256
biflora, 255
calcarata, 255
cuneifolia, 254, 255
dentata, 256
deppeana, 255, 256
exoxonia, 255
longiflora, 253, 254
maculata, 16, 255–256
pedunculosa, 253
quaterniflora, 255
rescissa, 254
tomentosa, 255, 256
uniflora, 256
sp., 256
Gentianaceae, 26, 253–256, 487
Gentium, 456, 457
rococorpusoides, 457, 460
dryadoides, 456
pseudocyranthemum, 457
plumosum, 460
polygamum, 456, 458
resinum, 457–458
sessiliflorum, 456
urbanum, 458
Geum rosae, 444, 445
Gibers brehmsii grandiflorus, 489
Ginaria curassavica, 537
Gibbaus, 131
Gilia
longiflora, 439
pinnatifida, 437
sessei, 437
Ginoria (Ginoria)
americana, 355
flava, 355
xiphilitica (siophilistica), 355
Glandularia amoena, 540
Gliciridia sepium (Glycine), 303
Gloxinia antirrhina, 256
Glycine (Glycine), 315
americana, 315
axiformis, ensiformis (Dolich.), 315
geiniflora (Dolich.), 311
Glycyrrhiza (Astr. niq.), 292
Gnaphalium
allylilicicum, 160
INDEX

Gnaphalium
foetidum, 160
gracile, 160
indicum, 147
lineare, 160
margaritaceum, 160
odoratissimum, 160
parvisorum, 160
pedunculare, 160
purpurascens, 160
purpureum, 160
Gowmania aesculifolia, 86
Goldmania foetida, 325
Gomphrena
argentea, 51
decumbens, 51–52
diffusa, 51, 52
dispersa Standl., 52
flava, 51, 52
nodiflora, 52
pringlei, 52
procumbens, 52, 53
pulverulenta, 52
serrata, 52
trispicata, 51
Gonfrena difusa, 52
Gonolobus, 75
fraternus, 75
grandiflorus, 75
niger, 75
prostratus, 75
uniflorus, 78
Gonzalagunia
panamensis, 470
spicata, 470
Goodeniaceae, 256–257
Gossypium, 372
lanceforme (lanceaeforme), 367, 372
trilobum, 371
Gothofreda periplota, 58
Gouania
domingensis, 452, 453
mexicana, 452
polygama, 452
rosei, 453
stipularis, 452–453
Govenia
liliaceae (Eucnemis), 417
sp. (Coral. macr.), 408; (Epi. lam.), 412; (Serap. lur.), 423; (Serap. palm.), 423
Gramineae, 257–259
Gratiola
monieria (monieria, moniera), 489, 490
monieria portulacaster, 489
monieria repens, 489
repens, 489
rotundifolia, 490
Grewia mexicana, 526–527
Grindelia, 138
angustifolia DC., 160, 161
angustifolia Dunal, 160
angustifolia H. B. K., 161
dunalii (duvalii), 160
glutinosa, 137
inuloides, 138, 150, 161
Grislea
herbacea, 32, 354, 355
sessilifolia, 354
umbellata (Vmbellata), 354–355
Gronovia scandens, 348–349
Grossulariaceae, 260
Guaiacum
acutifolium, 546
afrum (Ophrys imbr.), 419; 546
coulteri, 546
sanctum, 546
verticale, 546
Guarea
brachystachya (brachystachia), 389
glabra, 389, 390
guara, 390
guidonia, 390
hirsuta, 389–390
pauciflora, 389, 390
swartzii, 390
trichiloides, 389, 390
sp., 390
Guatteria
blainii, 57
viridiflora, 57
Guayabilla (not a new genus), 247, 248
Guayabilla, 249
2¹ Specie, 247
odorata, 247–248
Guazuma
mexicana, 521
polybotrya, 518
tomentosa, 518, 521
ulmifolia, 518
Guettarda
elliptica (eliptica), 466
galeottii, 466
resinosa, 465
rugosa, 465
scabra, 465
tetrandra, 466
sp., 465, 466
Guillandina
bonduc, 315
bonducella, 315
Guilleminea
densa, 52
[var.] ß alsinacelifol, 52
Gurania spinulosa, 206
Gutierrezia, 160
alamani, 160
583
Gutierrezia, 160
   dunali, 160
   linearifolia, 161
   sarothroides, 152
Guttiferae, 260–262
   Gymnema symphoricarpos, 125
   Gymnocyclus nucifera, 47
   Gymnanthes pavoniana, 234, 235
   Gymnostomidium macrantha, 234
   Gymnostyles
   parthenifolia, 158
   pedunculata, 178
Gyrocarpus, 262
   americanus var. pavonii, 262
   jacquinii, 262
   palmatifidus, 262
Habenaria
   clypeata, 408, 417, 421
   diffusa (Orch. imb.), 421
   macrocarpita, 417–418
   novemfida (Orch. imb.), 421
   oreophila, 417
   quinquanta, 417
   segetioides, 418
   strictissima, 418
   sp. (Oph. insec.), 420; (Orch. imb.), 421
Habraunthus haematodes, 42
Hackelochloa granulans, 258
Haemadictyon
   mexicanum, 63–64
   pallidum, 64, 65
Haematoxylum (Caesal. vesc.), 294; (Coulteria), 302
   brasiliense, 302
   campechianum, 302
Halenia
   brevicornis, 252
   elongata, 251–252
   plantaginea, 251, 252
Halimolobus polyspermus, 206
Hamelia (Hamelia)
   axillaris, 466
   corymbosa, 466
  declinata, 466
   patens, 466
   var. quinfinolia, 466
   versicolor, 466
   verticillata (verticillata), 466
Hampea nutricia, 367
Haploppappus, 135
   stoloniferus, 138
   venuis, 181
Haplophyton cimicidum, 59, 64
Harpaichea formosa, 316
Hartmannia laitflora, 407
Hauya elegans, 405
Hebanthe
   hookeriana, 52
   mollis, 52
Heberdenia penduliflora, 395
Hechita
   aff. glomerata, 102
   podantha, 102
Hecubaea scorzonertifolia, 146
Hedeoma piperitum, 269
Hedwigia ? mexicana, 105
Hedyotis (Hedlotis, Hedyptis), annotated list of North American species, 466
   crassifolia (crassifolia), 466
   dichotoma, 466
   fruticosa, 461, 462
   grandiflora, 468
   herbacea, 466, 469
   latifolia, 466
   longiflora, 461, 467
   mexicana, 461
   spinescens, 462
   villosa, 467
Hedysarum (Hedissarum, Hedissarum)
   acayucense (acayucense), 316
   arborescens, 316, 318
   biarticulatum, 311
   diphylleum (diphylleum), 316
   frutescens, 316
   fruticosum, 316
   geminiflorum, 311
   grandiflorum, 31, 291
   longiflorum, 316–317
   mexicanum, 317
   nicaraguense, 317
   orizavum, 317
   prismaticum, 317
   procumbens, 317
   quinqueangulaturn, 317
   reniforme, 317
   repens, 317–318
   retroflexum, 318
   scandens, 318
   stipulaceum, 311
   tomentosum, 318
   viridiflorum, 318
   volubile, 318
   sp. (Vic. trifl.), 339
Hedysarurum of Sessé & Mociño, 37
Heeria elegans, 384
Heimia
   salicifolia, 355
   syphilica, 355
Heisteria coccinea, 287–288
Helaterrum, see Elaterium
   penaphyllum, 208
Helenium
   integrifolium, 161
   mexicanum, 161
INDEX

Helianthemum
astylum, 127
coulteri, 127
glomeratum, 126, 127
ocordatum, 126, 127
tripetalum, 127
triphyllum, 127
Helianthus, 162, 177
alatus, 141, 148
altissimus, 161, 162
angustifolius, 161
atrorubens (atro-rubens), 161, 177
buccinatus, 161–162
dentatus, 138, 162
giganteus, 138, 162
hastatus, 161, 177
heterophyllus, 177
hirtus, 161
huamantensis, 162, 177
linearis, 138, 162
maritimus, 152
multiflorus, 177
procumbens, 162
purpureus, 161
quinquelobus, 162
quinque-radiatus, 162
scaber, 177
sericeus, 162–163, 176, 177
tetragonus, 132, 141
tetrapetalus, 147
trilobatus (trilobus), 163
triqueter, 162
tubaeformis Ort., 162, 163
tubaeformis Jacq., 163
Heliconia
hirsuta, 394
psittacorum, 394
rubra, 394
Helicteres
biflora, 518, 519
guazumaefolia, 518, 519
isora, 519
jamaicensis, 519
mexicana, 519
rubra, 519
rabra, 519
Helicocarpus
americana, 527
pallidus, 527
reticulatus, 527
terebinthinaceus, 527
velutinus, 527
Helicocereus speciosus, 107
Heliospis
annua, 142
buphthalmoides, 136
Heliotropium, 89
angiospermum, 90, 95
Heliotropium, 89
assurgens, 89
bacciferum, 99
calcicola, 90
curassavicum (curassaucum), 95
frutescens, 90
fruticosum, 89
indicum, 95
lancefolium, 95
mexicanum, 90, 95, 98
microphyllum, 89
oaxacanum, 89
parviflorum (paruiflorum), 95
sessei, 98
Hemianthus excelsum, 262
Hemigraphis elegans, 43
Hemisandra aurantiaca, 39
Herissantia crispa, 378, 379
Hermania (Hermannia)
isserata (biserrata), 519
cordifolia, 519
corymbosa (corimbosa), 519
inflata, 519
sessiliflora, 520
tomentosa, 519
Hernandia
peltata, 262
sonora, 262
Hernandiaefaeceae, 262
Herpestis
flava, 489
moniera, 489
Herrina species (Nama sericeum), 264
Hesperis matronalis, 205
Heteranthera
emarginata, 444
liebmanni, 444
sp., 444
Heterocentron
elegans, 384
sp. (Melast. enervata), 386
Heteromeris mexicana, 126, 127
Heteroserena diversifolium, 384
Heteropterys (Heteropteris)
bechehaya, 360
brachiata, 360, 364
laurifolia, 359, 360
subvar. floribunda, 360
purpurea, 359
sp. (Ban. panic.), 360
Heterospermum pinnatum (pinnata), 140
Heterotheca inuloides, 151
Heterotrichum octonum, 387
Heuchera
americana, 484
var. foliosa, 484
glabra, 484
longipetala, 484
Heuchera
micrantha var. diversifolia, 484
Hexadesmia crunigera, 414
Hibiscus (Hyglicus), 33, 375
acetosaefolis, 367
azanzae, 367
bifurcatus, 368, 371
bracteosus, 19, 367
brasiliensis (Malv.), 368; (Oxyph.), 369; (unilat.) 371;
(Malv. pent.), 375
columbinus, 371
coulteri, 367
cyanogynus, 367–368
cylindriflower, 370
fasciculatus, 368
feuleneus, 368
filicaceae (tiliaceae), 368
flavidus (Malvavis.), 374
fragrantissimus, 368
fraternus, 368
glandulosus, 382
malaviscus, 368–369, 375
mexicanus, 369
mutabilis, 369, 374, 375
nutans (Malvavis. pend.), 375
oxyphyllus, 369
palustris, 370
pedunculatus, 33, 369–370, 374
pernambucensis, 367
phoeiceus, 370
pleurantherus, 375
pleurogonus, 376
racemosus, 370
rigidus, 370
rosa chinensis (rosa chinensis), 370
spiralis, 370
tiliaceus, 367, 368
tubiflorus, 370–371
tuxtilensis, 371
umbellatus, 371
uncinellus, 368, 371
unilateralis, 371
virginicus, 371
vitiolius (Uitifolius), 370
sp., 371
Hibiscus sect. Azanzae, 367
Hieracium
abseissum, 163
acaul, 165
hirsutum, 163
lagopus, 163
mexicanum, 163
stipitatum, 145
strigosum, 163
Hillia
longiflora, 467
parastica, 467
tetragona, 467
Hillia
tetrandra, 467
tuxtilensis, 467
Hintonia
latiflora, 463
standleyana, 463
Hippeastrum punicum, 342
Hippia minuta, 178
Hippobroma longiflora, 112
Hippocratea
acutiflora, 262
uniflora, 262
volubilis, 262
Hippocrateae, 262
Hippomane
angustifolia, 245
biglandulosa, icon number assigned to, 228; 234, 235
cenfera, 234
crenata, 245
eglandulata, 235
fruticoso, 234–235, 245
glandulosa, 245
mancinella (manzanilla), 235
spinoso, 234, 235
suffruticosa (suffruticosa), 234, 235, 245
tricoca, 234
sp. nova, 234
Hippophae mexicana, 250
Hirae, 362
acuminata, 362
cycloptera, 362
macroptera (Banis. laur.), 359; 362–363
mucronata, 363
oxytoca, 363
podocarpa (Banis. hisp.), 359; (Banis. vol.), 361; 363
Hirtella
acayacensis (acaacensis), 458
americana, 458
castanea, 458
dodecandra, 458
doiglongifolia, 458
octandra, 458
racemosa, 458
rosea, 458
triandra, 458
Hochreutinera amplexifolia, 377
Hoffmannseggia sp. (Poinciana), 335
Hofmeisteria, 157
Hoitzia
coccinea, 438
coculica, 438
Holoites discus argenteus, 460
Holographis anisophylla, 44
Holostrium
lanceolatum, 122
mucronatum, 122–123
repens, 123
INDEX

Homalium
   molicellum, 248
   senarium, 248
   trichostemon, 248

Hopea (Hophea)
   lancifolia, 522
   martunicensis, 522, 523
   mexicana, 522, 523
   tinctoria, 522

Horminum caulescens (Betonica), 268, 269

Hosackia
   angustifolia, 318
   repens, 318

Humboldtia (Pleuroth.), 421

Hunteria
   columbina, 171
   fuscata, 171

Hura
   crepitans, 235
   polyandra, 235

Hyacinthus (Polianthes), 345

Hybanthus
   attenuatus, 542
   lineatus, 542
   mexicanus, 541
   oppositifolius, 542
   reticulatus, 541
   verticillatus, 542, 543
   sp. (Hyb. mex.), 541

Hydrocotyle
   asiatica, 530
   erecta, 530
   grumosa, 530, 531
   hirsuta, 530
   racemosa, 530
   spicata, 530
   verticillata
      var. racemosa, 530
      var. triradiata, 530

Hydrolea
   angustifolia, 262
   auriculata, 265
   cervantesii, 262
   decurrens, 263
   radians, 264
   rupincola, 264
   scorpioidea, 265
   spinosa, 262, 263
   tenella, 264
   tetracygina (tetragnia), 262–263
   violacea, 263
   sp., 34; (Nama undul.), 264

Hydrophyllaceae, 251, 262–265

Hydrophyllum (Hydrophyllum, Hydrophillum) erectum, 264

Hygrophila pringlei, 47

Hymenaea courbaril, 319

Hymenella moehringioides, 123

Hymenocalis sp. (Pancratium), 345

Hymenothecium
   trisetum, 258
   unisetum, 258–259

Hyoscyamus (Hyoscyamus) niger, 499

Hypericum
   haeceferum, 261
   barbatum, 261
   montanum, 260–261
   perforatum, 261
   pumilum, 261
   sp., 261

Hypoxis
   uniflora, 345
   sp. (Milla), 345

Hyptis, 272
   albida, 269–270
   atrorubens, 270
   conferta, 270
      var. angustifolia, 272
   ferruginea, 270, 272
   lantanifolia, 270
   lilacina, 270
   mocciniana, 270
   mutabilis, 272
      var. pavoniana, 270
   pectinata, 268
   pedicellata, 270
   pubescens, 270
   recurvata, 270
   rhomboidea, 272
   spinulosa, 270–271
   suaveolens, 268
   uricioideae, 270

Icacerea
   compressa, 394
   revoluta, 394

Ichthyomethia americana, 334

Ichthyomethia (rejected name), 334

Icica ? serrata, 104, 105–106

Ignatia (Ignatia) amara, 467; wrongly referred to Hura, 467–468

Illecebrum
   achyrantha, 123
   alsinaefolium, 52
   ficoideum, 52
   nodiflorum, 52, 53; (Gouan. stip.), 452
   paronychia (paronichia), 123
   vermiculatum, 52

Illysanthes inaequalis, 490

Indigofera
   anil (añil), 319, 320
      var. polyphylla, 319
   atropurpurea, 319
   cornezuelo, 319
   densiflora, 320
   eneaphylla, 319
   exstipulata, 320

587
Indigofera
  guatimala, 320
  guatimalensis, 319–320, 321
  humilis, 319
  michelliana, 319
  miniiata, 319, 320
  mucronata, 320
  siphonogperma, 319
  suffruticosa, 319, 321
  thibaudiana, 319
  tinctoria, 320
    var. brachycarpa, 319, 320–321
  truxillensis, 320, 321
  sp. (Hedy. linfolium), 317

Inga, 325
  alternifolia, 321
  anomala var. pedicellata, 321
  carmosa, 321
  coriacea, 294, 321
  edulis, 326
  emarginata, 294
  eriocarpa, 326
  hirsuta, 321, 325
  houstoni, 321–322
  latifolia, 294
  laurina, 326
  mociniana, 322, 326
  quamoclit, 329
  quaxiniquili, 326
  schiedea, 326
  tetraphyllum, 322
  trunca, 294
  vera, 322, 326

Ingenhouzia triloba, 367, 371–372

Inula (Hinula)
  leptorrhiza, 151
  tomentosa, 163
  trixis (Perdicia radiale), 170

Ionidium
  calceolarium, 541–542
  difforne, 542
  gracile, 542
  lineatum, 542
  longifolium, 542
  polygalaeformium, 542
  trispernum, 541

Ionoxalis group (of Oxalis), 425

Ionoxalis
  hermandesi, 424
  nudiflora, 425

Iostephane heterophylla, 149

Iphys fasciculata, 236

Ipomoea, 31, 193, 197, 198, 264
  arborescens, 193, 196
  bona-nox, 195
  bracteata, 194
  brevipes, 198
  bulbocastana, 199

Ipomoea
  campanulata, 199
  capillacea, 194
  cathartica, 197
  cavanillesii, 200
  coccinea, 201
  costellata, 194, 195
  cuernavacensis, 193
  deppeana, 197, 199
  digitata, 194
  emetica, 199
  erythrea, 201
  filiformis, 194
  glaucifolia, 199
  hastata, 199
  hederifolia, 201, 264
  heterophylla, 199
  humilis, 199
  intrapilosa, 193
  longifolia, 196
  mexicana, 201
  multiflora, 196
  muricata, 194
  murucoides, 193, 196
  nutans, 199–200
  parviflora, 200, 201
  pentaphylla, 200
  pes-caprae, 194, 198
  purga, 201
  quamoclit, 200
  quinquelandia, 200
  racemosa, 194
  rubra var. alboflavida, 197
  sagittata, 199
  sinuata, 200
  stans, 197, 199, 200
  suffulta, 194, 195
  tannifolia, 196
  temecatl, 199
  tenuifolia, 194
  tiliacea, 193, 197, 198
  tricolor, 200
  triloba, 194
  tuberosa, 199
  tubulata, 200–201
  uniflora, 5, 201
  verrucosa, 201
  violacea, 200

sp. (Conv. triflor), 197; 201

Ipomopsis pinnata, 439

Ipomopsis
  aggregata, 52
  angustifolia, 49
  calcei, 50, 52
  celosia, 49
  celostoides, 51
  flavescens, 50

Iridaceae, 265–267
INDEX

Iris sambucina, 265
Isidorea centauroides, 154
Ishchia verbenacea, 537
Isnardia
   mexicana, 405
   palustris, 405
   var. americana, 405
Isochilus linearis, 408, 413, 418
Isocoma veneta, 181
Isotypus onoseroides, 164
Iva
   cheiranthifolia, 164
   connata, 164
   frutescens, 164
Ixia (Yxia)
   americana, 265
   chinensis, 265
   lutea, 265
   mexicana, 265
Ixora (Yxora)
   alba, 468
   americana, 461, 468
   aphylla, 468
   cordifolia, 461
   ferrea, 470
   pulcherrima, 468
   tenuifolia, 468
   ternifolia, 468
   uniflora (Vniflora), 32, 468
Jaborosa
   integrifolia, 499
   longiflora, 499
Jacaratia mexicana, 120
Jacobinia, 41
   aurea, 41
   mohintli, 47
   spicigera, 41, 48
Jacquemontia, 198
   havennsis, 195
   hirsuta, 201
   jamaicensis, 195
   nodiflora, 193
   pentantha, 198
   rozynskii, 196
   sphaeroestigma, 201
   sp. (Conv. pilos.), 195; (Conv. umbel.), 198
Jacquinia, 524, 525
   aculeata, 525
   armillaris, 34, 524
   aurantiacea, 524
   linearis, 524–525
   racemosa, 525
   ruscifolia, 525
   umbellata, 525
Jacquinioda fasciculata, 524
Jaegeria
   bellidiflora, 133
   macrocephala, 126
Jaegeria
   pedunculata, 136
Jallomata procumbens, 495, 496, 503, 516
Jasminum sambac, 402
Jatropha, of the Sessé & Mociño herbarium, 36
   alamani, 236
   cathartica, 28, 95, 239
   ciliata, 236
   cinerea, 28, 236, 240, 241
   cordata (Androm. gland., 218; 236, 239, 240, 241;
   (Dolichos sp.), 312; (Probosc. alth.), 383
   cordata from “Nutka”, 441
   crenulata, 241
   cuneifolia, 236
   eureas, 236, 237
   dioica, 236, 241
   draco, 28, 236–237
   edulis, 236, 237
   gossypifolia (gossypifolia) (Crot. palm.), 226; 237
   var. elegans, 237
   hasiata, 238
   herbacea, 239, 240
   hernandiflora, 237
   heterophylla, 237
   jatipha (janifl., ianifa, ianisa), 237, 238, 240
   mitis, 237
   moluccana (moluensis, moluccensis), 237–238
   multifida, 238
   napaeifolia, 239
   octandra, 238, 240
   olivacea, 236
   ovalis (Jaborosa), 499
   palmata, 238
   palustris, 238
   peltata, 238–239
   platyphylla, 238
   podagrica, 238
   pseudocurcas, 236
   pulchella, 28, 239
   quinqueloba, 239
   spatulata, 236, 241
   triloba, 239
   tuberosa, 238
   tubulosa, 239
   var. quinqueloba, 239
   var. septemloba, 239
   var. triloba, 239
   urens, 239–240
   var. herbacea, 240
   sp. (cf. J. dioica), 236; (cf. Manihot), 240
Juanulloa
   elliptica, 500
   mexicana, 500
Jussieu (Jussiaeae)
   aquilinif., 406
   declinata, 405
   decurrens, 406

589
Jussieua (Jussieae)
  erecta, 406
    var. plumeriana, 406
  inclinata, 405
  repens, 406
  sessiliflora (sessiliflora), 406
  suffruticosa, 405
  swartziana, 406
  tenella, 406

Justicia, 40, 43, 44
  alba, 2, 41
  arborea (arboorea), 39
  assurgens, 41
  atramentaria, 47
  aurea, 41
  cardinalis, 43
  ciliaris, 41
  cylindrica, 43
  coccinea, 41, 48
  comata, 40
  exilis, 41
  falcata, 41–42
  flagelliformis, 2, 42
  guatimalensis, 42
  hiemalis, 42
  infundibuliformis, 42
  leucotricha, 40
  longiflora, 39
  longifolia, 42
  lutea, 39, 42
  macrocarpus, 46
  macrostachia, 39
  marginata, 39
  (Mohintli), 47
  oxyphilla, 42
  paniculata, 42
  papilionacea, 42–43
  parviflora, 43
  pectoralis, 40, 42
  pringlei, 43
  pulchella, 43
  pulcherrima, 43
  resupinata, 40
  revoluta, 40
  sexangularis, 40, 43–44
  spathacea, 46
  spicigera, 41, 47, 48
  subcapitata, 44
  superba, 44
  teucrilflora, 44
  triplistachya (tripolistachya), 41
  verticillata, 44

Justitia, 46
  linearis, 39, 40
    sp. (cf. Salvia falcata under S. grandiflora), 277

Kallstroemia
  maxima, 546
    sp. (Trib. max.), 546

Karwinsokia
  biniflora, 453
  humboldtiana, 453

Karnemalvastrum
  lacteum, 374
  subtriflorum, 374

Kleinia glandulosa, 171

Knorria, 255, 256
  deppeana, 255
  lanata, 256

Kosteletzkya
  depressa, 378
  paniculata, 371
  pentasperma, 379
  tubiflora, 370
    sp. (Hib. fasc.), 368

Krameria, numbers assigned to species (cf. Acaena), 455
  cuspidata, 267
    erecta, 267, 268
  ixina, 32, 267, 268
  lanceolata, 268
  paueriflora, 267–268
  rosmarinifolia, 268
  secundiflora, 267, 268

Krameriaccae, 267–268

Kuhnia rosmarinifolia, 154, 155, 156, 157

Kyllingia ramosa, 213

Labiateae, 87, 268–287, 358, 539

Laetuca
  intybacea, 178, 188
  scariola, 164

Laelia
  furfuracea, 408, 418
    sp. (Serap. paras.), 422

Lafoenisia
  mexicana, 355
  punicifolia, 355

Laguscea, 169
  angustifolia, 187
  helianthifolia, 169, 187
  latifolia, 169
  moccinniana, 164–165, 169, 187
  rigida, 169
    var. moccinniana, 164
  rubra, 169
  suaveolens, 169
    sp. (Tarchonanthus), 187

Laguncularia racemosa, 128, 129

Lamourouxia, 492
  exserta, 492
  multifida, 492
  rhinanthifolia, 490
  tenuifolia, 490

Lantana, numbers assigned to species, 537
  aculeata, 537
  annua, 537
  bipinnatifida, 537; (Rhinanthus) cited in error, 492
Lantana
camara, 537
hispida, 538
horminoides, 539
horrída, 537
involutata, 537
mista (mixta), 537, 540, 541
odorata, 537
polycephala, 539
repens, 538
trifolia, 537
tuxtlensis, 538
velutina, 537
sp., 537, 538

Larrea
mexicana, 546, 547
tridentata, 546

Lasiorrhenum strigosum, 96, 97, 98

Lathyrus (Lathyrus), 339; revision of North American species, 322
linearis, 339
odoratus, 322, 334
parviflorus, 322
speciosus, 322
vittatus, 339

Laubertia, 58
cortorta, 58, 63

Laugeria
dichotoma, 476
resinosa, 465

Lauraceae, 287–288

Laurus
aestivalis, 288
borbonia, 287, 288
coccinea, 287
cymosa, 288
indica, 288
moschatia, 288
nervosa, 288
sp., 288

Lavaxia tubifera, 407
Lavoisiera fasciculata, 524
Leandra mexicana, 388
Lebetina porophyllum, 132, 151, 172
Lechea tripetala, 127
Lechuguilla, 102, 174
Lecostemon (Lecostomum) terniflorum, 218
Lecythidaceae, 288–289

Lecythis
nicaraguensis (nicaraguensis), 288
ollaria, 289

Leguminosae, 21, 289–339; papilionoid, numbers assigned to species (Eryth. lept.), 314

Leguminosae tribe Amorpheae, 304, 336
Leguminosae tribe Psoraleeae, 336
Lemeryaanthemoides, 160

Lemna, 340
cordata, 340
gibba, 340

Lemnaceae, 340

Lendneria
cf. aegeratofolia, 487
humilis, 493

Lenoea madreporoides, 340

Lenoeaceae, 340

Lenitubulariaeae, 340; numbers assigned to species, 340

Leoehilus carinatus, 412
Leonia physaloideae, 491

Leonotis nepetifolia, 273
Leonorus mexicanus, 271, 286

Lepechinia
cauliscens, 269
spicata (Betonica), 268; 269

Lepidium, 205
iberis, 205
dlatinum, 205–206
ruderal, 206
sordidum, 206
virginicum, 205

Lepidopappus tripteris, 159
Leptochloa virgata, 258

Leptolottis, 328

Leria
nutans, 145, 165
spathulata, 165

Leucaena esculenta, 289

Leucas rubra, 273

Leucocarpus perfoliatus, 492

Leucothoe DC. (origin of name), 214

Leucolea
serrata, 214
terniflora (Rheedia), 261
villosa, 214

Licaria sp., 287–288
Lico perchordamericanum, 549, 550

Lieberkuhna ?, 165

Ligustrum levisticum, 550

Liliaceae, 102; sens. lat., 341–348

Lilium
kamtskatense (canschacense), 344
superbum, 344
variegatum (Alstroem.), 342, 344

Limnia sibirica, 445

Limnichoris flava, 49

Limodorum spicatum, 418

Limosella, the genus, study of, 490
acaulis, 490
americanus, 490
australis, 490
mexicana, 490

Linaceae, 348

Lindernia
[inaequalis], 490
sp. (Veron. rot.), 495
Linum
   maritimum, 348
   usitatissimum, 348
Liparis, 420
   loeselii, 420
   vexillifera, 424
      var. arnoglossophylla, 424
Lippia (Lippa), numbers assigned to species, 537
   alba, 538
   arborea, 538, 539
   callicarpifolia, 538
   crenata, 538
   cuneifolia, 538
   longifolia, 538
   micromera, 538
      var. helleri, 538
   obovata, 538
   umbellata, 538
   sp. (Lani. cam.), 537; (Lani. repens), 538; (Phryma), 539
Lisanthus
   incarnatus, 252
   pauciflorus (pauciflorus), 252, 350–351
   roseus, 252
   trinervis, 250, 252
Lithospermum (Lythospermum), 89, 95, 98
   angustifolium, 89, 97
   discolor, 97
   distichum, 89, 95, 96
   flavum, 96
   laevigatum, 95, 96
   longiflorum, 96–97, 98
   obtusiflorum, 97
   officinale, 97
   ramosum, 89
   rosmarinifolium, 89, 97
   strictum, 95, 97
   tinctorum, 89, 90
   virginianum, 96, 97–98
Litsea glaucescens, 288
Llaguina ? volubilis, 244
Llavea cordifolia, 548
Loasa
   hispida, 349
   lyrata, 349
   papaverifolia, 349
   triphylla var. rudas, 349
   urens, 349
Loasaceae, 348–349
Lobelia
   bellidiflora, 111–112
   biserrata (biserrata), 112
   cardinalis, 112, 114
      subsp. graminea, 114
   cliffortiana, 112
   coecinea, 112
   debilis, 112
   fenestralis, 112, 113
   fulgens, 112
   gruina, 112, 114
   laurentia, 112, 113
   laxiflora, 113
      var. angustifolia, 113
      var. stricta, 113
   longiflora, 112
   minuta, 112
   nana, 112–113
   patzquarensis, 31, 113, 114
   pauciflora, 112
   pumila, 113
   pyramidalis, 113
   sempervirens, 113
   sinuata, 112
   siphilitica (siphilitica), 113
   spicata, 112, 113
   surinamensis, 113, 114
   triqueta, 112, 113–114
   tuberosa, 114
   tupa, 114
Lochnera rosea, 67
Lockhartia oerstedii, 419
Loeflingia ? renifolia, 123
Loeselia
   ciliata, 437
   coerulaea, 438
   glandulosa, 438
   involucrata, 437
   mexicana, 438
Loganiaceae, 252, 349–351
Lonchocarpus, 322
   aropurpureus, 322
   domingensis, 303
   lanceolatus, 322
   latifolius, 303
   macrocarpus, 322
   parviflorus, 323
Lonicera, 118
   campanulata, 118
   caprifolium, 118
   gibbosa, 118
   involucrata, 118
   mociniana, 118
   nutkensis, 118
   pilosa, 118
   sempervirens, 118
   symphoricarpos, 118
Lopezia (Laposia), 406
   annua, 406
   mexicana, 406
   miniata, 406
   oppositifolia, 406
   racemosa, 406
   semprevirens, 407
   semprevirens, 407
   trichota, 406
INDEX

Lophospermum
  erubescens, 490–491
  physalodes, 491
  scandens, 490, 491
Loranthaceae, 351–352
Loranthus
  americanus, 351, 352
  calycula tus, 351–352
  ioniceroides, 352
  microphyllus, 352
  occidentalis, 352
  quaucihiti, 351, 352
  ramiflorus, 16, 352
  spicatus, 352
  vulubilis, 352
  sp., 352
Lorentea atropurpurea, 165
Lorenzanea dentata, 479
Lotus, 323
  angustifolius, 318
  coeruleus, 323
  galegocangos, 323
  orbooides, 318
  racemosus, 323
  repens, 318
  sp. (Dol. und.), 312; (Ononis conj. G. Don), 330
Loureia
  cinerea, 240
  cuneifolia, 241
  glandulosa, 236, 240, 241
Lucuma
  capiri, 483
  multiflora, 481
  salicifolia, 483
  sphaerocarpa, 483
Ludwigia palustris var. americana, 405
Luehea candida, 526
Luffa
  acutangula, 210
  cylindrica, 207, 210
  fricatoria, 207, 210
Lupinus
  altissimus, 323
  angustifolius, 323
  chrenbergii, 324
  geophilus, 323
  humifusus, 323
  integri folius, 323
  mexicanus, 323–324
  perennis, 324
  rotundifolius, 302, 324
  simplicifolius, 323
  trifoliatus, 324
  sp. (Crot. proc.), 302
Lycianthes
  campyloclada, 506
  lenta, 509
  moziniana (mociniana), 511
  tricolor, 515
  sp. (Sol. declin.), 506; (Sol. elaeag.), 507; (Sol. milto.), 511; (Sol. volub.), 517
Lycium
  carolinianum var. quadrifidum, 500
  quadrifidum, 500
  tetrandrum, 500
  sp. (Collenia di), 451
Lycopodium
  filiforme, 548
  nidiforme, 548
  nidus, 548
  repens, 548
Lycopsis
  arvensis, 98
  imbricata, 89
Lygodysodea (Ligodysodea)
  ciliata, 468–469
  mexicana, 468, 469
Lyncea hispida, 491
Lysiloma
  divaricatum, 326
  tergemina, 321
Lythraceae, 352–357
Lythrum (Litrum, Lithrum), 353, 356
  acinifolium (acinacifolium), 355
  alatum, 355
  album, 15, 354
  coccineum, 355–356
  cordifolium, 15, 353
  cuphea, 356
  gracile, 355
  lanceolatum, 356
  lineare, 355
  longifolium, 356
  maritimum, 355
  palustre, 353
  parviflorum, 356
  penis, 356
  purpureum, 356
  racemosum, 356
  repens, 357
  satureiaefolium (satureiaefolium), 356
  scabrum, 356
  tuxtlense, 5, 353, 357
  virgatum, 356, 357
  vulneraria (vulnerarium), 353, 356, 357
Maba
  acapulcensis, 217
  pavonii, 217
Maceria verbenacea, 537
Machariaenhera, 137
Machaerium bioovulatum (Pterocarpus lun.), 337
Machaonia velutina, 462
Macrionema lanceolatum, 469
Macromeria, 96, 97
Macreightia
acapulcensis, 217
pavonii, 217–218
Macrosiphonia hypoleuca, 61, 63
Maga (Montez.) grandiflora, 376
Magnolia, 358
dealbata, 357
glauc, 357
grandiflora, 357
mexicana, 357
tripetala, 357–358
Magnoliaceae, 357–358
Mahonia, 82
aquifolium, 82
fascicularis, 82
moranensis, 83
pinnata, 82
Maia
setosa, 389
vesiculosa, 389
Malachra
aleafolia, 372, 373
capitata, 372
hispida, 34, 372
Malaspina volubilis, 244
Malaxis
1phila, 419
calyxina, 409
ehrenbergii, 418
fastigiata (Ophris ovata), 408; 418, 419; (Oph. ovata), 420
leptostachya, 419
majantheumfolia, 419
myurus, 409, 419
ophioglossoides, 419
parthenia, 408
sp. (Epidendrum oval.), 413; (Limodorum), 418;
(Ophrys diph.), 419
Maleolaria lanceolata, 496
Malpighia
coccigera (coccitiera), 363–364
corymbifera, 364
crassifolia (crasifolia), 361
Malpighia decipiens, 366
eelliptica, 364
emarginata, 364
glabra, 364
var. acuminata, 364
var. lancifolia, 364
lucida, 364
mexicana, 364, 365
nittida (Bunchosia), 361, 365
ovata, 366
peruviana, 364
pulchra, 361
puniceifolia, 364
rotundifolia, 360, 364
seisifolia (Bunchosia), 361
spicata, 365
tomentosa, 365
undulata, 365; (putative hybrid), 365
urens, 365–366
Malpighiaceae, 358–366
Malva, 374
aee, 372
americana, 372
angustifolia, 372, 373
capensis, 372, 373, 374
coccine, 373
coromandeliana, 372–373
crispa, 373
havanensis, 373
hispanica, 373
leprosa, 373
limensis, 373
longifolia, 372, 373, 374
mexicana, 373
miniata, 373
rosea, 372, 373–374
subiflora, 374
suffruticosa, 374
umbellata, 373, 374
vitifolia, 374
Malvaceae, 366–382; Malvaceae of Mexico, 35; numbers assigned to species, 369, 370
Malvastrum
coromandelianum, 373
lacteum, 374
ribifolium, 374
spicatum, 372
subiflorum, 374
sp. (Malva suffl.), 374
Malvaviscus, revision of genus, 374
arboreus, 369, 370, 375
var. mexicanus, 375
var. penduliflorus, 375
candidus, 369, 370, 374, 376
flavidus, 369, 374–375
penduliflorus, 375
pentacarpus, 368, 375
INDEX

Malvaviscus
  pleurantherus, 375–376
  pringlei (M. pleuragon.), 376
Malvella leprosa, 373
Mammee
  americana, 261
  emarginata, 261
Mammillaria
elegans, 108
  geminispina, 108
  helicteres, 108
  lanifera, 109
  nuda, 109
  rhodantha, 109
Mandevilla, 60
  acutiloba, 59, 60, 62
  andreuxii, 60
  convolvulacea, 59, 60
  foliosa, 62
  holosericea, 60
  platyacalyx, 60, 62
  rosana, 62
  subsagittata, 62
  subsessilis, 62
Manfreda
  brachystachya, 341
  scabra, 341, 346
  sp. (Aloe var.), 342
Mangifera penduliflora, 395
Manihot
  angustiloba, 237, 238, 240
  carthaginensis, 240
  crassipeyna, 238, 239
  foetida, 239
  palmata, 238
  rhomboidea, 240
  stenoloba, 237
  triloba, 239
Manilkara
  bidentata, 482
  pleana, 481
  sp. (Richardia), 483
Maranta (Marantha), 545; final numbering system for, 382, 545
  arundinacea, 382
  galanga, 382–383
Marantaceae, 382–383; final numbering system for (Alpin. rac.), 545
Marcgravia
  mexicana, 383
  umbellata, 383
Marcgraviaceae, 383
Margarathus solanaceae, 500
Margaris
  barbigem, 118–119
  nudiflora, 119
Marina, 304

Margaris
  diffusa, 305
    var. diffusa, 336
  nutans, 307, 336
  procaembens, 308
Mariotea ciliaris, 169
Marscenia
  affinis, 76
  clausa, 76
Marsypianthes hyptodes, 271
Martynia (Martinia, Martinia)
  altheaeolia, 383
  annua, 383
  racemosa, 383
  triloba, 383
  unguis, 383
Martyniaceae, 383
Mascagnia macroptera, 362
Masticodendron capiri, 483
Matelea, 74, 76
  caudata, 78
  congestiflora, 75
  pavonii, 76
  quirii, 75
  standleyana, 76
Maurandya (Maurandia), 485, 491
  antirrhiniflora, 485, 491
  erubescens, 490
    var. glabratia, 491
  personata, 491
  scandens, 491
  semperflorens, 491
Maxillaria (Maxillaria)
  phoenicea, 410
  uncata, 418
  sp. (de Mexico) (Stanhopea bucc.), 423
Medeola notkana, 344
Melampodium, 165, 166, 167
  americanum, 165–166
  angulatum, 166
  arvense, 166, 167
  australis, 166
  connotatum, 166
  dichothomum (dichotomum), 166, 167
  divaricatum, 135, 167
  diversifolium, 166
  lanceolatum, 166–167
  longifolium, 166, 167
  microcephalum, 167
  montanum, 166
    var. viridulum, 166
  obovulifolium, 166
  perfoliatum, 135, 166
  pinnatum, 167
  repens, 166, 167
  rhombifolium, 166, 167
  sericeum, 168
Melampyrum (Melampirum), 490
  barbatum, 491–492
  fruticosum, 490
  mexicanum, 492
  subbipinnatum, 492
  subfruticosum (suffruticosum), 490
Melanthera
  aspera, 180
  nivea, 173
Melanthium hordeiolium (Verat. lüt.), 348
Melasma, revision of genus, 491
  hispidum, 491
  physalodes, 491
Melasma, sect. Lynceae, 491
Melastoma, 3, 383
  acinodendron, 384
  acuminata, 384
  angustifolia, 384, 385
  aspera, 383, 385, 386, 387
  canaliculata, 385
  coriacea, 385
  diffusa (difusa), 385, 388
  enervata, 385
  epiobia, 385
  epilobioides, 385
  ferruginea, 384, 386
  glabra, 385, 386
  grandiflora, 386, 387, 388
  hirsuta, 386
  hirta, 386, 387
  holosericea, 384
  laevigata, 386, 388
  lanceolata, 384, 386
  leucantha, 386
  linearis, 386
  macrophylla, 384, 387
  malabatrica (malabathrica), 387
Melastomataceae, 3, 67, 383–389
Melania, see Brotera, 518
Melia
  americana, 390
  azedarach, 390
  simplicifolia (Styrax arg.), 390, 521
Meliacae, 389–391, 521
Meliosma dentata, 479
Melissa (Melisa)
  macrostema, 269, 271
  mexicana, 271
Melochia, 520, 526
  adenodes, 519
  concatenata, 520
  conglobata, 520
  corymbosa, 519
  hirsuta, 519
  nodiflora, 520
  pyramidata, 520
  rhodocalyx, 519, 520
  rotundifolia (Pterostemon), 260, 520
  sp. (Malva mexicana), 373
Melochia sect. Physodium, 519
Melothria
  fluminensis var. triangularis, 209, 210
  pendula, 210
  sp. (Elaterium nuc.), 209; 210
Menispermacaeae, 391–392
Menispernum
  clematitideum [sic], 16, 430
  sp. nov., 391
Mentha
  aristata, 270, 271
  arvensis, 271
    var. pavoniana, 271
  canadensis, 271
  dispersa (Aloysia lig.), 271; 538–539
  ferruginea, 270
  genilis, 270
  haplocalyx subsp. pavoniana, 271
  mexicana, 271
  pulegium, 271
  tomentosa, 269
  sp. (Hyptis lilac.), 270; (Asterohyptis moc.), 270
Mentzelia
  aspera, 349
  hirta, 349
  hispida, 349
  petioliata, 349
  stipitata, 349
  zazale, 349
Menyanthes (Menyanthes)
  indica, 252
  nymphaeoides (nymphaeoides), 252
Merremia
  dissecta, 200
  quinquefolia, 196
  umbellata, 194, 197
Mespiodaphne moschata, 288
Mespilus
  distyla, 457
  mexicana, 457
  pyracantha (pyracantha), 456, 457
  texocoi (tejocote), 457
  sp. (Crataegus), 456
Mimosa
esculenta, 289
farnesiana, 325
filicioides, 325
foetida, 325
fragrans, 328
geminata, 327, 328
goldmani, 294
hirsuta, 321, 325
houstonii, 321
huanrichi, 325
inga, 322, 326
intis (Intisia), 328
laxiflora, 325
lebbbeck (lebbek), 326, 329
malacophylla, 327
michoacanensis, 326
microphylla (Microphylla), 326
monancistra, 329
nivea, 326
nodosa, 326
octophylla, 326–327
parota, 327
peanata, 327
peregrina, 321
pigra, 329
polyancistra, 327
polyantha, 325
procumbens, 327, 328
pudica, 325
var. hirsuta, 325
var. hispida, 325
purpurea, 27, 327
quadrivalvis, 327, 337
var. diffusa, 327–328
var. distachya, 289, 328
repens, 327
reticulata, 328
rotundata Pav., 289, 328
rotundata Sessé & Moc., 328
sarmentosa, 328
sensitiva, 328–329
septentrionalis, 329
tenuiflora, 324
tenuifolia, 329
tetraphylla, 322
tomentosa, 324, 329
trunc., 294
uncinata, 329
unguis-cati, 329
sp. (Carolinae fastuosa), 88; 327, 329; (Pith. soph.), 334; (Schrankia spp.) 337
Mimosa inermis foliis bipinnatis, 326, 329
Mimosae, of Sessé & Mociño, 289
Mimulus
alatus, 492
guttatus, 492
notkanus, 492
Botanical Results of the Sessé & Mociño Expedition — VII

Mimusops
  duplicata, 481
  nitida, 482
Minklerisia galactioides, 333, 334
Mirabilis
  aggregata (agregata), 399
  corymbosa, 399, 400
  dichotoma, 400
  glabrifolia, 399
  jalapa, 400
  longiflora, 400
  microclamymea, 400
  parviflora, 400
  triandra, 400
  triandria, 400
  viscosa, 400
  sp. (Calyxhymenia), 399, 400; (Quamoclid.), 401
Mirabilis triandria, numbering of icon (Ixora uniflora), 468
Mitella alternifolia, 484
Mitranthes sartoriana, 398
Mogosium sambact (Nyctanthes), 402
Mollugo
  debilis, 48
  verticillata, 48
Molucella leonurus, 273
Momordica
  aculeata, 208
  balsamina, 210, 211
  charantia, 210, 211
  operculata, 32, 211
  sicyoides, 211
Monarda citriodora, 272
Moneses uniflora, 392
Monnina, 440
  angustifolia, 439
  bifurcata, 439
  ciliolata, 439, 440
  ciliolosa, 439
  lanceolata, 439
  schlechtendaliana, 439
  xalapensis, 439
Monochaetum
  calcareatum, 388
  pringlei, 388
Monososis salicifolia, 158, 168
Monotropa
  coccinea, 392
  hypopitys (hypopitys), 392
  uniflora, 392
Monotropaceae, 392
Montagna mirabilis, 500
Montana (Montagnaea), 154, 169
  frutescens, 168
  grandiflora, 168
  leucantha, 172
  purpurascens, 172
  speciosa, 168
Montana (Montagnaea)
  tomentosa, 168–169
Montezuma speciosissima (speciosissima), 18, 376
Moricaceae, 392–394
Morea (Morea)
  coerulae, 266
  graminea, 266
  grandiflora, 266
  lutea, 266
  maculata, 266
  minuta, 266, 267
  plicata, 266–267
  sp., 267
Morinda royoc (royoc), 469
Morkillia mexicana, 546
Moronia, see Stachyurphaea, 539
Morus tinctoria, 393
Mouriri (Mourria), 383
  domingensis, 388
  mexicana, 383, 388
Moussonia deppepea, 255
Mozinna (generic name a synonym), 241
  cinerea, 240
  cordata, 236, 240–241
  spatulata, 241
Mucuna, 311
  albida, 294
  rutilans, 294
  sloanei, 311
Muhlenbergia, 259
  confusa, 259
  microsperma, 257, 259
Muntingia calabura, 527
Murraya
  exotica, 477
  simplicifolia, 477
Musa sapientum, 394
Musaceae, 394
Mussaenda (Mussenda)
  breviflora, 469
  formosa, 469
  mitis, 473
  nuda, 469, 472
  rotundifolia, 469, 473
  spinosa, 472
  tetracantha, 473
  sp., 469; (Psychotria asiatic.) on numbering, 472;
  (Randia micr.), 473
Mussatia hyacinthina, 84
Mustelia eupatoria, 182
Mycophyllum cyantoides, 340
Myosotis, 89
  lappula, 89
  mexicana, 98
  scorpioides, 98
Myrica, 395, 396, 397
  citrifolia, 396, 397
  cotinifolia, 397
INDEX

Myrica
  leptoelada, 395
  paniculata, 396
  splendens, 397
  sp. (Myrt. nitida), 396
Myrcianthes fragrans, 395, 396
Myrodia
  ovata, 88
  turbinata, 88
  verticillaris, 88
Myrsinaceae, 394–395
Myrsine penduliflora, 395
Myrtaceae, 395–398; numbers assigned to species, 395
Myrtus (Myrtus)
  acuminata, 395
  americana, 396
  biflora, 395, 396, 397
  bracteiflora (bractiflora), 396
  communis, 396
  conferta, 396
  corymbosa, 396
  cumini (cummini), 396
  disperma, 396
  emarginata, 396
  fragrans var. fajardensis, 396
  longifolia, 397
  nitida, 396–397
  ovalis, 396
  parviflora, 397
  piperita (piperitus), 395, 397
  punctata, 397
  racemosa, 397
  tabaseo, 395
  trifida, 397
  tuxtlensis, 397
  zeylanica, 398
sp. (non-Myrtaceae), 398
sp. nova (Myrt. trif.), 397
Naiocrene parvifolia, 445
Nama
dierotomum, 263
  var. pueblense, 263
erhina (errhyna, earhina), 264
jamaicense (jamaicensis), 251, 263
longiflora (longiflorum), 263–264
origanifolium, 264
  var. rupicolum (rupicola), 264, 265
rupicola, 264, 265
sericea (sericeum), 263, 264
tetrandra, 263
undulatum, 251, 263, 264–265
sp. (Gent. saxosa), 251; 265
Narcissus tazetta (tazetta), 345
Nasturtium mexicanum, 6, 16, 206
Navaretia heterophylla, 437
Nectandra
  coriacea, 288
  wilddenoviana var. latifolia, 288
Nectouxia formosa, 500
Negundo mexicanum, 48
Neltuma laevigata, 328
Nemastylis
tenuis, 266
  sp. (Morea gram.), 266; (Sisyrinchium unifl.), 267
Neobritonia acerifolia, 376, 377
Neomammillaria hamata, 106
Neottia
  peregrina, 420
  pubiflora, 420
Nepeta (Ballota), 268
  capitata, 272
  ferruginea, 270, 272
  mexicana, 272
Nerium, 58
  disentericum, 67
Nesaea salicifolia, 355
Nixandra physalodes, 495
Nicotiana
  amplicaulis, 500
  fruticosa, 501
  glutinosa, 501
  ipomopsisflora, 500
  longiflora, 501
  minor, 501
  paniculata, 501
  pilosa, 501
  plantaginea, 501–502
  plumbaginifolia, 501, 502
  pusilla (pussilla), 501, 502
  repanda, 502
  rustica, 501
  scabra, 502
  trigonophylly, 500, 502
Nigella damascena, 448
Nissolia, 329
  citrodora (Dalea obv.), 307, 308
  herbacea (Dalea serie.), 309
  hirsuta, 329
  micropetra, 329
Noeea, 193; (type sp., rigida), 169
  behiantifolia var. suaveolens, 169
  latifolia, 169
  mociniana, 164, 165
  n. sp. (Laghece), 164
  rigida, 164, 165, 169
  robinsonii, 164
Nolina rigida, 102, 344–345
Nopalea cochenillifera, 109
Nopalxochia phyllanthankoides, 106, 107
Nootia trispalata, 422
Nutka (Notka), material not credited to Mociño, 82, 336;
  credited to Mociño, 111, 118, 121, 236; (Jat. pelt.),
  239, 287, 312, 344, 383, 398, 423, 424, 427, 444,
  445, 450, 455, 460
Nutka (Notka), source of material so labelled, 441
Nyctaginaceae, 128, 398–402
Nyctaginaceae, 401
Nyctago
  angulata, 401
  cordifolia, 401
  jalapa, 400
  longiflora, 400
Nyctanthes arbor-tristis, 402
Nymphaceae (Nymphaceae) (Menyanthes), 252
Nymphoides fallax, 252
Obiene
  linifolia, 125
  polygama, 126
Ochnaceae, 402
Ochroma lagopus, 87
Ocotea, 288
  moschata, 288
  mucosa, 288
Ocimum (Ocimum)
  americanum, 272
  basilicum, 272
  campechianum, 272
  carnosum, 272
  micranthum, 272
  minimum, 272
  monachorum, 272
  punctatum, 272
  sanctum, 272
  selloi, 272
  tenuiflorum, 272
  sp., 272
Odontonema glabrum, 42
Odontotrichum, 144
  amplifolium, 143
  sinuatum, 144
Oenothera, 407
  kunthiana, 407
  laciniata var. pubescens, 407
  latiflora, 406–407
  linearis, 407
  mollissima, 407
  multicaulis var. tarquensis, 407
  pumila (pumilla), 407
  rosea, 404, 407
  rubra, 407
  sinuata, 407
  tetrapetala, 407
  tubiflora, 407
  tubiflora, 407
Oenothera subg. Pachylophi, 407
Oenothera, see Hauya, 405
Oleaceae, 402
Oldenlandia
  capensis, 24, 469
  depressa, 469–470
  herbacea, 466
  microthea, 466
  racemosa, 470
Oleaceae, 402
Oncidium
  altissimum, 408, 418
  funereum, 418
  iridifolium, 418–419
  lankesteri, 412
  pauciflorum, 410, 419
  pusillum, 414
  tetrapetalum, 419
  variegatum, 419
Ononis
  conjuga (coniugata), 330
  sp. (Dolichos und.), 312
Onosera
  onosericoides, 164
  paniculata, 164
Onosma
  angustifolia, 89
  simplicissimum, 98
Onosmodium, 96
  mexicanum, 96
  strigosum, 98
  thurberi, 96
  trinervum, 96
Onychocacanthus cumingii, 39
Operculina, 197
  ornithopoda, 197
  rhodocalyx, 195
Ophiophriza, see Loganiaceae
  mungos, 351
Ophrys (Ophris, Ofris)
  iphilla, 419
  corymbosa, 413, 419
  diphyllea, 409, 419, 423
  elliptica, 411
  ensifolia, 418, 423
  fastigiata, 418, 419
  imbricata, 419–420
  insectifera, 420
  lancifolia (Erythra. clav.), 408; (Physurus clav.), 421
  loeselii (loeselii), 419, 420, 424
  monophyllus (monophylla). 409
  monostachia, 408
  nodus avis, 420, 421
  ovata, 408, 420
  peregrina, 420, 424
  pubescens, 420
  rotundifolia, 424
  spiralis, 408, 420, 423
  tigrina, 414
  tristis, 420–421
  sp. (Dienia myurus), 409; (Epidendrum flor.), 412;
  (Sturmia arnoglossophylla), 424
Opiliaceae, 125, 408
Opuntia
  ficus-indica, 109
  hernandezii, 109
  imbricata, 109
INDEX

Opuntia
  microdasys, 107
  rosea, 109–110
Orchidaceae, 3, 408–424; numbering of species in the herbarium, 408
Orchis, 417
  havanensis, 417
  imbricata (Habenaria clyp.), 408, 417; 421
  latifolia, 420, 421
  longicorinis, 417, 418
  longicornu, 417
  papilionacea (Habenaria clyp.), 417
  pauciflora, 421
  purpurea (Microstylis ehr.), 418
  resupinata, 421
  spicata, 418
  vaginata, 421
Oreodaphne mucosa, 288
Oreopanax
  capitatus, 69
  liebmanni, 69
  peltatus, 69
  salvinii, 69
Orbisia acaulis, 191
Origanum
  majorana, 8
  vulgare, 8
Ornecarpum
  coccinea, 330
  elegans, 330
Ornithogalum
  graminifolium, 343, 345
  sp. (Anthericum), 343
Orobanchaceae, 424
Orobanche, 424
  americana, 424
  cytinoideas, 424
  mexicana, 424
Orobus, 330
  arborescens, 330
  falcatus, 330
  occidentalis, 330
  sericeus, 331
  spinosus, 331
  trifoliatus, 331
  sp., 331
Orthosiphon capitatus (capitatum), 273
Osmites camphorina, 169
Osmunda hirsuta, 547
Oxalidaceae, 424–425
Oxalis
  albicans, 424, 425
  corniculata, 424
  flabellaformis (flavellaformis), 424, 425
  hernandesii, 424–425
  microphylla (Chamaecrista kun.), 300
  nudiflora, 425
  sensitiva, 425
  stricta, 425
  tetraphylla, 425
  verticillata, 425
  violacea, 425
  sp. (Gratiola), 489
Oxandra laurifolia, 57
Oxybaphus
  aggregatus, 399
  cordifolius, 401
Oxylabrus (generic name), 170
  arbutfolius, 170
  trinervius (trinervis), 170
Pachecoa, 317
  guatemalensis, 317
  prismatica, 317
Pachira
  aquatica, 88
  minor, 88
Pachyphyllum
  aff. crystallinum, 421
  distichum, 409, 421
Pachyrhizus erosus var. palmatilobus, 312
Paeonia
  ciliata, 469
  pringlei, 469
Palaeoxia, 133
  angustifolia, 490
  linearis, 133
  multifida, 492
Palava (Saurauja), 214
Palicourea domingensis, 472
Palisota polystachya, 306
Palmae, 425–426
Pancratium
  caribaeum (caribeum), 345
  illyricum (illyricum, yllicum), 345
  mexicanum, 345
  tazetta, 345
Panicum
  colonum, 258
  distachyon (dystachyon), 259
  maximum, 259
  polystachyon (polystachyon), 259
  portoricense, 259
  scaberrimum, 259
Papaveraceae, 426–427
Paragonia pyramidata, 84
Parathesis serrulata, 394
Parietaria microphylla, 531, 532
Parkinsonia
  aculeata, 32, 331
  bipinnata, 32
Parmentiera
  aculeata, 86
  edulis, 85, 86
Parosela
bicolor, 308
citriodora, 305
inconspicua, 306
mutabilis, 307
tomentosa, 304
trifoliolata, 309
sp. (Dalea fruticosa), 305
Parthenium, 153
bipinnatifidum, 153, 191
hysterophorus, 191
Parthenocissus quinquefolia, 543
Paspalum
lagascæ, 259
pubescens, 259
tenellum, 259
sp. (Panicum polys.), 259
Passifloraceae, 427–430
Passiflora, 25; numbers assigned to species of, 428
adenopoda, 427, 429
aspera, 427
biflora, 427
bryoioides, 429
cærulea (coerulea), 427
coriacea, 427, 428
denticulata, 427
dictamo, 427
exsudans, 429
foetida, 428
var. gossypiifolia, 428
helleri, 430
hirsuta, 428, 429
holosericea, 428, 430
jorullensis, 430
ligularis, 429
longifolia, 428
lutea, 428, 429
minima, 428, 431
muchronata (muconata), 428
normalis, 427
obtusifolia, 31, 427, 428–429
pavonis, 20, 429
piosa, 428, 429
pullchella, 428
punctata, 430
rovirosae, 430
scabra, 429
serrata, 429
serratifolia, 427
serratistipula, 429
sexpunctata, 428
suberosa, 428
subpellata, 428, 429–430
tilliæfolia (tiliæfolia), 429
trisetosa, 430
tuxtlensis, 430
villosa, 429
Passiflora
vitifolia, 427
sp., 430
sp. nova (Pavonis), 20, 429
Paullinia
arborea, 480
costaricensis, 480
mexicana, 481
occidentalis, 480
pinnata, 480
pteropoda, 480
seriana (seriana), 480
tomentosa, 34, 480
trigueira, 480
Pavetta (Pavetta)
cuneifolia, 472
distichya, 470
mexicana, 470
odoratissima, 470
quinqueflora, 470
racemosa, 468, 470
secunda, 470
tabascensis, 470
Pavonia
acanthocarpa, 376
candida, 370, 374, 376
chloranth, 370
melanomma, 369
oxyphylla, 369
var. melanomma, 369
oblungifolia, 376
palmeri, 370
paniculata, 368
pleuranthera, 370, 375
schiedea, 371
spicata, 370
spinifex, 382
var. grandiflora, 376
var. oblongifolia, 376, 382
uniflora, 382
sp. (Hib. racem.), 370; 371
Pectis
arcnaria, 169
canescens, 169
ciliaris, 169; (Erinus portul), 489
maritima, 169
multiradiata, 169
prostrata, 169, 170
punctata, 170
rosei, 169
uniariata, 134
sp., 169, 170
Pedaliaceae, 430
Pedaliaceae (Sesameae), 537
Pedalium
filiforme (Isch. verb.), 537
sp. (Isch. verb.), 537
INDEX

Pedicularis
  incarnata, 492
  mexicana, 492

Pedilanthus
  aphyllus, 241
  articulatus, 228
  bracteatus, 228
  calcaratus, 228
  cymbiferus, 241
  palmeri, 228
  parvisicus, 241
  pavonis, 228
  ramosissimus, 241
  tithymaloïdes, 228
    subsp. angustifolius, 229
    subsp. parasiticus, 241
  sp. (Diadenaria pavonis), 228; (Euph. calyciflora), 229;
    (E. litor.), 232; (E. tithymaloïdes), 233

Pellaeas
  sagittata var. cordata, 547
  ternifolia, 547

Pennellia longifolia, 206

Penstemon, 488
  apateticus, 488
  barbatus, 488, 489, 492
  campanulatus, 488, 489
  gentianoides, 488
  kunthii, 489

Penstacaea, 121

Pentalinon luteum, 61

Pentalonae simplicifolia, 478

Pentaraphia
  cuneifolia, 254
  pedunculosa, 255

Peperomia, group Campylotropae, 433

Peperomia
  agapatifens, 432
  angustifolia, 432, 436
  blanda, 432
  botteri, 433
  campylotropa, 433, 436
  cordata, 432
  cordifolia, 432
  edulis, 436
  fraseri, 432, 435
  leptophylla, 434
  leucophyllum, 435
  loxensis, 432
  major, 432
  muscophylla (muscopila), 432
  nitida (nitidum), 432–433, 434
  ovato-peltata, 433
  polystachya (polystachia), 433
  pseudo-amplexicaulis, 433
  pumila (pumilla), 433
  quinquenervia, 433
  sciaphila, 433

Peperomia
  treleasei, 432
  trinervis, 433
  tuberosa, 433, 436
  verticillata, 433–434
  sp. (Piper cordif.), 434; (Piper pelluc.), 435; (Piper
    refl.), 435

Peraltlea oxyphylla (Harpalyce), 316

Perdicum
  californianum, 170
  cordatum, 132
  corymbosum, 188
  decurrens, 188, 189, 525
  longifolium, 170, 189
  mexicanum, 151, 172
  radiale (radiata), 170
  serratum, 172
  sp. (Acourtia form.), 132; 147; (Trixis alata), 188

Pereskia, 110, 111
  lychnidiflora, 110
  opuntiaeflora (opuntiiflora), 110
  rotundifolia, 110–111
  zinniiflora (zinniaeiflora), 111

Pereskiospis, 111
  opuntiaeiflora, 110
  rotundifolia, 110, 111

Perezia, 188
  alamanii, 172
  dugesi, 170
  formosii, 132
  hebeclada, 132
  reticulata, 172
  runcinata, 147
  thurberi, 172

Pergularia ? flavida, 77

Pergularia, 72, 76, 77
  cordifolia, 76
  erecta, 76
  glabra, 76
  laevis, 76–77
  tomentosa, 77

Percalia sessilifolia, 143

Perilomia tomentosa, 273

Periplaca, 72
  mexicoensis, 77
  ovata, 77
  parviflora, 77
  purpurascens, 76
  repens, 77
  sesseliana, 77
  viridiflora, 77
  sp., 77

Periptera punicea, 366, 367, 379

Perityle microglossa, 179, 189

Pernettya
  ciliaris, 219
  ciliata, 219
BOTANICAL RESULTS OF THE SÉSSE & MOCIÑO EXPEDITION — VII

Perymenium, 135, 181, 190
biphalhalmoides, 162, 181
cervantesii, 170; (Verbena mex.), 190
subsquarrosum, 190
Petalosimum sessile (Dalea thouinii), 310
Petastoma patelliferum, 85
Petesia
distachya, 470, 476
odoratissima, 471
repens, 470–471
spicata, 470
stipularis, 471
Petiveria
alliacea, 430, 431
hexandria, 430–431
ochroleuca, 431
octandra, 31, 430, 431; numbering of icon (Ixora
aphylla), 468
Petunia parviflora (Hydrophyllum eruc.), 263
Petraea (Petrea)
axillaris, 539
volubilis, 539
Peucedanum alsaticum, 531
Pfaffia hookeriana, 52
Phaca
alpina, 331
quaunahacensis, 331
suberosa, 331
Phaeranthus buccinatorius, 84
Phaethyma erecta, 493
Phalangium minimum, 345
Phaloe cabalangia, 467
Phania trinervia, 170
Pharbitis heterophylla, 199
Phaseolus, 332
alatus, 331–332
anisotrachis, 332
atro-pupureus (atropurpureum), 16, 332
auritus, 332
biflorus, 333
bulbocastanum, 331
coccineus, 332
esperanzea, 333
galactoides (galactoides), 333
gibbosifolius, 332
helvolus, 332
heterophyllus, 332, 333, 334
hirsutus, 332
lambertianus, 333
lathyroides, 332
leptophyllus, 332–333
leptospermus, 333
leptostachyus, 332
linearis, 332, 333
lunatus, 333
microspermus, 333
obvallatus, 332
pauciflorus, 333

Phaseolus
taberosus, 333–334
vulgaris, 334
Phyladelphia (Phylladelphus) coronarius, 484
Philibertia pavonii, 77
Philonomia
flava, 94
macrostemon, 94
viridiflora, 96, 98
Philoerus vermicularis, 52
Philotis
nepetifolia, 273
purpurea, 273
Phlox
auriculata, 437, 438
divariata, 437–438
involuta, 437
maculata, 438
pelisperma, 439
pinnatifida, 437
procumbens, 438
reticulata, 438
spinosa (spinosa), 438
violacea, 32, 438
Phoenix, see Palmae, 425
Phormium, 103
Phryma, 538
arborea (Lippia arborea), 538; 539
Phthirusa caribaea, 352
Phyta
nodiflora, 538
var. reptans, 538
stoechadifolia, 538
Phylaciscandens, 31, 452
Phyllanthus (Phyllanthus), collected by Sessé & Mociño,
37, 223 line 3
acuminatus, 242, 244
adenodiscus, 223
americanus, 242, 243
americanus. virgatus, 242
arbores, 244, 243
carolinianus, 243
compressus, 242, 243
cyclanthera, 242
var. genuinus, 242
decander (decandrus), 242, 243, 244
discolor, 242
embicus, 243
filiformis, 242, 243
foetidus, 241
galeotitanus, 242–243
grandifolius (grandifolia), 223, 244
juglandifolius, 243, 244
lathyroides, 243
var. commutatus, 242
var. genuina, 242
maderaspatensis, 244
mocinianus, 243
<table>
<thead>
<tr>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phyllanthus (Phyllanthus)</td>
</tr>
<tr>
<td>niruri, 242, 243</td>
</tr>
<tr>
<td>nobilis var. pavonianus (cf. Cicca), 222</td>
</tr>
<tr>
<td>obovatus, 243</td>
</tr>
<tr>
<td>orbicularis, 242, 244</td>
</tr>
<tr>
<td>var. ellipticus, 243–244</td>
</tr>
<tr>
<td>pavonianus, 244</td>
</tr>
<tr>
<td>pentaphyllus, 242</td>
</tr>
<tr>
<td>polygonooides, 244</td>
</tr>
<tr>
<td>quinquefidus, 243, 244</td>
</tr>
<tr>
<td>rotundifolius, 244</td>
</tr>
<tr>
<td>sessilis, 241, 244</td>
</tr>
<tr>
<td>virgatus, 242</td>
</tr>
<tr>
<td>sp. nova, 242, 244</td>
</tr>
</tbody>
</table>

| Physllanthus sect. Cyclanthera, 242  |

| Phymosia  |
| rosea, 372, 373  |
| umbellata, 374  |

| Physalis (Physalis)  |
| angulata, 502  |
| cozomall, 502  |
| curassavica var. integrifolia, 502  |
| dentata, 502  |
| foetens, 502  |
| foetidissima, 502  |
| integrifolia, 502  |
| jacquinii, 502  |
| minutiflora, 502–503  |
| mollis var. cinerascente, 502  |
| parviflora, 503  |
| pubescente, 502  |
| somnifer (somniferum), 503  |
| subinigra, 502  |
| urceolata (urecolata), 500  |

| Physocarpus capitatus, 460  |

| Physodium, 520  |
| corymbosum, 519, 520  |
| dubium, 519  |
| rhodocalyx, 519  |
| spp., 519  |

| Physosiphon, 411  |
| aff. minor (Epidendrum emarginatum), 408, 411  |
| tubatus, 411  |

| Physorus claviger, 421  |

| Phytophaca  |
| dodecandra, 431  |
| icosandra, 431  |
| rivinoides, 431  |

| Phytoleaccaeeae, 248, 397, 430–432, 468  |

| Pierannia  |
| antidesma, 495  |
| fessonia, 495  |

| Pilea  |
| microphylla, 531  |
| nummularifolia, 532  |
| parietaria, 532  |
| semidentata, 532  |
| var. minor, 531  |

| Pimenta dioica, 395, 397  |
| Pinaropappus roseus, 173  |

| Pinguiula  |
| communis, 340  |
| crenatiloba, 340  |
| lasiianica (larisanica), 340  |
| macrophylla, 340  |
| mexicana, 340  |
| oblongifolia, 340  |
| obtusiloba, 340  |
| villosa, 340  |
| vulgaris, 340  |

| Piper  |
| amalago, 27, 434, 435, 436  |
| angustifolium, 432, 435, 436  |
| aurantium, 436  |
| cordifolium (cadifolium), 434  |
| decumanum, 434, 436  |
| ellipticum, 434  |
| heterophyllum, 435  |
| latifolium, 434  |
| lesseritana, 434  |
| leucophyllum, 435  |
| longifolium, 435  |
| martensianum, 434, 435  |
| membranaceum, 16, 434, 436  |
| muconatum, 27  |
| nitidum, 434–435  |
| novae-hispaniae, 435  |
| nudum, 435  |
| obliquum (obicuum), 433, 434, 435  |
| obtusifolium, 434, 435  |
| oxytachys, 434  |
| pellucidum, 435  |
| reflexum, 435  |
| reticulatum, 435  |
| rotundifolium (roundifolium), 434, 435  |
| ruizianus, 435–436  |
| sanctum, 436  |
| schlechtendalii (schlechtendalianum), 432, 436  |
| siriboa, 434, 436  |
| tenuifolium, 16, 434, 436  |
| tigriannum, 436  |
| tuberosum, 433, 436  |
| umbellatum, 434  |
| urostachion, 436  |
| verticillatum, 436  |
| sp., 434, 435; (Peperomia angustifolia), 432  |
| sp. nova, 435  |

| Piperaceae, 3, 432–436  |
| Piptadenia patens, 325  |
| Piqueria (Piqueira), type-species, 170  |
| trinerva (trinervis), 170  |
| Piriqueta cistoides, 528  |
| Pirola, see Pyrola  |
| Piscidia (conserved name), 334  |
| americana, 334  |
| crithrinaefolium, 334  |
Piscidia
    punicea, 334

Pisonia
    aculeata, 401
    hirtella, 401
    pacerero, 401
    sp., 401; (Rhamnus pent.), 454

Pisoniella arborescens, 128

Pisonia decandra, 401

Pistia stratiotes, 68

Pisum sativum, 322, 334

Pitcairnia, 102
    palmeri, 103
    rupestris, 103

Pithecellobium
    dulce, 326, 329
    sophorocarpum, 334

Pithecocentrum
    echinatum, 86
    muricatum, 54, 86

Pithecolobium (Inga), 321

Plantaginaceae, 436

Plantago
    alpina, 436
    mexicana, 436

Platanaceae, 436

Platanus, 31
    mexicana, 436
    occidentalis, 436
    orientalis, 436

Platygyne hexandra, 244

Plenckia, 476
    grandiflora, 476
    parviflora, 476

Pleroma
    diffusum, 385
    mexicanum, 387

Pleuropetalum sprucei, 51

Pleurothallis
    linearis, 421
    pruinosa, 421
    stenostachya, 408, 422

Pluchea
    odorata, 147
    salicifolia, 155

Plukentia
    integrifolia, 244
    penninervia, 244–245
    volubilis, 244, 245

Plumbaginaceae, 436–437

Plumbago
    acutiflora, 436
    lancolata, 436–437
    mexicana, 436, 437
    pulchella, 437
    scandens, 437
    zeylanica, 437

Plumeria, 64
    alba, 64
    muricata, 64
    obtusa, 64
    pudica, 64
    rubra, 58, 64
    sanguinea, 64

Pneumonanthe bicuspida, 250, 251

Poa mexicana, 259

Podachaeniium eminens, 159

Podopterus mexicanus, 443

Poinciana
    compressa, 294, 334
    depressa, 294
    elata (alata), 334–335
    eliator, 294
    hirsuta, 335
    hispida, 335
    horrida, 294, 302
    inermis, 31, 335
    parviflora, 31
    pulcherrima, 335
    punctata, 335
    setigera, 335

Polanisia dodecandra subsp. uniglandulosa, 117

Polemoniaceae, 437–439

Polemonium
    candidum, 438–439
    coeruleum, 439
    mexicanum, 439

Polianthes (Polianthes, Poliantes)
    americana, 345–346
    tuberosa, 341, 346
    tubulata, 345

Polyaster boroniioides, 478

Polyclathra
    albiplora, 211
    cucumerina, 211

Polycenenum arvense, 121

Polygalaceae, 439–442

Polygala, group Obscurae, 441; group (Ovatofoliae), 441; revision of Mexican species, 35

Polygala (Poligala)
    albowiana, 439, 441
    angustifolia, 439–440
    baccifera, 439, 440
    bryoides, 439
    buxifolia, 441
    californica, 441
    capitata, 440
    cuculata, 441
    diffusa, 442
    diversifolia, 440
    flagellaria, 440
    filiformis, 440, 441
    leptoaulis, 440
    longicaulis, 440
    longifolia, 439

606
INDEX

Polygala (Poligala)
  mexicana, 439, 440–441
  microphylla (-lae), 442
  monspeliaca, 440
  myrtilloides, 441
  nutkana, 441
  ovalifolia, 441
  paludos, 440
  paniculata, 441
  pavonii, 441
  rivinifolia, 441
  scoparia, 440, 441
  subalata, 441
  verticillata, 441–442
  violacea, 439
  vulgaris, 442
  sp., 442

Polygonaceae, 442–444; Polygonaceae indet., 444

Polygonum
  angustifolium, 123, 443
  cirrhosum, 442
  decumbens (Caryoph.; Polyg. procumbens), 123
  fasciculatum, 443
  hydrophiper, 443
  lapathifolium, 443
  maritimum, 443
  procumbens (Caryoph.), 123–124, 443
  scandens, 79, 442
  volubile (Basellaceae), 79, 443

Polymnia, 171
  depressa, 170
  maculata, 170–171
  odoratissima, 171
  Uuedalia, 171
  Wedalia (wedelia), 171

Polypodium (Polipodium)
  alatum, 548
  aureum, 548
  filix-mas, 548
  furfuratum, 548
  latum, 549
  madrense, 548
  palmatum, 548
  phyllitidis, 549
  polypodioides, 548
  pubescens (Athyrium domb.), 548
  reticulatum, 549
  taxifolium, 549

Polystachya
  cerea, 414
  luteola, 422

Pomaria, revision of genus, 335
  glandulosa, 335
  sp. (Poinciana), 335

Ponera
  juncifolia, 422
  aff. juncifolia (Epid. gramineum), 408

Pontederiaceae, 444

Pontederia
  unifolia, 444
  sp., 444

Porana
  nutans, 199
  velutina, 200

Porcella, genus of Peru, 57
  cinnamomea, 57

Porphyllum
  coloratum, 171
  linaria, 143, 171
  macrocephalum, 171–172

Portlandia
  grandiflora, 463, 471
  hexandria, 463
  pterosperma, 463

Portulaca, 236, 445, 446
  foliosa, 445
  meridiana, 446
  patens, 31, 446
  pilosa, 446
  stelliformis, 445
  suffrutescens, 445
  triangulans, 446
  verticillata, 446

Portulaceae, 444–446

Posoqueria latifolia, 467, 468

Potentilla, 459
  argentea, 459
  candicans, 459
  chiapensis, 459
  lineailoba, 459
  recta, 459
  rubra, 459
  sericea, 459

Pothos scolopendria, 68

Pouteria
  campechiana, 483
  multiflora, 481

Pouzolzia
  latifolia, 531
  nivea, 531

Prestonia, 58
  agglutinata, 61
  concolor, 61
  contorta (Laubertia), 58
  glabra, 64
  mexicana, 64–65
  mollis, 64

Priestleya
  corimbosa, 168
  longifolia, 168
  squarrosa, 168

Primulaceae, 447

Prinos, 11, 34

Privia, 540
  grandiflora, 540
  lappulacea, 540
Priva
mexicana, 540
rhinaanthifolia, 540

Proboscidea, 383
altheifolia, 383
triloba, 383

Prockia
acutia, 248
crucis, 248
var. cordata, 248
macrostachya (=Trichostigma), 248, 431
subcordata, 248

Prosopis
juliflora, 289, 328
laevigata, 289, 328
sp. (Inga altern.), 321; (Mimosa rotund.), 328

Proustia
mexicana, 151, 172
reticulata, 172

Prunus, 397
canadensis, 456
domestica, 459
ferruginea, 456
lusitanica, 456
samyooides (Myrtus rac.), 397
serotina, 456
subsp. capulis, 456, 459
virginiana, 456, 459
zinggii, 456

Psacalium megaphyllum, 143
Psedanamomis umbellulifera, 396
Pseudelefantopus spicatus, 152
Pseudantheremum
cuspidatum, 41
sp. (Justicia exilis), 41

Psedosmodingium rhoifolium, 55
Psidium
friechrichtshalianum, 398
guajava, 398
pomiferum, 398
sartorianum, 398
sp., 398; (Crataegus), 456

Psiguria triphylla, 206
Psilacis brevilingulata, 152

Psittacanthus
americanus, 352
calyclus, 351
macrantherus, 352
ramiflorus, 352
sp., 352

Psoralea, 303, 336
alopecurus, 309
arboarea, 335–336
citriodora, 305
citrodora, 304–305, 307, 308
daelea, 304
diffusa, 305
foliolosa, 305
fruticosa, 305, 336, 339
herbacea, 309
laevigata, 304, 336
lagopus, 336
lutea, 306, 308
luteola, 310, 311
macrostachya, 336
mutabilis, 307, 336
nautans, 336
polystachya, 308
procumbens, 308
purpurea, 336
reclinata, 309
sericea, 309, 310
stipularis, 336
tomentosa, 310
triphylia, 309

Psorothamnus, 304
Psychotria (Psychotria, Psychotria, Psychotria, Psychotria)
americana, 471
annularis (pinularis), 471, 472
arboarea, 471
asiatica (assiatica), 471–472
berteriana, 471
cuneifolia, 472
herbacea, 472
horizontalis, 472
incurvata, 472
microdon, 471, 472
oblungata, 472
pubescens, 472
sessilifolia, 471
thyroidea, 472
sp., 472

Ptelea
pentandra, 477
podocarpa, 477
simplicifolia, 477
trifoliata, 477
trifoliolata, 477

Pteridophyta, 547–549
Pteris
acinaciformis, 549
cretica, 547
semiserrata, 547

Pterocarpuus, 292
ateleia, 292
cyathiformis, 312
crispatus, 336
draco, 336, 337
ecastophyllum, 312, 336–337
lunatus, 337
mexicanus, 337
orbiculatus, 336, 337
scandens, 312

Pterocarpuus sect. Ateleia, 292
INDEX

Pteronia, 158
atropurpurea, 154
porophyllum, 151, 172

Pterostemon mexicanus, 260

Pyrola (Pirola)
secunda, 219, 447
uniflora, 392
verticillata, 219, 447

Pyrolaceae, 447

Pyrrophappus
multicaulis, 146
pauciflorus, 145
sessaeanus, 146

Pyrus, see Crataegus, 456

Quamoclit
coecinea, 200, 201
ederiflora, 201
pennata, 200
sanguinea, 201
vitiflora, 201–202
sp. (Ipomoea glauc.), 199; (Ipom. quin.), 200; 201, 202

Quararibea turbinata, 88

Quassia amara, 34, 495

Quercus
agrioflora, 246
alba (alta), 246
angustiflora, 246
candicans, 246
castanea e mexicana, 246
circinata, 246
crassipes, 246
elliptica, 247
hartwegii, 247
magnolaeifolia, 246
mexicana, 246
microphylla, 246
molucca, 246
nigra, 246
nudinervis, 247
obtusata, 246
var. hartwegii, 246–247
peduncularis, 247
phellos (phelos), 246, 247
polymorpha, 247
prinus, 246
repanda, 246
reticulata, 247
rossii, 247
rugosa, 247
sp., leaves of (Psid. sartor.), 398

Quirchamalium ? mexicanum, 95

Rachicalis americana, 466
Rafflesiaaceae, 447

Randia
aculeata, 469, 472
canescens, 472

cinerea, 472
decussata, 472
diantha, 473
echinocarpa, 472
inermis (Stemmadenia), 472
latifolia, 473
microcarpus, 473
mitis, 473
tetracantha, 472, 473
watsoni, 472
sp. (Gardenia), 465, 473

Ranunculaceae, 447–450

Ranunculus
aquatilis, 448
bulbosus, 448
cymbalaria var. saximontana, 450
dichotomus, 16, 448
donianus, 448–449
fasciculatus, 449
goeides, 449
humilis, 448
hydrocharoides var. natans, 449, 450
macranthus, 449
multicaulis, 449
muricatus, 450
natans (nutans), 449
obtusifolius, 450
parvulus, 5, 449
pensylvanicus, 449
petiolaris, 449
pinnatus, 16, 448
polyanthemos, 449
repens, 449
sessei, 449
stolonifer (stoloniferus), 450
tridentatus, 450
uncinatus, 449, 450
sp. nova, 449

Ranunculus sect. Epiretes, 449

Rauwolfia (Rauwolfia), 61
glabra, 65
heterophylla, 65
hirsuta, 65
longifolia, 58
lycioides, 65, 535
nitida, 65
oppositiflora (oppositiflora), 65–66
tetraphylla, 65
sp. nova (Citharexylum lyci.), 535

Recchia
decandra, 16, 495
mexicana, 16, 213, 495

Renealmia
aromatica, 545
exaltata, 545

Resedaceae, 450

Reseda luteola, 450
Rhamnaceae, 450–455

Rhamnus
- amole, 8, 453, 454
- biglandulosus, 453
- biniiflorus, 453
- calyeifolius, 453
- canescens (Celastraceae), 125
- capreaefolia, 454
- distichus, 453
- domingensis, 452
- ferrugineus, 455
- frangula, 453
- grangenos, 453, 454
- granulosus, 452
- guatemalensis, 453
- iguanaea (iguanaeae), 454, 529
- linearis, 451
- lycioides, 454
- maculatus, 33, 453
- mexicanus, 454
- microphyllus (microphylla), 454
- occidentalis, 454
- pentaphyllus, 454
- pinnatus, 454
- rotundifolius, 454
- spicatus, 454, 455
- terniflorus, 454–455
- triflora, 452
- turbinatus, 455
- zizyphus, 455
- sp. (Ceanothus moc.), 451

Rheedia
- edulis, 261
- lateriflora, 261

Rhedia
- inaequalifolia, 384
- cubensis, 386
- glabella, 388
- mariana, 386
- tortuosa, 387

Rhinanthus
- bipinnatifidus (Lantana), 492
- capensis, 490

Rhipsalis
- baccifera, 111
- cassutha, 111
- cassytha var. mocciniana, 111
- cassythoides, 111
- purpusii, 111

Rhizophora mangle, 8, 455

Rhizophoraceae, 455

Rhus, 54
- ericarpum (ericarpon), 53, 54
- flicina, 53–54
- fruticosum, 54
- heterophyllum, 54
- lineatifolium, 54
- potentillaeefolia, 54
- pterocarpus (pteroarpa, pterocarpon), 33, 55
- radicans, 55
- saxatilis, 54–55
- subbipinnatum, 53
- succedanea (succedaneum), 55
- tetlatzian (tetlatziian), 53, 54
- tridentatum, 54, 55
- varifolium, 54
- villosa (villosum), 55

Rhynchanthera, revision of genus, 388
- mexicana (cf. Thenardia), 67; (Melas. grand.), 386; 388

Rhynchosia
- cf. reticulata (Hedysarum vol.), 318
- sp. (Dolichos arb. & ses.), 311, 312

Ribes
- fuchioides (fuchsioides), 260
- speciosum, 260
- stamineum, 260
- sp. nov., 260

Ribes sect. Robsonia, 260

Richardia
- brasiliensis, 474
- montana (Achras), 483
- ovalifolia, 473
- procumbens, 473, 483
- scabra, 473
- tricocca, 470
- var. tetracocca, 470
- villosa, 473

Richardsonia ascendens, 473–474

Riedelia corymbosa, 519, 520

Riosia pubiflora, 491

Rieve corymbosa, 195, 198

Rivina
- humilis, 431
- laevis, 431
- mexicana, 431

Robinia
- mexicana, 303
- pringlei, 330

Rollinia
- mucosa, 56
- subsp. portoricensis, 56

Romanschulzia arabiformis, 205

Rondeletia
- cocinea, 474
- inermis, 474
- obovata, 474
- odorata, 474
- pilosa, 467
- tetrandra, 474
- villosa, 470
- volubilis (voluvilis), 469

Rorippa
- mexicana, 206
- pinnata, 205

Rosaceae, 87, 172, 358, 397, 455–460
INDEX

Rosa
  alba, 5
  angulata (Rubus trilob.), 460
  sinensis, 370
Rosanthus subverticillatus, 358
Rotala ramosior, 353
Ruagea hirsuta, 390
Rubiaceae, 89, 98, 257, 351, 460–476, 492, 503
Rubi
  diphylla, 474
  mexicana, 474
Rubus
  bucareensis (bucchareensis), 459
  guatimalensis, 459, 460
  hispidus, 459
  moluccanus, 460
  notkanus (notkanus), 460
  occidentalis, 460
  odoratus, 460
  parviflorus, 460
  pedatus, 459
  pentaphyloides, 460
  pentaphyllus, 460
  saxatilis, 459
  spectabilis, 459
  stamineus, 260
  stellatus, 459
  trilobus, 16, 459, 460
  vitifolius, 459
Rubus group Eubatus (Rubus pent.), 460
Rudbeckia
  amplexicaulis, 173
  amplexifolia, 172
  lacinata, 168
  leucantha, 172
  perfoliata, 172–173
  sp. (Eriocoma frag.), 154; 172, 173
Rudicularia, see Lopezia semeandra, 407
Rudolphia
  breviflora, 337
  longiflora, 337
  volubilis, 337
Ruellia (Ruelia), 11, 39, 40, 45, 46, 47
  aggregata, 47
  amoena, 11, 34, 44–45
  angustifolia, 45, 48
  arborescens, 39
  ascendens, 45
  biflora, 45
  cedillorum, 46
  ciliaris, 45
  coccinea, 45
  conceavifolia, 46
  cupheoides, 46
  depressa, 3, 45
  diebotoma, 45
  diphylla, 45–46
  dulcis, 48
Ruellia (Ruelia)
  fruticosa (fruticosa), 46
  hirsutoglandulosa, 47
  humifusa, 40
  inundata, 44
  lactea, 46
  macrocarpus (macrocarpa, macrocarpos), 46
  megasphaera, 45
  nudicaulis (nudiflora), 40, 47, 48
  ocyymoides, 46
  ovata, 46
  paniculata, 40
  parviflora, 47
  petiolaris, 47
  pilosa, 40
  prostrata, 46
  pumila (Stemodia), 494
  purpurea, 47
  repens, 47
  rubiculis, 47
  strepensis, 47
  triflora (as Ruelia), 47
  tuberosa, 40, 45
  verticillata, 46
  violacea, 46
  viscosa, 47
  yucatanus, 40, 47
Rumex, 443
  acutus, 443
  obtusifolius, 443
  polygamas, 443–444
Rupincola, see Nama undulatum, 264
Ruprechtia chiapensis, 444
Russelia sp. (Capraria vert.), 487
Rutaceae, 476–479
Rytidosiylis (Elaterium quad.), 209
Sabatia
  maculata, 252
  purpussii, 252
  stellarsis, 252
Sabazia humilis, 137
Sabiaceae, 479
Sabicea, 474
  aspersa, 474
  hirta, 474
  stipularis, 474
Sageretia
  elegans, 454
  spicata, 455
  theezans, 454
Sagittaria, 49
  demersa, 49
  triquetra, 49
Saliceaeae, 479
Salix
  angustifolia, 479
  babylonica, 479
  cinerea, 479

611
Salix
linearis, 479
microphylla, 479
parvifolia, 479
taxifolia, 479
Salix scandens, 181
Salix urceolatum, 500
Salsa salsa, 126
Salvia, numbers assigned to species, 275
adglutinans, 273–284
aegyptiaca (aegyptiaca), 273–274, 278, 279
ajugoides, 281
amarissima, 274, 275, 278, 282
angustiflora, 274
angustifolia, 278, 279
arborescens, 278
axillaris, 274
bicolor (bicolor), 274, 276, 279
bracteae (bracteae), 280
breviflora, 274
bulbos, 283
bullata, 274
calyciniiata, 283, 284
candida, 275
cardinalis, 277, 281
chamaedryoides, 138, 275
chia, 275, 276, 278
ciliaris, 271, 275; (cf. S. discolor), 276; (cf. S.
hirsuta), 277; (cf. S. palafoxiana), 281
circinata, 274, 275
clinopodiumoides, 281
coeotata, 282
coccinea, 275, 278
concolor, 275
crenulata, 275
cretic, 282
cyanega (cyanega), 275–276
dichroma, 274, 276, 279
discolor, 274, 276, 278
dominica, 280
elegans, 279
elongata, 276, 284
erecta, 282
eremítica, 279
falcata, 277
fastuosa, 283, 284
filipes, 283
fruticosa, 273
fulgens, 276, 277
gesneraefflora, 274, 277
 glutinosa, 11, 277
gracilis, 276
grahamii, 276
grandiflora Pl. Nov. Hisp., 276–277
grandiflora Fl. Mex., 276, 277, 278
hirsuta, 274, 275, 277–278, 281
hispanica, 275, 276
Salvia
indivisa, 284
integrifolia, 284
involucrata, 278, 281
laevis, 273, 278
lanceolata, 278
lasiantha, 278
lavandulae, 278, 284
leptophylla, 273, 274, 278, 279
leptostachys, 278
leucantha, 274, 276, 279, 284
linearis Ort., 279
linearis Sesé & Moc., 279
lineatifolia, 279
longiflora, 279
macrantha, 277
martinicensis, 279–280
melisscedora (melisscedora), 280, 281
membranacea, 280
mexicana, 280, 281
micrantha, 274, 280
microphylla, 276, 281
moccini (moccini), 280
nepetoides, 277–278
nitidifolia, 281
obusifolia, 280
occidentalis, 279
odoratissima, 276
officinalis, 280
palafoxiana, 278, 280–281, 283
papilionaceae, 278
parvifolia, 281
patens, 277
patzquarensis (parquerensis), 31, 281
pauciflora, 277
pendula, 277, 281
petiolaris, 276
phlomoides, 281
polystachia Cav., 274, 275, 276, 279, 282, 284
polystachya Ort., 274, 275, 279, 282
pomifera, 282
prunelloides, 282–283
pseudochia, 283
pseudococcinea, 283
pubescens, 273
pulchella, 281, 283
punctata, 278, 279
purpura (cf. S. angust.), 274, (cf. S. memb.), 280,
283, (see also under Verb. recta), 539
reflexa, 278
repans, 279
rhombifolia, 282, 283
rhomboides, 283
riparia, 285
rugosa, 280
scorodoniaefolia, 280
secundiflora, 282
sessei, 273, 283–284
INDEX

Salvia
spicata, 275, 276, 278, 282
stricta, 284
subspicata, 282
tenufolia, 32
thymoides, 284
tuberosa, 282
tubifera (tubiflora), 284
turcica, 284
ventricosa, 280, 281
virgata, 279
viscosa, 11, 33, 285
sp., 278, 282
sp. nova, 278, 280, 282
Salvia sect. Calosphase, revision of, 275, 277
Sambucus nigra, 119
Samolus ebracteatus, 447
Samyda (Samida)
dentata, 247, 249
dodecandra, 247, 249
eaneandra, 248
lancifolia, 248
macrocarpa, 247, 248
octandra, 248–249
parviflora, 249
rubra, 247, 249
spinosa, 249
spinulosa, 247, 248
tomentosa, 247, 249
virgata, 249
Sanguisorba sitchensis, 455
Santolina
oppositifolia, 139
procumbens, 139
scabra, 173
Sanvitalia, 165
procumbens, 165
villosa, 165
Sapindaceae, 479–481
Sapindus, 34, 481
amolli, 480–481
saponaria (saponarius), 481
trifoliatus, 481
Sapium
appendiculatum, 245
biglandulosum var. klotzschianum f. oblongatum, 245
brachystachyum, 235
eglandulatum, 235
glandulosum, 245
macrocarpum, 245
mexicanum, 245
pedicellatum, 245
persicifolium, 245
sebiferum, 234
Sapotaceae, 481–483
Sapranthus, 57
foetidus, 57
violaceus, 57
Saracha
alata, 503
procumbens, 495, 496, 503, 516
umbellata, 496
sp. (Capsicum), 496
Sarcoglottis schaffneri (Ophris monostachia), 408; (Ophr.
ovata), 420
Sarcophaea reticulata, 454
Sarcostemma, 77
bicolor, 58
clausum, 58, 78
elegans, 58
pannosum, 77–78
Sarratia ureolata, 53
Satureja
hortensis, 285
macrostema, 269, 271
Satyrium turgidum, 408, 409
Saurauja, 214
aspera, 214
reticulata, 214
serrata, 214
villosa, 214
Saururaceae, 483–484
Saururus cernuus, 33, 484
Sauvagesia
erecta, 402
geminiflora, 402
Saxifragaceae, 484–485
Saxifraga, 484
ferruginea, 485
nothana, 484, 485
stellaris var. vulgaris, 484–485
Saxifraga, [group] Micranthes, 484
Scabiosa, see Borrella haenkeana, 461
Scaevola, 256
lobelia, 256–257
plumier, 256
Scaphyglottis, 422
graminifolia, 422
sp. (Epigynum parv.), 414
Schaefferia, 125, 408
albiflora, 125
completa, 125
frutescens, 125
racemosa, 125; (Opilaceous), 408
viridescens, 125, 408
viridiflora, 125
Schinus (Burserac), 105
angustifolius, 106
areira, 55
hexander, 106
mollis, 55
occidentalis, 32, 106
Schizocarpum
filiforme, 211
sp. (Momordica operc.), 211
Schistophragma pusilla, 493
Schlechterdalia, 133

capillacea, 132

glandulosa, 132, 133, 191

Schlechterdalia Less., 191

Schlechterdalia Willd., 191

Schmitthizia vestita, 55

Schoenocaulon, numbering of species, 215

officinale, 348

Schrankia (Schrank), 327, 328
diffusa, 327, 328

distachya, 328

spp., 337

Schrankia, as synonym of Mimosa, 327, 337

Schweinitzia racemosa, 408

Scirpus palustris, 213

Scoparia dulcis, 486, 492

Scopulophila parryi, 123

Scorpiurus monadelphus (Astragalus), 291

Scorzonera

angustifolia, 173

graminifolia, 173

picroides (picroides), 173

Scrophulariaceae, 28, 340, 485–495, 537

Scrophulariaceae, numbers assigned to species, 486, 487;
to diandrous species, 494; to tetraandrous species, 492

Scrophularia, 492

californica, 492

notkana, 492

physalodes (physaloides, physaloides), 491

Scutellaria (Scutelaria), revision of genus, 285
coccinea, 285, 286
c coerula, 285
grandiflora, 286

havanensis, 285, 286

indica (Yndica), 285, 286

longiflora, 285

microphylla, 285–286

mociniana, 286

multiflora, 285, 286

nicaraguensis, 286

parviflora, 286

tomentosa, 273

tuberosa, 285

sp. (Stemodia sp.), 494

sp. nova, 285

Sebastiania pavoniana, 234, 235

Sechiopsis triqueta, 213

Sechium
cule, 212

palmatum, 211

Securidaca (Lollochecarpus), 322

volubilis, 442

Sedum, 203

acre, 204

anacampseros, 204, 205

arboreascens, 204

arbuscula, 204

bourgaei, 204

Sedum

cordifolium, 204
dendroidem, 204

ebracteatum, 204

jaliscanum, 203

moranense, 204

murale, 204

oxypetalum, 204, 205

paniculatum, 204

peregrinum, 205

reflexum, 205

spatulatum, 203

spicatum, 203, 205

tereifolium, 203

Selaginella pallescens, 548

Selaginella subg. Euselaginella, 548

Selericereus hamatus, 107

Scleriari euboea, 112

Semeiandra grandiflora, 407

Senecio

alatus, 173

angulifolius, 174

aureus, 173

barba-johannis, 163, 173

bellidifolius, 174, 175

callosus, 144

canicida, 173–174

cinerarioides, 174, 175

cordovensis, 143

ehrenbergianus, 174

lactuella, 174, 175

linifolius, 174

lobatus, 146, 174

longifolius, 174

peasitis, 146, 174

pinnatus, 174

praecox, 146, 174, 178

procumbens, 175

roldana, 175

rotundifolius, 174–175

saliicifolius, 175

salignus, 175, 176, 177

sanguisorbae, 174

sinuatus, 178

squamosus, 175

tolucaucus, 173

vernus, 175, 176

vulcanicus, 175

vulneraria DC., 174, 175

vulnerarius Sessé & Moc., 174, 175

xarilla, 175–176

sp. (Cacalia pelt.), 143; (Cacalia sonch.), 144; 176

Senecio sect. Mulgedifolii, 143

Senna, revision of genus, 295; 298, 300, 337, 338

alata, 295

atomaria, 297, 298, 300

bicapsularis, 300

614
INDEX

Senna
  cobanensis, 298
  croatalioides, 337
  foetidissima var. grandiflora, 297
  fruticosa, 296
  holwayana, 300
  lindheimeriana, 337
  mollissima, 296, 298
    var. glabrate, 295, 296
  multiglandulosa, 295
  nicaraguensis, 337–338
  obtusifolia, 338
  pallida, 296, 297
    var. geminiflora, 296
  pendula,
    var. advena, 297
    var. ovalifolia, 338
  polyantha, 299
  polyphylla, 299, 300
  quinquangulata, 296, 300
  reticulata, 338
  septentrionalis, 300
  spectabilis, 295, 300
  undulata, 300
  uniflora, 338
  villosa, 297
Senna × floribunda, 296

Serapias
  diphylla (diphilla), 422, 423
  guatimalensis, 422
  imbricata, 419
  longifolia, 422
  lurida (lurida), 423
  palmifolia, 422, 423
  parasitica, 409, 422
  purpurea, 423
Sericographis mohintli, 41, 47–48
Sericospermum, 146
  heterophyllum, 176
Scriptium
  corimbosum (corimbosum), 158
  uniflorum, 158, 168

Sejania
  mexicana, 481
  schiedeana, 480
Serratula
  atropurpurea, 154
  scabra, 176
  scariosa, 176
  tinctoria, 139
Sesamum
  indicum, 430
  orientale, 430
Sesbania (Sesban), 290
  emerus, 303
  herbacea, 303
  longifolia, 290; (Cytisus), 303
  Sesbania (Sesbania)
  macrocarpa, 290
  pica, 290
  sesban, 290
Sesuvium
  portulacastrum, 48–49
  revolutifolium, 49
  uvifolium (ubiferum), 49
Seymeria virgata, 486
Shawia corymbosa, 158
Silphoria, 492
  americana, 492, 494
  diffusa, 492
  pichinchensis, 492
Sicana odorifera, 211
Sicydium tannifolium, 207
Sicyos (Sycos)
  alata, 213
  angulata, 212
  deppei, 212
  edulis, 212
  garcinii, 212
  lacinatus, 212
  microcarpus, 212
  microphylla, 212
  palmata, 211
  parviflorus, 212
  triqueter (triquetra), 16, 213
  sp., 212
Sida, 378, 380, 381
  abutlium, 376
  acerifolia, 366, 376–377, 380
  acuminata, 377
  acuta, 379, 381
  alba, 377
  amatlanensis, 377
  amplexifolia, 377
  angustifolia, 380
  anoda, 377–378
  bicolor, 378
  brachystemon, 378
  calyptrae, 379
  capensis, 378
  carne, 378
  ciliata, 378
  coerula, 378
  conferta, 378
  cordifolia, 378, 379, 380
  crispa, 379
  decumbens, 381
  disticha, 379
  exilis, 379
  glomerata, 379
  glutinosa, 381
  hastata, 366, 377, 379
  hastifolia, 379
  heterophylla, 366
  integerrima, 380

615
Sida
  integrifolia, 379–380
  jamaicensis, 380
  leprosa, 373
  linearis, 380
  malvaeflora, 380
  malvaviscus, 366–367
  mociñiana, 378
  obliqua, 378
  ovata, 380
  oxyphylla, 380, 381
  palmata, 376, 377, 380
  paniculata, 381
  paramitaee, 380–381
  parviflora, 381
  pedunculata, 381
  peripetala, 367
  procumbens, 377
  quinqueangularis, 380
  quinquelandia, 366
  repens, 381
  rhombifolia, 378, 381
  rhomboida, 381
  rostrata, 381
  sessilis, 380, 381
  spirifex, 376, 377
  spinosa, 378, 380, 381
  triloba, 31, 380
  viscosa, 381
  sp., 381

Sidalcea malvaeflora, 380
Sideritis repens, 286
Sideroxylon
  capiri, 483
  tempisque, 483
Sieversia paradoxa, 457, 460
Sigesbeckia (Siegesbeckia)
  integrifolia, 171
  jorullensis, 171
  orientalis, 176
  triangularis, 176
  sp. (Polymnia), 171; 176
Silene, 17, 121, 124
  laciniosa, 124
    subsp. laciniosa, 124
  mexicana, 16, 124
  mociñiana, 124
Silphium (Silphium)
  ovatum, 176
  tenuatum, 176
Silvia
  prostrata, 486
  serpillifolia, 28, 485
Simarubaceae, 213, 495
Simsia
  adenophora, 149
  amplexicaulis, 149, 162, 163, 176–177
  auriculata, 149
  foetida, 148, 149, 177
    var. grandiflora, 177
  heterophylla, 163
  lagascaformis, 177
  polycephala, 177
  sanguinea, 161, 177
  sp. (Hel. trilli.), 163
Sinapis (see Rapa sp.), 265
Sisybrium (Sisymbrium)
  amphibium, 206
  indicum, 206
Sisyrinchium
  arizonicum, 266
  bermudiana (bemudianum), 267
  gramineum, 266
  graminifolium (graminifolia), 267
  ixioides, 265
  micranthum, 267
  palmifolium, 267
  scabrum, 267
  spicatum, 267
  striatum, 267
  tenuifolium, 266, 267
  uniflorum, 267
  sp. (Ixia mex.), 265; (Morea lut.), 266
Sloanea tenuiflora, 218
Smilax, numbering of species, 215
  bona-nox subsp. wrightii, 346
  caduca, 346
  domingensis, 347
  excelsa, 346
  glauca, 346
    var. discolor, 346
  gymnopoda, 347
  havanaensis, 346
  jalapensis, 348
  lanceolata, 346–347
  laurifolia, 347, 348
  mazatlensis, 347
  mecapathi, 348
  mexicana var. costaricae, 347
  mollis, 347, 348
    var. pavoniana, 347
  moranensis, 348
    var. mexiae, 347
  ovata, 347
  parvifolia, 347
  pringlei, 348
  pseudochina, 347, 348
  regelii, 346
  rotundifolia, 347–348
  spinifolia, 346
  spinosa, 347
  tamnoides, 347, 348
  tuberosa, 215
  uruapensis, 348
Solanum
ferox, 508
ficifolium, 508
filiforme, 503
flexuosum, 506
foetidum, 509
fructu-tecto, 515
havanense, 508
hernandesii, 508
heterodoxum, 508, 517
hispidum, 508
hybridum, 508-509
hygrophilum, 513, 516
igneum, 509
incanum, 507, 513
lanceaeolatum, 504, 509, 513
lanceolatum Cav., 506, 509, 511
lanceolatum Sessé & Moc., 509
lanceolatum, 509
laurifolium, 505, 506, 509, 511, 515
lentum, 509, 515
var. eichinatum (S. reclinatum), 509-510
leptanthum, 506, 510, 513
leycesterianum, 510
lineatum, 510
longifolium, 507, 508, 510, 515
luridum, 506, 510, 516
macrantherum, 507
macranthum, 513
macrophyllum, 506
mammosum, 510
melongena, 510
mexicanum Dunal, 505, 509, 510-511
mexicanum Sessé & Moc., 505, 506, 511
de Mexico, 504, 506, 507, 508, 509, 510, 513, 514
microcarpon, 506, 510
microphyllum, 505, 512
miltomate, 511, 516
monanthum, 512
mozinianum (mozinianum), 506, 511-512
var. luteiflorum, 512
multinervium, 512
muricatum, 512
myriacanthum, 513
nicaraguense, 509
nigricans, 512
nigrum, 505, 510, 512
nitidum, 512
nudum, 507
nulans, 512-513, 514
oaxacanum, 504
ochraceo-ferrugineum, 514, 516
ocraeopense, 3, 513
oporinum, 506
oppositifolium, 516
pauciflorum (pauciflorium), 511
pavonii, 504, 513
persicifolium (persicaefolium), 507
Solanum
polygamum, 514, 515, 516
porphyranthum, 513
pseudocapsicum, 513, 516
pubigerum, 506, 513
pyriforme var. uniflorum, 507, 513
reclinatum, 509
refractum (Capsicum frut.), 496; 504, 505, 515
var. angustifolium, 504
repens, 504
rostratum, 513–514, 516
rubrum, 514
rude-pannum, 514
sanctum, 514
sarmentosum, 507
scandens, 507, 512, 513, 514
simplicicaule (simplicicaulis), 505
sodomeum, 516
sonniculentum, 506
spinosum, 516
stoloniferum, 514
stramonifolium, 504
symphycaulis, 514
tabascense, 4, 514
tectum, 515
tehuacanense, 515
tlacotalpense, 509, 515
torvum, 504, 508
totonacum, 515
tricolor, 515
tridynamum, 514, 515, 516
var. stylosum, 515–516
triquetrum, 516
tuberosum, 514
tubulosum, 516
tuxtlense, 509, 516
ulmoides, 516
umbellatum, 509
umbelliferum var. incanum, 505
undulatum, 505
uniflorum, 511, 512
urceolatum, 516
verbascifolium, 516
virginianum, 508, 516–517
volubile, 517
wendlandii, 515, 517
zuccagnianum, 508
sp., 517; spp., 517
Solanum sect. Euleptostemonum, 513
Solanum sect. Tuberranum, 511, 514
Solidago
altissima, 177
canesceens, 177
mexicana, 176, 177, 178
pinnata, 177
secunda, 177–178
sinuata, 146–147, 174, 178
velutina, 153
Soliva
anthemidifolia, 178
mexicana, 178
Sonchus
angulatus, 178
havanensis, 178
maritimus, 178
minor, 178
oleraceus, 178, 188
paniculatus, 187
plumieri, 178
Sophora, 293
capensis, 338
secundiflora, 293
Sparganothorus
ageratoideus, 179
obtusifolius, 179
Spartium junceum, 338
Spathacanthus hahnianus, 46
Spathelia rhoifolia, 55
Spathodesa edulis, 86
Spergula arenarioides, 124
Spermacoce
adscendens, 473, 474
avenia, 474
capitata, 463, 474–475
ciliaris, 464, 475
coecina, 463, 464
decinata, 464
depressa, 475
glabra, 475
hirta, 463, 475
linearis, 475
repens, 475
rubra, 464
stricta, 475
subulata, 461
tenia, 475
tenuiflora, 476
tenuifolia, 476
tenuior, 461
verticillata, 475, 476
Sphaerulacea
angustifolia, 372, 373
coulteri, 379
miniata, 373
rosea, 372, 373
umbellata, 374
Sphenostigma, 266
Spigelia
anthelmia, 351
hedypioidae, 351
lindheimeri, 351
longiflora, 351
marginata, 351
mexicana, 351
paucriflora (parviiflora), 350, 351
INDEX

Spigelia
scabrella, 351
speciosa, 351

Spilanthes
alba, 152, 179
americana, 136, 137
heterophyllus, 180
ocymifolia, 140, 152, 179

Spilanthes (Spilanthes)
acmella, 179
amarus, 179; (Verbesina cam.), 179, 189
corymbosus, 179
helianthiflorus, 179
heterophyllus, 140, 179–180
litoralis, 180
muticus, 180
occidentalis, 180
oconixahlitl, 180
sinuatus, 180
squarrosus, 180
suberosus, 149, 180–181; (Verbesina pter.), 190
uniflorus, 181
volubilis, 181
sp. (Santolina), 173; 181

Spiraea
cuneifolia, 460
douglasii, 460
elliptica (eliptica), 460
hartwegiana, 460
opulifolia, 460
tomentosa, 460

Spiranthes
aurantica, 420, 424
cinnabarina, 420, 423, 424
ensifolia, 423
graminea, 423
hyemalis, 424
montana, 420
orchoides (Ophrys peregrina), 420
pauciflorus, 424
romanoffiana, 423
sp., 420

Spondias,
dulcis var. mucroniserrata, 55
mombin, 55–56
myrobalanoides, 56
myrobalanus (mirabilanus, myrobalana), 56
terebinthinaceus, 56

Sponia micrantha, 531

Sporobolus microperus, 259

Sprekelia formosissima, 342

Stachys (Stachis), revision of genus, 286, 287
alpina, 286
annua, 286
coccinea, 271, 286
emersonii, 287
criantha, 286–287

Stachys (Stachis)
mexicana, 287
rigida, 287
rotundifolia, 287
sylvestria (silvatica), 287
uniflora (Micromeria), 271, 272

Stachytarpheta sp., 539
Staelileina (Stelina) viscosa, 181
Stanhopea
bucephalus, 423
fregeana, 423
oculata, 411, 423
tigrina, 423

Stapelia
campanulata, 76
ereeta, 78
herbacea, 78
lutea, 78
mexicana, 78
pancololote, 78
punctata, 75
quinqueangularis, 78
rubrosa, 78–79

Staphyleaceae, 517

Staphylca
brachiata, 517
paniculata, 517
pinnata, 517
sp., 517

Stegnosperma cubense, 431–432

Stellaria
aristata, 124
cuspidata, 124
dichotoma, 124
ovata, 121
triangularis, 124
virgata, 122
sp. (Holosteum repens), 123

Stemmadenia, 66
galeottiana, 66

Stemodia, revision of American species, 493
durantifolia, 486
erecta, 493
humilis, 489, 493, 494
jorullensis, 493
lanata, 493
maritima, 493
neglecta, 493
palmeri, 493
pusilla, 493
silicousa, 32, 493
tenufolia, 486, 487
tomentosa, 493
verticillata, 489, 493–494
sp., 494

Stenandrium dulce, 45, 48
Stenanthella frigida, 342
| Stenocactus  | crispatus, 108  |
| Stenoptera peruviana, 423  |
| Stenorrhynchus  | cinnabarinus, 423  |
|  | lupulinus, 420, 424  |
|  | pauciflorus, 408, 424  |
|  | sp. (Opysys peregrina), 420  |
| Stenostephanus haematodes, 42  |
| Stenostomum dichotomum, 98, 476  |
| Sterculiaceae, 517–521; numbers assigned to species, 519  |
| Sterculia  | apetala, 520  |
|  | carthaginensis, 520  |
|  | helicteres, 520  |
|  | oblongifolia, 520  |
|  | punctata, 520  |
| Stevia  | 181, 183, 184, 185  |
|  | angustifolia, 185  |
|  | canescens, 182  |
|  | connata, 181, 185  |
|  | elatior, 134, 181, 182, 184  |
|  | enarthrotica, 181–182, 183  |
|  | eupatoria, 134, 182, 183  |
|  | febrifuga, 170  |
|  | glabra, 181  |
|  | hymenopappa, 183  |
|  | hyssopifolia, 134, 182  |
|  | incanescens, 182  |
|  | jorullensis, 185  |
|  | laciniata, 133  |
|  | lanceolata, 182, 183, 184, 185  |
|  | laxiflora, 182–183, 185  |
|  | leuconeura, 183, 185  |
|  | linearis, 133  |
|  | longifolia, 181, 185  |
|  | longiseta, 183  |
|  | lucida, 183  |
|  | micrantha, 183, 184  |
|  | multifida, 183  |
|  | var. trifida, 185  |
|  | nepetifolia (nepetaefolia), 181, 183  |
|  | ovata, 183–184, 185  |
|  | paniculata, 182, 183, 184  |
|  | pedata, 133, 134  |
|  | pilosa, 134, 184  |
|  | podocarpa, 134  |
|  | pubescens, 183, 184  |
|  | punctata, 134, 182  |
|  | purpurea, 183, 184  |
|  | quinquepartita (5-aristata), 182, 183, 184–185  |
|  | rhombifolia, 181, 182, 184  |
|  | salicifolia, 134, 185  |
|  | serrata, 134, 182, 185  |
|  | var. ivifolia, 182  |
|  | suaveolens, 183, 185  |
| Stevia  | subpubescens, 184, 185  |
|  | tenella, 183  |
|  | tomentosa, 182  |
|  | trifida, 133, 183, 185  |
|  | triptersis, 159  |
|  | villosa, 134, 183  |
|  | viminea, 181, 185  |
|  | viscosa, 134, 183, 185  |
|  | viscosa, 133, 134  |
| Stigmaphyllum (Stigmaphyllum), 358, 360, 364  |
|  | dichotomum, 360  |
|  | ellipticum, 359, 360  |
|  | var. ternatum, 360  |
|  | floribundum, 360  |
|  | humboldtianum, 360  |
|  | lindenianum, 360, 361  |
|  | mucronatum, 360  |
|  | ternatum, 360  |
|  | tomentosum, 360  |
| Stillingia (Stillingia)  | acutifolia, 234  |
|  | appendiculata, 245  |
|  | arborea, 245  |
|  | macrantha, 234  |
|  | sanguinolenta, 245  |
|  | var. lanceolata, 245  |
|  | sebifera, 234  |
|  | silvatica, 234, 235  |
|  | suffruticosa (suffruticosa), 234, 235, 245  |
|  | zelayensis, 234, 235, 245  |
| Strumphia (Strumphia) maritima, 476  |
| Struthanthus  | haenkeanus, 352  |
|  | microphyllus, 352  |
| Sturmia arnoglossophylla, 424  |
| Stylosanthes guayenensis, 339  |
| Styracaceae, 390, 521  |
| Styraux, 521  | argenteus, 521  |
|  | dependens, 521  |
|  | racemosum, 521  |
|  | sp. (Melia simp.), 521  |
| Suneda linearis, 126  |
| Sweertia  | cucullata, 252  |
|  | sp. (Halenia elong.), 251  |
| Swietenia  | humilis, 391  |
|  | mahagoni, 391  |
|  | mexicana, 391  |
| Symphoricarpos  | albus, 118  |
|  | microphyllus, 119  |
|  | sp. (Margaris barbigera), 118; (M. nudiflora), 119  |
| Symphytum (Symphytum) fruticosum, 90  |
| Symplocaceae, 522–523  |
Symplocos (Simplocos), 522
apolis, 522
citraea, 522, 523
hartwegii, 522, 523
limoncillo, 522
martinicensis, 32, 522–523
pringlei, 523
prionophylla, 522, 523
Syndrella nodiflora, 190
Tabebuia, 84
chrysanth, 84, 87
fuscata, 86
haemantha, 85
heterophylla, 85
pentaphylla, 84
Tabernaemontana
acapulcensis, 66
alba, 67
amygdalifolia, 66
cymosa, 66
dichotoma (dichothoma), 66
grandiflora, 66
laurifolia, 66
lutea, 66
tuxtlensis, 66
umbellata, 67
verrucinensis, 67
sp. (Echites undulata), 63; 66, 67
Tagetes
anethina, 186
clandestina, 186
coronopifolia, 186
corymbosa, 186
erecta, 186, 187
filifolia, 133, 186
fragnantissima, 186
lucida, 133, 186
lunulata (lunata), 186, 187
micrantha, 186
multifida, 133
patula, 186–187
punctata (punctates), 33, 132, 133, 187
subvillosa, 187
tenuifolia, 186, 187
Talauma mexicana, 357
Talinum
napiforme, 445, 446
paniculatum, 446
triangularare, 446
tuberosum, 446
Tamonea scabra, 537
Tamus triandra, 216
Tanacetum integrifolium, 187
Tarchonanthus
cañacana, 165, 187
glaber, 165, 187
purpureus, 164, 165, 187
Tarchonanthus
scaber, 187
zazanaca, 187
Tecoma
fuscata, 86
guarume, 86
haemantha, 85
heteropoda, 86–87
leucoxyylon, 84
pentaphylla, 84
stans, 85
Telanthera obovata, 52, 53
Tellima grandiflora, 484
Tephrosia
arcuata, 330
cathartica, 314, 315
multifolia, 330
senna, 314
sinapou, 331
toxicaria, 331
sp. (Galega polygon.), 315; (Lotus), 323; (Orobus), 330
Terebraria (Guetarda), 465
Ternstroemia
brevipes, 523, 524
cuneifolia, 523, 524
ecliptica (eliptica), 524
lineata, 523–524
meridionalis, 523, 524
occidentalis, 523, 524
parviflora, 523
pringlei, 524
serrulata, 523
sphyilltica (siphylitica), 523
sylvatica, 524
tepazapote, 524
verticillata, 524
Tetracera
erecta, 16, 215
sessiliflora, 214
volubilis, 214, 215
Tetraclea coulteri, 539, 541
Tetragastris balsamifera, 105
Tetramerium
glandulosum, 42
hispidum, 43
nervosum, 43
Tetranthera cervantesii, 288
Tetrazygia angustifolia, 385
Teucrum
canadense, 271, 287
cubense, 287
mexicanum, 287
stoloniferum, 271
Thalia
geniculata, 382, 383
sp. (Maranta gal.), 382
Thalictrum
  dioicum, 450
  peltatum, 450
  roseanum, 450
Theaceae, 523–524
Theisia oppositifolia, 180
Thenardia,
  floribunda, 63, 67
  rosea, 67; (Rhinchanchera mex.), 388
Theobroma
  angustifolium (angustifolia), 520–521
  bicolor, 521
  guazuma (guazuma), 521
  ovatifolium (ovatifolia), 521
  patastle, 521
  simiarum, 520, 521
Theophrastaceae, 524–525
Thermogoton flagellare, 484
Thespesia (Montezuma), 376
  grandiflora, 376
Thevetia
  cuneifolia, 67
  nerifolia, 59
  ovata, 59, 67
  peruviana, 59
  thevetioides, 59, 67
  yecottii, 59, 67
Thouinia villosa, 48, 481
Thouinidium decandrum, 481
Thrianthema (Trianthema)
  monogynia, 446
  portulacastrum, 446
Thryallis hirsuta, 366
Thurberia thersesoides, 367, 371, 372
Thymelaeaceae, 525–526
Thymophylla setifolia, 187
Thysantherum floribundum, 131
Tibouchina
  diffusa, 385
  galeottiana, 389
  mexicana, 387
  rufiflora, 385, 389
  sp., 385
Tigridia
  pavonia, 267
  sp. (Ferraria), 265; (Morea coerulea), 266; (M. plicata), 267
Tiliaceae, 526–528; numbers applied to species, 526
Tillandsia
  acerosa, 102
  chaetophylla, 102
  coccinea, 102
  deppeana, 103
  ensifolia, 102
  grandis, 102
  imperialis, 103, 104
  ionantha, 103
  leiboldiana, 102
  ligulata, 103
  longiflora, 103
  paniculata, 103
  var. genuina, 103
  parasiticum, 103
  recurvata, 103
  recurvifolia, 103
  rubra, 103
  rupestris, 103
  secunda, 103
  serrata, 103
  spinosa, 103
  streptophylla, 103
  strobilantha, 103–104
  sp., 102, 104
Tinamia
  erecta, 130
  gypsophiloide, 401–402
Tithonia (Helianthus alt.), 161
  diversifolia, 162
  grandiflora, 187
  rotundifolia, 162, 187
  tagetiflora, 187
  tubaeformis, 163
Tithymalus subpavonius, 228
Tococa vesicolosa, 389
Tonduzia longifolia, 58
Topoeba laevigata, 383
Tournefortia
  argentea, 98–99, 100
  bicolor, 100; (Stenostomum), 476
  cymosa, 99
  dichotoma, 99
  foetidissima, 99
  fruticosa, 99
  gnaphalodes, 99
  herandesii, 99–100
  hirsutissima, 99, 100
  laevis, 100
  lanceolata, 100
  laurifolia, 100
  maculata, 100
  mutabilis, 99, 100
  odorata, 100
  odoratissima, 100
  suffruticosa (suffruticosa), 99, 100
  syringaefolia, 100
  velutina, 99
  volubilis, 99, 100
  sp. (Boraginaceae), 89
Toxicodendron radicans, 55
Trachodes paniculatus, 187–188
Tradescantia, 129
  amplexicaulis, 130
  capitata, 130
  coapati, 130
  cordifolia, 129
<table>
<thead>
<tr>
<th>Index</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tradescantia</td>
<td></td>
</tr>
<tr>
<td>cattlinii, 750</td>
<td></td>
</tr>
<tr>
<td>descarga, 130, 131</td>
<td></td>
</tr>
<tr>
<td>erecta, 130–131</td>
<td></td>
</tr>
<tr>
<td>labiata, 131</td>
<td></td>
</tr>
<tr>
<td>malarbarica, 131</td>
<td></td>
</tr>
<tr>
<td>parviflora, 131</td>
<td></td>
</tr>
<tr>
<td>pulcherrima, 131</td>
<td></td>
</tr>
<tr>
<td>racemosa, 131</td>
<td></td>
</tr>
<tr>
<td>umbellata, 130</td>
<td></td>
</tr>
<tr>
<td>umbellifera (umbellifera), 130</td>
<td></td>
</tr>
<tr>
<td>virginiana (virginica), 131</td>
<td></td>
</tr>
<tr>
<td>Tragia</td>
<td></td>
</tr>
<tr>
<td>angustifolia, 246</td>
<td></td>
</tr>
<tr>
<td>nepetifolia var. dissecta, 245</td>
<td></td>
</tr>
<tr>
<td>volubilis, 246</td>
<td></td>
</tr>
<tr>
<td>sp. (Platygyne), 244</td>
<td></td>
</tr>
<tr>
<td>Tragoceros (Tragoceros)</td>
<td></td>
</tr>
<tr>
<td>moccinnianus, 188</td>
<td></td>
</tr>
<tr>
<td>zinnioides, 188</td>
<td></td>
</tr>
<tr>
<td>Trema micrantha, 531</td>
<td></td>
</tr>
<tr>
<td>Tribulus</td>
<td></td>
</tr>
<tr>
<td>cistoides, 546</td>
<td></td>
</tr>
<tr>
<td>lanuginosus, 546</td>
<td></td>
</tr>
<tr>
<td>maximus, 546</td>
<td></td>
</tr>
<tr>
<td>tuberculatus, 546</td>
<td></td>
</tr>
<tr>
<td>Trichilia</td>
<td></td>
</tr>
<tr>
<td>americana, 390, 391</td>
<td></td>
</tr>
<tr>
<td>glabra, 391</td>
<td></td>
</tr>
<tr>
<td>havanaensis, 391</td>
<td></td>
</tr>
<tr>
<td>hirsuta, 390</td>
<td></td>
</tr>
<tr>
<td>hirta, 390, 391</td>
<td></td>
</tr>
<tr>
<td>laevis, 391</td>
<td></td>
</tr>
<tr>
<td>pavoniana, 390</td>
<td></td>
</tr>
<tr>
<td>pringlei, 390</td>
<td></td>
</tr>
<tr>
<td>trifolia (trifoliata), 391</td>
<td></td>
</tr>
<tr>
<td>Trichochloa microsperrma, 257</td>
<td></td>
</tr>
<tr>
<td>Trichostigma octandrum, 431</td>
<td></td>
</tr>
<tr>
<td>Tridax</td>
<td></td>
</tr>
<tr>
<td>135, 146</td>
<td></td>
</tr>
<tr>
<td>coronopifolia, 139</td>
<td></td>
</tr>
<tr>
<td>procumbens, 135, 139, 146, 153</td>
<td></td>
</tr>
<tr>
<td>trilobata, 146, 159</td>
<td></td>
</tr>
<tr>
<td>Trifolium</td>
<td></td>
</tr>
<tr>
<td>cherleri, 338</td>
<td></td>
</tr>
<tr>
<td>involucratum, 338</td>
<td></td>
</tr>
<tr>
<td>melilotus, 338</td>
<td></td>
</tr>
<tr>
<td>ortegae, 338</td>
<td></td>
</tr>
<tr>
<td>stipulare, 339</td>
<td></td>
</tr>
<tr>
<td>Trigonella mexicana, 339</td>
<td></td>
</tr>
<tr>
<td>Trigonospermum</td>
<td></td>
</tr>
<tr>
<td>floribundum, 154</td>
<td></td>
</tr>
<tr>
<td>sp. (Polynnia), 174</td>
<td></td>
</tr>
<tr>
<td>Trimeria ficoidea, 188</td>
<td></td>
</tr>
<tr>
<td>Triticum angulatum, 464</td>
<td></td>
</tr>
<tr>
<td>Trionyteris (Triopteris, Tripteris)</td>
<td></td>
</tr>
<tr>
<td>acuminata, 362</td>
<td></td>
</tr>
<tr>
<td>mucronata (Hirarea), 363</td>
<td></td>
</tr>
<tr>
<td>oblongifolia, 362</td>
<td></td>
</tr>
<tr>
<td>Triopteris (Triopteris, Tropteris)</td>
<td></td>
</tr>
<tr>
<td>oxyota, 363</td>
<td></td>
</tr>
<tr>
<td>podocarpa (Banister hisp.), 359; podocarpa (Hirarea), 363</td>
<td></td>
</tr>
<tr>
<td>rigidia, 358</td>
<td></td>
</tr>
<tr>
<td>volubilis (Hirarea podo.), 363</td>
<td></td>
</tr>
<tr>
<td>sp. (Banisteria brev.), 358</td>
<td></td>
</tr>
<tr>
<td>Triplaris</td>
<td></td>
</tr>
<tr>
<td>americana, 444</td>
<td></td>
</tr>
<tr>
<td>auriculata, 444</td>
<td></td>
</tr>
<tr>
<td>sp., 444</td>
<td></td>
</tr>
<tr>
<td>Tripogandra</td>
<td></td>
</tr>
<tr>
<td>amplexicaulis, 129, 130</td>
<td></td>
</tr>
<tr>
<td>disagrega, 130, 131</td>
<td></td>
</tr>
<tr>
<td>Tristaniella</td>
<td></td>
</tr>
<tr>
<td>columbina, 171</td>
<td></td>
</tr>
<tr>
<td>fuscata, 171</td>
<td></td>
</tr>
<tr>
<td>Triumfetta (Triumfetta, Triumfetta), revision of, 527</td>
<td></td>
</tr>
<tr>
<td>acuminata, 527</td>
<td></td>
</tr>
<tr>
<td>bartramia, 527, 528</td>
<td></td>
</tr>
<tr>
<td>cordifolia, 527</td>
<td></td>
</tr>
<tr>
<td>grandiflora, 528</td>
<td></td>
</tr>
<tr>
<td>hintonii, 526</td>
<td></td>
</tr>
<tr>
<td>oxyphylla, 527–528</td>
<td></td>
</tr>
<tr>
<td>polyandra (polyandra, polyandra), 16, 527, 528</td>
<td></td>
</tr>
<tr>
<td>semitrioloba, 528</td>
<td></td>
</tr>
<tr>
<td>simplicifolia, 526</td>
<td></td>
</tr>
<tr>
<td>Trivolvulus nuans, 199, 200</td>
<td></td>
</tr>
<tr>
<td>Trixis</td>
<td></td>
</tr>
<tr>
<td>alata, 188, 189</td>
<td></td>
</tr>
<tr>
<td>corymbosa, 132, 189</td>
<td></td>
</tr>
<tr>
<td>decurrens, 188–189</td>
<td></td>
</tr>
<tr>
<td>frutescens var. angustifolia, 189</td>
<td></td>
</tr>
<tr>
<td>inula, 188</td>
<td></td>
</tr>
<tr>
<td>involucratia, 189</td>
<td></td>
</tr>
<tr>
<td>longifolia, 170, 189</td>
<td></td>
</tr>
<tr>
<td>michuacana, 170, 189</td>
<td></td>
</tr>
<tr>
<td>var. longifolia, 189</td>
<td></td>
</tr>
<tr>
<td>ochroleuca (Proustia), 172</td>
<td></td>
</tr>
<tr>
<td>radialis, 188</td>
<td></td>
</tr>
<tr>
<td>sp. (Perdicum), 170</td>
<td></td>
</tr>
<tr>
<td>Tropaeolaceae, 528</td>
<td></td>
</tr>
<tr>
<td>Tropaeolum (Tropaeolum)</td>
<td></td>
</tr>
<tr>
<td>majus, 528</td>
<td></td>
</tr>
<tr>
<td>peregrinum, 528</td>
<td></td>
</tr>
<tr>
<td>Trophi americana, 28, 408</td>
<td></td>
</tr>
<tr>
<td>Tryallis tryallis (Galphimia oval.), 33, 362</td>
<td></td>
</tr>
<tr>
<td>Turneraceae, 528–529</td>
<td></td>
</tr>
<tr>
<td>Turnera</td>
<td></td>
</tr>
<tr>
<td>callosa, 529</td>
<td></td>
</tr>
<tr>
<td>cistoides, 528</td>
<td></td>
</tr>
<tr>
<td>coerulea, 16, 528, 529</td>
<td></td>
</tr>
<tr>
<td>pallida, 529</td>
<td></td>
</tr>
<tr>
<td>palmeri, 529</td>
<td></td>
</tr>
<tr>
<td>pumila, 529</td>
<td></td>
</tr>
<tr>
<td>trichoflora, 529</td>
<td></td>
</tr>
<tr>
<td>ulmifolia, 529</td>
<td></td>
</tr>
<tr>
<td>var. coerulea, 528</td>
<td></td>
</tr>
<tr>
<td>sp., see Malva mexicana, 373</td>
<td></td>
</tr>
</tbody>
</table>
Botanical Results of the Sessé & Mocíño Expedition — VII

Turpinia paniculata, 517
Turraea virens (viridis), 477–478
Turritis hirsuta, 206
Tydea
  hypoxina (Fritillariet), 343, 344
  meleagrina, 344
Tyrbaea (Tyrbea), 394
  capollina, 394
  erubescens, 394
Ulmaceae, 529
Ulmus americana, 529
Umbellulariae, 529–531; numbers assigned to species, 530
Uiona
  penduliflora, 57
  violacea, 57
Urechites lutea, 61
Urena (Vrena)
  americana, 381–382
  grandiflora, 382
  lobata 34, 382; (Hibiscus fasc.), 368
    var. lobata, 382
  sinuata, 382
  trilobata, 382
  uniflora (Pavonia obl.), 376; 382
Ures
  bacchifera, 531, 532
  caracasana, 532
Urtica
  bacchifera, 531
  biserrata, 531
  capitata, 531–532
  chichicaztli, 532
  ciliaris, 532
  dioica, 532
  fruticosa, 531
  glomerata, 532
  japonica, 532
  longifolia, 532
  rotundifolia, 532
  spicata, 532
  tomentosa, 531
Urticaceae, 531–532
Urvilleana ulmacea, 480
Usteria, 491
  rosea, 485
  scandens, 491
Uvaria (Ubaria)
  dodecandra, 57
  penduliflora, 57
  purpurea, 57
  viridiflora, 57
Valerianaceae, 532–533
Valeriana
  dioica, 533
  dissecta, 533
  elongata, 533
  mixta, 533
  montana, 533
  officinalis, 533
  phu, 24; 533
  ramosa, 533
  scandens, 533
  sorbifolia, 533
  tanacetifolia, 532
  volubilis, 533
Vallesia
  cymbaefolia, 65
  glabra, 65
Vancouveria acuminata, 401
Vandellia diffusa, 492, 494
Vanilla
  pompona, 416, 424
  sp., 408; (Epidendrum ver.), 416, 424
Varennea polystachya, 339
Varronia
  bullata, 100–101
  crenulata, 89, 90
  curassavica (curasavica), 92, 101
  globosa, 92, 101
  guatimalensis, 101
  linearis, 92
  lineata, 93, 101
  longifolia, 92, 101
  martiniensis, 101
  parviflora, 101
  spinascens, 93
  tuberosa, 92, 101
  sp., 101–102
Vasconcellea boissieri, 120
Veratrum (Ueratrum) luteum, 348
Verbenaceae, 65, 271, 283, 533–541
Verbena (Uerbenia), 283; numbers assigned to species, 537
  amoen a, 540
  angiosperma (Buchnera), 494
  carolina (caroliniana), 539
  ciliata, 540
  curassavica, 540
  faleta (Salvia), 277
  grandiflora Ort., 540
  grandiflora Sessé & Moc., 31, 540
  integrifolia, 540
  laciniata, 540
  lappulacea (lapulacea, lapulacea), 540, 541
  litoralis, 539
  menthaefolia, 540, 541
  mexicana, 540
  multifida, 540
  nodiflora, 538
  officinalis, 540
  pinnatifida, 541
INDEX

Verbena (Uerbenia), 539
recta, 539
rosea, 540
scabrella (scabrela) (Buchnera), 494
spuria, 540–541
supina, 541
Verbena (Actinomeris), 132; (Helianthus), 161;
(Lorentea), 165
Verbena, 192
acmella, 179
alata, 147, 189
biserrata (biserrata), see serrata
canomilloides, 179, 189
conyzoides, 191
corymbosus (corymbosa) (Spilanthus), 179, 180
crocata, 140, 141, 180
crucioides, 179, 192
fragrans, 189
fruticosa, 189
greenmanii, 180, 190
lacinia, 152
latifolia, 189–190
mexicana, 190
mexicana Cerv. (Perymenium), 170
nodiflora, 190
oncophora, 191
ovata, 149, 190
perfoliata, 190
pinatifida, 152, 190
pinatifolia, 151, 152
polipetala (polypetala), 190
procumbens, 142
pterocaula, 149, 180, 190
repens, 190
scabra, 189
seatonii, 136
serrata (biserrata, biserrata), 179, 190
sinuata, 180
sphaerocephala, 180
tetraptera, 132, 141, 147, 148
tricornis, 165
trinervata, 190
turbacensis, 180
uniflora, 181
virgata, 191
var. conyzoides, 191
sp. (Bidens nivea), 141; 180
Vernonia
alamanii, 154, 176
arctioides, 150
capreacantha, 154
morelana, 157
phyllostachya, 156
salicifolia, 158, 168
sericea, 157
serrata, 150
solaniifolia, 157
uniflora, 158

Veronica
americana, 494
arvensis, 494
beccabunga (beccabunga), 494
crenulata, 494, 495
peregrina var. xalapensis, 495
persica, 495
polita, 494
romana, 494–495
rotundifolia, 495
serpyllifolia (serpillifolia), 494, 495
var. humifusa, 494
Viborquia polystachya, 339
Viburnum
dentatum, 119
stenocalyx, 119
thus, 119
sp., 119
Vicia, 339
angustifolia, 339
hirsuta, 339
linearis, 339
mexicana, 339
onobrychioides (onobrychioides), 339
polyphylla, 339
pulehella, 339
sativa, 339
sesi, 339
setifolia, 339
subulata, 339
sylvatica (silvatica), 339
trifoliata, 339
Vigna (Glycine), 315
repens, 312; repens (Orobus trif.), 331
Viguiera
argyrophylla, 163
dentata, 161, 162
excelsa, 162
grammatoglossa, 163
linearis, 161, 162
quinqueradiata, 162
triquetra, 162
Villanova, 146
bipinnatifida, 191
Vinca rosea, 67
Violaceae, 541–543
Viola
calceolaria, 541, 542
cucullata, 541
dichotoma, 542
diformis, 541
lineata, 542
longifolia, 542
lutea, 542
odorata, 542
scandens, 542
umbellata, 542
verticillata, 542, 543
Viola
  sp., 543
Virgilia secundiflora, 293
Viscum arboreum, 352
Vismia
  guianensis var. glabrata, 261–262
  mexicana, 261
  rufescens, 261
Vitaceae, 492, 543–544
Vitex
  hemsleyi, 536
  mexicana, 536
  mollis, 536, 537
  pentaphylla, 536
  ternata, 536
  tomentosa, 537
Vitis
  indica, 544
  labrusca, 544
  tilifiolia, 544
  vinifera, 544
Vogelocassia cobanensis, 298
Volkameria
  aculeata, 541
  dentata, 541
  inermis, 541
Vriesia gladioliflora, 102
Waltheria
  mexicana, 521
  pringlei, 521
Wedelia
  hispida, 142
  triloba, 136
Werneria
  mocinntana, 191
  nubigena, 191
Wigandia
  kunthii, 265
  scorpioides, 265
Wildenowia glandulosa, 132, 133, 191
Wimmeria
  confusa, 124
  mexicana, 124
  microphylla var. latifolia, 125
  persicifolia, 125
  serrulata, 124, 125
Winteraceae, 544
Winterania (Winteriana) canela, 114
Wissadula
  excelsior, 381
  periplacofolia, 379
Xanthium, 131
  chinense, 191
  fruticosum, 31, 159, 191
  orientale, 191
Xanthocoma humilis, 191–192
Ximenesia, type-species of, 192
Ximenesia encelioides, 192
Ximenia americana, 402
Xyridaceae, 544–545
Xyris
  ambigua, 544
  elliottii, 544
  sp. (Hib. uncinellus), 371; (Eriocaulon ances), 544
Ypomea, see Ipomea
Yucca mexicana, 348
Yucca, Agave with habit of, 341
Yxora, see ïxora
  lutea, see Hedyotis lutea, 467
Zaluzania
  augusta, 159
  globosa, 136
  triloba, 136
Zanthoxylum
  caribaeum, 478
  clava herculis, 478
  fagara, 454, 478
  horrida, 478
  inermis, 478
  liebmianianum, 479
  marginatum, 478
  martincense, 478
  monophyllum, 478
  pentanome, 478–479
  simplicifolium, 478, 479
  trifoliatum, 479
Zea mays (mayz), 258, 259
Zephyranthus sp. (Crinum), 343
Zexmenia
  ceanothifolia (Verbesina frut.), 189
  hispida, 142
  sp. (Verbesina lat.), 190
Zingiberaceae, 382, 545–546
Zingiber officinale, 545
Zinnia (Cinna)
  bicupris, 188, 192
  elegans, 192; (Stachys co.), 286
  leptopoda, 192
  multiflora, 192
  parviflora, 192
  pauciflora, 192
  peruviana, 192
  revoluta, 192
  violacea, 192
Zizania aquatica, 259
Ziziphus
  amole, 453, 454
  reticulatus, 454
  sonorensis, 453
  sp. (Rhamnus citr.), 455
Zornia diphylla (Hedysarum), 316
Zygomeris flava, 19, 291
Zygophyllaceae, 546–547
Zygophyllum tridentatum, 546–547