



# Bulletin

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*Rumex obtusifolius* leaf [*Rumex obtusifolius* Linnaeus, Polygonaceae], watercolor on paper by Julia Trickey, 2006, 55 × 36.5 cm, HI Art accession no. 7755, © 2006 Julia Trickey, All Rights Reserved. Gift from the artist.

## News from the Art Department

### *What We Collect* opens

Whether working alongside botanists for scientific and horticultural publications or preparing artworks for collectors, galleries or commercial use, artists throughout the centuries have added their individual perspectives to portraying plants and have made lasting contributions to the botanical record and the history of art. *What We Collect: Recent Art Acquisitions, 2007–2012*, includes work by 41 artists active from the 18th century to the present in Europe, Asia and North and South America. The items in the exhibition are organized by topics and create a context for the collecting practices of the Hunt Institute's Art Department.

The artists working before 1900 include Pancrace Bessa (1772–1846), Sydenham Edwards (1769?–1819), Will Kilburn (1745–1818), James Sowerby (1757–1822), William Jackson Hooker (1785–1865), W. A. Meyn (19th-century), Powe (18th-century) and Christian Schkuhr (1741–1811). The contemporary artists featured include Bobbie Angell, Wendy Brockman, John Cody, Felicity Rose Cole, Carolyn Crawford, Paul Dobe (1880–1965), John Doughty, Beverly Duncan, Josephine Eyston Elwes, Alison Gianangeli, Janice Glimn-Lacy, Audrey Hardcastle, Lizzie Harper, Christina Hart-Davies, Lyn Hayden, Richard Homala (1934–2009), Job Kuijt, Donelda LaBrake, Peter Loewer, Rogers McVaugh (1909–2009), Susan G. Monden, Cindy Nelson-Nold (1957–2009), Susan Ogilvy, Kandis Phillips, Alfred Putz (1892–1966), Mary Rankin, Thomas Reaume, Eugeni Sierra-Ràfols (1919–1999), Eva Stockhaus, Sun Yingbao, Jessica Tcherepnine, Julia Trickey, Brigitte Volkmann-Kohlmeyer, Denise Walser-Kolar and John Wilkinson.

Scientific illustrations of threatened and endangered plants are represented by a watercolor by Eugeni Sierra-Ràfols of *Lapageria rosea* Ruiz & Pavon, the national flower of Chile; an ink drawing by Sun Yingbao of *Cycas taitungensis* C. F. Shen, K. D. Hill, C. H. Tsou & C. J. Chen, now protected in the Taitung Cycad Nature Reserve in southern Taiwan; a watercolor by Mary Rankin of *Echinocereus triglochidiatus* var. *arizonicus* (Rose ex Orcutt) L. D. Benson, that only occurs in two counties in Arizona; and a colored pencil drawing by Carolyn Crawford of *Eutremi penlandii* Rollins, a rare alpine native in central Colorado that has been compromised by watershed alterations. An *endangered* species is in danger of extinction throughout all or a significant portion of its range, and a *threatened* species is likely to become endangered within the foreseeable future.

Three artists have pursued their interests in insects by rearing and studying the life cycles of moths and butterflies and incorporating these elements into their paintings of plants. This is expressed in a classical watercolor of *Aquilegia coerulea* E. James with the butterfly *Hyles gallii* Rotemburg by Cindy Nelson-Nold; the Saturniid moth *Graellsia isabellae* Graëlls set off by an untraditional, but quite dynamic, colored background by John Cody; and the *Actias luna* Linnaeus with dogwood, which includes gold leaf inspired by medieval illuminated manuscripts, by Kandis Phillips. The relationship



Aging Datura [*Brugmansia* Persoon, Solanaceae], vitreograph on paper by Peter Loewer, 2003, 34 × 26.5 cm, for his *Botanical Wanderings, Ten Vitreographs by Peter Loewer* (Spruce Pine, North Carolina, Littleton Studios, 2003, suite of ten, edition of 30), HI Art accession no. 7887.01, © 2003 Peter Loewer, All Rights Reserved.

between plants and insects, whether for pollination, food source or egg placement, is paramount to the survival of both.

The native North American *Trillium* Linnaeus is illustrated by a mixed media painting inspired by herbarium specimens by Lyn Hayden, whose interest is in the medicinal history of native plants; annotated pencil and ink drawings by Thomas Reaume that are a record of wild plants of Winnipeg and are used on the Nature Manitoba Web site to educate the public about identifying and protecting native species; and a hand-colored engraving from an original by William Hooker, whose illustration was published in *Curtis's Botanical Magazine* (London, 1830, vol. 4, pl. 3002) to document native plants in other parts of the world for use in 19th-century European gardens. Habitat loss, land development and invasive plant introductions contribute to declining populations. These artworks are important historical and ecological records and contribute to studies of conservation and biodiversity.

Printmaking has been an important tool in botanical documentation for centuries. With its advent, information could be more economically disseminated to a larger audience. The Institute's Art collection has a variety of processes both historical and contemporary. In earlier centuries images were cut or carved into wood, metal and stone by master



*Citrus hystrix* (Kaffir lime) [*Citrus hystrix* de Candolle, Rutaceae], ink on acetate by Susan G. Monden, ca.1990, 35 × 23.5 cm, for George W. Staples and Michael S. Kristiansen, *Ethnic Culinary Herbs: A Guide to Identification and Cultivation in Hawai'i* (Honolulu, University of Hawai'i Press, 1990, p. 28, fig. 7, pl. 15), HI Art accession no. 7751.07, © 1990 University of Hawai'i Press, All Rights Reserved. Gift from George Staples.

engravers. The inking and printing on paper of these blocks, plates and stones was handled by a master printer, and if hand colored, painted by an assembly line of artists. Today, artists are continuing many of these traditions and creating new techniques, often on their own or by working closely with a master atelier. A copper-plate etching of *Fuchsia glaberrima* I. M. Johnston by Bobbie Angell is a natural extension of her scientific pen-and-ink illustrations. A miniature wood engraving of *Linnaea borealis* Linnaeus by Eva Stockhaus represents a plant that was named by and for the Swedish botanist Carolus Linnaeus (1707–1778) and was donated on the 300th anniversary of his birth. Vitreography, a printing technique that uses glass plates instead of stone or metal, is represented in Aging Datura [*Brugmansia* Persoon] by Peter Loewer. Two nature printings of cutleaf weeping birch and featherleaf Japanese maple by John Doughty were created from living material, and the latter was printed on both sides of the paper to add a subtle, dimensional, visual quality to the subject. Gelatin silver prints of drawings by Paul Dobe are part of broken sets for his *Photos nach Zeichnungen: Mehrtönige Bilder* (Photos after drawings: Polyphonic images, ca.1910); *Photos nach Zeichnungen: Schattenrisse* (Photos after drawings: Silhouettes, ca.1915); and *Acht Blumenstudien von*

Paul Dobe: *Inhandschriftlich Gezeichneten Photographischen Wiedergaben* (Eight flower studies by Paul Dobe in hand-drawn photographic reproductions, 1921). Instead of creating a portrait of an individual plant with its imperfections, his goal was to strip the unessential and create with clarity the true, pure form that mirrored the laws of geometry in design.

Historically, artists have portrayed and exhibited botanical subjects solely for their artistic resonance. Contemporary artists, who have been, or will be, included in the Institute's *International Exhibition of Botanical Art & Illustration*, are represented in these artworks that fall into the category of fine art. Watercolors on vellum of leaves of the red oak (*Quercus rubra* Linnaeus), *Rumex obtusifolius* Linnaeus, red maple (*Acer* Linnaeus) and walnut (*Juglans* Linnaeus) are respectively by Wendy Brockman, Julia Trickey, Beverly Duncan and Susan Ogilvy. Each of these artists have used their individual perspectives of deteriorating autumn leaves. The tradition is also represented by the charcoal study of hemlock [*Tsuga* (Endlicher) Carrière] by the 19th-century, French artist Pancrace Bessa.

Horticultural-themed watercolors, drawings and prints are an excellent record of flowers, fruits and vegetables grown in the 20th and 21st centuries. Those exhibited, commissioned for commercial use and publications, include a colored pencil drawing by Carolyn Crawford of sunflower (*Helianthus annuus* Linnaeus) for a seed packet and ink drawings by Alfred Putz published as a key for identifying seedlings of garden plants for *Dreer's Picture Story of Seedlings* (1937) and as illustrations for his garden column in the *New York Herald Tribune* in the 1930s. Other artworks represent an individual artistic perspective of currently available flowers and food and were intended for exhibition. They include watercolors of a stately orchid hybrid (*Oncidium* Swartz) by Donelda LaBrake; the intense red parrot tulip 'Rococo' by Alison Gianangeli; a graceful cascade of onions tied together by Jessica Tcherepnine; a luminous single cherry reflecting subtle color at the base by Denise Walsler-Kolar; a casual group of blooming *Rudbeckia* Linnaeus by John Wilkinson; the subtle tonality of the stages of *Iris foetidissima* Linnaeus by Josephine Eyston Elwes; and a dynamic copper engraving of leeks by Bobbie Angell.

For centuries botanical illustrators have made important contributions to taxonomic literature by illustrating the text of botanists published as *floras* (a list and description of all the plants growing in a particular country or region) and *monographs* (the most complete taxonomic information available on a particular plant group). Usually the botanist works with an illustrator who renders the subject in a configuration that best illustrates the identifying characteristics. This requires studying several specimens to show the average of the species, and the botanist includes the range in the accompanying description. In these examples botanists and mycologists have illustrated and written the descriptions for their own scientific journal articles. Each scientist's experience and understanding of their subjects has enabled them to create quite accomplished illustrations. Included are ink drawings of several genera of fern spores by Rogers McVaugh; the newly discovered genus of marine

## News from the Art Department

fungi, *Belizeana* Kohlmeier & Volkmann-Kohlmeier, by Brigitte Volkmann-Kohlmeier; and a genus of mistletoe, *Dendropemon* Blume, by Job Kuijt.

Educational materials for teaching introductory botany in the classroom include ink drawings by Janice Glimn-Lacy of *Acer saccharinum* Linnaeus for a textbook and a 19th-century lithographic wall chart by W. A. Meyn, published by botany professors in Germany as part of a series illustrating plant anatomy, morphology and physiology. This chart is one of the 170 in the collection that were rescued from dusty shelves and dumpsters for their historical importance. The ink drawing by Susan Monden of *Citrus hystrix* de Candolle illustrated an educational and cultural guide to herbs commonly grown and used in Hawaiian cuisine, which is influenced by flavors used in the Pacific Rim and Asia. The Institute's collection includes every, or almost every, illustration for several 19th- and 20th-century botanical publications that might otherwise have been lost to the history of science. Some continue to be consulted or are used for revisions of plant families or new editions of earlier publications.

In the late 18th and early 19th centuries, a widespread passion for the study of nature was stimulated by the publications of the Swedish botanist and naturalist Carolus Linnaeus (1707–1778), whose sexual system of plant classification made identification accessible to the amateur naturalist. The example of an early botanical handbook illustrated by Powe and Christian Schkuhr for the latter's *Botanisches Handbuch* (1808) was a guide for the learned amateur to identify German flora. Sources note that Schkuhr illustrated and engraved the plates for the four volumes, using the microscope to render plant details, but five of the donated items include watercolors signed by Powe. Some pages include his watercolors and sections of hand-colored engravings with the engraved signature of Schkuhr, which are glued to one sheet of paper. We have yet to determine if these watercolors and engravings are working proofs for the first or second edition and any information about the artist Powe.

The 20th- and 21st-century version of the botanical handbook was, and continues to be, the portable field guide. Often pocket-sized, these guides are meant for easy transport on walks to search for and identify a variety of regional plants, fungi, birds, etc. In these examples of British wildflowers and mushrooms, one may find many examples of those native or introduced to North America. Included are detailed watercolors by Audrey Hardcastle, Christina Hart-Davies, Felicity Rose Cole and Lizzie Harper of different plant families for *Collins Flower Guide* (2009) and a selection of fungi, many poisonous, by John Wilkinson from the complete set of illustrations for *Collins Gem Guides, Mushrooms and Toadstools* (1982) in the Institute's collection. These paintings indicate that illustrations remain the best way to show identifying characteristics and will not be supplanted by photography. An 18th- and a 20th-century image of the fungus *Mutinus caninus* (Hudson) Fries is represented by a



From left: Curatorial Assistant Carrie Roy, artists Kandy Phillips, Wendy Brockman and Denise Walser-Kolar and Curator of Art Lugene Bruno at the *What We Collect* preview reception, 21 March 2013. Photo by Frank A. Reynolds.

hand-colored engraving for William Curtis's *Flora Londinensis* (1781), which was an illustrated record of wild plants in the region around the city of London, and a watercolor by Richard Homala of a specimen collected in the United States by this respected generalist in mycology.

Three of the artists, Kandis Phillips from Maryland and Denise Walser-Kolar and Wendy Brockman from Minnesota, traveled to Pittsburgh for the preview reception. On Friday, 22 March, Walser-Kolar and Brockman, who paint on vellum (animal skin), viewed several works in our collection by historical and contemporary artists who have used the same surface, which is notable for the translucency and vibrancy created when watercolor is applied.

The Art Department organizes two exhibitions a year featuring historical and contemporary works from the permanent collection or those on loan from artists or institutions. Many of the contemporary artists represented in *What We Collect* have been featured in our now triennial *International Exhibition of Botanical Art & Illustration*. Through this series, begun in 1964, the Institute's curators have developed relationships with many artists and collectors and acquired significant artworks and larger bodies of work, mostly through donations and occasionally purchase, resulting in the growth of the permanent collection. This has enabled the Hunt Institute not only to strengthen the collection with some of the best examples of botanical art being produced but also to be a valuable source of inspiration and a research center to artists, scholars and the general public by retaining an important history of plants represented through the centuries in watercolors, drawings and prints. Art collection data can be referenced on the Hunt Institute's online database, and images continue to be added. Groups may schedule exhibition tours and themed talks, and individuals may make appointments for viewing specific works in the collection.

*What We Collect* will be on display through 30 June 2013. Don't miss the Institute's annual Open House on 23 and 24 June (see page 11) with related talks and tours of the exhibition.

(continued on page 12)

## In Memoriam

# Kazunori Kurokawa

(Japan, 1936–2012)

We mourn the passing of Hunt Institute's Honorary Curator of Art Emeritus, Kazunori Kurokawa. He was instrumental in introducing the work of contemporary Japanese botanical artists to the Institute and the rest of the world through his relationships with artists, collectors and institutions.

Mr. Kurokawa was interested in drawing and painting since his youth, but his parents encouraged him to pursue a career in which he could make a living. He studied economics and began working at the Mitsubishi Chemical Holdings Co., Ltd. in 1959, becoming director in 1989 until his retirement in 1999. During a six-month period in 1973, while he was recuperating from a health issue in the mountainous region of Tateshina, he was inspired to draw again beginning with the flowers that grew around his cottage. Soon after, he began to contact respected senior Japanese botanical artists, visit museums, galleries and print dealers and collect botanical art during business trips that took him to the United States and Europe. He contacted the Hunt Institute in 1979 for information on one of our publications and visited in 1982 to see the exhibition *Talking in Flowers: Japanese Botanical Art*. After he attended the Institute's *5th International Exhibition of Botanical Art & Illustration* (1983), he began visiting solo and group exhibitions in Japan and selecting those artists whose work showed the most merit. Mr. Kurokawa and Curator of Art James J. White (1941–2011) began a long correspondence on botanical art and literature, and Kurokawa began to recommend Japanese artists and facilitate their correspondence and the shipment of their original artworks beginning with the preparation of the *6th International Exhibition of Botanical Art & Illustration* (1988). In 2002 he asked that we begin contacting the artists directly. He attended the International preview receptions accompanied by his wife, Sumiko, and several of the participating Japanese artists. In 1998 the Institute named Mr. Kurokawa Honorary Curator of Art.

Mr. Kurokawa was invited to the first American Society of Botanical Artists conference that was held in Pittsburgh during the Institute's *8th International Exhibition of Botanical Art & Illustration* (1995) and gave slide lectures on historical and contemporary Japanese botanical art over the years. In 1996 he was named honorary director of this organization and in 1999 was presented the ASBA Award for Excellence in the Service of Botanical Art. Through his communication with the contemporary botanical art collector Shirley Sherwood, he brought her then traveling exhibition to the Seiji Togo Memorial, Hasuda Kasai Museum of Art in Tokyo in 1998. Remarkably, it was the first time an international selection of botanical artwork was exhibited in Japan.

Mr. Kurokawa was an honorary member of the Japanese Association of Botanical Illustration that was founded in 1991 by award winners of the National Science Museum competitions. The members also produced a florilegium of endangered Japanese plants in 2004 that was exhibited in Japan and at the National Arboretum, Washington, D.C.,



From left: 11th International artist Takeyo Fukuda, Honorary Curator of Art Kazunori Kurokawa (1936–2012), Curator of Art James J. White (1941–2011) and 11th International artist Kimiyo Maruyama at the 11th International preview reception, 21 October 2004. Photo by Frank A. Reynolds.

and the Chicago Botanic Garden, Glencoe, Illinois, in 2005. Mr. Kurokawa selected 121 drawings and 8 books from the collection of the Lindley Library for *Treasures from the World of Botanical Art*, an exhibition celebrating the bicentenary of the Royal Horticultural Society shown at the University Art Museum, Tokyo National University of Fine Arts and Music in 2005, and he contributed an essay and supervised the color plates for the accompanying catalogue. In 2006 he facilitated a second museum exhibition in Tokyo of Shirley Sherwood's collection.

Many of the artists that Mr. Kurokawa recommended to the Hunt Institute over the years were represented in *Yuuga: Contemporary Botanical Watercolors from Japan* (2006), an exhibition including many works that became part of our permanent collection through donation. He contributed the essay "Contemporary botanical art in Japan and its historical background" for the accompanying catalogue. Due to health concerns Mr. Kurokawa requested that he retire from his position at the Hunt Institute and was named Honorary Curator Emeritus in 2007, but he continued to encourage Japanese artists to submit their work for our International series. We are honored by his commitment and contribution to the Hunt Institute for almost a quarter of a century and without which we would not have been able to highlight the botanical artworks of so many Japanese artists.

In the closing paragraph of his essay in the Institute's *Yuuga* catalogue, Mr. Kurokawa wrote:

I firmly believe that the interchange between East and West through botanical art enhances mutual understanding and, for the artists, results in the improvement of their skills and the aesthetic quality of their work.

Mr. Kurokawa's legacy is firmly rooted by his role in the development of Japanese artists as well as the global community of botanical artists who continue to inspire one another and educate the larger public of the importance of botanical art.

We wish to thank Mrs. Kurokawa and Mieko Ishikawa for their assistance with providing information for this article.

—Lugene Bruno, Curator of Art

## Fungi in floras, 1600–1800: Illustrated mushroom books, part 1

In the early modern period, nature was envisioned as comprising three kingdoms or realms: animal, vegetable and mineral. Fungi were generally included in the vegetable kingdom. Today, life scientists most commonly speak of five kingdoms or domains: bacteria, algae, fungi, plants and animals. Mycology is the study of fungi, including mushrooms, truffles, lichens, yeasts, molds, plant pathogens and medically important fungi. Lichens are grouped with fungi because of the universal presence of a fungus in the partnership that forms lichens. Fungi are no longer considered to be plants, and although hundreds of years ago there was disagreement about whether they were plants, animals or something else, most of the people studying them were amateur or professional botanists. Some reported their research in books strictly about fungi, while others listed fungi among the other plants in their floras or systematic studies. Although for the most part we no longer collect mycological books for our Library, we hold wonderful riches in the historical literature. What follows is not a history of mycology but a discussion of selected illustrated books of mycological interest in our Library published 1600–1800, specifically works that are regional in scope. Modern scientific names are cited to the best of our knowledge, but names are constantly shifting.

The fungus literature in this period, much of it illustrated, often emphasized form and structure. Botanical or mycological floras listed species found growing in a particular region. Other works reported on culture experiments, microscopic examination and other types of scientific studies. It was difficult to preserve specimens of fungi, so providing good quality illustrations was extremely important for successful communication about these organisms. Early printed illustrations were made from woodcuts, later to be superseded by copper-plate engravings. At first the printed images from this period were generally uncolored, but later some authors arranged for hand coloring, which added to the expense of producing the publication. Color printing was introduced in the early 18th century and used in fungus literature in the last decades of that century. Some authors continued to present uncolored images for financial or logistical reasons or because color could obscure the information contained in the finely detailed, engraved images.

Early regional mycological work was done by the Dutch botanist Carolus Clusius (1526–1609), widely considered to have been the foremost European botanist of the 16th century. In addition to his work on herbaceous plants, he studied fungi. We hope to discuss him further in a later article, but he merits mention here for his intensive studies of fungi in what had been the old Roman province of Pannonia (a region including parts of Hungary, Austria, Slovakia and several Balkan states), done in the late 16th century and published as part of his *Rariorum Plantarum Historia* (1601).

In the 18th century more floras with fungi were produced, many of which were also systematic studies. An early example comes from Johann Jacob Dillenius (1687–1747). Born in Darmstadt, Germany, and educated at Giessen, Dillenius later went to England and eventually became the first Sherardian professor of botany at Oxford. His local flora, *Catalogus Plantarum Circa Gissam Sponte Nascentium*... (1718 [–1719]), included some 200 mosses and 160 mushrooms from the area around Giessen. Dillenius discussed plants and fungi found in each month of the year, introduced new fungi genera and further developed Joseph Pitton de Tournefort's (1656–1708) classification scheme, thereby, according to mycologist and historian Geoffrey Clough Ainsworth (1905–1998), contributing important changes to the general classification of larger fungi. The book was reissued in 1719 with an appendix, a map of the vicinity, and plates that according to art historian Claus Nissen (1901–1975) were drawn and engraved by Dillenius.

Fungi enthusiast and rare book dealer Christian Volbracht called the first edition of the first part of *Catalogus Plantarum Circa Gissam Sponte Nascentium* “excessively rare. The work marks an important step in the systematics of fungi, because Dillenius introduced new genera like *Amanita* and developed the classification of Tournefort” (2013). Our Library contains two copies of the 1718 and three of the 1719 editions, two of those with sixteen plates plus map, the third with only three plus map. The plate shown here (Fig. 1), the only one illustrating fungi, has an interesting array of what appear to be fungi, mosses and possibly lichens. The large mushroom in the center Dillenius labeled “*Erinaceus*” is now believed to be *Hydnum* Linnaeus, a mushroom with teeth-like projections instead of gills. Interestingly, *Erinaceus* is also a genus name for the hedgehog, which has spines that look similar to the underside of this mushroom. This plate also shows *Peziza* Dillenius ex Fries, or cup fungus.

Almost ten years later, French botanist Sébastien Vaillant (1669–1722) produced a beautiful flora of the vicinity of Paris, *Botanicon Parisiense* (1727), which included dozens of fungus illustrations. He engaged Claude Aubriet (1665–1742) to produce the plates. Vaillant recognized 8 fungus genera and 108 species.

To the north, George Christian Oeder (1728–1791) began *Flora Danica* (1766 [i.e., 1761]–1883, supplement 1884), a Scandinavian flora that included fungi. Oeder was a German who studied under Swiss botanist Albrecht Haller (1708–1777), corresponded with Carolus Linnaeus (1707–1778) and spent much of his career in Denmark and Norway. The large-scale flora of Denmark and nearby regions that he began had the support of five successive kings of Denmark. The area of coverage at the beginning of publication “stretched from north Germany, Denmark, Norway and the Faeroe Islands to Iceland and Greenland. Towards the end of the

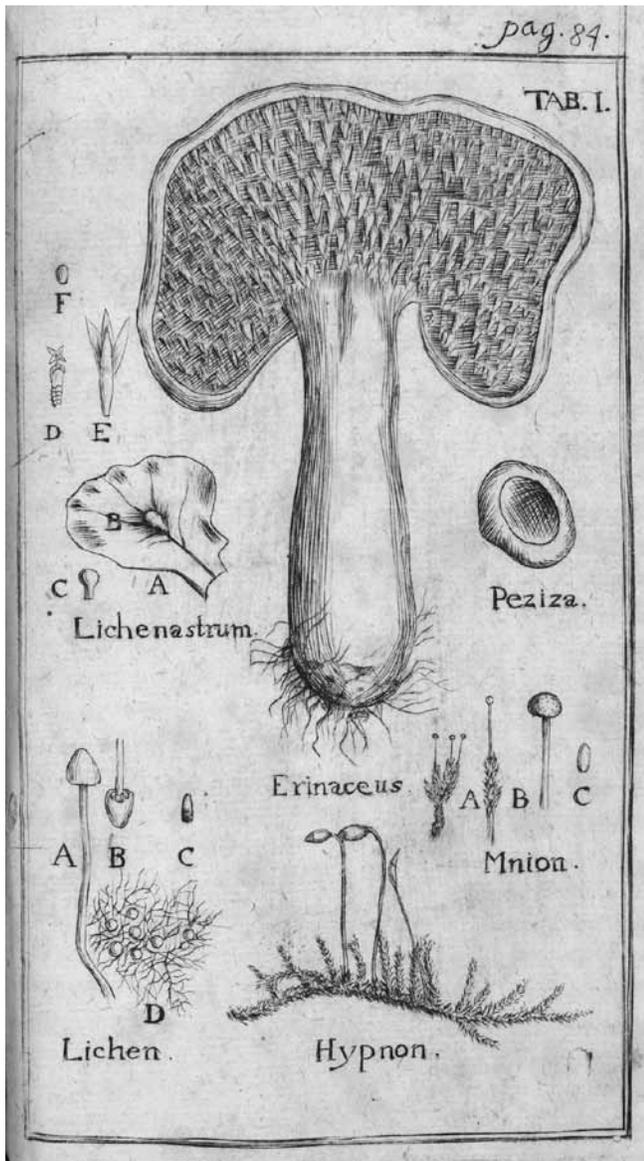


Figure 1. *Erinaceus*, *Peziza*, [etc.] [*Hydnum* Linnaeus, *Hydnaceae*; *Peziza* Dillenius ex Fries, *Pezizaceae*], engraving by Johann Jacob Dillenius after his drawing for his *Catalogus Plantarum Circa Gissam Sponte Nascentium* (Frankfurt am Main, Joh. Maximilianum à Sande, 1718 [-1719], pl. 1), HI Library call no. DS246 D578c.

Flora some species from Sweden not found in this territory were also included. Thus it comprises the largest single collection of illustrations of Scandinavian plants” (Stearn 1983, p. 4). Its 51 fascicles and supplement contained 3,240 plates, including several hundred fungus images. In our set only the engravings in volumes 1–7 were hand colored. Oeder was the first of nine authors/editors who worked on this flora. According to botanical historian William T. Stearn (1911–2001), approximately 600 plates were drawn and engraved by Martin (1727–1782) and Michael Rössler (1705–1778), and later that work was continued under other

author/editors by Christian F. Mueller (1748–1814), Johann Theodor Bayer (1782–1873) and Johann Christian Thornam (1822–1908).

In Austria the prominent Dutch-born botanist Nicolai Joseph Jacquin (1727–1817) also produced some work on fungi. He spent much of his career in Vienna, where he taught at the University of Vienna and served as director of the botanical garden. He spent five years on a royal commission collecting natural history specimens in the West Indies and Central America, and later he produced at least a dozen important illustrated botanical works, employing a number of artists in the process. His *Miscellanea Austriaca ad Botanicam, Chemiam et Historiam Naturalem Spectantia* (1778–1781) was in two volumes and contained illustrations of plants, fungi, lichens and a few insects. The 44 plates were hand-colored, copper engravings of drawings by Jacquin, who was first instructed in botanical art by then Leiden University gardener Nicolaas Meerburgh (fl.1775–1789). They were engraved by Viennese draughtsman and engraver Jakob Adam (1748–1811). Volbracht noted that this work included important mycological contributions by Jacquin, Franz Rubel and Franz Xavier Wulfen (1728–1805). In both the Oeder and Jacquin works, the plates were beautifully executed.

Two additional works from this region deserve comment. *Fungi Mecklenburgenses Selecti* (1790–1791) by German botanist and clergyman Heinrich Julius Tode (1733–1797) contained 2 fascicles with 17 plates, each with dozens of figures drawn by Tode and engraved by Ernst Ludwig Riepenhausen (1765–1840) of Göttingen. Volbracht called this a very rare “mycological classic with new genera and many new species from northern Germany” (2013). *Ausführliche Beschreibung der in Unterösterreich* (1782), an extremely rare work about *Russula* Persoon and *Lactarius* Persoon fungi by Austrian botanist Karl von Krapf, was in 2 parts with 17 brightly hand-colored, quarto-sized plates. The images were drawn by J. Lachenbauer and engraved by J. Engelman of Vienna.

Giovanni Antoinio Battarra (1714–1789), an Italian clergyman, physician and mycologist from Rimini, produced an Italian regional mycological flora. Battarra taught philosophy and was most active botanically in 1754–1757. His *Fungorum Agri Ariminensis* (1755, 1759) was a flora with a systematic framework. According to Ainsworth, it made a good, functional supplement to Micheli’s 1729 groundbreaking work on Italian fungi, *Nova Plantarum Genera*, which we may discuss further in a later article. In this period it was still generally believed that species were constant, i.e., that the same species that were present at the creation of the world would continue to exist, with none disappearing and no new ones coming into being, and in his introduction Battarra wrote that although species were constant, their distribution varied, which accounted for his being able to describe so many new species from Italy. He

## Fungi in floras, 1600–1800



Figure 2. A–I: ... I. *Monomyces pedunculo longissimo* [*Collybia laxipes* (Fries) Gillet, Tricholomataceae], copper engraving by Giovanni Antonio Battarra after his own drawing for his *Fungorum Agri Ariminensis* (Faenza, Ballantianis, 1755, pl. 9), HI Library call no. DT9 B335f.

drew and engraved the 40 plates in this book. They varied in degree of fullness, the one shown here (Fig. 2), Tab. IX, being exceptionally full of mushrooms and skillfully arranged. The stalk of the mushroom in his figure I, which he called “*Monomyces pedunculo longissimo*” and is now *Collybia laxipes* (Fries) Gillet, began at the left margin and wound behind the other mushrooms before its cap peeped over the tops of the others. The mushrooms here represented five of Battarra’s eighteen fungi “classes.” Battarra classed figures A, B, C and I as “*Monomyces*,” a large group now relegated to numerous genera and families.

A notable French flora of mycological importance was produced by botanist and mycologist Jean Baptiste François (Pierre) Bulliard (1752–1793). Although our copy of his *Histoire des Champignons de la France* (1791–1812) lacks the plates, we do have his earlier *Herbier de la France* (1780 [–1798]) in four volumes, which included many fungus plates later

reissued in his mycological flora. The talented and inventive Bulliard made his own drawings and engravings and then color-printed them himself using a key plate and three color-separated plates in a process that he developed, as was described by natural history bibliographer and printmaking historian Gavin Bridson (1936–2008) in *Printmaking in the Service of Botany* (1986). The results were a successful example of 18th-century color printing.

Another early and fairly unusual example of color printing in regional mycological literature is Polish naturalist Michael Johann Graf von Borch’s (1751–1810) *Lettres sur les Truffes du Piémont* (1780). The three plates, made using the three-color printing process developed by J. C. Le Blon, depicted truffles and flies; they were signed at bottom “Dessiné par l’Auteur” and “Gravé en couleur par Louis D’agoty.” According to Volbracht, the engraver was a son of the famous French engraver Jacques-Fabien Gautier d’Agoty. Although several authors have written that Bulliard’s was the first mycological book with color-printed plates, it should be noted that this work by Borch was also printed in the same year that the *Herbier de la France* began to be published.

The British began publishing mycological floras later in the century. Yorkshireman James Bolton (ca.1735–1799) was a weaver and later, briefly, a publican. He was also an avid natural history enthusiast, studying plants, birds and insects, and his publications were intended to popularize natural history. An artist and engraver, he illustrated his own publications. Bolton had a special interest in mycology and was an astute observer of fungi.

Bolton’s first published monograph was *Filices Britannicae: An History of the British Proper Ferns* (1785). In 1788 to 1791 he published his second, *An History of Fungusses, Growing About Halifax*, the first English book devoted to fungi and according to Ainsworth the only one to be translated into German, although with figures redrawn and rearranged. The work was in four volumes, the fourth being a supplement listing new fungi discoveries. The 182 plates showed 231 species and have been praised by a number of mycologists for their clarity and accuracy.

British horticultural historian Blanche Henrey (1906–1983) wrote that the original manuscript and drawings for this publication were purchased by the United States Department of Agriculture’s National Agricultural Library (NAL). Interestingly, we too have what appear to be original Bolton drawings for this work, in the form of 229 watercolors, ink and pencil drawings bound into two albums and labeled, “The primary sketches from nature to Bolton’s History of Fungusses.” Hunt Institute Curator of Art Lugene Bruno conferred with Susan Fugate of NAL’s Special Collections, who emailed photos of their Bolton manuscript titled “*Icones Fungorum circa Halifax nascentium*.” We believe

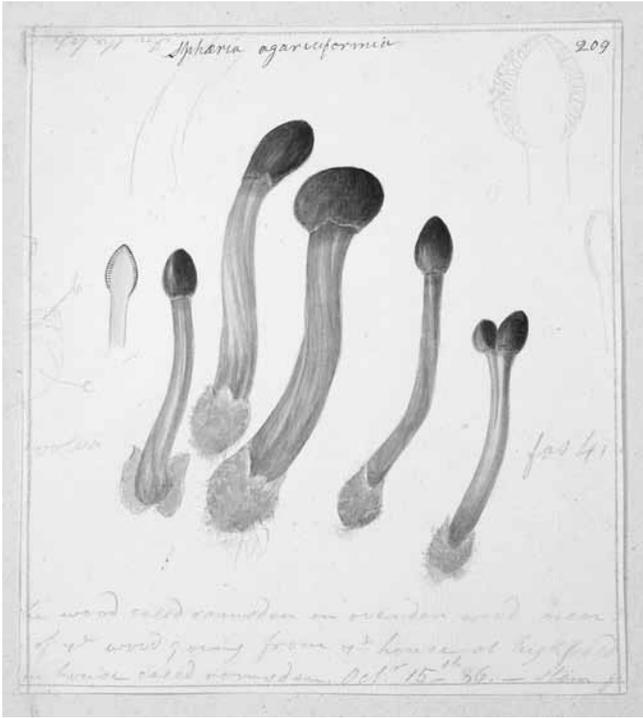


Figure 3. *Sphaeria agariciformia* [*Elaphocordyceps capitata* (Holmskjöld) G. H. Sung, J. M. Sung & Spatafora, Ophiocordycipitaceae], pencil and watercolor sketch attributed to James Bolton for “The primary sketches from nature to Bolton’s *History of Fungusses*,” pl. 209, HI Art accession no. 5196.023.

the handwriting to be the same in both and have tentatively concluded that our two volumes are the initial sketches, some annotated in pencil, and NAL’s are the finished manuscript from which the publication would have been prepared.

Natural history researcher and bookseller John Edmondson researched Bolton and studied the “*Icones Fungorum*” albums at NAL. Edmondson corresponded with Hunt Institute Curator of Art James J. White (1941–2011) in 1995 about our albums, commenting that “The multiple drawings of a species are quite unlike any other compilation of Bolton’s drawings, and again suggest that this was his ‘reference set’ of drawings.” He noted that our set was incomplete and that he knew of other original sketches at Knowsley, at the British Museum and in private hands. Edmondson’s published memoir, *James Bolton of Halifax* (1995), shared his findings on the “*Icones Fungorum*,” again stating that there must have been a set of drawings on which those plates were based and that he was not able to look at our albums in person to determine what they were.

We chose to compare one of NAL’s “*Icones Fungorum*” plates that Edmondson showed in his memoir with corresponding plates in our manuscript and in the published *History of Fungusses*. The subject is “*Sphaeria agariciformia*,” now known as *Elaphocordyceps capitata* (Holmskjöld) G. H. Sung,

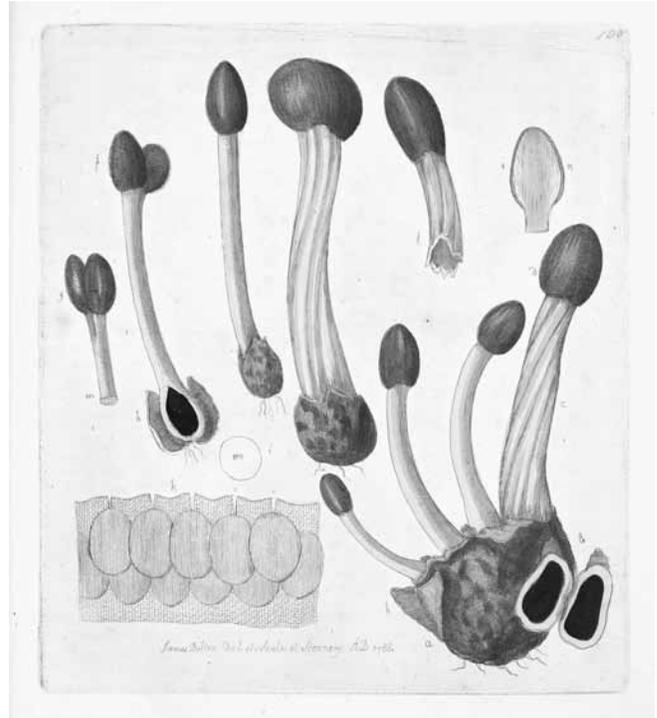


Figure 4. *Sphaeria agariciformia* [*Elaphocordyceps capitata* (Holmskjöld) G. H. Sung, J. M. Sung & Spatafora, Ophiocordycipitaceae], hand-colored, copper-plate engraving by Bolton, 1788, after his original drawing for his *An History of Fungusses, Growing About Halifax* [Huddersfield, Printed for the author, 1788–1791, pl. 130], HI Library call no. DT9 B694h.

J. M. Sung & Spatafora, which in our manuscript is depicted in two watercolors, plates no. 209 (Fig. 3) and 210 (not shown). Though difficult to see here, plate 209 has some pencil sketches in the top right corner of a mushroom cap, or pileus, cross section. The lines of the handwritten, penciled note at bottom have been cut at their beginnings and ends, but what we still have reads:

... the wood calld ramsden in ovenden wood near ...  
 ... of [the] wood going from [the] house at highfield ...  
 ... house calld ramsden Oct 15<sup>th</sup> 86. \_\_\_ stem of ...

The handwritten notes on plate 210 have been cut off entirely.

Bolton wrote in his text that his published plate 130 (Fig. 4) showed “*Sphaeria agariciformia*” from the two instances that he found it, those from 15 October 1786 at top, and those from 28 October 1787 at bottom. These two sets correspond with the figures on our two watercolor plates. Bolton also noted that it “grows in Ramsden-Wood, below Highfield, near Halifax.” The “*Icones Fungorum*” illustration reproduced in Edmondson’s memoir corresponds with our watercolor plate 209 and the 15 October set, though it has only four standing stalks, and the pileus cross sections have been moved to the bottom. The stalks in the NAL image are resting on an illusionistic surface, unlike those on our manuscript and the published plate shown floating on the page.

## Fungi in floras, 1600–1800

Close to the end of the century, well-known botanical artist James Sowerby (1757–1822) and English botanist James Edward Smith (1759–1828) began to publish *English Botany* (1790–1814), the beautifully illustrated and popular serial on the flora of England. *English Botany*, however, did not include fungi. Sowerby wrote and illustrated *Coloured Figures of English Fungi* (1797–[1815?]) as a complement to *English Botany* and to encourage the use and cultivation of mushrooms in his native land, earning him a reputation as a fungi expert. When the Royal Navy's ships began to rot at an accelerated rate, mushrooms growing on the timbers before they even left the shipyard, the Navy called on several mycologists, including Sowerby, to solve the problem. Sowerby correctly determined that poor ventilation and unseasoned timber were the culprits.

The original drawings for *English Fungi* are now in the British Museum's collections (along with Sowerby's 200 models, which he made for the project and displayed in his home for the public at no charge twice a month), but the Institute's Art collection holds a set of colorists' pattern plates for the complete *English Fungi*, including the supplement (missing plate 427). As might be expected, quality varies in the patterns, sometimes surpassing that of the published plates in our volumes. For a publisher to offer books with hand-colored plates, there would be at least a few colorists working on a given publication's plates, and they needed a pattern to refer to so that their coloring was accurate and uniform. The Institute's pattern plates occasionally have handwritten instructions in Sowerby's hand, some in pencil and some in ink. The handwritten text on the pattern shown here (Fig. 5) reads, "Keep the light in the broad part and clear from the engraving. within the ink line." Often an X marks the spot in the illustration where the instructions should be applied, and here the X marks the middle stalk in the series of five along the bottom. It is open to debate whether or not our colorist followed the pattern, but the coloring in the pattern is an off-white, while that on the published plate is a crisp, brighter white.

The Institute's collection of illustrated mushroom books is richer than we supposed and has yielded many surprises along the way. Though we do not actively collect mycological works anymore, we still have a noteworthy record of the history of mycology. We hope to discuss books from this same period that focus on mycological science in a future article.

We wish to thank Curator of Art Lugene Bruno for her assistance with the Bolton and Sowerby items and Assistant Director T. D. Jacobsen for his nomenclatural assistance. We also thank Susan Fugate at the National Agricultural Library for her help in comparing the Bolton manuscripts and John Edmondson for his helpful comments.

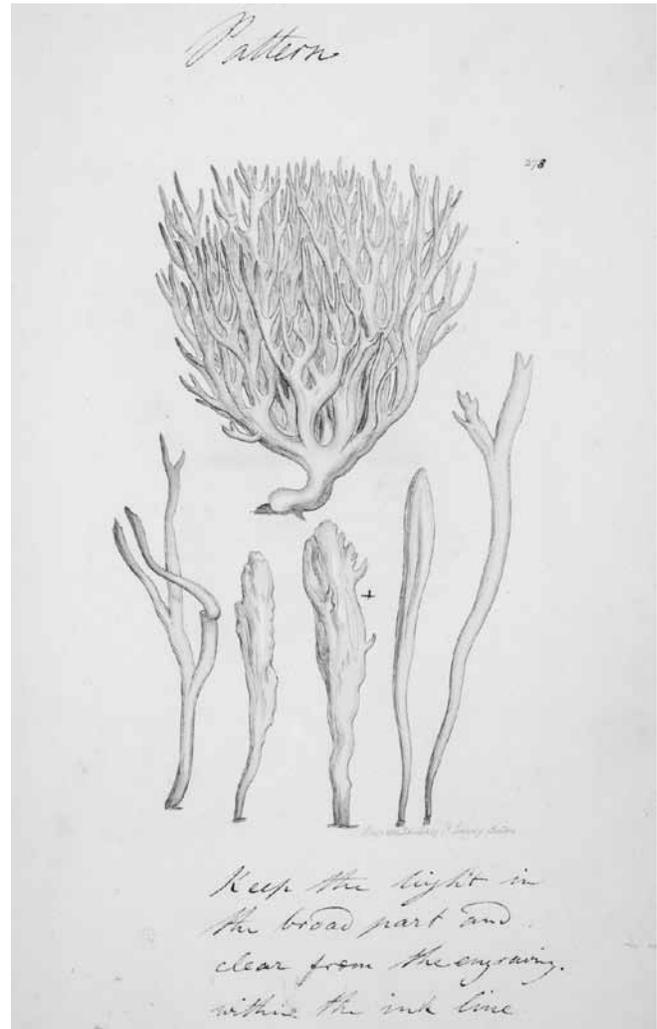


Figure 5. *Clavaria coralloides* [*Clavulina coralloides* (Linnaeus) J. Schröter, Clavulinaceae] pattern plate, hand-colored engraving by James Sowerby with handwritten coloring instructions in ink, 1 May 1800, for his *Coloured Figures of English Fungi or Mushrooms* (London, J. Davis, 1797–[1815?], vol. 3, pl. 278), HI Art accession no. 6004.278, HI Library call no. DT9 S731c.

Finally, we also want to mention a wonderful online exhibit made by our colleagues at Harvard Botany Libraries, "A brief history of mycological illustration" ([http://www.huh.harvard.edu/libraries/mycology/Myco\\_illustration.htm](http://www.huh.harvard.edu/libraries/mycology/Myco_illustration.htm)). They have inspired us to continue our examination of our own holdings of historical mycological literature.

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# Open House 2013

In conjunction with *What We Collect: Recent Art Acquisitions, 2007–2012*, the Hunt Institute will hold its annual Open House on 23 and 24 June 2013. We will offer talks, tours and opportunities to meet one-on-one with our staff to ask

questions and see items in the collections. We encourage everyone to consider visiting us during this Open House. It will be a good time to see the exhibition before it closes and to have an inside look at our collections and our work.

## Schedule of events

### Sunday (23 June)

- 1:00 Registration (continues all afternoon)  
1:15–1:30 Welcome and Introduction in Reading Room by Publication and Marketing Manager Scarlett Townsend  
1:30–2:15 Exhibition Tour of *What We Collect: Recent Art Acquisitions, 2007–2012*, by Curatorial Assistant Carrie Roy  
2:15–3:00 Walking tour of Reading Room furniture by Publication and Marketing Manager Scarlett Townsend  
3:15–4:00 “Botanical wall charts” by Curator of Art Lugene Bruno

Bruno will present an overview of the Hunt Institute’s collection of instructional wall charts that were produced in Europe and circulated around the world from the late 19th to the early 20th centuries. Using the less expensive printing process of lithography, these large-scale charts featured the characteristics of important plant families (often in magnified detail) and were used in introductory to advanced botany courses. As information became accessible in different formats, this important record of educational presentation fell into disuse. In recent decades these charts have often been retrieved from neglected storage areas and dumpsters and donated to institutions for preservation.

- 4:00–4:30 Enjoy exhibition and displays; talk with curators and staff

### Monday (24 June)

- 1:00 Registration (continues all afternoon)  
1:15–1:30 Welcome and Introduction in Reading Room by Curator of Art Lugene Bruno  
1:30–2:15 Exhibition Tour of *What We Collect: Recent Art Acquisitions, 2007–2012*, by Curatorial Assistant Carrie Roy  
2:15–3:00 Walking tour of Reading Room furniture by Publication and Marketing Manager Scarlett Townsend  
3:15–3:45 “From field to folio: Stories behind botanical publications” by Assistant Librarian Jeannette McDevitt

Long before our modern conveniences, such as overnight shipments and photocopies, passionate botanists and botanical artists were pouring blood, sweat and tears into their work. Ever at the mercy of the natural elements, each other and tight budgets, they traveled near and far to document the world’s flora. McDevitt will display some of Hunt Institute’s special items and speak about the dramas, disasters and absurdities that went on behind the scenes before these beautiful books could come to fruition.

- 3:45–4:30 Enjoy exhibition and displays; talk with curators and staff

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## Fungi in floras, 1600–1800

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—Jeannette McDevitt, Assistant Librarian  
and Charlotte Tancin, Librarian

# Bulletin

of the Hunt Institute for Botanical Documentation

Carnegie Mellon University  
5th Floor, Hunt Library  
4909 Frew Street  
Pittsburgh, PA 15213-3890  
Telephone: 412-268-2434  
Email: [huntinst@andrew.cmu.edu](mailto:huntinst@andrew.cmu.edu)  
Web site: [huntbot.andrew.cmu.edu](http://huntbot.andrew.cmu.edu)

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## News from the Art Department

(continued from page 4)

### Upcoming exhibitions

#### Fall 2013

The preparation for the *14th International Exhibition of Botanical Art & Illustration* is well under way. The exhibition will include 41 artworks by 41 artists from 10 countries, preview on 26 September and be on display through 19 December 2013. The artists are Christine Battle, England; Phansakdi Chakkaphak, Thailand; Li-Jun Chen, China; Gaynor Dickeson, England; Ria van Elk-van Altena, Netherlands; Dianne Emery, Australia; Mayumi Ezure, Japan; Laura Fantini, United States; Lara Call Gastinger, United States; Ellen Gaube, United States; Janice Glimn-Lacy, United States; Cherie Ann Gossett, United States; Asuka Hishiki, Japan; Annie Hughes, Australia; Carolyn Jenkins, England; Barbara Klaas, United States; Esther Klahne, United States; David Kopitzke, United States; Joo-Young Lee, South Korea; Kyung-Min Lee, South Korea; Charlotte Linder, England; Roberta Mattioli, Italy; Carrie Megan, United States; Kayoko Miyazawa, Japan; Masako Mori, Japan; Julie Nettleton, Australia; Mary Anne O'Malley, United States; Tomoko Otomo, Japan; Beth Phillip, England; Lesley Randall, United States; Abigail Rorer, United States; Susan Rubin, United States; Gael Sellwood, England; Deborah B. Shaw, United States; Janet Snyman, South Africa; Min-Jeung Son, South Korea; Sun Yingbao, China; Charlotte Staub Thomas, United States; Denise Walser-Kolar, United States; Eric Wert, United States and Margaret Wilson, United States. As we have since 1995, we are coordinating activities for the 14th International artists and the registrants of the American Society of Botanical Artists educational conference, which is held every three years in Pittsburgh during the opening weekend of the International exhibition.



Wild Wisteria (Chinese Wisteria, *Wisteria sinensis*) [*Wisteria sinensis* (Sims) Sweet, Leguminosae], watercolor and gouache on paper by Margaret Wilson, 2012, 43 × 47 cm, HI Art accession no. 8023, © 2012 Margaret Wilson, All Rights Reserved.

#### Spring 2014

With the working title *Duets*, the spring exhibition will create a new harmony by pairing historical and contemporary botanical art and illustration from the Institute's collection and comparing the contexts for which they were created.

—Lugene Bruno, Curator of Art