





FLOWER OBSESSION

Plant Collecting in East Asia 1600s-1900s

BOTANICAL ART GALLERY

23 April - 23 October 2022

Curated by Michele Rodda Edited by Yeo Wei Wei





Contents

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Introduction

"There are certain rules which require one to draw things in a certain manner, but I cannot comply with these rules if I am to represent things as they really are."

Ono Ranzan, (1729–1810), a materia medica scholar and skilled illustrator, explaining that if plants are to be drawn accurately the established rules of flower painting cannot be strictly followed. From *Ka-i* [Selected flowering plants], vol. 1 (1759), translation by John V. Brindle.

PAINTING FLOWERS

Flower painting was established in Asia as a distinct art genre centuries before it became established in Europe. Chinese flower painting dates to the 300s CE. Flowers became prominent in Chinese literati painting through the depiction of plants which were called 'The Four Gentlemen' – the plum blossom, orchid, chrysanthemum, and bamboo, traditionally painted in black ink. The classical Chinese genre of bird-and-flower painting dates to the 900s, becoming popular in Japan from the 1300s onwards. The naturalistic and accurate depictions of flowers and birds, as well as fish and insects, were influential on the plant drawing styles seen in this exhibition. In the 1600s and 1700s flower painting became accessible to the middle class, such as Chinese and Japanese merchants and artisans, as dedicated manuals were published.

These long-established forms of depiction are an important early source of information on which plants were cultivated and appreciated. The level of accuracy in these art forms may, however, not be sufficient for precise plant identification. They are nonetheless the basis for the development of more accurate forms of plant depiction aimed at plant identification.

FROM MATERIA MEDICA TO BOTANY

China produced texts on materia medica (including plants, animals and minerals believed to have medicinal properties) since the Eastern Han Dynasty (25–220 CE), such as the Shennong bengcao jing [the divine farmer's materia medica]. The illustrated Bencao gangmu [Compendium of materia medica], was written by Li Shizhen (1518–1593). It was first printed in Nanjing in 1596. In 1607 one copy of Bencao gangmu arrived in Japan and fell into the hands of the first shōgun Tokugawa leyasu (1543–1616). This event had a lasting impact on Japanese scholars, eventually leading to the development of the study of local natural history. Bencao gangmu was copied, commented upon, and, in 1637, published in Japanese (as Honzō kōmoku). This inaugurated a period during which Japanese plant knowledge was derived from books brought from China or Korea. Every effort was made to identify the plants of Japan with those of the mainland and correlate Chinese and Japanese names. Illustrations produced for these publications were generally in black ink and not very detailed.

Scholars soon realised that Chinese and Japanese plants may differ. Consequently, from the middle of the 1600s, rather than copying earlier Chinese illustrations, new ones were drawn from wild or cultivated Japanese specimens, regardless of whether they had a Chinese identification or not. An independent recording of Japanese plant diversity began. The importance of accurate descriptions and illustrations became apparent and the focus of scholars began to shift from materia medica to documentation of the diversity they found in the wild as well as in cultivation. Although Chinese books on natural history continued to be translated and published in Japanese, often with poor illustrations, Japanese original publications, often with skilfully rendered illustrations, increased in popularity. From the mid-1800s Japanese scholars started adopting the Linnean plant classification and Latin names. Dissections and close-ups of diagnostic plant parts started to be included in illustrations in a similar fashion to those of Western publications.

HORTICULTURE DURING THE EDO PERIOD

The Edo period (1603–1868) was a long period of peace which started when Tokugawa leyasu was appointed shōgun. He moved the government to Edo (now Tokyo), far away from the imperial capital Kyoto.

In Edo, horticulture was considered a suitable activity for men of power, learning and influence. leyasu supported the diffusion of plant studies from China and was described as 'a lover of flowers'. Both his son Hidetada and grandson lemitsu were keen plant growers, with the latter reported to have overlooked the affairs of state in order to dedicate his time to growing bonsai. Most later Tokugawa shōgun also shared this passion for plants.

The late Edo period saw the most substantial expansion of ornamental horticulture. Plants were prominently featured in arts, drove scientific development, affected politics and the economy. The practice of 'alternate attendance', or sankin kotai was at the heart of this phenomenon. Daimyō (feudal lords) were required to live in Edo every other year. Consequently grand townhouses were built around Edo castle and their lavish gardens were planted with species from throughout Japan. Never before had such a variety of plants and growing skills been concentrated in one city. In Edo, plants were exhibited, sold or exchanged and plant competitions were held often. When the daimyō returned to their home domains, unusual plants and novel horticultural practices would travel with them, revolutionising the nation's gardening culture.

Japanese native species were cultivated side by side with species from abroad. In particular, species with symbolic significance were popular throughout East Asia. The desire for new, rare plants for competitions led to selective hybridisation aimed at obtaining new and unusual horticultural varieties. Plant breeding and propagation techniques now associated with modern horticulture were already well understood by Edo gardeners. Particularly popular were *kihin*, the Japanese term for plants with unusual characteristics such as variegated leaves. Specialised nurseries were established to support their breeding and propagation.

A wealth of illustrations developed to document exhibitions, or to illustrate plants with short flowering periods, or delicate ones which could not be exhibited easily. Collections of plant illustrations also started to assume the role of sales catalogues. Although initially intended for use within Japan, after the Edo period new catalogues were also produced specifically to support overseas trade.

The items presented in this catalogue are arranged following the flow of the exhibition, starting with works by scholars Ito Keisuke, linuma Yokusai and Iwasaki Tsunemasa, who documented both wild and cultivated plants. They produced richly illustrated publications which formed the start of modern Japanese botany (pp. 8–19). Then follows a selection of works dedicated to kihin, including encyclopaedic

works (pp. 20–23) as well as works on orchids (pp. 24–33), morning glory (pp. 34–41 and *Rohdea japonica* (pp. 42–51). In a separate room is a selection of flowers that have, for centuries, been fairly ubiquitous in the arts and plant collecting traditions of East Asia. These include peony (pp. 56–63), lotus (pp. 64–69), chrysanthemum (pp. 70–81), iris (pp. 82–89) and lily (pp. 90–103).



Akitafukizuri [Print of Petasites japonicus subsp. giganteus leaves]

As installed within the exhibition, along the left wall Early 20th century
Miyakoshi family
PRIVATE COLLECTION

The technique of printing large-sized leaves of *Petasites japonicus* subsp. *giganteus* was developed by the Miyakoshi family in Akita prefecture in 1862. The technique has been handed down from generation to generation in the Miyakoshi family; the details of production remain a family secret. The huge prints are used as decoration, for example pasted on *fusuma* sliding doors, or mounted as hanging scrolls. Itō Keisuke (see pp. 11–13) owned some of the prints.

Plant illustration

Discrimination between similar-looking plants, whether species or cultivars, is not possible without accurate drawings. From the early to mid-1800s, there was a boom in plant drawings in horticultural, honzōgaku (herbalist) and later botanical literature in Japan. The burgeoning of drawings of kihin, the Japanese term for plants with unusual characteristics such as variegated leaves, coincided with that of illustrations for identifying useful and medicinal plants by herbalists. At that time, botany was just starting to be recognised as a separate discipline from herbalism. Illustrations of wild and cultivated plants would later become an essential component of botanical research. Li Shizhen's Bencao gangmu [Compendium of materia medica] inspired and spurred Japanese herbalists to create their own illustrated manuals.



Flower show

1890s Photographer unknown PRIVATE COLLECTION

This image shows the many varieties of plants available for purchase in Japanese nurseries in the late 1800s. Many were objects of interest for early botanists, who depicted them in their sketchbooks and publications.



Watanabe Noritsuna honzō zufu [Watanabe Noritsuna's illustrated encyclopaedia of materia medica]

Early 1800s, manuscript
Watanabe Noritsuna
COLLECTION OF HIGASHIYAMA BOTANICAL GARDENS

This is an important manuscript because it includes illustrations of plants from the garden of linuma Yokusai, author of Sōmoku zusetsu zenpen [Illustrated encyclopaedia of plants and trees, part 1]. The manuscript also provides details about each plant – arrival year, provenance, and characteristics. Watanabe Noritsuna was also a respected tea master.



Vol. 4 of **Sōmoku kihin zuroku**[Catalogue of unusual and rare plants]

1800s, manuscript

Artist unknown

COLLECTION OF HIGASHIYAMA BOTANICAL GARDENS

During the Edo period, *kihin*, that is, plants with unusual features such as variegated leaves, became sought after by collectors. This book contains images of such plants as well as other rare species.



Shokubutsu zusetsu zassan [Miscellaneous plant illustrations], also known as Kinka shokubutsu zusetsu [Kinka plant illustrations]

1893-1899

Itō Keisuke, also known as Kinka

COLLECTION OF HIGASHIYAMA BOTANICAL GARDENS

Itō Keisuke (1803–1901), a honzōgaku scholar, introduced Linnaean plant classification into Japan. Kinka shokubutsu zusetsu is a series of notebooks compiled by Itō when he was over 90 years old. He put together all he had learned about plants throughout his long life and included notes, sketches, drawings, clippings from printed books and numerous leaf prints. The plants are arranged according to the Japanese alphabet. The display here is of the section with plants that have names beginning with the Japanese character 'mi'.



Vols 16 & 17 of *Kinka shokubutsu zusetsu* [Kinka plant illustrations] 1893–1899

Itō Keisuke, also known as Kinka

COLLECTION OF HIGASHIYAMA BOTANICAL GARDENS

A collection of materials on *Camellia* species and cultivars. It contains illustrations taken from foreign journals, original drawings, a list of *Camellia* names, and a study on the patterns found on their petals.

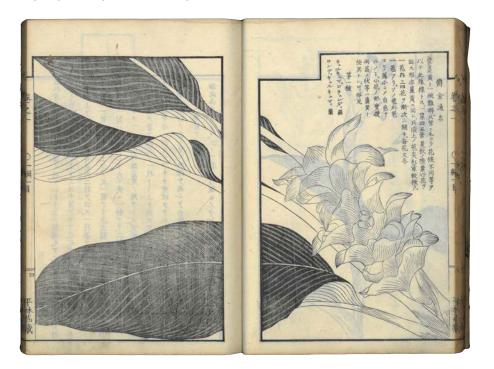


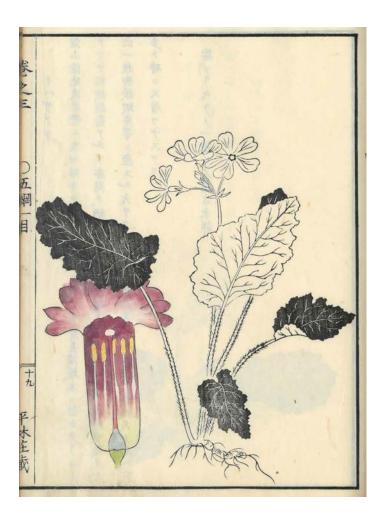


Botanical encyclopaedias

Honzō zufu is Japan's first major botanical pictorial book series with almost 3,000 illustrations of plants. It covers native and cultivated plants including exotic species. The series and the arrangement of plants follow that of Honzō kōmoku keimō, a book modelled on Li Shizhen's Bencao gangmu [Compendium of materia medica]. It also includes some illustrations derived from western publications such as Johann Wilhelm Weinmann's Phytanthoza iconographia.

Honzō zufu was compiled by Iwasaki Tsunemasa (1786–1842). Iwasaki was widely known by his pseudonym, Kan-en, which means 'irrigation of a garden for plants'. The name refers to his delight in watering his plants. Also included here is Iinuma Yokusai's Sōmoku zusetsu, the first modern illustrated botanical encyclopaedia published in Japan.

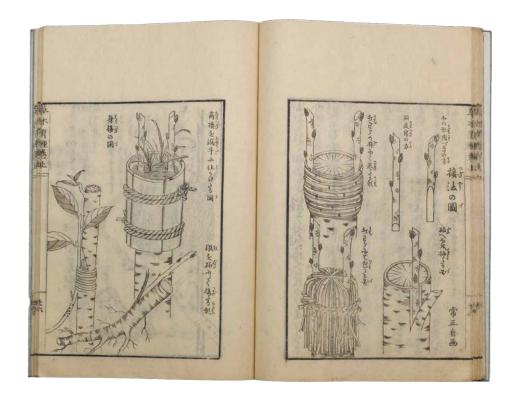




Sōmoku zusetsu zenpen [Illustrated encyclopaedia of plants and trees, part 1]

20 vols, 1856–1862 linuma Yokusai PRIVATE COLLECTION

This 20-volume illustrated encyclopaedia contains illustrations and descriptions of hundreds of native and introduced plants, observed and drawn under a specially made microscope. It was the first botanical encyclopaedia in Japan to use Linnean taxonomy. Iinuma Yokusai (1782–1865) was a retired doctor who moved to Gifu Prefecture where he built a villa as a retreat to focus on writing this book.



Sōmoku sodategusa [Cultivation and care of plants]

2 vols, 1818 Iwasaki Tsunemasa COLLECTION OF SOUKAEN BUNKO

Iwasaki Tsunemasa was also a renowned horticulturist. Before *Honzō zufu,* he published this work on plant propagation which established his reputation for horticultural excellence in Japan.



Honzō zufu [Illustrated encyclopaedia of materia medica]

4 vols, 1830

Iwasaki Tsunemasa, also known as Iwasaki Kan-en, with artist Okada Seifuku PRIVATE COLLECTION

Honzō zufu has a complex publication history. Iwasaki completed 96 autograph volumes in 1828 including almost 3,000 illustrations of plants. The volumes numbered 5–8 were printed in 1830, 9–10 were likely printed shortly after but they didn't sell well. The other volumes were distributed to subscribers as manuscript copies transcribed from the original set. All volumes were printed in colour woodblock in 1916–1923. The plants are arranged following the Japanese translation of Ben cao gang mu [Compendium of materia medica] by Li Shizhen (1518–1593), the celebrated Chinese herbalist.



Honzō zufu [Illustrated encyclopaedia of materia medica]

Mid-1800s, manuscript Iwasaki Tsunemasa, also known as Iwasaki Kan-en COLLECTION OF SOUKAEN BUNKO

These manuscript copies of *Honzō zufu* were produced under Iwasaki's supervision. They are outstanding examples of *Honzō zufu*, with highly detailed drawings and vibrant colours. Authentic copies co-exist with later copies of varying quality, contingent on the skills of copyists.





Encyclopaedias of cultivated plants

Plant shows and competitions were popular in major cities during the Edo period (1603–1868). Literature on plants replete with beautiful illustrations proliferated, as exemplified by the *kihin* encyclopaedias here – *Sōmoku kihin kagami* (1827) and *Sōmoku kin'yōshū* (1829), both published at around the same time as *Honzō zufu* and including illustrations by Sekine Untei (1804–1877), a prominent artist of the period. Also displayed is the text widely recognised as the earliest horticulture picture book in Japan, *Kusabanae zenshū* (1699).





Kusabanae zenshū [Complete book of flower paintings]

3 vols, 1699 Itō lhee Sannojo COLLECTION OF SOUKAEN BUNKO

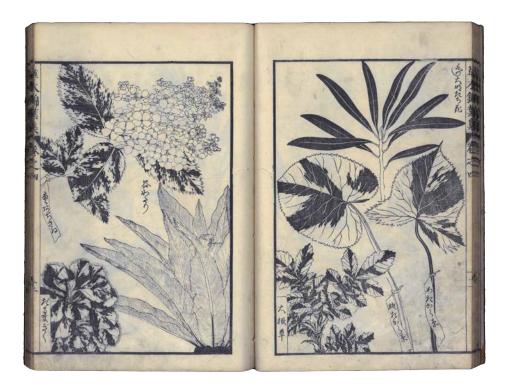
The pictures in this book were drawn by Itō Ihee Sannojo, a nursery owner in Somei, Edo. His son Masatake was editor and publisher. The book includes illustrations of 120 garden plants with 40 items in each volume. The names, flower shapes, colours, and flowering times of each plant are provided in detailed diagrams.



Sōmoku kihin kagami [Illustrated manual of rare and unusual plants]

3 vols, 1827 Edited by Kinta the gardener assisted by Genzō the florist COLLECTION OF SOUKAEN BUNKO

This book introduces about 90 *kihin*, the Japanese term for plants with unusual characteristics such as variegated leaves. These plants were cultivated by Edo horticultural enthusiasts. The book includes the history of their cultivation.



Sōmoku kin'yōshū [Brocade-leaf collection of plants and trees]

7 vols, 1829

Mizuno Issai (Chūkyō)

Illustrated by Ōoka Unpō and Sekine Untei

PRIVATE COLLECTION

Sōmoku kin'yōshū is considered the best work on variegated plants published in Japan. Many plants were sketched from life, while others were likely copied from Sōmoku kihin kagami (1827). The illustrations are skilfully executed with a sharp contrast between the green foliage which is rendered in black and the variegated parts which are left uncoloured.

 $^{\prime 2}$

Orchid

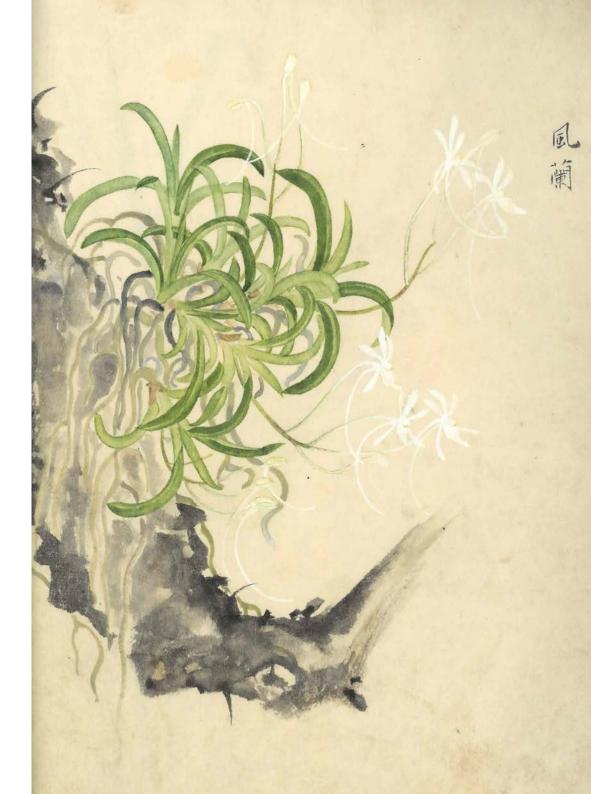
The Chinese were the first in East Asia to cultivate and appreciate native orchids. Japanese monks who travelled to China for their studies and Chinese monks who moved to Japan are said to have been amongst the first to bring orchid appreciation to Japan during the Heian Period (794–1185). In Chinese painting, the beauty of orchids is represented by the leaves rather than flowers. In traditional Japanese horticulture, some genera – namely Cymbidium, Dendrobium, Goodyera and Vanda (formerly Neofinetia) – are treasured for their leaves as much as for their flowers or perhaps even more. Due to collectors' fascination with rare and unusual plants in the Edo period (1603–1868), orchid varieties with unusual leaves were much in demand. The variegated forms of orchids such as Vanda falcata and Dendrobium moniliforme commanded exorbitant prices among collectors which led many to search for these plants in the countryside all over Japan.

Kusabana shashin, ran-shu [Images of flowers, orchids]

Mid-1800s, manuscript Artist unknown PRIVATE COLLECTION

A manuscript album that includes images of 44 native Japanese orchids, including some which are widely cultivated such as Cymbidium spp., Vanda falcata and Calanthe spp.







Fūran-fu [Vanda falcata]

1830, manuscript Artist unknown, possibly Akiotei Shujin, known as 'The Master of Akio-tei' COLLECTION OF SOUKAEN BUNKO Vanda falcata (formerly Neofinetia falcata) is an evergreen perennial orchid that grows on the trunks and branches of large trees in the mountains west of central Honshu in Japan as well as in China and Korea. Forms with unusual flower and leaf shapes were first collected from the wild and then selectively bred. This manuscript contains illustrations of 25 varieties.



Chōseisō [Long-lived grass]

1835

Akiotei Shujin, known as 'The Master of Akio-tei' COLLECTION OF SOUKAEN BUNKO

Dendrobium moniliforme has fragrant white or pink flowers, but for the Japanese, the leaves rather than the flowers are the highlight of the plant. This book focuses on variegated or unusual leaf forms of this long-lived orchid. There is information about the cultivation method, and the illustrations of 33 varieties present the plants in highly decorated pots.



Akita Renga [Illustrated book of Cymbidium orchids]

1888

Edited by Keizō Hikita
PRIVATE COLLECTION

Orchid breeding became a sophisticated hobby during the Edo period. Publications like Akita Renga were part of this trend, depicting prized orchids from various collections. The hand-coloured prints of these 30 orchids use lithographic printing to represent leaf patterns and shades accurately. Flower pots are also depicted exquisitely, sometimes using gold ink. Keizo Hikita studied Western painting from the Italian painter Fontanesi at the Technical Fine Arts School.



Igansai ran hin [Delightful orchids]

2 vols, 1772 Matsuoka Gentatsu, also known as Matsuoka Shoan COLLECTION OF SOUKAEN BUNKO

Inō Jakusui's student, Matsuoka Gentatsu, published a series of studies on the cultivation of orchids, cherry trees, bamboos, and plum trees. In his book on ran, other large-flowered plants such as magnolias are included. Not all orchids are ran, and not all ran are orchids. The classification of ran was aesthetic rather than scientific. Flower scent, rather than form, was another factor in their classification.



Vol. 3 of Ka-i [Selected flowering plants]

8 vols, 1759–1765 Shimada Mitsufusa, Ono Ranzan PRIVATE COLLECTION

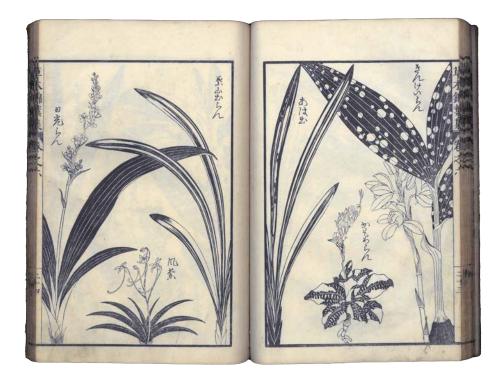
An illustrated encyclopaedia based on Chinese sources and Japanese gardening knowledge, it was one of the three texts cited in Franchet and Savatier's Enumeratio plantarum in Japonia crescentium (1875–1879). The other two were Honzō zufu by Iwasaki Tsunemasa and Sōmoku zusetsu by Iinuma Yokusai, also featured in this catalogue. Mitsufusa was a professional gardener and the book shows his expertise. Ranzan, a honzōgaku scholar, was also known as the 'Japanese Linnaeus'.



Vol. 18 of *Shintei sōmoku zusetsu* [Illustrated encyclopaedia of plants and trees, revised]

20 vols, 1874 Linuma Yokusai PRIVATE COLLECTION

Second edition, posthumously revised and published by Tanaka Yoshio and Ono Motoyoshi. It includes plant names in Latin added by French botanist Ludovic Savatier. More information on the first edition, *Sōmoku zusetsu zenpen*, can be found at page 15.



Vol. 6 of $S\bar{o}moku\ kin'y\bar{o}sh\bar{u}$ [Brocade-leaf collection of plants and trees]

7 vols, 1829 Mizuno Issai (Chūkyō) Illustrated by Ōoka Unpō and Sekine Untei PRIVATE COLLECTION

More information on Sōmoku kin'yōshū can be found at page 23.

Morning glory

Ipomoea nil, originally from America, is commonly found in tropical and subtropical countries. It is called asagao in Japanese, which means 'face in the morning', likening the morning glory to a young girl's refreshing beauty. Ornamental forms gained popularity in the early 1800s and were featured in dedicated shows in major cities. The most beautiful and unusual forms were depicted in illustrated books. Economic hardship during the Tenpo era (1830–1844) caused many of the lower-class samurai to resort to cultivating morning glories to supplement their meagre incomes. The 'changing morning glory', spontaneous mutations of the asagao, showed the sophistication of their methods. These plants are proof that evolution of very widely different morphological types in nature need not necessarily take place over a long span of time.





Asagao sou [Asagao or morning glory collection]

2 vols, 1817 Sijian Keiei COLLECTION OF SOUKAEN BUNKO

The morning glory became popular across Japan in the early 1800s. This is an example of the many books produced as a result. A beautiful woodblock print book, it contains a wealth of information about asagao. Vol. 1 includes an image of the yellow morning glory which is no longer in cultivation. An outline of cultivar differentiation is provided in vol. 2.



Sōmokushasei [Plant sketches]

Early 1800s Artist unknown PRIVATE COLLECTION

Before the asagao craze started, the single-flowered blue morning glory was the most commonly cultivated form in Japan.





Tohi shūkyō [Various asagao images from Edo and the countryside]

3 vols, 1857 Edited by Naritaya Tomejiro COLLECTION OF SOUKAEN BUNKO

This book contains images from various earlier publications. Although it is littered with errors and modified original images by altering their colours, it was popular and widely distributed amongst enthusiasts. The author is credited for introducing a large persimmon-coloured morning glory, which became very popular.







Santo itchō [Morning glories from three cities, Edo, Kyoto, Osaka]

1854, later manuscript copy Edited by Naritaya Tomejiro PRIVATE COLLECTION

This work contains 88 coloured drawings of prize-winning morning glories exhibited from 1854 to 1857 at exhibitions in Edo, Kyoto and Osaka. These were compiled by Iriya's morning glory master, Naritaya Tomejiro. Various flower shapes known as peony bloom, lion bloom, and wind chime bloom are shown, as well as different colour shades and patterns.



Asagao zusetsu [Illustrations of asagao or morning glory]

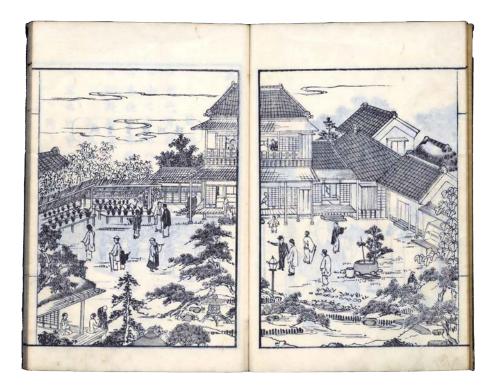
2 vols, 1903 Kataoka Senpu COLLECTION OF SOUKAEN BUNKO

The asagao boom disappeared for a while in the late 1800s and returned in the early 1900s. Competitions took place once again around Japan, starting with Osaka, Kyoto, and Tokyo. Enthusiasts participated with their own plants and exchanged seeds.

Rohdea japonica

Rohdea japonica is a herb with creeping rhizome found on the forest floor of warmer parts of East Asia. In China its cultivated varieties are called wannianqing, meaning 'evergreen'. In Japan, where it is called omoto the plant was recognised first for its medicinal properties before it became known as an ornamental plant during the Muromachi Period (1392–1573). From the mid-Edo period onwards, omoto was treasured by the upper echelons of society. Omoto with unusual leaf shapes and variegated leaves were coveted by collectors. Exhibitions featuring only omoto were held from the early 1800s and, at these shows, a lot of attention was paid not only to the plants, but also to their ornate decorative pots. A large variety of cultivated omoto was featured in numerous books. Other native species such as *Psilotum nudum* and *Ardisia crispa* also became highly sought after in horticulture and were depicted in dedicated publications.





▲ Omoto-baiyo-hiroku [Secrets of cultivating omoto or Rhodea japonica]

1885

Tsunegorō Shino

PRIVATE COLLECTION

Tsunegorō Shino owned a long-established store in Tokyo, well-known to collectors of omoto during the Edo period. In the late 1800s the store was in charge of taking care of prized omoto plants belonging to the emperor.

◆ Display of kihin

late 1800s Adolfo Fasari

PRIVATE COLLECTION

A display of unusual plants, including dwarf Cycas revoluta and omoto. This kind of display, on a much grander scale, could often be seen in daimyō mansions in the Edo period.



Vol. 2 of $S\bar{o}moku\ kin'y\bar{o}sh\bar{u}$ [Brocade-leaf collection of plants and trees]

7 vols, 1829 Mizuno Issai (Chūkyō) Illustrated by Ōoka Unpō and Sekine Untei PRIVATE COLLECTION

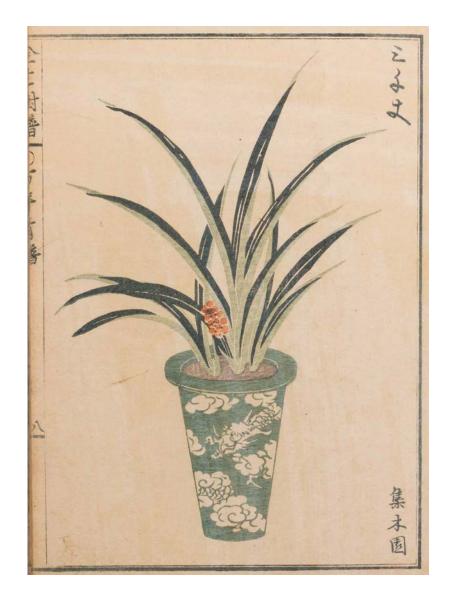
More information on Sōmoku kin'yōshū can be found at page 23.



Vol. 2 of *Sōmoku kihin kagami* [Illustrated manual of rare and unusual plants]

3 vols, 1827 Edited by Kinta the gardener assisted by Genzō the florist COLLECTION OF SOUKAEN BUNKO

More information on Sōmoku kihin kagami can be found at page 22.



Kinseijufu: omoto-bu [Propagation of valuable plants: omoto part]

1833

Nobumitsu Kurihara, also known as Chōseisha Shujin COLLECTION OF SOUKAEN BUNKO

This book contains information about 36 expensive varieties of omoto. Illustrations are accompanied by cultivation tips. The book has been credited with further fuelling the craze for omoto.

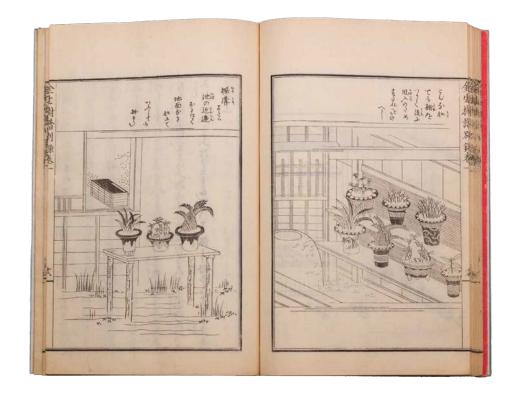


Omoto zufu [Illustrated book of omoto or Rhodea japonica]

2 vols, 1885 Kurimoto Hōan, edited by Tsunegorō Shino

PRIVATE COLLECTION

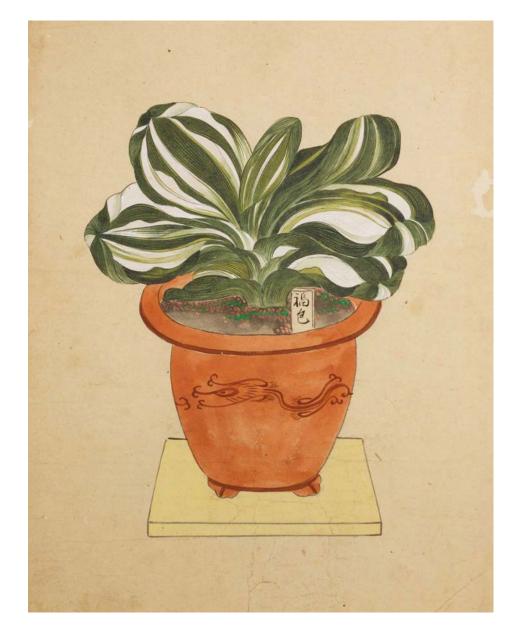
Lithography or an offset process simulating lithography might have been used in the printing of this book, as suggested by the gold in the illustrations of flower pots. The flat shades of green may have been printed typographically from blocks surfaced with very finely woven silk or some other textile.



Kinsei jufu betsuroku [Propagation of valuable plants]

3 vols, 1833 Nobumitsu Kurihara, also known as Chōseisha Shujin COLLECTION OF SOUKAEN BUNKO

Nobumitsu Kurihara, a member of the shogunate, owned the Edo nursery $Ch\bar{o}seisha$. Vol. 1 has figures of gardening supplies such as pots, stands, and warm rooms (Japanese style greenhouses). Vol. 2 offers annotated illustrations of famous pines, willows, and plum trees. The third volume describes propagation techniques such as grafting and cutting. Well-versed in horticulture, he published other notable plant books including $Matsuba\ ran\ fu\ (p.\ 54)$.



Album of Rohdea japonica

Late 1800s Artist unknown PRIVATE COLLECTION

An album formerly belonging to Uchiyama Nursery, Sugamo, Tokyo.



Ko-omoto nayose [Small omoto]

1830s

Edited by Mizuno Issai (Chūkyō), illustrated by Sekine Untei COLLECTION OF SOUKAEN BUNKO

On 15 and 16 September 1832, an exhibition of *ko-omoto*, or small *omoto*, sponsored by Mizuno Issai, was held at Kuramae Hachimansha, a shrine in Edo. The plant exhibits were drawn by Sekine Untei and printed as a set of coloured woodblock prints with much attention paid not only to the plants but also to the beautiful pots.



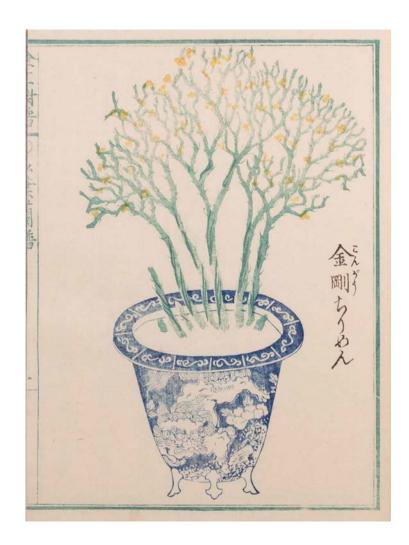


Matsuran-fu [pictures of whisk fern]

2 vols, 1837 Fukami Rozan PRIVATE COLLECTION

This book has 90 items and ranks as the best and most elaborate collection of whisk fern (*Psilotum nudum*) prints in colour. A fern-like plant, notably lacking true leaves and roots, the whisk fern's branches are finely divided and resemble a broom. In the early 1800s, unusual forms started to be appreciated, and like the omoto, the whisk fern became popular with collectors who cultivated rare and unusual plants.





Matsuba ran fu [pictures of whisk fern]

1836

Nobumitsu Kurihara, also known as Chōseisha Shujin COLLECTION OF SOUKAEN BUNKO

This book is dedicated to the whisk fern (*Psilotum nudum*), one of the species which became popular from the middle to the latter half of the Edo period. Many mutations were selected and traded at high prices. The figures for this work were printed using four blocks with different colours – blue for the porcelain pots in four designs, grey for the soil, green for the plant and yellow for the sporangia.



Karatachibana-hinrui [Study of Ardisia varieties]

1797

Kimura Toshiatsu

COLLECTION OF SOUKAEN BUNKO

Ardisia crispa was one of the horticultural favourites greatly in vogue among Japanese amateur gardeners. It was also one of the first native plants featured in dedicated illustrated books. This book shows some of the unusual forms available at the time, either with variegated foliage or unusual shapes. Ardisia is otherwise also admired for its flowers in spring and for the beauty of its inedible crimson fruit.

Peony

Paeonia is the only genus in the family Paeoniaceae. Peonies are perennials with characteristically divided leaves and two growth forms. Herbaceous peonies have fleshy roots and the arial shoots arise from the surface of an underground stem during the summer months. Tree peonies are deciduous, soft-wood shrubs with buds at the tips and bases of the annual over-wintering growth. In China, peonies, particularly Paeonia lactiflora, have long been grown for the beauty of the flowers and the medicinal properties of the roots and seeds. Tree peonies were planted in Japanese temple and court gardens as ornamental plants, with their cultivation becoming widespread during the Edo period (1603–1868). Single or semi-double flowers are more popular in Japan than the fully double flowers of the Chinese types because they better withstand frequent rainfall. The flower's associations with wealth and the upper class are evident from its representations in East Asian art and landscape design.





▲ Peony garden in Kyoto

◄ Flower show

1890s

Attributed to Kusakabe Kimbei

PRIVATE COLLECTION

Tree peonies displayed under a shelter made of bamboo. This kind of display was popular in flower shows and nurseries during the Edo period. Today, it is rare to come by such displays.





Vol. 2 of Sōmoku kajitsu shashin zufu [A collection of pictures of plants and fruits]

4 vols, late 1800s Kawahara Keiga PRIVATE COLLECTION

Kawahara Keiga was a painter from Nagasaki who made many drawings for Philipp Franz Von Siebold, German physician, and botanist who resided in the Dutch trading post of Dejima in Nagasaki from 1822–1829. Kawahara drew a large number of plants for Von Siebold, using a realistic style. His works, which included enlarged illustrations of dissected flowers, heralded the start of western style botanical illustration in Japan.



Vol. 9 of *Honzō zufu* [Illustrated encyclopaedia of materia medica] after 1830

Iwasaki Tsunemasa, also known as Iwasaki Kan-en, with artist Okada Seifuku PRIVATE COLLECTION

More information on Honzō zufu can be found at pp. 17–19.



Export sales catalogue

1890s, partly manuscript
Artist unknown
PRIVATE COLLECTION

This book is a catalogue, most likely produced by Yokohama Nursery. It contains 142 illustrations of peonies (both woody and herbaceous), irises, lycorises, magnolias and maples. The images are partly hand-drawn, partly printed. The general catalogues of Yokohama Nursery from the late 1800s and early 1900s include 'coloured hand-drawn paintings after nature' on top of their extensive selection of plants for sale.





Album of herbaceous peonies

late 1800s Artist unknown

PRIVATE COLLECTION

An album formerly belonging to Uchiyama Nursery, Sugamo, Tokyo.



Lotus

The genus *Nelumbo* includes two species, *N. lutea* from America and *N. nucifera* from Asia. *Nelumbo nucifera* has been widely grown since ancient times, making it difficult to ascertain its precise indigenous origins. Because all its parts are edible, the lotus has been an economic crop in Asia for millenia. It is the national flower of India and Vietnam and a sacred symbol in Hinduism and Buddhism. The lotus features prominently in East Asian paintings and gardens. The finest lotus ponds are found in Buddhist temple grounds. Shinobazu Pond, in the compound of Ueno's Kan'ei-ji in Tokyo, has been a popular site for *hasumi* (lotus appreciation) for centuries. *Hasumi* is similar to the more widely-known ritual of *hanami*, the celebration of cherry blossoms during spring. Visitors gather by Shinobazu Pond before dawn to see lotus flowers open at sunrise with a popping sound.





Vol. 4 of Sōmoku kihin zuroku [Catalogue of unusual and rare plants]

1800s, manuscript

Artist unknown

COLLECTION OF HIGASHIYAMA BOTANICAL GARDENS

More information on Sōmoku kihin zuroku can be found at p. 10.



Album of lotuses

early 1800s, manuscript Artist unknown PRIVATE COLLECTION

This manuscript is an early copy of an album made in 1798. It depicts lotuses that were growing within the grounds of Senyoji temple in Edo, famous for the peony lotus, a form with many petals resembling a peony.



Renge hyakushu [100 renge or lotus flowers]

2 vols, 1800s, manuscript Edited by Matsudaira Sadanobu, also known as Sakingo COLLECTION OF SOUKAEN BUNKO

After retirement, Matsudaira Sadanobu (1773–1856) set up a garden, Yukuonen, at the mouth of the Sumida river. Yukuon-en's lotuses were well-regarded and they would have been popular for *hasumi*, the enjoyment of lotus flowers during summer. It is customary to drink tea and eat rice flavoured with lotus seeds served on a lotus leaf during *hasumi*.



Chrysanthemum

The chrysanthemum (*Chrysanthemum* × *morifolium*) is widely renowned for its attractive flowers and has been cultivated for centuries. Of the 20,000 cultivars, 7,000 were developed in China. In classical Chinese painting, the chrysanthemum is one of the 'Four Gentlemen', ranked alongside the plum blossom, orchid and bamboo as an emblem of virtue. The chrysanthemum was introduced to Japan as a medicinal plant. From the 12th century onwards, it was also cultivated as an ornamental plant. During the Edo period, aristocrats and commoners alike were breeding chrysanthemums and creating new and fashionable varieties, and the wide popularity of the chrysanthemum in Japan has persisted to this day. It is a Japanese symbol of royalty and has been Japan's national flower since 1910. Competitions are organised regularly. Japanese gardeners have been known to devote considerable attention to the cultivation of specific chrysanthemum plants for display.



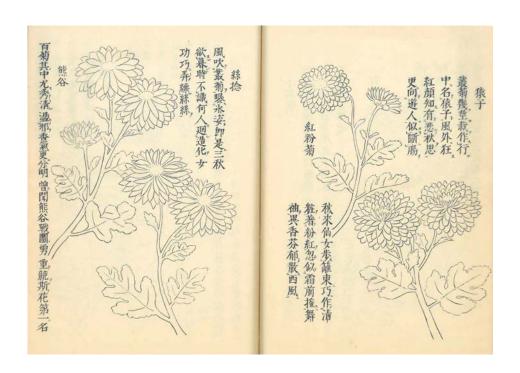


Album of chrysanthemums

Late 1700s—early 1800s, manuscript Author unknown PRIVATE COLLECTION

This is an album with 105 drawings of chrysanthemums. The name of each variety is written on decorative paper slips.

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Gakiku [Chrysanthemum pictures]

1691, later manuscript copy Tōzan Junpo PRIVATE COLLECTION

A large book describing 100 chrysanthemum cultivars accompanied by Chinese poems. It is based on drawings that date back to 1519. The large number of cultivars included in the book are all of medium-sized type, indicating that large-flowered varieties were bred only later. The publication of such books is credited with fuelling interest in chrysanthemums during the late 1600s. Since that time, publications about chrysanthemums have a dedicated readership.



Fuso Hyakukiku-fu [Pictures of one hundred heavenly chrysanthemum flowers]

2 vols, 1736

Ji Sosen

COLLECTION OF SOUKAEN BUNKO

This book is of considerable importance because it documents the presentation of giant-flowered chrysanthemums at a Kyoto exhibition. Earlier books only showed small and medium-sized chrysanthemums.

73

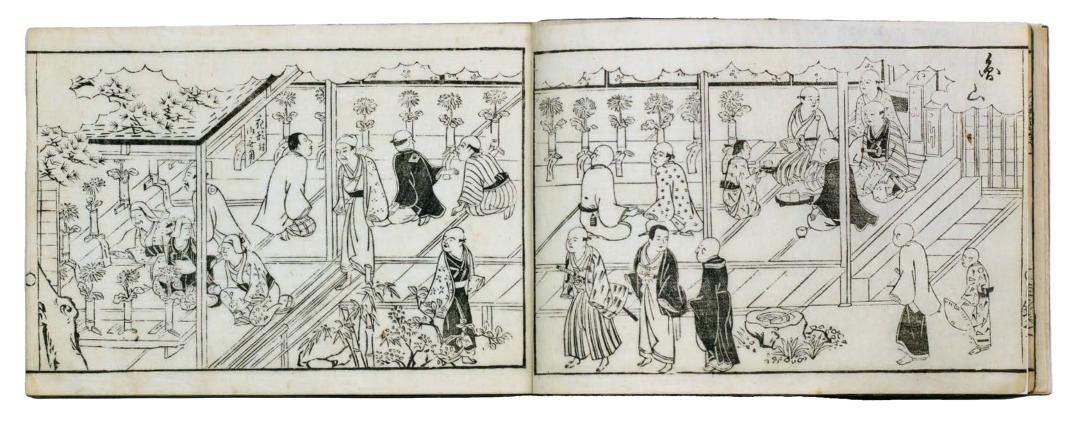




Part 1 of *Hyaku kikuzu maki* [Handscroll with illustrations of 100 chrysanthemums]

2 parts, 1704, manuscript
Illustrations by Murata Sannaka Hitoshiran
Preface by Ōyodo Michikaze
COLLECTION OF SOUKAEN BUNKO

This handscroll includes illustrations of 50 varieties of prized chrysanthemum. It is a valuable record of the varieties cultivated in the early 1700s in Ise.



Kadan yōgiku-shū [Cultivation of garden chrysanthemums]

3 vols, 1715 Kanji Shimizu COLLECTION OF SOUKAEN BUNKO

Chrysanthemum shows started gaining popularity in Kyoto from the beginning of the 1700s. This book includes a double spread image of an exhibition situated inside a house with its screens removed to show the garden. It also contains detailed information about seasonal methods of cultivation and transplantation.





Kikuhana zufu [Illustrated book of chrysanthemums]

3 vols, 1800s, manuscript
Author unknown (possibly limuro Shozaemon)
COLLECTION OF HIGASHIYAMA BOTANICAL GARDENS

The illustrated manuscript, Kusabana zufu [Illustrated book of flowers] by limuro Shozaemon, a vassal of the shogunate, contained one of the largest number of botanical illustrations in the Edo period. The pages were scattered after the author's death and many illustrations were included in Itō Keisuke's Kinka Shokubutsu zusetsu [Kinka botanical illustrated], see pp. 11–13. Some scholars consider the three volumes of Kikuhana zufu to be part of limuro's work.





Keika hyakugiku [100 chrysanthemums by Keika]

3 vols, 1893 Keika Hasegawa PRIVATE COLLECTION

As suggested by the title, there should be a total of 100 illustrations. However, only three volumes (with 25 illustrations each) were ever published. The author was also known for his modern and colourful Meiji era textile design pattern books.



Kikka meiji sen [Catalogue of selected chrysanthemums]

1891

Imai Kanesumi

PRIVATE COLLECTION

Imai was a horticulturist. The illustrations in this volume were printed using the same techniques as that of *ukiyo-e* prints. The book contains a prefatory comment by Prince Arisugawa Taruhito (1835–1895), signalling its high status. The English title, introduction and transcribed Romaji plant names suggest a target readership overseas. This copy was in fact sent to American publisher Charles Scribner for consideration for US distribution.

Iris

The genus *Iris* comprises nearly 300 species, making it the largest genus of the family Iridaceae. Its name is taken from the Greek goddess of the rainbow. Its species and hybrids come in a wide range of colours. *Iris* ensata has a wide distribution in the marshlands of Asia with the greatest range of natural variants found in Japan. *Iris* laevigata is known in Japan as a garden plant with a long history and a popular subject in art. Matsudaira Sadatomo, a samurai who devoted his life to breeding irises, wrote the acclaimed illustrated manuscript, *Kashō baiyiōroku* (1848) [Record of cultivating irises]. His championing of the *Iris* led to others starting *Iris* gardens, some still extant today, and developing regional *Iris* strains. In the late 19th century, export catalogues listed numerous irises but they were not as popular as lilies as they were more difficult to grow, needing to be cultivated in or near ponds.





▲ Vol. 5 of Shintei sōmoku zusetsu [Illustrated encyclopaedia of plants and trees, revised]

20 vols, 1874 Linuma Yokusai PRIVATE COLLECTION

Second edition, posthumously revised and published by Tanaka Yoshio and Ono Motoyoshi. It includes plant names in Latin added by French botanist Ludovic Savatier. More information on the first edition, *Sōmoku zusetsu zenpen* can be found at page 15.

▼ Vol 1 of Kusabanae zenshū [Complete book of flower paintings]

3 vols, 1699

Itō Ihee Sannojo

COLLECTION OF SOUKAEN BUNKO

More information on Kusabanae zenshū can be found at page 21.



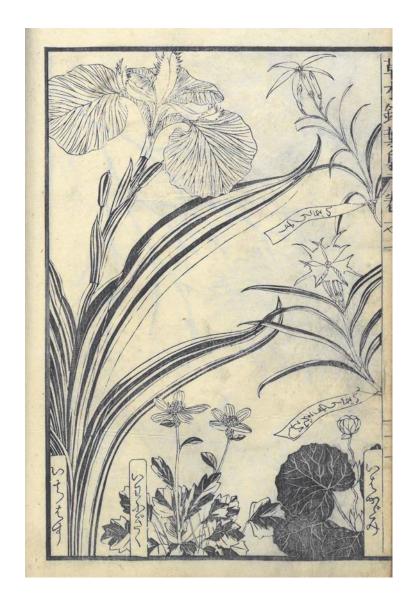
Painting of irises

1855

Matsudaira Sadatomo, also known as Sakingo COLLECTION OF SOUKAEN BUNKO

In his illustrated manuscript, Kashō baiyōroku [Record of cultivating irises] (1848),

Matsudaira Sadatomo inserted a note explaining that he had gathered seeds of wild irises at Asaka-no-numa near Fukushima and used them for breeding. His manuscript was acclaimed among contemporary books on gardening. Matsudaira devoted his life to breeding irises. He distributed new varieties to other enthusiasts, who started their own collections.



Vol. 1 of $S\bar{o}moku\ kin'y\bar{o}sh\bar{u}$ [Brocade-leaf collection of plants and trees]

7 vols, 1829 Mizuno Issai (Chūkyō) Illustrated by Ōoka Unpō and Sekine Untei PRIVATE COLLECTION

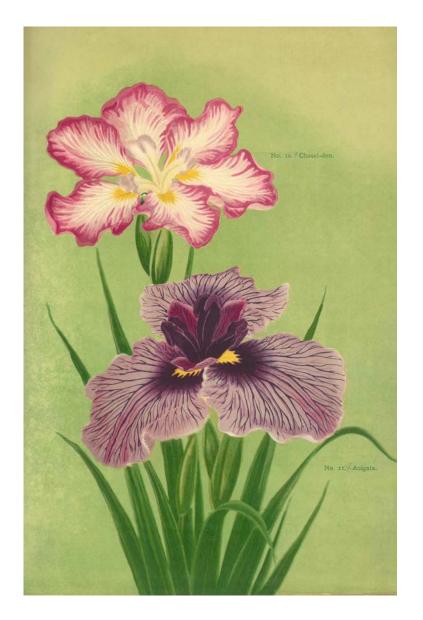
More information on Sōmoku kin'yōshū can be found at page 23.



Album of irises

late 1800s, manuscript, Artist unknown PRIVATE COLLECTION

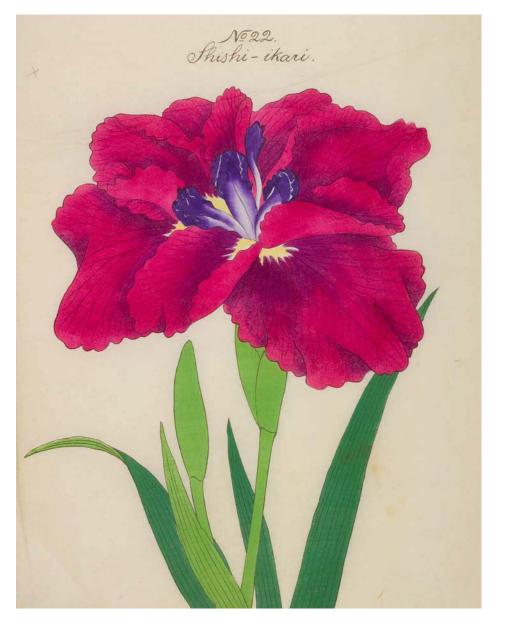
An album formerly belonging to Uchiyama Nursery, Sugamo, Tokyo.



Iris kaempferi 25 choice var.

c. 1900 Yokohama Nursery PRIVATE COLLECTION

A nursery catalogue with 25 different *Iris* varieties printed in 13 lithographs. *Iris* kaempferi is now considered a synonym of *Iris* ensata.



Export sales catalogue

1890s, partly manuscript Artist unknown PRIVATE COLLECTION

More information on this work can be found at page 60.

Lily

The genus *Lilium* in the Liliaceae family has over a hundred species distributed throughout the northern temperate zone, with the majority in East Asia. Cultivated globally for their ornamental flowers, bulbs of various species are also used in Chinese, Korean and Japanese cooking and remedies. Unlike the other flowering plants grown for competition that are showcased in this catalogue, lilies are usually not ranked among the plants found in traditional Japanese horticulture. This is perhaps due to how they are often found at the edge of fields and are therefore considered very common. Yet lilies appear in numerous nineteenth-century manuscripts, for example, *yurikagami* in Nagoya City's Hōsa Library. They also appear in what is said to be the first Japanese horticultural pictorial book, *Kusabanae zenshū* (1699). In the past lilies were not extensively hybridised, but unusual forms of wild species were prized by growers over more commonly available ones.



1866, manuscript
Takemoto Sekitei
COLLECTION OF SOUKAEN BUNKO

The keyword in the book title, tenkō, is read as tianxiang in Mandarin. It means lily. The book features plant names in Japanese, Chinese and vernacular. The copy on display belonged to Motoo Shimizu, a researcher of lilies and teacher of Ogasawara Saemonnojo Ryoken, founder of Soukaen Bunko, one of Japan's leading collections of botanical illustrated publications and manuscripts since 1970.







Vol. 5 of *Shintei sōmoku zusetsu* [Illustrated encyclopaedia of plants and trees, revised]

20 vols, 1874 Linuma Yokusai PRIVATE COLLECTION

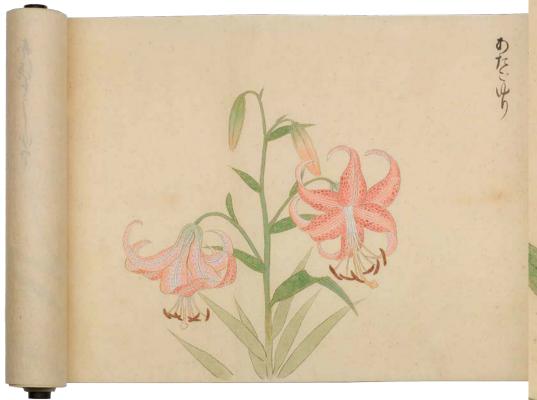
Second edition, posthumously revised and published by Tanaka Yoshio and Ono Motoyoshi. It includes plant names in Latin added by French botanist Ludovic Savatier. More information on the first edition, *Sōmoku zusetsu zenpen* can be found at page 15.



Yuri zufu [Illustrated book of lilies]

Mid-1800s, manuscript Artist unknown PRIVATE COLLECTION

This is an anonymous manuscript with 34 images of lilies with some images copied from an earlier manuscript by limuro Shozaemon. A very similar copy in the collection of the National Diet Library is dated 1845.

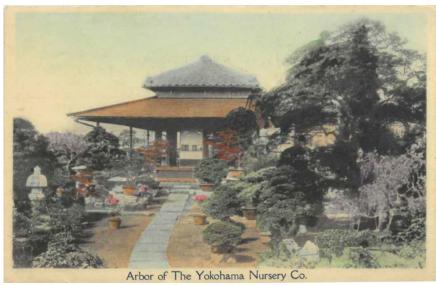


Summer flowers

Early to mid-1800s, manuscript Artist unknown PRIVATE COLLECTION

This handscroll is exceptionally long at 2,042 cm. It contains 68 pictures of summer flowers, including numerous lilies.







Advertisement card

early 1900s Yokohama Nursery PRIVATE COLLECTION

In 1891, a group of nurserymen led by Uhei Suzuki set up Yokohama Nursery. The nursery issued illustrated sale catalogues in English as well as special catalogues with hand copied drawings. The company is still in business today.



Lilies of Japan

1899 Yokohama Nursery

PRIVATE COLLECTION

After the Meiji Restoration in 1868, as large-flowered lilies became popular in Europe and the Americas, lily bulbs became the second most important Japanese export commodity after silk. Dormant bulbs can be stored for extended periods of time, making them suitable for export. This catalogue was reprinted and revised multiple times up to the 1920s.



Icones florae Japonicae [Illustrations of Japanese flora]

Vol. 1(2), 1902 Makino Tomitarō PRIVATE COLLECTION

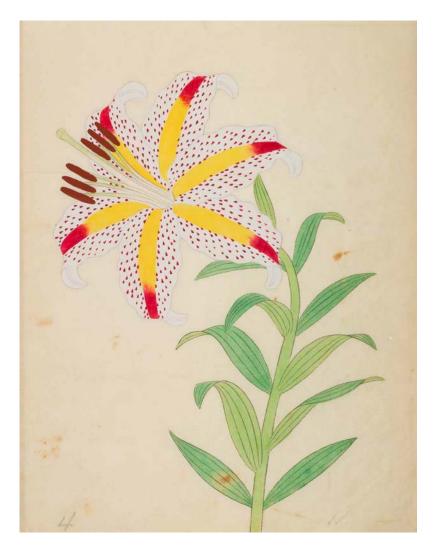
This is an illustration of *Lilium auratum* var. *platyphyllum* (*Lilium auratum* var. *hamaoanum*) based on a drawing by Makino Tomitarō (1862–1957) who has been called the 'Father of Japanese botany'. He was a prolific taxonomist and accomplished botanical illustrator.



Excerpted from *Nihon Sanbutsushi* [Government survey of the natural resources of Japan]

11 vols, 1873–1877 Itō Keisuke PRIVATE COLLECTION

An illustration of *Lilium auratum*, cultivated for its edible bulbs, is found in this first extensive survey of the natural resources of Japan after the establishment of the Meiji era in 1868.



Export sales catalogue

1892, manuscript Artist unknown PRIVATE COLLECTION

Yokohama Nursery, established in the early 1890s for Japanese plant exports, probably issued this catalogue. Illustrations of lilies, irises and maples are accompanied by a three-page handwritten price list for Gibbs, Bright and Company, a shipping freight company in Adelaide. The Yokohama offices of Jardine, Matheson & Co., were the exporting agents.





Album of lilies

Late 1800s, manuscript Artist unknown PRIVATE COLLECTION

An album formerly belonging to Uchiyama Nursery, Sugamo, Tokyo.



Pictures of the various kinds of Japanese lilies

Late 1800s, manuscript N. Uchiyama PRIVATE COLLECTION

The English title suggests that this catalogue was targeted at nurseries overseas. The manuscript, made on very large paper, was distributed by Uchiyama Nursery, a successful establishment in Sugamo, Tokyo. Uchiyama Cyotaro, the nursery owner in the mid-1800s, introduced many flowers which remain familiar to us today. Among them is 'Chotaro yuri', a compact form of Lilium longiflorum with white striped leaves.



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The following colleagues from NParks are thanked for their support of this publication: Mr Kenneth Er, Chief Executive Officer; Dr Leong Chee Chew, Executive Director, National Parks, Gardens & Nature Reserves and Commissioner of Parks & Recreation; Dr Yap Him Hoo, Deputy Chief Executive Officer and Director-General, Animal & Veterinary Service Cluster; Dr Puay Yok Tan, Group Director of the Singapore Botanic Gardens; and Dr David Middleton, Director of Research and Conservation at the Singapore Botanic Gardens and Keeper of the Singapore Herbarium (SING).

The exhibition would have not been possible without generous loans of artworks from Soukaen Bunko and the Higashiyama Botanical Gardens, and generous donations through the Garden City Fund. Okamoto Makoto, Taniguchi Shigehiro, Ishikawa Kazuyuki (Nagoya Botanical Gardens); Ogasawara Sei and Ogasawara Saemonnojo Ryoken (Soukaen Bunko) are thanked for supporting the exhibition.

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ABOUT SOUKAEN BUNKO

Soukaen Bunko is custodian of one of Japan's leading collections of botanical illustrated publications and manuscripts. This private library of Mr Ogasawara Saemonnojo Ryoken has been built up since 1970 when its owner began to collect literature and materials related to plants and horticulture in the Edo period. Born in Nagoya in 1933, Ogasawara Saemonnojo Ryoken was Chairman of the Japan Horticultural Society and director of Nagoya Engei Nursery & Florist Co. Ltd.

ABOUT THE HIGASHIYAMA BOTANICAL GARDENS LIBRARY

The library contains numerous materials that belonged to Itō Keisuke, a botanist from Nagoya and the first Japanese doctor of science. The library is collaborating with researchers at universities and museums on the transcription and publication of Itō Keisuke's diaries.

ABOUT THE GARDEN CITY FUND

The Garden City Fund is a registered charity and Institution of a Public Character (IPC) established by the National Parks Board in 2002. The Charity works with corporations, organisations and individuals to better engage members of the public through conservation efforts, research, outreach and education. In doing so, we hope to cultivate a sense of ownership and encourage the community to play its part in preserving Singapore's legacy as a lush and vibrant City in Nature.

For more information, please visit www.gardencityfund.gov.sg.





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Front cover: Kinka shokubutsu zusetsu (above, also see pp. 16 & 17)

Hyaku kikuzu maki (below, also see pp. 74 & 75)

Back cover: Ko-omoto nayose (also see pp. 50 & 51)

Inner cover and pages 104–105: views of the exhibition









