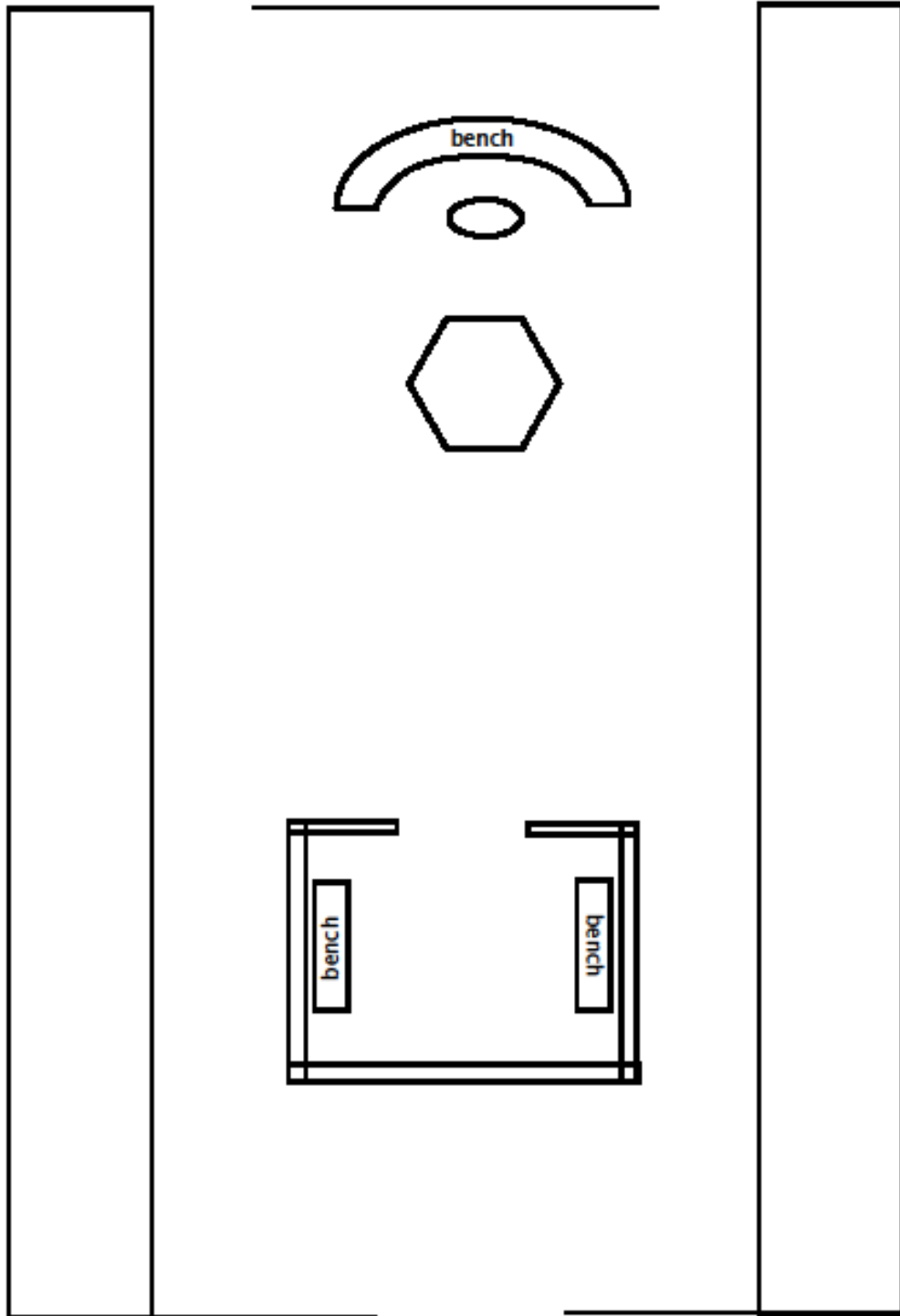


Potted Plants Gallery



Potted Plants Gallery

With its decorative containers, wooden arbor and abundance of tropical blooms, Potted Plants creates a genteel atmosphere in keeping with the early Victorian days of the building. Botany was one of the most popular sciences of the 19th Century. Europeans and North Americans were simply possessed by the hunt for unusual plants and took up the practice of identifying, cataloguing and pressing plants in droves. The century also saw an unprecedented boom in greenhouse construction to house large private and public collections of heat-loving tropical plants.

Territorial expansion was the name of the game during the Victorian era, and one of its enduring symbols is the exotic plant. Collected on daring adventures in far flung corners of the world, tropical plants were among the most prized of the countless natural wonders and seemingly endless resources that were paraded home from the unfortunate tropics during the 19th Century.



European plant collectors had been making journeys into the tropics since the 16th Century to gather seeds and spores of tropical plants, but the introduction of the Wardian Case (left photo) in 1827 changed everything. This portable forerunner of the modern terrarium enabled collectors to transport tender young plants and the more delicate species that would ordinarily die on the journey home. The Wardian Case started a revolution in the traffic of tropical plants. One can be found in the lobby.

Now an increasingly comfortable European and North American middle-class could indulge its passion for subtropical gardening, the creation of a tropical looking garden in a temperate climate. Plant crazes began. There was fern madness, rhododendron hysteria, the coleus craze and many others.

In England, the abolition of the glass tax in 1845 and the construction of the famed Crystal Palace in 1851 helped fuel the vogue for heated conservatories, and soon conservatories were being added on to elegant homes across Europe and America. Entertaining in the conservatory was the height of fashion. The exotic orchids and carnivorous plants inside served as interesting conversation pieces for dinner parties and social occasions.

The Victorians liked to rotate their plants in and out of the conservatory, continually refreshing the display inside. They were also believers in the “more is better” philosophy of décor. So, ornamental pots and fancy furnishings were essential components of the 19th Century conservatory.

Pots

The Conservatory of Flowers applies the essence of this Victorian design principle to Potted Plants which features an elegant wooden arbor, several decorative benches and an extensive and valuable collection of containers. But in a contemporary twist to an old theme, the emphasis is on the tropical countries where the plants on display grow. The majority of these beautiful urns and pots were handcrafted by talented artisans around the tropical globe.

The above was excerpted from Treasures of the Conservatory of Flowers by Nina Sazevich.

ARCHITECTURE / DESIGN / ARTWORK

- Potted Plants pays homage to the Conservatory's Victorian roots, recreating an historical development termed by garden historians "Victorian Pot Culture." In Victorian glasshouses visitors encountered a diversity of potted plants displayed on benches, arranged to allow people to stop and admire one interesting flower or plant after another.
- An ipé wood arbor with hints of Asian design influence stands in the center of this gallery. This handcrafted structure was created by Gene DeSmidt of DeSmidt Design Build. The arbor is built from *Tabebuia avellandae* (syn. *T. ipé*), an exotic South American ironwood. This certified lumber was harvested from sustainable, managed forests. Ipé is extremely decay, pest and fire resistant. The wood is so heavy a forklift was necessary to assemble the finished components of the arbor.



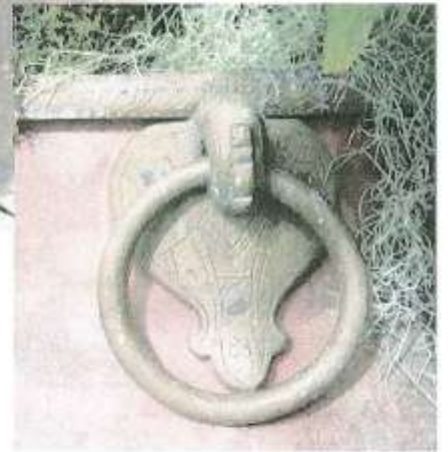
Panama-Pacific International Exposition Urn

This Travertine plaster urn was created for display in the 1915 Panama-Pacific International Exposition hosted by San Francisco. It is an example of the exuberant, Beaux Art style. The urn was rediscovered during the Conservatory's reconstruction and received a conservation treatment cleaning for the 2003 reopening.



Chiang Mai Pottery

These are contemporary reproductions of ancient Thai pottery that adorn temples. The Thai artisans meticulously craft the stoneware to express the coloration and texture of the historical pieces.



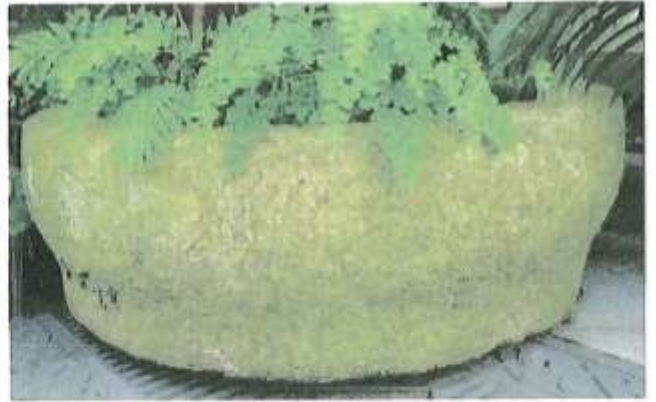
Gangalaya Pots

The Conservatory has a varied collection of antique, lustrous, brass pots from Karnataka India. The detailing includes parrot beak shaped handles, patterned indentation, with elaborate inscriptions. These vessels were used to carry holy water from the Ganges River to temples and the faithful unable to reach the river's banks.



Brazilian Water Vessels

These lightweight ceramic containers were crafted mid-20th century to serve as traditional water coolers.



Chinese Granite Vessels

These substantial, distinctive containers served generations of Chinese farmers as livestock feed bins. The surface qualities are a result of the original hand carving, centuries of use and weathering, and the nature of the stone's venation.



Javanese Palm Pots

Carved and hollowed by hand from a black coconut tree, each majestic, columnar container shows the palm's sinewy grain and has a gleaming, dark finish. They are contemporary pieces made on the island of Java.



Indian Metal Pots

Made during the 19th century in Gujarat India of brass alloy, this collection exhibits several distinct pieces. Such as, a squat cauldron with ring handles, a bell pot with a perfect encircling hammered design, and a delicately tapered urn with more than a century's pile of patina. One pair of pots is constructed of brass alloy strips soldered together and pinned to create a rustic patterned surface.



Sutured Pots

From China, these ceramic urns have been repaired over the centuries with metal sutures, metal bands, and soldering. Each generation's mending and glazing gives a layered, rich, inimitable patterning.



Champa Ceramics

From southern Vietnam this is a collection of contemporary stoneware reflecting the heritage of the long past kingdom of Champa. This group includes Lu Bau pots with a braided rim and bat motif, giant round egg urns, and Ang cone pots.

[Conservatory of Flowers](#)

Updated: 6/16



Mossi Bobo Tribe Jars

From Burkino Faso, Africa these rotund jars are mid-century ceramic. The vessels have a beautifully balanced form and elaborate incised patterning.



Guatemalan Glazed Pottery

The Conservatory's 1920's Guatemalan glazed terra cotta containers are hand made and express traditional designs by village artisans. The patterning can include raised appliqué, stencils, and glaze suffusions.



Javanese Incised Pots

These conical containers are unsealed terra cotta, featuring architecturally inspired decorative scoring. They are contemporary and hand made on the island of Java.



Gladding McBean Pottery

The Conservatory has a collection of the classic California pottery company's glazed terra cotta pottery. Each piece is made to order and expresses a clean, modern design.

Plant Families in the Potted Plants Gallery

The following pages detail some of the most popular plants found in this gallery:

1. African mask, *Alocasia amazonica*
2. Mexican yam or Tortoise plant, *Dioscorea macrostachya*
3. Madagascar palm, *Pachypodium lamerei*
4. Bat flower, *Tacca chantrieri*
5. *Begonia spp.*
6. Ficus Family, *Moraceae*
7. Sensitive plant, *Mimosa pudica*
8. *Anthurium spp.*
9. Shrimp plant, *Justicia spp.*
10. Golden shrimp plant, *Pachystachys lutea*
11. Lipstick plant, *Aeschynanthus spp.*
12. *Amorphophallus konjac*
13. Economic Plant: Vanilla

PLANT INFORMATION SHEET



Family: Araceae

Botanical Name: *Alocasia amazonica* (name confusing because it does not occur naturally in Amazon forests. It was brought into cultivation there 1950 and discrepancy about this name is interesting.)

Common Name(s): African Mask, Elephant's Ear

Country of Origin: Phillipines and Borneo

Native Habitat: Moist tropical rainforest understory

Galleries where found: Aquatics and Potted Plants

This plant is noteworthy because...

- Comes from a tuber just like its relative, the Taro.
- Horticultural value as it is a popular ornamental.
- Related to the *Amphophallus*, *Anthurium* and *Philodendron*.

An interesting adaptation of this plant is...

- Water repellent leaf to keep molds, fungus and other plants from growing on it and blocking its sunlight.
- Flowers are on a short stalk, not conspicuous, often hidden behind the leaves.

General Plant Description & Characteristics: Glossy textured, dark green to almost black Leaves, very ornate, with prominent veins of a light silver. Leaves are arrow shaped pointing downward. Has a pinkish/white flower typical of Araceae with the spadix and the cream colored spathe. Male flowers are on the top of the spike and the female flowers on the bottom are often hidden by the unfolding spathe.

PLANT INFORMATION SHEET



Family: Dioscoreaceae

Botanical Name: *Dioscorea macrostachya* (now known as *mexicana*)

Common Name(s): Tortoise plant, Mexican yam, Barbasco de placa

Country of Origin: Mexico, El Salvador, Panama

Native Habitat: Semiarid areas

Galleries where found: Potted Plants

This plant is noteworthy because...

- Our plant is about 75 years old!
- In 1940 it was discovered how to convert diosgenin

from Mexican yam into progesterone, leading to the oral contraceptive.

- The pharmaceutically untreated *Dioscorea* is used for: abdominal colic, spasmodic hiccough, painful vomiting, gastritis, irritable bowel syndrome, chronic hepatic congestion, urinary tract spasms, and rheumatism.

An interesting adaptation of this plant is...

- Dioecious (male and female flowers on different plants; we have a male)
- Drought adapted: has a “woody on the outside to retain moisture” storage unit for the base (a caudex) that sprouts a single vine. This caudex is the “yam,” an above-ground tuber.

Is this plant or its native habitat endangered or threatened? It suffers from loss of habitat.

General Plant Description & Characteristics: Looks like a sprouting tortoise shell. The vine comes out of the tortoise shell and grows on to the arbor. The caudex only sprouts roots from the sides, not underneath.

PLANT INFORMATION SHEET



Family: Apocynaceae (Dogbane family)

Botanical Name: *Pachypodium lamerei*
(in Greek = “thick foot”)

Common Name(s): Madagascar palm (it’s not a true palm)

Country of Origin: Madagascar

Native Habitat: Seasonally dry landscapes

Galleries where found: Potted Plants

This plant is noteworthy because...

- Has a tall, silver-gray trunk covered in spines that rarely branches and leaves only grow at the top of the trunk.

- Other family members include: Oleander, Plumeria, Allamanda, and Vinca.
- The flowers form only on mature plants, which could take 10 or more years.

An interesting adaptation of this plant is...

- The trunk of tree is succulent because it stores water to survive the drought season or periods of root desiccation in exposed dry and rocky conditions.
- Spinescence- adaptive feature to collect moisture from fogs and dews! The spines often point downward so the moisture falls directly to the roots. The degree of spinescence demonstrates the degree to which the plant depends upon the spines for collecting water. While cacti spines evolved from leaves, *Pachypodium* spines evolved from stipules.
- They have a superficial root system to take advantage of dripping water from spines.

Is this plant or its native habitat endangered or threatened? It is a protected species to prevent poaching and safeguard against habitat destruction.

General Plant Description & Characteristics: Distinguishing features are a thick spine-bearing trunk, with leaves only at the top. It is a succulent plant with large, fragrant white flowers.

PLANT INFORMATION SHEET



Family: Dioscoreaceae

Botanical Name:
Tacca chantrieri

Common Name(s): Bat Flower,
Devil Flower, Tiger's Whiskers

Country of Origin: tropical
regions of south-eastern
Asia including Thailand,
Malaysia & China.

Native Habitat: tropical,
understory of rainforest

Galleries where found: Potted Plants, small plant also in Highlands

This plant is noteworthy because... Bold foliage and large "bat-like" flowers up to 12 inches across. Plants are pollinated by flies.

An interesting adaptation of this plant is...

- The Flower is actually an inflorescence as there are several small black flowers subtended by 3 black bracts.
- The long whiskers give the genus an interesting look and are believed, along with the dark color and large size, to attract carrion eaters as pollinators. The whiskers are actually filiform bracteoles.

Is this plant or its native habitat endangered or threatened? They are endangered in their native habitat, but popular as a horticultural oddity with gardeners.

General Plant Description & Characteristics: Beautiful upright foliage and a large black "flower" which is actually 3 black bracts making the smaller black flowers more pronounced. Whiskers can be up to 28 inches long.

PLANT INFORMATION SHEET



Family: Begoniaceae

Botanical Name: *Begonia spp.*

Country of Origin: Native to tropical and subtropical regions world-wide. They are found most prolifically in Central and South America, Africa, and southern Asia.

Native Habitat: Shady and wet habitats such as forest understory and are often epiphytic or lithophytic in the wild.

Galleries where found: Potted Plants

This plant is noteworthy because...

- Economic importance for horticultural use in greenhouses and as house plants.
- The magnificent flowers of tuberous varieties- plain, ruffled, or toothed; come in red, orange, white, salmon, and pink blooms and make great potted plants.
- Plants are easily hybridized and cultivated in the temperate zone.

An interesting adaptation of this plant is...

- Tuberous varieties drop their leaves and enter a dormant period for the winter.
- The plant comes from a tuber- a short thickened underground stem bearing buds from which new shoots grow.

Is this plant or its native habitat endangered or threatened?

They are considered endangered in the wild.

General Plant Description & Characteristics:

Begonias are a very diverse Genera of plant with over 1,300 species of fibrous-rooted, rhizomatous, and tuberous-rooted plants. The flower is unisexual (male flowers separate from female) and the plant monoecious (male and female on one plant).

The Conservatory boasts many examples of begonias and was even historically known for its wonderful collection. For many of us, our first experience with begonias was seeing the large lush foliage and bright flowers of tuberous begonias at a nursery or garden. The three begonias above are fascinating not only because they are all true species, but they exemplify the variety of expression which begonias display.



One of the most unusual begonias in the Conservatory is *Begonia luxurians* which can be found in the decorative pot near the travertine fountain on the north side of the Potted Plants gallery. *B. luxurians* is an upright, cane-like begonia commonly called the palm leaf begonia. Its common name derives from the fan-like leaflets which emerge from its reddish petiole.



Another unusual begonia found throughout the Potted Plants Gallery, including planted in the travertine planter, is *Begonia prismatocarpa*. *B. prismatocarpa* is a miniature begonia, which has leaves which measure on average three inches long. Its tiny yellow flowers have only two petals, with male and female flowers almost identical. They grow mostly in dead wood, but are also found growing epiphytically.



Begonia brevirimosa can be found in the Lowlands Gallery, Potted Plants Gallery, and Highlands Gallery. Perhaps the best example of this plant and its foliage is in the southwest plantings in the Highlands Gallery. *B. brevirimosa* is one of the most striking fibrous begonias in cultivation today. Its large leaves have vibrant tones of pink. Its flowers, which are often overshadowed by its leaves, are sporadic, sparse, small and pink.

PLANT INFORMATION SHEET



Family: Moraceae

Botanical Name: Ficus various species including *F. aurea* (Florida strangler fig), *F. barbata* (Bearded Fig), *F. watkinsiana*, *F. obliqua*, and *F. benghalensis*, *F. deltoidea* (Mistletoe Fig, photo)

Common Name(s) Strangler Fig

Country of Origin: Fig species can be found in many tropical regions.

Native Habitat: Dark tropical forests.

Galleries where found: Sculpture in Aquatics, Potted Plants

This plant is noteworthy because...

The Strangler Fig begins life as a seed in the branches of a tree. The seedlings grow their roots downward, enveloping the host tree while the ficus grows upward toward the sun. Eventually the host tree is "strangled" to death and as it decays it provides nutrient for the strangler fig which can grow to be over 200 feet tall with a canopy up to 60 feet across, providing a home to other epiphytes and animals and providing food for birds and mammals. Documentation shows that in some cases the roots have gone so far down into the earth that they reached the water table causing water to bubble up into springs which have joined together to form rivers.

An interesting adaptation of this plant is...

It is one of the few epiphytes that kills the host - most epiphytes are only "using the real estate".

Is this plant or its native habitat endangered or threatened? If so, what work is being done to preserve it and what can a CoF visitor do to help?

PLANT INFORMATION SHEET



Family: Fabaceae
sub family, Mimosoideae

Botanical Name:
Mimosa pudica (pudica is latin for bashful)

Common Name(s):
Sensitive plant, humble plant, touch-me-not, bashful, and sleeping grass

Country of Origin:
Central and South America

Native Habitat: Open grasslands

Galleries where found: Potted Plants

This plant is noteworthy because:

- The leaves have nyctinastic movement (foliage closes during darkness and opens in light)
- The leaves have seismonastic movement (foliage closes due to touching or movement)
- Night or touching causes the release of a chemical in the stems which forces water out of cell vacuoles, producing cell collapse and leaf collapse.
- It has nodules in the roots for nitrogen fixing bacteria like all Legumes.

An interesting adaptation of this plant is...

The leaf is usually flat, but at the onset of darkness or when touched, the leaflets curl up and “hide”. This movement makes the plants less likely to be eaten by predators.

Is this plant or its native habitat endangered or threatened? Quite the opposite, this plant is an invasive species in its non-native countries. Grows in open fields and in dry thickets it may become a fire hazard.

General Plant Description & Characteristics: Pink pom-pom flowers are pollinated by wind. It has an erect stem but becomes a creeping annual, which grows close to the ground. Fruit is typical pod like other legumes.

PLANT INFORMATION SHEET



Family: Araceae

Botanical Name: *Anthurium spp.*

Common Name(s): Anthurium Lily, Flamingo flower

Country of Origin: Neotropical distribution (mostly central and south America)

Native Habitat: wet tropical mountain forests, some in semi-arid places

Galleries where found: Aquatics, Lowlands, Potted Plants

This plant is noteworthy because.... A large genus of possibly 600-1,000 species, it is possibly the largest genus of this family and probably the most

complex. Many species not yet described and many new ones found each year. Not thought to be found naturally in Asia but some species have been now introduced.

An interesting adaptation of this plant is...

- Like most aroids, the adventitious roots can hang all the way from the canopy to the forest floor to get extra nutrition and moisture.
- The leaves have a “geniculum,” which allows the plant to swivel its leaves towards the sun like a sunflower does.

Is this plant or its native habitat endangered or threatened? Potentially habitat loss and introduction of non-native species in its native habitat.

General Plant Description & Characteristics: The Flower: the spathe, which is NOT the flower but a colorful, leathery bract that surrounds the spadix. The spadix the spike, an inflorescence of many flowers with the male flowers separated from the females flowers.

PLANT INFORMATION SHEET



Family: Acanthaceae

Botanical Name: *Justicia* spp.

Common Name(s): shrimp plant, flamingo flower (pink varieties)

Country of Origin: Tropical regions of the Americas, India,

Galleries where found: Potted Plants

An interesting adaptation of this plant is... These large pink plumes of flowers helps the plant attract hummingbirds for pollination.

Is this plant or its native habitat endangered or threatened? No. Some species are naturalized in Florida. *Justicia carnea* has been a greenhouse favorite since the early nineteenth century, when they were raised in Victorian conservatories.

General Plant Description & Characteristics: Evergreen shrubs cultivated for their showy flowers that bloom from late spring to fall.



Family: Acanthaceae

Botanical Name: *Pachystachys lutea*

Common Name(s): golden shrimp plant

Country of Origin: Peru

Galleries where found: Potted Plants

An interesting adaptation of this plant is... The brightly colored bracts help the plant attract hummingbirds for pollination and also protect the flowers before they emerge.

Is this plant or its native habitat endangered or threatened? No. *P. lutea* is a popular landscape plant in tropical and subtropical areas of the world

General Plant Description & Characteristics: Evergreen shrub. The plant's long-throated, short-lived white flowers emerge sequentially from overlapping bright yellow bracts.

PLANT INFORMATION SHEET



Family: Gesneriaceae (gesneriad)

Botanical Name: *Aeschynanthus*

Common Name(s): lipstick plant

Country of Origin: Southeast Asia

Galleries where found: Potted Plants, Aquatics on the strangler fig, vestibule plant wall



An interesting adaptation of this plant is...

The long stamen protrude outside the flower to ensure the bird will make contact when drinking nectar from the flower tube.

General Plant Description &

Characteristics: Epiphytic trailing vine. The leaf shapes and colors vary widely among species. The name *Aeschynanthus* is derived from aischyno ("to be ashamed") and anthos ("flower", referring to the flowers). The genus is in the gesneriad family along with the African violet. Long stamen emerge from the tubular, curved corolla. The corolla is made up of five partially fused petals. This flower shape suggests pollination by birds.



PLANT INFORMATION SHEET



Family: Araceae

Botanical Name: *Amorphophallus konjac*

Common Name(s): voodoo lily

Country of Origin: Tropical and subtropical Eastern Asia

Galleries where found: Potted Plants, Occasionally one in bloom will pop up in the Lowland Gallery. You'll smell it before you see it!

An interesting adaptation of this plant is...

When blooming, they give off the signature stench of dead rats that plants in this family are known for. The stench, while off

putting to humans, is a seductive lure for the beetles and flies that pollinate this plant in its native habitat. While the *A. konjac* is not super-sized like its famed relative, the gigantic *Amorphophallus titanum*, it is impressive. Visitors often come in looking for the 5-foot tall "stinky flower", "titan arum" or "corpse flower". Years ago, COF borrowed a *A. titanum* from another public garden and visitors waited in line to see and smell it.



General Plant Description & Characteristics:

The massive inflorescence consists of a spathe and spadix. The male flowers are at the base of the spathe and the female flowers are above them. There are usually multiple Amorphophallus leaves in Potted Plants. Note that each leaf emerges from a tuber and each plant is only one leaf (see diagram). Sugars made in the leaf are transported back to the tuber for storage as starch. Each year, the leaf withers before a new one develops, using the tuber's energy stores. Every few years, the tuber produces a flower instead of a leaf.

A. konjac has been cultivated in Asia for thousands of years. Its starchy corms are processed into both a flour and jelly. In Japanese cuisine, a gelatinous cake called konnyaku is used in dishes such as oden and is also cut into noodle-like strips. *A. konjac* is often used as a diet food, as it has no calories and is high in fiber.

Economic Plants in the Potted Plants Gallery

Vanilla orchid, *Vanilla planifolia*, Orchidaceae

- Tropical America
- The orchid family is considered the second largest family of flowering plants (after the daisy family).
- The flowers are bee-pollinated in the Americas. However, most cultivated vanilla is grown in Madagascar, where the pollinating bees are absent. Because of this, the vanilla flowers are hand-pollinated. This process is made more labor intensive by the fact that the flowers only live for 24 hours, and so plants must be inspected every day for new blooms.
- This orchid produces pod-like fruits, inaccurately called “beans”, that are the source of vanilla extract used as a flavoring and in perfumes.
- One of the only vining orchids, vanilla plants climb on the trunks of trees or poles by means of aerial roots; they can grow to almost 90 feet.
- The Aztecs originally used vanilla as a flavoring for chocolate, and the Spanish carried it back to Europe where it was used for this same purpose.
- Vanilla extract is obtained from the unopened seed capsules; inside the pulpy pods are thousands of minute seeds. The tiny brown or black specks in vanilla ice cream can tell you that real vanilla beans were used.