



The living collection of the U.S. Botanic Garden is the

institution. Maintaining an ordered, documented, labeled collection of living plants is essential to the Garden's mission of promoting botanical knowledge.

Keeping track of so many plants is a challenge, but an extensive database is necessary for cultivation, conservation, and research. When acquired, each plant is tagged with its scientific names, common names, description, native range, original source, and physical location in the collection. The information is used for display, follow plant propagation history, and maintain documentation on rare and endangered plant populations.

## Summary of the Collection

The U.S. Botanic Garden maintains more than 12,000 accessions, which equates to about 65,000 plants. These are used for exhibition, study, and exchange. The Garden's noteworthy collections include economic plants, medicinal plants, orchids, carnivorous plants, cacti and other succulents, aroids, plants of economic importance, bromeliads, cycads, and ferns. Historic specimens include several that date from the original 1842 founding of the collection.

The Garden also serves as a rescue center for plants confiscated at U.S. borders in cooperation with the Convention on International Trade in Endangered Species and Flora (CITES).

While individual plants are the building blocks of exhibits, the plant collection as a whole reflects our institutional history and priorities, and supports programs.

Questions about our holdings or inquiries about a specific taxon should be addressed to botanist Kyle Wallick.

## Fruits and Produce from our Economic Plant Collection

Our fruits and vegetables are left growing as long as possible so visitors can see how the foods we eat grow. Some items are picked to use for educational programs, cooking demonstrations, discovery carts, and classes. Then finally, after they are used for these programs or when they are overripe and must be removed, they are turned back into soil. No plants are thrown away. As all plants here are federal property, they cannot be picked or taken by individuals.

### How to Read a Plant Label

Throughout the U.S. Botanic Garden, plants are labeled to help visitors recognize and learn about them. Most plants have at least one common name that is in English. The botanical name is in Latin and is the most prominent feature on the label. Labels are designed so that the essential information about a plant is consistently.

- The first line, at the top of the label, has the plant family name, and sometimes the plant's conservation status or ranking based upon information from the IUCN (International Union for Conservation of Nature) and NatureServe.
- The second line is the italicized botanical name. The first word is the genus and the second word is the specific epithet - together they form the species name. Occasionally there is a third word that indicates a subspecies (subsp. or ssp.) or variety (var.) of the species.
- The third line usually gives one or more common names, but may instead have a cultivar (cultivated variety) name. Cultivars are plants that were developed for one or more desirable characteristics (e.g., variegated leaves, tasty fruit, larger seed set). If the plant is a cultivar, then the common name is followed by the cultivar name.
- The last line usually indicates the native range of the species. This is generally omitted for cultivars as they do not typically appear in the wild.

### MORE INFORMATION ABOUT OUR COLLECTIONS

**1.2. Scope of Collections.** In general, collections maintained by the USBG fall within two broad categories:

- Specialized collections that are slated for continued diversification in both taxonomic diversity and conservation value, or as an educational resource.
- General collections that are managed for outstanding horticultural merit, support of exhibits, display, and/or programs, and whose continued growth depends on specimen quality, or exhibition value, but not necessarily on taxonomic expansion.

#### 1.3. Specialized Collections.

Specialized collections include taxonomically or thematically focused groups of specimens. The following list is subject to change in future years as USBG priorities or projects merit its updating.

##### 1.3.1. Orchidaceae.

The USBG maintains, as its largest taxonomic grouping, various taxa in the family Orchidaceae (Orchid Collection). Historically, the collection developed a focus on cultivated orchids, but emphasis began to shift toward species conservation in the 1990s. Acquisition of species continues for the purposes of conservation and display. Orchid cultivars of significant horticultural and aesthetic impact are maintained or acquired to support display. The collection is primarily displayed in the Orchid Houses of the Conservatory, and in the annual orchid exhibit held in partnership with Smithsonian Gardens.

The USBG collaborates with the Smithsonian Institution in support of the North American Orchid Conservation Center (NAOCC). The goal of this collaboration, along with other partnering institutions, is the conservation, preservation, and public education about the orchid species native to the United States and Canada.

##### 1.3.2. Medicinal and Economic Plants.

The USBG maintains a collection of plants with known medicinal or other economic or societally important properties. These plants are used in exhibits and to educate the public about the therapeutic and ethnobotanical importance of plants. The collection supports exhibition in the Medicinal Plants and Garden Court houses. In addition, the USBG maintains the collection for conservation purposes and to support research undertaken by partnering institutions.

This is a diverse collection with many complex considerations for determining which plants are included. Plants defined as medicinal are either those used in their original source for prescription, over-the-counter, or herbal remedies. Plants may be maintained in the collection if:

- published in authoritative sources with the bioactive compound identified;
- identified through primary or secondary literature as having ethnobotanical importance;
- or are identified by current researchers or primary literature as having potential for clinical or therapeutic effectiveness.

##### 1.3.3. Native Plants of North America.

This collection includes plants native to specified regions of the U.S., Canada, and Mexico that are planted in outdoor groupings or areas that are most often representative of a certain geographic region and/or ecosystem. Plants native to the U.S. Mid-Atlantic from New Jersey to North Carolina are featured in the Regional Garden. Plants native to the Southeast and Southwestern U.S. are displayed in Southern Exposure and in the perimeter of the National Garden. Plants native to eastern North America are featured in Bartholdi Park.

#### **1.3.4. Plants of Historical Significance or Institutional Importance.**

This collection includes presumed original plants and their descendants from the Wilkes expeditions, commemorative gifts by foreign governments, and plants of American historical significance. Maintaining these collections as a priority is essential to remaining connected to, and interpreting for the public, the USBG's history.

#### **1.3.5. Rare and Endangered Species.**

This collection includes plants recognized as threatened, rare, or endangered under the Endangered Species Act, by IUCN and/or Nature Serve, as well as plants received through participation in the CITES program as a U.S. Fish and Wildlife designated Plant Rescue Center. This collection helps conserve species by maintaining germplasm in cultivation, sharing the collections with other gardens when appropriate and legally allowed, and educating the public about the diversity, plight, and value of rare and endangered plants. This collection is currently primarily displayed in the Rare and Endangered house of the Conservatory, but has a presence throughout indoor and outdoor displays.

#### **1.3.6. Plants of the Mediterranean Climate Zones.**

This collection includes plants that are native to, or commonly cultivated in Mediterranean climate zones around the world. The collection is primarily displayed in the Mediterranean house of the Conservatory, but also has a presence elsewhere in the Conservatory and in outdoor gardens.

#### **1.3.7. Native Hawaiian Plants.**

This collection features plants that are native to the Hawaiian Islands, with a focus on endemic species. The Hawaiian flora is one of the most threatened in the world, and highlighting it offers opportunities to participate in the conservation of native U.S. plants and to educate the public about island biogeography, endemism, and plant diversity. This collection is primarily displayed in the Hawaii house of the Conservatory.

#### **1.3.8. Plants Adapted to Arid Environments (Desert Collection).**

This collection features plants that have evolved in mostly low to mid elevation, warm, arid environments. Major components of the collection include Cactaceae and Euphorbiaceae. It is primarily displayed in the World Deserts house of the Conservatory, but also has a presence in the Rare and Endangered house and in outdoor displays.

#### **1.3.9. Rosa.**

This collection is featured in the Rose Garden within the National Garden due to the rose being designated as the National Floral Emblem. Roses are evaluated by the Plant Health Care Specialist, Gardens and Grounds Supervisor, and Plant Curator for performance in the USBG's climate and response to minor pest treatment.

#### **1.3.10. Carnivorous Plants.**

This collection includes tropical and temperate carnivorous plants and is maintained due to their charismatic nature and interest to the public. It is displayed in Southern Exposure, Plant Adaptations, the Regional Garden, and Bartholdi Park.

#### **1.4. General Collections.** Including:

- **Araceae.** This diverse family collection includes some of our most charismatic collections, such as the corpse flower (*Amorphophallus titanum*) and *Monstera deliciosa*, as well as an abundance of featured plants in The Tropics.
- **Landscape Plants.** Plants appearing in permanent landscape plantings in the Conservatory, National Garden, and Bartholdi Park outdoor gardens are included in the accessioned collection due to their prominence and longevity.
- **Horticultural and Educational Stock Plants.** This collection includes plants needed to support reoccurring exhibits or educational programming, plants for display accent, and horticultural propagation stock plants.