

## Bougainvillea

Bougainvillea (/ˌbuːgənˈvɪli.ə/ BOO-gən-VIL-ee-ə, US also /ˌboʊ-/ BOH-) is a genus of thorny ornamental vines, bushes, and trees belonging to the four o' clock family, Nyctaginaceae. It is native to eastern South America, found from Brazil, west to Peru, and south to southern Argentina. Different authors accept from 4 to 22 species in the genus. The inflorescence consists of large colourful sepal-like bracts which surround three simple waxy flowers, gaining popularity for the plant as an ornamental.

## **Description**

The species grow 1 to 12 metres (3 to 39 ft) tall, scrambling over other plants with their spiky thorns. They are <u>evergreen</u> where rainfall occurs all year, or <u>deciduous</u> if there is a <u>dry season</u>. The <u>leaves</u> are alternate, simple ovate-acuminate, 4–13 cm long and 2–6 cm broad. The actual <u>flower</u> of the plant is small and generally white, but each cluster of three flowers is surrounded by three or six <u>bracts</u> with the bright colours associated with the plant, including pink, magenta, purple, red, orange, white, or yellow. <u>Bougainvillea glabra</u> is sometimes called "paper flower" because its bracts are thin and papery. The <u>fruit</u> is a narrow five-lobed achene.

## History

The first European to describe these plants was <u>Philibert</u> Commerçon, a <u>botanist</u> accompanying French Navy admiral <u>Louis Antoine de Bougainville</u> during his voyage of circumnavigation of the <u>Earth</u>, and first published by <u>Antoine Laurent de Jussieu</u> in 1789. It is possible that the first European to observe these plants was <u>Jeanne Baret</u>, Commerçon's lover and assistant, who was an expert in botany. Because she was not allowed on ship as a woman, she disguised herself as a man in order to make the journey (and thus became the first woman to circumnavigate the globe). [4]

Twenty years after Commerçon's description, it was first published as 'Buginvillæa' in <u>Genera Plantarum</u> by <u>A. L. de</u> <u>Jussieu</u> in 1789. The genus was subsequently spelled in several ways until it was finally established as "*Bougainvillea*" in the <u>Index Kewensis</u> in the 1930s. Originally, *B. spectabilis* and *B. glabra* were undifferentiated until the mid-1980s when botanists classified them as distinct species. In the early 19th

#### Bougainvillea



<u>Bougainvillea spectabilis</u> found in Damauli, Nepal



<u>Bougainvillea glabra</u> found in <u>Jakarta</u>, Indonesia

#### Scientific classification 🧳 Kingdom: Plantae Clade: **Tracheophytes** Clade: **Angiosperms** Clade: **Eudicots** Order: Caryophyllales Family: Nyctaginaceae Tribe: Bougainvilleeae Genus: Bougainvillea Comm. ex Juss.[1] **Species**

Synonyms<sup>[1][2]</sup>

See text

century, these two species were the first to be introduced into Europe, and soon nurseries in France and Britain sold these varieties in Australia and throughout their former colonies.

later studies classified it as a natural hybrid of a variety of *B. glabra* and possibly *B. peruviana* - a "local pink bougainvillea" from Peru. Natural hybrids were soon found to be common occurrences all over the world. For instance, around the 1930s, when the three species were grown together, many hybrid crosses were produced



Close-up photo of <u>Bougainvillea</u> spectabilis in Hawaii, showing thorns

ese *Tricycla* <u>Cav.</u>



Bougainvillea, <u>Behbahan</u>. Many of the small white flowers, in various stages of development, may be seen among the larger bracts.



Bougainvillea glabra in Kerala

Meanwhile. Gardens distributed plants it had propagated to British throughout colonies world. Soon thereafter, a specimen crimson in Cartagena, Colombia was added to the genus descriptions. Originally thought to be a distinct species, it was named B. buttiana in honour of the European who first encountered it. However,

# almost spontaneously in East Africa, India, the Canary Islands, Australia, North America, and the Philippines.

#### **Cultivation and uses**



A "stick" of pink bougainvillea.

Bougainvillea are popular <u>ornamental plants</u> in most areas with warm climates, such as <u>Florida</u>, <u>South Carolina</u>, <u>[6]</u> <u>South India</u>, California, and across the Mediterranean Basin.

Although it is frost-sensitive and hardy in USDA <u>Hardiness Zones</u> 9b and 10, bougainvillea can be used as a houseplant or hanging basket in cooler climates. In the landscape, it makes an excellent hot season plant, and its drought tolerance makes it ideal for warm climates year-round. Its high salt tolerance makes it a natural choice for colour in coastal regions. It can be pruned into a standard, but is also grown along fence lines, on walls, in containers and hanging baskets, and as a hedge or an accent plant. Its long arching thorny

branches bear heart-shaped leaves and masses of papery bracts in white, pink, orange, purple, and burgundy. Many cultivars, including double-flowered and variegated, are available.

Many of today's bougainvillea are the result of interbreeding among only three out of the eighteen South American species recognised by botanists. Currently, there are over 300 varieties of bougainvillea around the world. Because many of the hybrids have been crossed over several generations, it is difficult to identify their respective origins. Natural mutations seem to occur spontaneously throughout the world; wherever large numbers of plants are being produced, <u>bud-sports</u> will occur. This had led to multiple names for the same cultivar (or variety) and has added to the confusion over the names of bougainvillea cultivars.

The growth rate of bougainvillea varies from slow to rapid, depending on the variety. They tend to flower all year round in equatorial regions. Elsewhere, they are seasonal, with bloom cycles typically four to six weeks. Bougainvillea grow best in dry soil, in very bright full sun and with frequent fertilisation; but they

require little water once established, and in fact will not flourish if over-watered. They can be easily propagated via tip cuttings. [7]

*Bougainvillea* is also a very attractive genus for Bonsai enthusiasts, due to their ease of training and their radiant flowering during the spring. They can be kept as indoor <u>houseplants</u> in temperate regions and kept small by bonsai techniques.

 $\underline{B. \times buttiana}$  is a garden hybrid of  $\underline{B. \ glabra}$  and  $\underline{B. \ peruviana}$ . It has produced numerous garden-worthy cultivars.

The cultivars 'San Diego Red'[9] and 'Mary Palmer's Enchantment' [10] have gained the <u>Royal Horticultural Society</u>'s <u>Award of Garden Merit</u>. Bougainvillea are relatively pest-free plants, but they may be susceptible to worms, snails and <u>aphids</u>. The <u>larvae</u> of some <u>Lepidoptera</u> species also use them as food plants, for example the giant leopard moth (*Hypercompe scribonia*).

## Symbolism and nomenclature

Various species of *Bougainvillea* are the official flowers of <u>Guam</u> (where it is known as the *Puti Tai Nobiu*);<sup>[11]</sup> <u>Lienchiang</u> and <u>Pingtung Counties</u> in <u>Taiwan</u>; <u>Ipoh</u>, <u>Malaysia</u>;<sup>[12]</sup> the cities of <u>Tagbilaran</u>, <u>Philippines</u>; <u>Camarillo</u>, <u>California</u>; <u>Laguna Niguel</u>, <u>California</u>; <u>San Clemente</u>, <u>California</u>; the cities of <u>Shenzhen</u>, <u>Huizhou</u>, <u>Zhuhai</u>, and <u>Jiangmen</u> in <u>Guangdong Province</u>, <u>China</u>; <u>Xiamen</u>, <u>Fujian</u><sup>[13]</sup> and <u>Naha</u>, <u>Okinawa</u>. Is also the national flower in Grenada.

Native to South America, bougainvillea carry several names in the different regions where they are present. Apart from Rioplatense Spanish santa-rita, Colombian Spanish veranera, Peruvian Spanish papelillo, it may be variously named *primavera*, *três-marias*,



Its low water requirements make the bougainvillea an ideal plant for the decoration of dry places, such as the <u>Greek island</u> of <u>Santorini</u> depicted

sempre-lustrosa, santa-rita, ceboleiro, roseiro, roseta, riso, pataguinha, pau-de-roseira and flor-de-papel in Brazilian Portuguese. Nevertheless, buganvília [bugeˈviʎe] in Portuguese and buganvilia [buɣamˈbilja] in Spanish are the most common names accepted by people of the regions where these languages are spoken but it is an introduced plant.

### **Toxicity**

The sap of bougainvillea can cause serious skin rashes, similar to  $\underline{Toxicodendron}$  species. [14]

## Taxonomy and phylogeny

As of 2010, *Bougainvillea* is generally placed in the *Bougainvilleeae* subtribe (containing 3 genera) of the *Nyctaginaceae* tribe with *Pisonieae* being a sister subtribe (containing 4 genera):



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Guapira Aubl. (76)

Pisonia L. (47)

Bougainvillea Comm. ex Juss. (16 species)

Bougainvilleeae

Belemia Pires (2)

Phaeoptilum Radlk. (1)
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#### **Species**

According to the Catalogue of Life, there are 16 species of *Bougainvillea*.[15]

- Bougainvillea berberidifolia Heimerl
- Bougainvillea campanulata Heimerl
- Bougainvillea glabra Choisy<sup>[16]</sup>
- Bougainvillea herzogiana Heimerl
- Bougainvillea infesta Griseb.
- Bougainvillea lehmanniana Heimerl
- Bougainvillea malmeana Heimerl
- Bougainvillea modesta Heimerl
- Bougainvillea pachyphylla Heimerl ex Standl.
- Bougainvillea peruviana Humb. & Bonpl.
- Bougainvillea praecox Griseb.
- Bougainvillea spectabilis Willd. [16]
- Bougainvillea spinosa (Cav.) Heimerl
- Bougainvillea stipitata Griseb.
- Bougainvillea trollii Heimerl
- Bougainvillea × buttiana Holttum & Standl. (B. glabra × B. peruviana)[16]

#### See also

Wisteria

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## **External links**

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