

Production of Bougainvillea

Anita Hosalli and Seetharamu G.K.
 College of Horticulture, UHS Campus, GKVK Bengaluru

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Introduction:

Common Name: Bougainvillea, Paper Flower

Scientific Name: *Bougainvillea* spp.

Family: Nyctaginaceae



In the landscape, it makes an excellent hot season plant and its drought tolerance makes *Bougainvillea* ideal for warm climates year-round. Native to the coasts of Brazil, *Bougainvillea* has a high salt tolerance, which makes it a natural choice for south Florida and other coastal regions. As a woody clambering vine, *Bougainvillea* will stand alone and can be pruned into a standard, but it is perfect along fence lines, on walls, in containers and hanging baskets, and as a hedge or an accent plant. Its long arching branches are thorny, and 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 (Table 1).

Table 2. Commonly produced *Bougainvillea* Cultivars and their primary uses

'Raspberry Ice'	Red. Variegated foliage. Slow grower. Repeat bloomer.
'Double Pink'	Huge clusters of bright pink doubles. Repeat bloomer.
'Surprise'	Free blooming pink which may sport white flowers.
'Vicky'	Pink bracts. Leaf centers creamy yellow some white bracts may be sported.
'Golden Summer'	White. Variegated yellow-gold foliage. Repeat bloomer.
'Sweet Dream'	Leaves are completely gold, bracts are pale lavender. A thorn less variety.

Landscape use

Bougainvillea is a wonderful addition to any landscape, whether it's used as a permanent fixture, a container plant or hanging basket in a semi-tropical landscape, or an annual in cooler climates. For the best performance out of your *Bougainvillea*, follow these guidelines:

- Keep *Bougainvillea* on the dry side, especially if you want lots of blooms. Too much water will promote root rot and cause leaves to drop. Don't water on cool nights.
- Use a high-bloom fertilizer.
- Plant or place *Bougainvillea* in full sun. As a potted plant, flowers will last for up to eight weeks if kept in a sunny location.
- Winter dieback may be a problem if the weather gets too cool, so if you're growing *Bougainvillea* in a frost-prone area, plant in a protected location or cover in case of frost.



Propagation:

Propagate this plant from cuttings, but propagation can be slow and difficult due to *Bougainvillea*'s extremely fine root system. *Bougainvillea* roots best from semi-hard wood cuttings 5-9 nodes in length. Take softwood cuttings if you are propagating when night temperatures are above 55°; hardwood cuttings when night temperatures are below 55°F. Treat cuttings with between 2000 and 2500 ppm IBA. Remove leaves from all portions of the stem that will be underground. Some research suggests that thicker cuttings with higher concentrations of auxin produce better rooting; however, high levels of auxin may result in stunted branching. Bottom heat will speed rooting. Intermittent over head mist is required; cuttings must never be allowed to wilt. High relative humidity must be maintained around the plants at all times. Time to rooting is 6-12 weeks. Trans plant young plants with caution to avoid damaging the roots, and always apply a broad-spectrum fungicide when planting cuttings and again after transplanting to prevent root rot.



Production Temperatures:

Temperatures should be maintained somewhat high; a minimum of 65° F at night and 75° to 95° F during the day. Crop scheduling will be delayed at cool temperatures, especially if the soil is also cool.

Fertilization:

At planting, provide a fertilizer that is high in phosphate, and follow with a balanced liquid fertilizer at 150-300 ppm. Nitrogen and phosphate are critical to flowering, but do not over fertilize too much fertilizer will add growth, but will inhibit blooming. Magnesium and iron deficiencies are common, but apply a complete micronutrient blend or chelated spray with caution, as too much of either Mn or Fe will cause the other to be unavailable to the plant, and will result in a deficiency. Micronutrient applications can be used at ½ the recommended rate at two times to avoid toxicity.

Growing media:

Bougainvillea has an extremely fine root system and should be planted in well-drained soils. Avoid soil mixes with high peat levels and water retention. These types of media retain too much water and will contribute to root rot; be sure to select a well-draining media.

Plant Growth regulators:

The need for and effects of plant growth regulators vary greatly depending on a number of factors. It is always recommended that growers test plant growth regulators before use. Always follow label instructions. Growers have reported success with Paclobutrazol at 20-40 ppm when plants are near salable size.

Photoperiod/Flowering:

Blooms occur only on new growth, so new growth on plants is vital to the achievement of flowering. *Bougainvillea* normally flowers during the short days of winter, but blooms are highly dependent on temperature. Drought stress can also stimulate flowering even with long daylight exposure. Growers frequently allow plants to dry just to the point of wilting to induce flowering. However, excessive drying can cause leaf drop and dormancy; use care and be sure to water at first signs of wilt.

Common Problems:

- Irregular flowering is a major concern for growers, who often use drought stress to

encourage blooming. Variety choice can be extremely helpful in remedying this problem, however.

- Leaf drop can be a problem as a result of over-watering, under-watering, low light levels, or cold temperatures.
- Root rot is easily prevented by careful handling and by the application of a broad spectrum fungicide drench during transplanting or planting in the landscape.
- New growth yellowing or chlorosis is often a result of a magnesium or iron deficiency, and an application of a complete micronutrient blend or chelated spray should help, but use caution—too much of either Mn or Fe will result in a secondary deficiency, as the plant is unable to absorb one when the other is present at high levels.
- For old growth chlorosis, apply Epsom salts at 1-2 tsp/gal as a drench or foliar spray.

