

## Magnolia

Magnolias (*Magnolia* species) are an integral part of the Southern landscape. There are 80 species, some of which are native to the United States. Others are native to Mexico, Central America, the West Indies and Asia. Some are trees and others are tall shrubs. They may be deciduous, semi-evergreen or evergreen. They may bloom in early spring before leaves develop, or they may flower in summer when in full foliage. The three main species discussed here are Southern magnolia (*M. grandiflora*), star magnolia (*M. stellata*) and sweetbay magnolia (*M. virginiana*). One hybrid has been singled out for discussion because of its popularity in South Carolina - saucer magnolia (*M. x soulangiana*). Others are briefly mentioned. All magnolias discussed are adapted to all areas of South Carolina.



*Magnolia grandiflora* (Southern Magnolia) flower.  
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### General Information on Magnolias

**Mature Height/Spread:** Magnolias range from the small star magnolia to the massive southern magnolia.

**Growth Rate:** The growth rate of magnolias depends on the species.

**Ornamental Features:** Most magnolias are valued for their showy, fragrant flowers, large glossy leaves and striking fruit. The flowers may be white, pink or purple. They may be small (3-inch diameter), with thin, strap-shaped petals (star magnolia), or large (12-inch diameter), with wide petals (Southern magnolia). Magnolias may not bloom for many years after planting if grown from seed. One seedling may not bloom for 15 to 20 years, while another may bloom in three years.

Leaves range from small (2 inches long, 1 inch wide), as with star magnolia, to large (10 inches long, 4 inches wide), as with Southern magnolia. They are usually dark, lustrous green on the upper side, but may be light green, fuzzy reddish-brown or even silvery on the lower side.

The fruit size ranges from 1 to 8 inches. They are reddish and knobby and open to expose bright red-orange seeds in early fall (September through November). The fruit is attractive to wildlife. The bark of most magnolias is smooth and silvery-gray. This is especially attractive in the winter landscape.

**Landscape Use:** Magnolias may be used as specimens, screens, patio trees, hedges, border accents and even container plants. There is such a wide variety of form and size that landscape use is dependent on the species being used.

The ideal soil for most magnolias is rich, porous, acidic (pH 5.0 to 6.5) and well-drained. Most tolerate moderate drought and some tolerate wet soils. Plant in full sun or partial shade. The soil should be amended with leaf mold at planting.

**Problems:** Most magnolias are generally pest-free. They may be troubled by various types of scales, which can infest twigs and leaves. They are also

subject to leaf spots, black mildew, blights, scab and canker, caused by various fungi or bacteria. Control is not generally warranted.

Magnolias are generally soft-wooded and may be prone to breakage in ice storms. The bark is thin, and easily damaged by mowers and string trimmers. As pruning wounds may not heal well, shaping should be done early in the life of the tree to avoid big cuts. Prune after flowering.

Magnolia roots tend to girdle (circle the trunk or root ball). Cut any circling roots, especially if located at the top of the root ball or close to the trunk. The root system spreads wider than most trees. For this reason, transplanting magnolias is difficult, as so much of the root system is lost. Transplant field-grown trees in late winter or early spring. Plant container-grown trees for best results.

### **Southern Magnolia (*M. grandiflora*)**

**Mature Height/Spread:** Southern magnolia, also known as Bull Bay, is a handsome evergreen tree that will grow 60 to 80 feet tall and 30 to 50 feet wide. It is densely pyramidal, symmetrical and low-branching when young. The form is more irregular at maturity. The form of seedlings varies considerably. Some are open with a lot of space between branches, others are very dense. Some are as wide as they are tall, others are very columnar.



Southern magnolia leaves  
Karen Russ, ©HGIC, Clemson Extension

**Growth Rate:** The growth rate is variable, depending on the seedling, but generally it grows at a slow to medium rate (1 to 2 feet yearly). It responds to water and fertilization with faster growth. It is a long-lived tree.

**Ornamental Features:** This tree is valued for many features: beautiful, fragrant flowers; dark lustrous leaves; striking fruit and overall size and stature. The flower is creamy white, large (8 to 12 inch diameter), solitary and very fragrant. It blooms in May and June, and some cultivars bloom sporadically throughout the summer.

The leaves are large (5 to 10 inches long, 3 to 4 inches wide), dark green and lustrous on the upper side. The lower side may be light green, or fuzzy and rusty brown. The fuzzy, brown fruit is 3 to 8 inches long. The bright red-orange seeds are exposed September through November. The fruit fall in November and December.

**Landscape Use:** The Southern magnolia requires a lot of space, and should be reserved for large properties. It can be used as a lawn specimen, screen, or, with smaller, dense cultivars, as a hedge.

Preferred soil conditions are as previously mentioned. This tree tolerates occasional wet conditions; some cultivars tolerate moderate drought if allowed enough space for root growth. If soil is moist, or irrigation can be provided, this tree thrives in full sun. Otherwise, plant the tree in partial shade.

**Problems:** This tree is mostly problem-free. Scales may infest leaves and twigs. In humid climates, leaves may develop leaf spots. Leaves are shed as new foliage appears. Unless lower limbs are left on the tree, this leaf litter is unsightly, and often removed by homeowners. Lower limbs are often removed in order to mow beneath the tree. When planting, allow enough space so the lower limbs can drape the ground, hiding the fallen leaves, which will provide necessary nutrients as they decompose.

### **Cultivars:**

- 'Bracken's Brown Beauty' - This tree is compact and dense, possibly 30 feet tall. The leaves are small (6 inches), with dark, lustrous upper and rusty brown lower. The fragrant flowers are 5 to 6 inches in diameter.
- 'Claudia Wannamaker' - This is a vigorous grower, medium broad pyramid form, more open than 'Bracken's Brown Beauty.' Leaves are dark green and rusty brown. Blooms at an early age.

- 'Edith Bogue' - This has a tight pyramid form (30 feet tall, 15 feet wide). Leaves are narrow, dark green and tan. Blooms at an early age.
- 'Little Gem' - This is compact and upright, more like a dense shrub (20 feet tall, 10 feet wide). Leaves are small (4 inches) and lustrous, dark green and bronze. Flowers are small (3- to 4-inch diameter). Blooms at an early age and sporadically throughout the growing season.
- 'Majestic Beauty' - This is a large pyramidal tree (35 to 50 feet tall, 20 feet wide). Leaves are large; flowers profusely.
- 'Samuel Sommer' - This tree is fast growing, with an upright, ascending habit (30 to 40 feet tall, 30 feet wide). Leaves dark green and bronze. Large flowers.
- 'St. Mary' - This has a compact, somewhat flat habit. It is easily trained for espalier. Early, profuse flowers. Leaves dark green and deep bronze.

### Star Magnolia (*M. stellata*)

**Mature Height /Spread:** Star magnolia is a dense, oval-to-rounded deciduous shrub or small, multi-stemmed tree that grows 15 to 20 feet tall and 10 to 15 feet wide.

**Growth Rate:** It is a slow grower (3 to 6 feet over 5 to 6 years).



'Waterlily' star magnolia flower  
Jack Scheper ©2002 Floridata.com

**Ornamental Features:** The flowers of this tree/shrub are relatively small (3- to 4-inch diameter), pink or white, fragrant, and appear in late February and March before the leaves appear. Star magnolias can be damaged by freeze, although they are not as sensitive to cold as the saucer magnolia. (Late-blooming cultivars are available.) The leaves are dark green on top and light green underneath, and show little change in color in fall before dropping.

**Landscape Use:** This tree may be used as a lawn specimen, border accent, patio tree or container plant. Ideal soil conditions are the same as previously mentioned. This tree doesn't tolerate shade and should be protected from late winter winds that may damage open flowers. Avoid placing this tree in a southern exposure where flowers will open early.

**Problems:** As with most magnolias, this plant is mostly pest-free.

### Cultivars:

- 'Centennial' - The flower is 5 inches in diameter, petals blushed with slight pink on the outside. Vigorous and cold hardy.
- 'Rosea' - (Pink Star Magnolia) - Flower buds are pink, fading to a white flower. Good form and vigor. More than one clone has this name, so buy this plant in flower to ensure desired color.
- 'Royal Star' - Pink buds open to fragrant white flowers.
- 'Waterlily' - Very fragrant pink buds open to white flowers. This plant is late-flowering.
- 'Little Girl' hybrids (Ann, Betty, Jane, Judy, Randy, Ricki and Susan) are late-flowering.

### Saucer Magnolia (*M. x soulangiana*)

Saucer magnolia, a hybrid, is usually a large, spreading shrub or small, low-branched tree with wide spreading branches. It will grow 20 to 30 feet tall and wide. It is deciduous.

**Growth Rate:** It has a medium growth rate (about 1 foot per year).



Saucer magnolia flowers  
Karen Russ, ©HGIC, Clemson Extension

**Ornamental Features:** It is valued most for its early display of flowers. The large white flowers (5 to 10 inches) shaded with pink and purple open in March and April (possibly February along the coast) before the leaves appear. These early blooms can be damaged by early frost. Late-blooming cultivars are available, although the flowers may not be as showy. Leaves are medium green on upper and lower sides. They show little color change in fall.

**Landscape Use:** This shrub/tree is an excellent selection as a specimen, container plant and espalier. It works well in groupings.

Although it prefers full sun, it tolerates partial shade. As with star magnolia, avoid planting this tree in southern exposures, as bloom will occur earlier. Ideal soil conditions are as previously noted. This tree tolerates occasional wet soil and moderate droughts.

Prune drooping branches if located near a patio or walkway. To increase canopy density and flowering, prune aggressive branches after flowering.

**Problems:** Saucer magnolias are generally pest-free. They may be troubled by various types of scales, which can infest twigs and leaves. They are also subject to leaf spot.

#### Cultivars:

- 'Brozzonii' - A large plant (25 to 30 feet tall) with large white flowers, lavender-pink at the base. A late bloomer. May not be as fragrant.

- 'Grace McDade' - This plant has a loose, shrubby habit. Flowers are large, white inside and lavender-pink outside.
- 'Lennei' - This stiff, broad shrub has huge flowers, white inside with dark purplish-magenta outside. It flowers late, and usually sporadically into the summer. The leaves are larger than most.
- 'Rustica Rubra' - This is possibly a seedling of 'Lennei,' but is a larger and looser shrub. Flowers are rose-red with white inside.
- 'San Jose' - This is an early bloomer with large, fragrant, rosy purple flowers. A vigorous grower.
- 'Speciosa' - This late-flowering, dense tree has white blooms with flushed purple at the base.
- 'Verbanica' - This is a slow-growing late bloomer. Flowers are rose pink outside, with white at the tips. Young plant blooms profusely.

#### Sweetbay Magnolia (*M. virginiana*)

**Mature Height/ Spread:** Sweetbay magnolia is usually a single-trunk tree, sometimes a multi-stemmed round shrub. It is usually deciduous in the Piedmont and semi-evergreen or evergreen in the remainder of the state. It can grow 40 to 50 feet tall and 15 to 25 feet wide.

**Growth Rate:** This tree grows at a moderate rate (1 to 1½ feet per year).

**Ornamental Features:** The flowers are small (2- to 3-inch diameter), creamy white and lemon-scented. They bloom in May and June; some bloom through September. This tree may be slow to flower in youth. The leaves are dark green with a silver underside. They are especially attractive when the wind blows. The bark on older, larger stems is silvery-gray, and bright green on new twigs. The small fruit are green with red seeds.

**Landscape Use:** The branches of sweetbay magnolia grow upright, making this tree ideal for outdoor living areas - decks, patios and pools, as well as lawn specimens and border accents. This tree grows freely in coastal areas, and is often found along stream banks and swamps. Although it flourishes in moist soil, it will tolerate moderate drought. It requires acid soil, and full sun or partial shade.

**Problems:** This tree has few problems. Scales may infest foliage and twigs, especially in dry areas where the tree may suffer stress. As with other magnolias, mechanical damage and breakage from ice may cause problems.

## Other Species & Hybrids

### Species:

- *Magnolia acuminata* (Cucumber Tree) - This is a very large tree (50 to 70 feet tall, 40 to 60 feet wide). It has small, inconspicuous flowers, light green leaves and unusual cucumber-shaped red fruit. It is best used in natural areas. A hardy tree, it is a rapid grower.
- *Magnolia macrophylla* (Bigleaf Magnolia) - This tall tree or shrub (30 to 40 feet) has the largest leaves and blooms of any hardy native North American tree. Leaves are 1 to 3 feet long, and the fragrant flowers are 10 to 12 inches in diameter.

### Hybrid:

- *Magnolia x loebneri* (Loebner Magnolia) - This deciduous tree is 20 to 30 feet tall with a slightly greater spread. The fragrant flowers bloom in March-April. The leaves are medium green. Recommended cultivars include 'Ballerina,' 'Leonard Messel,' 'Merrill' and 'Spring Snow.'

**Note:** Chemical control of diseases and insects on large trees is usually not feasible since adequate coverage of the foliage with a pesticide cannot be achieved.

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