Magnolia, Southern 'Little Gem'

Leaf Color Green
Fall Color No change in fall color
This plant has attractive foliage.

Leaf Identification
Type: Simple
Arrangement: Alternate
Venations: Brachidodrome and pinnate
Margins: Entire
Shapes: Elliptic and ovate
Length: 4in./10cm to 8in./20cm

Fruit Color Brown and red

The fruit is dry and elongated.

Environment
This plant tolerates some drought, occasional wetness and some salt.
This plant will grow in dry to occasionally wet soil.
Suitable soil is well-drained/loamy, sandy or clay.
The pH preference is an acidic to slightly alkaline (less than 6.8 to 7.7) soil.

Landscape Uses
- Screen
- Espalier
- Street tree
- Specimen

Attributes and Features
- Pest tolerant
- Attracts birds
- Attractive fruit
- Fruit is edible by birds
- Fruit can be a litter problem
- Fruit attracts animals

Magnolia grandiflora 'Little Gem'

Southern Magnolia, Bull Bay

Magnoliaceae (Magnolia)

Type Tree, woody plant

Hardy range 6B to 10B
Height 40' to 60' / 12.20m to 18.20m
Spread 10' to 15' / 3.00m to 4.60m
Growth rate Slow
Form Upright or erect
Exposure Partial shade or partial sun to full sun
Persistence Evergreen

Bloom Color White
Bloom Time Spring through Fall

The flowers are fragrant and showy.

Native Habitat
Species is native to North America

Crown, Branch and Twig
This plant is symmetrical with a medium texture and has a moderately dense crown.
This plant's bark is not showy.
Branches or twigs have a thick and fibrous surface.

This plant is best when trained to a dominant trunk.
This plant typically grows with one trunk.
Little pruning is required.
This plant has low flammability.

Culture Notes

The original parent tree of this cultivar was 42 feet tall in 1997. This cultivar will probably remain smaller than most and will grow slower than many other magnolia cultivars. This makes it well suited for maintaining as an espalier or tall hedge. Many growers find that this cultivar requires more fertilizer than others to maintain a full canopy.

Southern Magnolia will thrive in a moist organic soil in full sun and hot conditions once established. Southern Magnolia prefers acid soil but will tolerate a slightly basic, even wet or clay soil. Select seedlings grown from trees in alkaline soil for planting in this high pH soils. The root system is wider spreading than most other trees, extending from the trunk a distance equal to about 4 times the canopy width. This makes it very difficult to save existing Magnolia trees on construction sites, and makes transplanted trees recover slowly. Growers overcome this by digging from a field nursery in mid-summer - this appears to help them recover quicker than those transplanted in the dormant season. Dormant season dug trees often loose many interior leaves and canopies look quite thin for a period of years. Field grown trees transplant best if root pruned regularly during the production period.

Tolerance to wet soils appears to be seed source dependent. Some trees die when exposed to sudden wet soil conditions following a heavy rain, others pull through with little apparent damage. I have also seen plants growing well on sandy dunes near the beach. Cultivars could be selected for tolerance to wet soil and drought.

Southern Magnolia makes a fabulous street tree except in the extreme southeastern portion of its range (south Florida). Cities such as Charlotte and San Francisco use it well in this manner. Trees tend to have a low failure rate meaning that branches break from these trees less often than from some other trees. This plant is considered mostly allergy free and causes little or no allergy problems in most people.

Maintain adequate mulch area

Clear all turf away from beneath the branches and mulch to the drip line, especially on young trees, to reduce competition with turf and weeds. This will allow roots to become well established and keep plants healthier. Prune the tree so trunks and branches will not rub each other. Remove some secondary branches on main branches with included bark. This reduces the likelihood of the main branch splitting from the tree later when it has grown to become an important part of the landscape. Locate the tree properly, taking into account the ultimate size, since the tree looks best if it is not pruned to control size. The tree can enhance any landscape with its delightful spring flush of foliage. It can be the centerpiece of your landscape if properly located.

Tree establishment specifications

Choose good quality trees for planting. The most common cause of young tree failure is planting too deep. In most instances, the point where the top-most root in the root ball originates from the trunk (referred to as the root flare zone or root collar) should be located just above the soil surface. You may have to dig into the root ball to find the root flare. If there is nursery soil over this area, scrape it off. Never place ANY soil over the root ball. The planting hole should be at least twice the width of the root ball, preferably wider because roots grow best in loose soil. In all but exceptional circumstances where the soil is very poor, extensive research clearly shows that there is no need to incorporate any amendments into the backfill soil. Simply use the loosened soil that came out of the planting hole. Simply planting with the topmost portion of the root ball slightly higher than the surrounding soil might still install the tree too deep - be sure to locate the root flare.

Weed suppression during establishment is essential. Apply a 3-inch thick layer of mulch to at least a six-foot diameter circle around the tree. This area should be at least two feet in diameter for each inch of tree trunk diameter and maintained during the establishment period. Apply a thinner layer of mulch directly over the root ball but keep it at least 10 inches from the trunk. This allows rainwater, irrigation and air to easily enter the root ball and keeps the trunk dry. Placing mulch against the trunk and applying too thick a layer above the root ball can kill the plant by oxygen starvation, death of bark, stem and root diseases, prevention of hardening off for winter, vole and other rodent damage to the trunk, keeping soil too wet, or repelling water.

Regular irrigation after planting encourages rapid root growth that is essential for tree establishment. Trees provided with regular irrigation through the first growing season after transplanting require about 3 months (hardiness zones 9-11), 6 months (hardiness zones 7-8), or one year or more (hardiness zones 2-6) per inch of trunk diameter to fully establish roots in the landscape soil. Trees in desert climates may take longer to establish. Trees that are under-irrigated during this establishment period (and most trees are) often require additional time to establish because roots grow more slowly. Be prepared to irrigate through the entire establishment period, especially during periods of drought.

Irrigation also helps maintain and encourage the desirable dominant leader in the tree canopy on large-maturing trees. Instead of a dominant leader, trees that are under-irrigated during the establishment period often develop undesirable, low, co-dominant stems and double leaders that can split from the tree later.

Unlike established plants, which do best with deep, infrequent irrigation, research clearly shows that recently transplanted trees and shrubs establish quickest with light, frequent irrigation. For trees planted in spring or summer, provide one (cooler hardiness zones) to three irrigations (warmer hardiness zones) each week during the first few months after planting. Daily irrigation in the warmest hardiness zones provides the quickest establishment. Following the initial few months of frequent irrigation, provide weekly irrigation until plants are fully established. With every irrigation, apply one (cool climates) to two (warm climates) gallons of water per inch trunk diameter (e.g. 2 to 4 gallons for a 2-inch tree) over the root ball only. In most landscapes that receive more than 30 inches of rain or irrigation annually, if the mulch area is maintained weed-free, irrigation does not need to be applied outside of the root ball. Never add water if the root ball is saturated.

In cooler hardiness zones, in all but the driest years, irrigation of spring- and summer-planted trees usually can be discontinued once fall color has begun. Irrigation of fall planted trees, however, should be continued until foliage has dropped from the deciduous trees in the region. In warmer climates, irrigate fall-and winter-planted trees as described for the spring- and summer-planted trees.

In drier, desert climates there is benefit to be gained from applying additional irrigation outside of the root ball area. This is best done by making a large diameter berm four to six inches high, then filling it with water so it percolates into the soil. For the first two years, irrigate twice each week through the spring, once per week in summer provided monsoons arrive, and twice each week again in fall if it remains warm. Taper off watering to once or twice each month in winter and resume twice weekly next spring. For years three to five, water twice per month in spring, summer, and fall and once or twice per month in winter. During years five through seven, water once every three weeks in warm weather and once every six weeks in winter. After this, the drought-tolerant desert trees should be able to survive on natural rainfall.

Trees with good, strong structure need no pruning at planting, except to remove broken twigs. Do not remove branches to compensate for root loss - research has shown that this can be detrimental to establishment.

Pests, Diseases and Damaging Agents

Pests: Scales, borers and weevils. Formosan termites can feed on live, healthy trees.

Diseases: Magnolia may be subject to leaf spots, blights, scabs and black mildews caused by a large number of fungi, or a bacterium but they rarely require chemical controls. Algae can also cause leaf spots.

Canker diseases will kill branches. Verticillium wilt may cause death of a few branches or, rarely, may kill the tree.