

Growing Magnolias in New England: Magnolia Ecology and the Garden

Stefan Cover

We begin a two-part series on growing magnolia in the northeastern part of the us (probably one of the most inhospitable areas of the us for magnolias). The first part of the article provides background on magnolia culture, most of which is germane to growing magnolias anywhere followed by specific instructions on growing magnolias in climates similar to that of the us northeast. The second part of the article describes Stefan's experience in growing specific magnolia species in the northeast. This is good stuff! —Ed.

Like many of the finest flowering woody plants native to temperate areas, magnolias are adapted for life in rich, mostly deciduous forests, with relatively mild climates and abundant rainfall. Most magnolias appear to be gap colonists. These are trees whose seedlings tolerate considerable shade when young and establish themselves in the forest understory where they grow slowly for some time. To grow to maturity, however, they need a gap to occur in the forest canopy through the death of trees by disease, old age, or storm damage. The increased light enables the magnolia seedlings to begin rapid growth and reach mature size, often entering the canopy in the process. Many species also reproduce from stump sprouts that arise when the original stem is cut or killed back. These sprouts behave much like seedlings, but grow much faster when light becomes available because of the large root system left from the original tree. A few magnolias have diverged from this basic life history. Some (for example, *M. stellata*, *M. liliiflora*) have become adapted to life in shrubby thickets along the edges of forests or wetlands, and others (for example, *M. tripetala*, *M. ashei*, *M. sieboldii*) are understory trees that almost never reach the canopy. All magnolias, however, including hybrids, retain certain traits from their ancestral life history that impact their use in gardens.

As a group, magnolias prefer sites that are like their native forest communities. They prefer rich, acid soils with lots of organic matter, good drainage, and reliable moisture. They like abundant light for good growth, but also protection from strong winds and from extreme heating and drying of the soil. In nature, this is provided by the presence of other woody plants. Magnolias are not plants of open, barren habitats, and dislike the exposure, drought, wind, poor soil structure, and low soil fertility so often characteristic of these areas. Likewise, they do not like soggy, poorly drained soils that suffer periodic inundation. Given this, it

is easy to see potential problems for growing magnolias in New England. First, the glacial pummeling the entire area received some 10,000 years ago scraped off most of our good soils and left behind dry gravelly sands, thin soils overlaying bedrock, or poorly drained wetland soils. Our building practices don't help either. Soils in residential areas tend to be profoundly disturbed. Construction removes topsoil and compacts whatever is left, reducing fertility and aeration. Plus we often surround our dwellings with lawns that are hot and dry, and periodically douse them with chemicals to get rid of dandelions, crabgrass, and grubs—creating precisely the kind of harsh habitats that magnolias resent.

The good news is that most magnolias are adaptable and will grow well if one shows modest discrimination in the selection of planting sites. Avoid sterile gravelly soils, parched sunbaked sites, or areas with poor drainage. Avoid severely compacted soils that make proper development of the roots difficult. Remember, amending poor soils can help, but it will never turn an awful site into an acceptable one. Lastly, avoid planting near trees with dense, shallow root systems (like Norway Maples); intense root competition is especially tough on young plants. Always mulch and provide good soil fertility. Remember to water plants attentively the first year or two while the root system is getting established, and during times of drought in later years. Note: in USDA Zones 4–6, the best planting time is in the spring after the soil has warmed substantially. In the northeast, never plant in the fall—no matter what you read elsewhere. One last point, unless pot bound to the point of agony, container grown plants (in say, 4–7 gallon pots) generally establish faster and perform better over time than larger, balled and burlapped specimens purchased at nurseries. This is one place where patience pays off. In addition, container plants usually develop better form, because they are less often pruned to maintain a small size at the nursery—a procedure good for the nursery but problematic for the plant's future looks. While waiting to plant container-grown plants, be sure to shield the pots from direct sun and don't let them dry out! If you don't, you risk "cooking" the root system and possibly killing the plant.

If you love flowering woody plants, growing magnolias can be deeply rewarding. When well developed, their floral displays are unparalleled among temperate plants, and they require only a decent planting site, a little care, and some patience. It is a very small price to pay to experience such beauty.

Following are brief accounts of the Magnolia species that can be grown in New England, based on our present knowledge.

Magnolia acuminata**Common name**

Cucumber Magnolia.

Other names in literature:

None.

Description

A widespread, geographically variable species. In its typical form (subsp. *acuminata*), it is a medium to large sized tree with smooth twigs, yellow-green to blue-green (occasionally mostly yellow) inconspicuous flowers, and medium-textured foliage. At the SE extreme of its range, in the Piedmont of South Carolina and Georgia, several independently varying characters coincide to produce some populations that are small to medium sized trees with densely pubescent twigs and leaves, and small, but conspicuous yellow flowers. These southeastern plants are often called the subsp. *subcordata*.

Native range/natural history

M. acuminata occurs from extreme southern Ontario (Canada) south to the Gulf Coast states, and west to isolated populations in the Ozark and Ouachita mountains in Missouri and Arkansas. Though never a common tree, it is most abundant and reaches its largest size in the southern Appalachians where it occurs in cove forests and on cool mid-elevation slopes. This species is a true gap colonist. Seedlings germinate and survive for a time in the forest understory, but need gaps created when canopy trees die or are blown down in storms to begin rapid growth and reach the forest canopy. Mature Cucumber Magnolias are impressive, sometimes magnificent, and will reach 80–100ft (24–30m) in the forest. Narrowly pyramidal and strongly upright when young, mature open-grown plants develop a broadly rounded canopy supported by massive limbs. Forest-grown plants develop a long, straight trunk that branches near the top and supports a moderate-sized crown at canopy level.

Hardiness

USDA Zones 4b–8 (5–8 for subsp. *subcordata*).

Ornamental value

Typical Cucumber Magnolia becomes a large shade tree with attractive foliage, noticeable reddish seed cones in the fall, rugged ornamental bark, and yellow-brown fall coloration. The subspecies *subcordata* is a fine small specimen tree to 30ft (9m) tall, occasionally larger. The 3–4in (7.6–10.2cm) diameter yellow flowers emerge with the new leaves in mid to late May in Zones 5–6 and sometimes seem to blend with the emerging light green leaves in bright sunshine. On overcast or rainy days, however, the yellow is positively luminescent. Note: *M. acuminata* has proven to be extremely valuable to hybridizers. It confers great hardiness and late flowering on its offspring, and it is the sole source of the yellow flower pigments for all the yellow hybrid magnolias introduced into horticulture in the last 20 years.

Culture

As for other magnolias. Growth rate can be 2–3ft (0.6–0.9m) a year when happy. The subsp. *subcordata* is somewhat slower.

Cultivars

Rarely offered for subsp. *acuminata*. 'Golden Glow' is a selection of typical *M. acuminata* with yellow flowers from the Great Smoky Mountains that is sometimes sold. The following are occasionally offered under subsp. *subcordata*. 'Miss Honeybee,' 'Mister Yellowjacket,' and 'Skylands Best' are all excellent small trees [to 30ft (9m)] that share the following traits: flowers light to medium yellow and larger than normal, leaves dark green. 'Koban Dori' and 'Brenda' are reportedly small trees with smaller, bright yellow flowers. 'Pierce's Park' is a record-holding 100ft (30m) tall yellow-flowered subsp. *subcordata* from Longwood Gardens near Philadelphia. It is hard to go wrong with any of these plants.

Problems

None.

Magnolia amoena**Common name**

Tian Mu Mulan (China).

Other names in literature

None.

Description

Described for the first time in 1934, this plant was introduced to western horticulture only in the last decade. Because of its recent introduction, plants have not had time to grow to maturity here, and some doubts exist as to whether or not our plants represent the true species. In addition, no detailed information is available from China, so the following description is tentative. *M. amoena* forms a small to medium sized tree, perhaps to 40ft (12m) tall, with gray bark and 4–6in (10.2–15.3cm) long bright green leaves. The precocious flowers are small [2–3in (5–8cm) wide], perch upright on the branches, and are white to light pink with a basal pink or red spot. Reportedly, flowering is very early—even earlier than *M. kobus* or *M. stellata*—so the flowers must have good frost resistance.

Native range/natural history

Eastern China. The Flora of China (draft) lists *M. amoena* from "Forests; 2297–3281ft (700–1000m). Zhejiang (Tianmu Shan, Longquan Xian, Suichan Xian)." Its natural history is unknown.

Hardiness

Apparently safe in USDA Zones 6–8. So far so good for plants I have in Zone 5b.

Ornamental value

Some magnolia experts are dubious, citing the small flowers. One must note, however, that the same comments were made about *M. zenii* and *M. biondii* when they were first introduced, and these are now generally conceded to be gorgeous plants. As in other small-flowered magnolias, the flower display in *M. amoena* should improve radically as the plant ages and sets more flower buds. Recently posted images on the Eisenhut website (<http://www.eisenhut.ch/home>), and on Wim Rutten's website (www.magnoliastore.com) appear to be the real *amoena*. The flowers are poised erect on the branchlets, have a pronounced basal red spot, have the outer tepals reflexed, and are very attractive indeed! Note: until the characteristics of this species are better known, the probability of buying a plant from a nursery and getting the wrong thing is high. For example, Harry Heineman's supposed *M. amoena* finally flowered and turned out to be a yellow-flowered hybrid that we suspect may be the famous 'Butterflies!' Seeds of *M. amoena* from China have been offered by the Magnolia Society Seed Counter for the past several years. This is probably the best way to acquire the plant at this point.

Culture

As for other magnolias. Will grow 2–3ft (0.6–0.9m) per year if happy.

Cultivars

None.

Problems

None so far.

Magnolia ashei**Common name**

Ashe Magnolia, Cow Cucumber.

Other names in literature

M. macrophylla var. *ashei*, or subsp. *ashei*.

Description

Commonly seen as a small tree or large shrub to 15–20ft (4.6–6.1m) tall and 10–15ft (3–4.6m) wide. The largest plant on record is a magnificent single-trunk specimen nearly 60ft (18.3m) tall at the Henry Botanic Garden in Gladwyne, Pennsylvania. *M. ashei* has bright green leaves to 20in (50.8cm) long, with whitish undersides, held in whorls. The foliage and twigs are coarse textured and tropical in appearance. The flowers are 6–10in (15–25.4cm) in diameter, white with purple spotting inside the flower at the base of the tepals (sometimes absent), wonderfully fragrant, and appear after the leaves in late May or early June in USDA Zones 5–6. The seed cones are elongate, up to 3in (8cm) long, have salmon-pink seeds, and are not particularly ornamental.

Native range/natural history

A close relative of the Bigleaf Magnolia (*M. macrophylla*), *M. ashei* is endemic to the Florida Panhandle where it occurs only on the slopes of "steepheads," protected valleys or ravines carved through deep pure sands by spring-fed creeks. These rare habitats support some of the richest forests in North America. In its native habitats, *M. ashei* is a shrub or small tree that often has a picturesque form derived from growing towards small gaps in the canopy that let light into the forest understory. It grows on sandy soils that are reliably moist, but perfectly drained. Note: *M. ashei*, along with its close relatives *M. macrophylla*, and the Mexican *M. dealbata*, represent an extremely ancient lineage within the Magnoliaceae that occurs exclusively in the New World.

Hardiness

Remarkably hardy for a plant with its southern geographic distribution, USDA Zones 5b–8.

Ornamental value

A striking large shrub or small tree for the woodland or partly sunny garden. Open-grown plants tend to be relatively compact and have dense foliage. Plants grown in light or partial shade develop a more open, graceful growth form and the foliage is less dense. The tropical foliage, coarse twigs, and picturesque form are all assets in the garden, but the flowers are extraordinary. The tree will flower when only 3–5 years old, and it flowers well even in shade. An excellent magnolia for small gardens.

Culture

This species requires moist soils, but is vulnerable to poorly drained, soggy soils, which can cause root rot. It also requires protection from strong winds that may tatter the foliage, and from excessive exposure that can burn the leaves. *M. ashei* will tolerate full sun if the moisture supply is reliable, but is happiest and looks its best in part shade or high, light shade.

Cultivars

None.

Problems

A resilient, trouble-free plant if its cultural requirements are met.

Magnolia biondii**Common names**

Chinese Willow-leaf Magnolia, 'Hope of Spring' (in China).

Other names in literature

M. aulacosperma.

Description

Ultimately, a medium to large tree with green twigs and 4–6in (10–15cm) long, narrow leaves that droop to create a unique and attractive foliage texture. Reportedly grows to 60ft (18m) tall and this is confirmed by pho-

tos of mature plants from China that show tall trees with narrow, rounded crowns. Reports from China also mention considerable variation in flower color and structure, but plants in the west typically have small, fragrant flowers 3–4in (8–10cm) in diameter, white, with a delicate basal pink stripe on the outer surfaces of the six tepals, held upright on the branchlets. A striking feature of this plant is that it flowers very early, in late March or early April in USDA Zones 5–6, well before all other magnolias, except for *M. zenii*. The flowers are frost resistant and are borne by the hundreds on mature plants.

Native range/natural history

Eastern and Central China. The Flora of China (draft) lists *M. biondii* from "Forests: 1,968–6,890ft) (600–2,100m). Gansu, Henan, Hubei, Shaanxi, and Sichuan." The ecology of this species is poorly known, but it is cultivated extensively to make Xinyi, an extract of flower buds used in traditional Chinese medicine. This is a long-lived plant: 200–400 year old specimens have been observed. Note: though known to western botanists since the early 1900's, the plant has been cultivated in the USA and Europe only since 1977, when a small batch of seeds was given to the Arnold Arboretum by Dr. Y. C. Ting, who collected them in his native Henan Province for the Magnolia Society. The first seedling to flower did so at the Arnold Arboretum in 1991 at the age of 13 years. Since that time, additional seeds have become available from China, broadening the genetic base for this species outside of China.

Hardiness

USDA Zones 5B–8. This is a tough, cold-tolerant plant.

Ornamental value

Like several other small flowered magnolias, *M. biondii* is sometimes criticized by the impatient because the flowers are small and occur sparsely on young plants. This species, however, forms an elegant specimen tree that features a narrow upright growth form, winter interest (green twigs, gray bark, flower buds) and attractive foliage. On mature plants the flowers make a beautiful display, all the more impressive considering its earliness. Some things are well worth waiting for.

Culture

As for other magnolias. Leaf out early, so avoid frost pockets if possible. When happy this plant can grow 2–3ft (0.6–0.9m) feet/year.

Cultivars

None.

Problems

None evident so far.

Magnolia cylindrica**Common name**

Huang Shan Mulan (China).

Other names in literature

None.

Description

This plant was introduced to western horticulture in 1936 when a small number of seeds were sent to Mary Gibson Henry in Philadelphia and Gus Krossa in Michigan by the Lu-Shan Botanical Garden in China. Mary Henry subsequently sent propagation material to Hilliers Nursery in Britain. The Henry and Krossa plants gave rise to upright growing trees, reaching 40–50ft (12–15m) tall. The British plants were smaller [20–35ft (6–9m) tall] and exhibited a distinctive horizontal branching pattern. All the plants have exceptionally pretty 4–6in (10–15cm) diameter white flowers with nine petal-like tepals and a basal pink spot, held upright to horizontally on the branches, that emerge before the leaves. These plants were assumed to represent the true species until the 1970's, when magnolia experts noticed that the cultivated plants do not match E. H. Wilson's (1927) original description of *M. cylindrica*. At present, the Henry, Krossa, and British forms are regarded as probable hybrids of *M. cylindrica* with *M. denudata*. The true *cylindrica* has been imported on at least two occasions and its characteristics are now known. The flowers perch upright on the branchlets, have six petal-like tepals and three tepals that look like sepals that fall off promptly when the flower opens. The seed cones are prominent, bright red, and disintegrate completely when the seeds disperse, a feature unique to this species.

Native range/natural history

China. The Flora of China (draft) lists *M. cylindrica* from "Forests; 2,297–5,249ft (700–1,600m). Anhui, Fujian, sw Hubei, Jiangxi, and Zhejiang." Its natural history is not known, but at its type locality in Anhui Province, it occurs together with *M. denudata* and flowers at the same time.

Hardiness

USDA Zones 5–8.

Ornamental value

Some magnolia experts prefer the *cylindrica* hybrids to the species. I prefer the species myself, but there isn't a bad plant in the lot. In any of its forms, *M. cylindrica* is an outstanding small to medium sized specimen tree, flowering in early May before the leaves emerge in USDA Zones 5–6. The foliage is medium-textured and attractive. The seed cones can be ornamental in the fall. Note that when purchasing a plant, it is hard to tell what one is getting. In general, if the plant is a graft, it is probably one of the hybrids. If raised from seed, it may (or may not) be the true species, as seeds have become intermittently available from China. Be sure to ask the nursery about where they obtained their stock. Of course,

when your plant flowers, all will be revealed—but whatever happens, you are unlikely to be disappointed.

Culture

As for other magnolias, no special requirements. Does well in light or partial shade.

Cultivars

The British form has been given the cultivar name 'Pegasus' and it is one of the great smaller magnolias. If you see it offered for sale—buy it! 'Bjuv' (probably a form of the species, not a hybrid) has small but gorgeous white flowers with a pronounced red-purple base and a blueish green cast to the foliage. *M. cylindrica* is also a parent to several outstanding hybrids. 'Leda' and 'Albatross' have large white flowers with great poise and substance. A personal favorite of mine is a plant called 'Anticipation.' A *cylindrica* seedling raised by Augie Kehr, it has exceptional white flowers 8in (20cm) in diameter with a basal pink spot and with great poise, sitting upright on the branches.

Problems

None reported.

Magnolia dawsoniana

Common name

None.

Other names in literature

None.

Description

A handsome single or multi-trunked tree with a broad crown to 50ft (15m) tall. The 8–10in (20–25cm) diameter precocious flowers have nine light pink to red–pink tepals that droop after opening, and are borne abundantly on mature plants. The leaves are 6–8in (15–20cm) long, a little less broad, dark green, and leathery in texture.

Native range/natural history

China. The Flora of China (draft) lists this species from "Forests; 4,593–8,202 (1,400–2,500m). Central Sichuan." Little additional information is available. The first herbarium collection was made in 1869 by Father David at Baoxing, in western Sichuan Province, China. E. H. Wilson collected seeds in 1908 at about 7,000ft (2,133m) near Tatsien-lu, also in western Sichuan. All plants in cultivation in the west apparently stem from this original introduction.

Hardiness

Apparently USDA Zones 6–8. Does well on the Pacific Coast north of San Francisco and throughout much of the UK. Included here because noble specimens exist at Planting Fields Arboretum, Long Island, New York, and in Scituate, Massachusetts (the Heineman Collection), so the plant will grow on the east coast.

Ornamental value

Mature trees are spectacular in flower, though some magnoliaphiles kvetch about the drooping flowers. The trees are distinctive and have a characteristic medium foliage texture. This species deserves wider planting in the eastern us. Seedlings are reportedly slow to flower (10–20 years); grafted plants flower much sooner.

Culture

As for other magnolias. Harry Heineman's plant of 'Strybing Pink' has grown well and flowered in a very sunny spot.

Cultivars

'Clarke' has medium-pink flowers and gets almost universal praise in the magnolia literature. 'Strybing Pink' forms a good single-trunk tree with medium to light pink flowers and dark green foliage. 'Chyverton Red' reportedly has flowers that begin nearly crimson and fade to pink, with the intensity of the color strongly influenced by the weather. 'Ruby Rose' has abundant, large rich pink flowers. Not a bad plant in the lot here.

Problems

None reported so far.

Magnolia denudata**Common names**

Lily tree, Yulan (in China).

Other names in literature

M. heptapeta, *M. conspicua*.

Description

At maturity, usually a small to medium sized tree 30–50ft (9–15m) tall with a picturesque, relatively horizontal branching pattern and abroad, rounded crown. In youth, taller than broad and strongly upright. Flowers are 5–7in (13–18cm) in diameter, white to ivory, sometimes with a pink basal stain (rarely mostly pink), graceful, and appear before the leaves by the hundreds in mature specimens in late April or early May in USDA Zones 5–6. The leaves are 5–7in (13–18cm) long, paddle shaped, and create a characteristic medium texture.

Native range/natural history

Widely distributed in eastern China where it occurs in rich mountain forests. The Flora of China (draft) lists it from "Forests; 1,640–3,281 (500–1,000m). Guizhou, Hunan, Jiangxi, and Zhejiang." Wild populations are apparently uncommon, but the tree has long been planted at Buddhist Temples, where its white flowers are esteemed as a symbol of purity. It is presently cultivated throughout China as an ornamental and as a source of flower buds, which are used in traditional Chinese medicine.

Hardiness

USDA Zones 5–8.

Ornamental value

A beautiful specimen tree with great character, its value limited only by its early flowering, which means that the display may be ruined by late frosts in some years. A favorite species of many magnolia experts.

Culture

As for other magnolias. Do not plant in a frost pocket, or with a southern exposure that will encourage early flowering.

Cultivars

Rarely offered. 'Gere' is sometimes seen for sale and reputedly has larger than average white flowers and blooms a week later than other *denudata*. 'Forrest's Pink' is an outstanding plant raised from seed collected in China by the famous plant explorer George Forrest. It forms an attractive small tree with abundant bright pink, frost-resistant flowers with white interiors. Some think it is a pink form of *denudata*; others are convinced it is a hybrid. Either way it is a great garden plant.

Magnolia denudata has been extensively used in magnolia hybridizing. The most famous of the hybrids are the Saucer Magnolias (*M.* × *soulangiana*). These are crosses with *M. liliiflora*, and dozens of cultivars have been named, many of which are available in commercial horticulture. Another major group of hybrids are crosses with *Magnolia acuminata* that have given rise to the hardy yellow magnolias. The first generation of yellow magnolia hybrids were direct crosses between *M. denudata* and *M. acuminata* or *M. acuminata subcordata*. The most famous of these is 'Elizabeth,' an attractive, medium sized tree with precocious, large, light yellow flowers that fade to cream in some years. In recent years, yellow hybrids with more complex ancestry have been introduced, but most have at least some *M. denudata* in their genes.

Problems

The flowers are vulnerable to late frosts; otherwise a hardy and trouble-free plant.

Magnolia fraseri**Common name**

Fraser Magnolia, Mountain Magnolia.

Other names in literature

M. auriculata.

Description

In nature and in cultivation, commonly a medium sized, often multi-trunked tree 40–60ft (12–18m) tall, pyramidal in youth, with a rounded crown in maturity. In the heart of its range, on the upper Blue Ridge in southwestern Virginia and western North Carolina, it can be an impressive canopy tree 80–110ft (24–33.5m) tall. The leaves can reach 18–20in (48–51cm) in length, have a unique shape, and are held horizontally in

whorls, creating a graceful foliage with an overall coarse texture. Flowers are white, 8–10 in (20–25 cm) in diameter, with a pungent, pleasant fragrance, and appear at branch tips beginning as the leaves emerge in mid-May in USDA Zones 5–6.

Native range/natural history

This magnolia is a plant of the southern Appalachian Mountains from West Virginia and eastern Kentucky to southwest Virginia, south through western North Carolina and eastern Tennessee to northern Georgia and South Carolina. It prefers cove forests, creek valleys, and moist mountain slopes up to 4,400 ft (1,341 m) in elevation. Like Cucumber Magnolia, it is a classic gap colonist. Seedlings establish themselves and grow slowly in the forest understory—but require the appearance of a gap in the forest canopy created by storm damage or tree death to grow into the canopy themselves. *M. fraseri* also frequently reproduces from stump sprouts that are produced in response to the death or cutting of the original trunk. *M. fraseri* is closely related to *M. pyramidata* of the southern Coastal Plain.

Hardiness

USDA Zones 5–7, doesn't like too much summer heat.

Ornamental value

One of the great treasures of the North American flora, but very rare in cultivation. Young trees are pyramidal. Their regular branching and leaves in whorls create a strong architectural presence in the garden. Older trees are less regular in their branching, but no less striking. The flowers are beautiful, but wild and exotic looking, especially when opening. The seed cones are attractive and pink to purplish-red in color, but are not as conspicuous as those of *M. tripetala*. Overall, this is one of the most distinctive trees native to eastern North America.

Culture

As for other magnolias. It likes rich, moist (but not soggy) soils, and some protection provided by other woody plants. Prefers partial or light shade when small, but grows well in full sun as long as the soil is good and the moisture is reliable. Grows fast when young, if happy.

Cultivars

None. Rarely offered in commercial horticulture, but a gorgeous tree nonetheless.

Problems

Very few, if cultural requirements are met. Sensitive to infertile, droughty soils, and to poor drainage.

Magnolia grandiflora**Common name**

Southern Magnolia, Bull Bay.

Other names in literature

None.

Description

One of the great broadleaf evergreen trees of the world. In nature, a large forest tree to 100ft (30m) tall with a dense, dark canopy and smooth, light brown to gray bark. As an ornamental, commonly seen as a small to medium sized tree to 60ft (18m) tall, densely clothed in attractive, shiny evergreen foliage. The flowers are large, sometimes 10–12in (25–30cm) in diameter, intensely fragrant, and appear sporadically over a long period starting in the late spring. This species exhibits enormous variation in flower size, growth form, leaf size and shape, hardness, and density of indumentum (brown fuzz) on the leaf undersides.

Native range/natural history

Occurs along the Coastal Plain from eastern North Carolina west to eastern Texas and Arkansas. *M. grandiflora* typically occurs in rich, mature, reasonably moist forests in the company of a wide range of tree species. When young, it is shade tolerant and can grow in the forest understory. It is also common in younger, more open forests and woodlands, and along forest edges as well. Southern Magnolia is not fussy about soils, but does not thrive in dry, well-drained sands.

Hardiness

USDA Zones 7–9. Some clones survive and grow in Zone 6. Despite claims to the contrary, even the hardiest cultivars are marginal in Zone 5B, a disappointment to many. While common as a weed in the south, in USDA Zone 5 this plant is something of a Holy Grail to the Zonal Denial Crowd, and the Quest for a reliably hardy Zone 5 *grandiflora* has felled many a good Horticultural Knight.

Ornamental value

One of the finest ornamental evergreen broadleaf trees in the world. Planted everywhere in the southern us and widely planted in southern Europe, China and Japan as well. In New England, this plant does best along the Massachusetts coast south of Boston, on the Cape and Islands, and south along the Rhode Island and Connecticut coasts. Even so, a specimen 30ft (9m) tall would be exceptional in this area. Even on favorable sites in New England, some leaf burn is common during bad winters, but recovery is rapid if the plant is in good health. In the mid-Atlantic States and the Gulf Coast States the tree commonly grows much larger, and leaf burn is rare. In truly favorable climates *M. grandiflora* can become very large, so care in cultivar selection and siting is advisable.

Culture

As for other magnolias. Grows very well in full sun and enjoys summer heat. In Zone 6, proper siting is critical to increasing chances of success. Above all, avoid exposure to harsh winter sun and wind. Mulch generously to limit the depth to which the soil will freeze and don't plant in a frost pocket. Additional winter protection will help establishment during the first couple of years. Under favorable conditions growth can be rapid.

Cultivars

Dozens, perhaps hundreds, but in Zone 6 only a handful have the superior cold hardiness necessary for survival. The two most commonly available are 'Edith Bogue' and 'Bracken's Brown Beauty.' Others reputed to have comparable hardiness, but seldom seen in commercial horticulture are: 'Victoria,' 'Poconos,' and '24 Below.' 'Bracken's Brown Beauty' is an excellent plant with smaller than normal shiny dark green leaves with dense red-brown indumentum, smaller flowers, dense foliage, and a pyramidal shape. It is the one to try in marginal climates if you can find it. It is generally regarded as more attractive, and somewhat harder than 'Edith Bogue.'

Problems

Relatively trouble free in the warmer parts of Zone 6 if a hardy cultivar is selected and sited properly.

