The Southern Magnolia

The southern magnolia is one of the best known trees found in Mississippi and throughout the South. No other tree in the southern forest excels the magnolia in the combined beauty of its lustrous green leaves and fragrant white flowers. Some botanists and horticulturists have acclaimed it as the most beautiful of all evergreen trees.

Public interest in the southern magnolia began to increase at the turn of the century. School-aged children of Mississippi selected the tree's magnificent blossom as their choice for the state flower around 1900. The state Legislature officially adopted the southern magnolia (Magnolia grandiflora) as the state tree in 1938. In 1952 the magnolia's flower was designated as the official flower of Mississippi. Commonly referred to as the Magnolia State, Mississippi is the only state with the southern magnolia and its blossom representing the state tree and flower.

In 1986 the American Forestry Association awarded a southern magnolia in Smith County, Mississippi, the distinctive title of National Champion. At a height of 122 feet and diameter of over six feet, this tree became the largest southern magnolia reported in the United States.

The magnolia is a native tree of the South and grows naturally from North Carolina to Florida, and west through Louisiana and Arkansas to eastern Texas. Favoring the rich moist soil found along the borders of river swamps, it attains heights generally of 60 to 90 feet and trunk diameters up to four feet. The dense crown is made up of numerous small spreading branches and branchlets, which form a cone, or pyramid-like, crown appearance. When grown unpruned, the magnolia’s graceful limbs usually sweep to the ground.

The large handsome flowers, seven to ten inches in diameter, appear at intervals during the summer. They consist of waxy-white petals surrounding a splash of bright purple in the center, and offer a pleasing aromatic fragrance.

The leaves are thick and leathery in texture, and oval to elliptical in shape. They are colored a dark lustrous green above and rusty or silvery below. The leaves are mostly from five to eight inches long and two to three inches wide, with prominent midribs. They remain on the tree for about two years.
The fruit consists of a rounded or oval head from three to four inches long that contains many seeds, each enclosed in a sheath. The sheaths open in the fall and display bright red seeds dangling on slender, elastic threads.

The bark is light brown to gray-brown in color. On small trees it is smooth, becoming scaly as the tree ages. The wood is moderately heavy and has a creamy color. It is used for ornamental purposes, occasionally as firewood, and, in limited quantities, cut for lumber.

The southern magnolia has been widely cultivated for its ornamental value. Numerous other species of genus Magnolia are prized ornamental plants, but few of them are known to the general public. Some are deciduous, but the evergreen species are naturally more popular. Two found in many gardens are the Japanese magnolia (Magnolia soulangiana) and the star magnolia (M. stellata). Among the other species are sweetbay (M. virginiana), cucumber tree (M. acuminata), and bigleaf magnolia (M. macrophylla).

The southern magnolia has the ability to adapt itself to a wide range of soil conditions. Plants found growing naturally in low areas can be grown easily on drier upland soil. Small trees (two to four feet tall) will transplant with more ease than larger ones. To transplant, dig a large ball of earth with the roots (known as a root ball), taking care to protect the roots from the drying effects of the sun and wind. Transplanting woods-grown seedlings is most successfully done in late fall and winter.

It is important to give newly planted seedlings partial shade and plenty of water during the dry and hot summer months. Watering must be continued until plants have become thoroughly established, usually in three to five years. Artificial shade for the young seedlings may be provided with something as simple as a burlap canopy supported by wood stakes.

In planting a magnolia seedling, it is important to pre-condition the planting hole for the root system. The hole should be dug several times deeper and wider than the root ball. Fill the hole to the point where the root ball will rest at the same level as it was growing before transplanting. Allowances should be made to offset any settling of the soil. Fill around the tree with mulch. Keep a one inch mulch free zone away from the stem. Mulch can be 3 to 4 inches deep, but not touching the stem of the tree.

Magnolias benefit greatly from mulching. Many established trees suffer in the summertime because uncovered soil holds a higher temperature which is harmful to the roots. In some landscape themes grass may be grown beneath the trees, but this requires pruning the lower limbs to allow sunlight to reach the ground. When grass cannot be grown, organic mulch should be substituted. Decomposed leaves of any hardwood plants, including magnolias, will serve as a good mulch.

As magnolia leaves fall, they can be raked to the ground area between the trunk and branches. This provides an ideal "natural" mulch. The failure to mulch and water has resulted in the loss of many magnolia trees planted in community improvement projects.
Magnolias seem to grow best when fertilized with organic materials such as cottonseed meal, bone meal, tankage, fish scraps and decayed cow manure. Such fertilizers should be applied during January or early February. Plants should not be fertilized in the autumn, since they are slow growing at this time of year. Excessive plant food can stimulate growth and result in winter injury. It’s also recommended to avoid fertilizing transplanted seedlings during the first year.

Southern magnolia seed can be germinated if treated properly (cuttings are difficult to root, and therefore, not recommended). Gather seed from the cone as soon as they have begun to turn red (usually in early October). Soak them in water to which one tablespoon of baking soda has been added for each gallon. This prevents fermentation while the seeds soak for two to three days. Remove and clean off the pulp. Wrap some moist material such as peat moss, or even damp paper towels, in a plastic bag with the seeds to prevent them from drying during storage. Store the seeds at a constant temperature of about 45 degrees F for at least three months. The hydrator of a kitchen refrigerator is an excellent place for seed storage.

Following storage, they can be planted in fertile soil while still moist. Protect the seeds from birds and rodents until germination is complete (about two weeks in warm temperatures).

The southern magnolia lends itself to community landscape use. It fits nicely into naturalistic plantings, used as an accent for existing native trees and shrubs. In planting, thought must be given to space that will be needed for full development of the branches into a well-balanced tree. As with any yard tree, do not plant beneath overhead power lines or close to sewer lines.

(Information, in part, courtesy of the Mississippi Cooperative Extension Service, Information Sheet #228.)