



Magnolia grandiflora 'Samuel Sommer' 'Samuel Sommer' Southern Magnolia¹

Edward F. Gilman and Dennis G. Watson²

INTRODUCTION

This medium-sized cultivar of Southern Magnolia is evergreen with its huge, beautiful, saucer-shaped, fragrant flowers clearly a foot across (Fig. 1). The species has been selected as the state tree of Mississippi. Capable of growing at a moderate rate to a height of 35 to 40 feet with a 30-foot spread, this cultivar forms an upright oval type crown which spreads with age.

GENERAL INFORMATION

Scientific name: *Magnolia grandiflora* 'Samuel Sommer'

Pronunciation: mag-NO-lee-uh gran-dih-FLOR-uh

Common name(s): 'Samuel Sommer' Southern Magnolia

Family: *Magnoliaceae*

USDA hardiness zones: 7 through 10A (Fig. 2)

Origin: native to North America

Uses: espalier; wide tree lawns (>6 feet wide); recommended for buffer strips around parking lots or for median strip plantings in the highway; screen; shade tree; specimen; residential street tree; no proven urban tolerance

Availability: grown in small quantities by a small number of nurseries

DESCRIPTION

Height: 35 to 40 feet

Spread: 20 to 30 feet

Crown uniformity: symmetrical canopy with a regular (or smooth) outline, and individuals have more

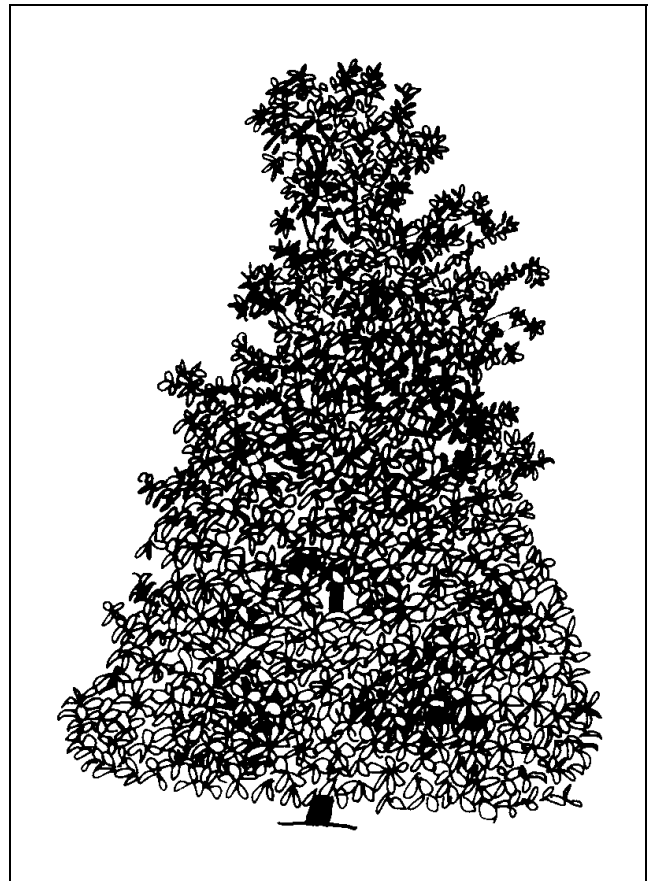


Figure 1. Middle-aged 'Samuel Sommer' Southern Magnolia.

or less identical crown forms

Crown shape: upright

Crown density: dense

Growth rate: fast

Texture: coarse

1. This document is adapted from Fact Sheet ST-377, a series of the Environmental Horticulture Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. Publication date: October 1994.
2. Edward F. Gilman, associate professor, Environmental Horticulture Department; Dennis G. Watson, associate professor, Agricultural Engineering Department, Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida, Gainesville FL 32611.



Figure 2. Shaded area represents potential planting range.

Foliage

Leaf arrangement: alternate (Fig. 3)

Leaf type: simple

Leaf margin: entire

Leaf shape: elliptic (oval); ovate

Leaf venation: banchidodrome; pinnate

Leaf type and persistence: broadleaf evergreen; evergreen

Leaf blade length: 8 to 12 inches; 4 to 8 inches

Leaf color: green

Fall color: no fall color change

Fall characteristic: not showy

Flower

Flower color: white

Flower characteristics: pleasant fragrance; spring flowering; summer flowering; very showy

Fruit

Fruit shape: elongated

Fruit length: 3 to 6 inches; 1 to 3 inches

Fruit covering: dry or hard

Fruit color: brown; red

Fruit characteristics: attracts birds; fruit, twigs, or foliage cause significant litter; showy

Trunk and Branches

Trunk/bark/branches: bark is thin and easily damaged from mechanical impact; grow mostly upright and will not droop; not particularly showy; should be grown with a single leader; no thorns

Pruning requirement: needs little pruning to develop a strong structure

Breakage: resistant

Current year twig color: green

Current year twig thickness: thick

Wood specific gravity: 0.50

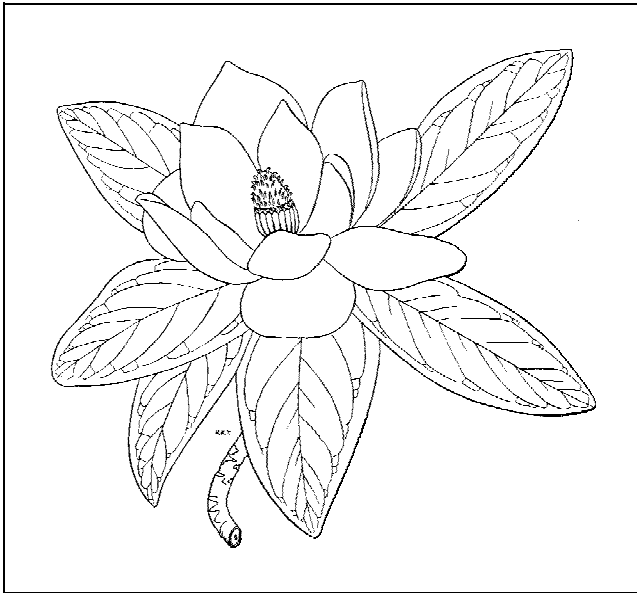


Figure 3. Foliage of 'Samuel Sommer' Southern Magnolia.

Culture

Light requirement: tree grows in part shade/part sun;
tree grows in full sun

Soil tolerances: clay; loam; sand; slightly alkaline;
acidic; extended flooding; well-drained

Drought tolerance: moderate

Aerosol salt tolerance: moderate

Other

Roots: surface roots are usually not a problem

Winter interest: no special winter interest

Outstanding tree: tree has outstanding ornamental
features and could be planted more

Invasive potential: little, if any, potential at this time

Verticillium wilt susceptibility: susceptible

Pest resistance: long-term health usually not
affected by pests

USE AND MANAGEMENT

The five to 8-inch-long, leathery, oblong, shiny leaves are shed as new leaves emerge in the spring. Some people consider this a litter nuisance when the large, slowly-decomposing leaves drop on the sidewalk, lawn, or patio. The underside of the leaves is covered with a dense, red-brown fuzz which is very prominent on this cultivar. In late spring and sporadically throughout the summer, huge, 12-inch-diameter, waxy, fragrant, white blossoms open to perfume the entire garden. Fuzzy brown cones follow these blooms, ripening in fall and winter to reveal

bright red seeds which are used by a variety of wildlife.

Long-used as a striking garden specimen, Southern Magnolia can also serve as a dense screen windbreak or street tree (with lower limbs removed). Its ease of growth and carefree nature make Southern Magnolia ideal for the low-maintenance landscape. With proper pruning, Southern Magnolia trees can also be used as an interesting espalier.

If moist, peaty soils are available, Southern Magnolia will thrive in full sun and hot conditions once established. If irrigation cannot be provided periodically, plants located in partial shade for several years after planting seem to grow better. Very drought tolerant when grown in areas with plenty of soil for root expansion. Only moderately drought tolerant in restricted-soil areas or in areas with poor, dry soil. Southern Magnolia prefers acid soil but will tolerate a slightly basic, even wet or clay soil. It is generally too hot and dry in central and western Texas and Oklahoma, and the soil pH is often too alkaline for this tree.

The root system is wider spreading than most other trees, extending from the trunk a distance equal to about four times the canopy width. This makes it very difficult to save existing Magnolia trees on construction sites.

Be sure that there are no roots circling close to the trunk, as Magnolia is prone to girdling roots. Cut any circling roots prior to planting. Field-grown trees recover slowly from transplanting due to the wide-spreading root system in the nursery, and trees often transplant best in winter and spring, not in the fall.

The species germinated from seed is quite variable in growth rate and form with some trees dense and compact, others loose and open. A number of other cultivars are available: 'Bracken's Brown Beauty' has an unusually dark brown lower leaf surface; 'Cairo' has an early and long flowering period; 'Charles Dickens' has broad, nearly blunt leaves, large flowers and large red fruit; 'Edith Bogue' is the hardiest of the cultivars and will bloom when only two to three-years-old; 'Glen St. Mary' has a compact form, will bloom when young, is slow-growing, and the leaves have a bronze underside; 'Gloriosa' has large flowers and leaves; 'Goliath' has flowers up to 12 inches across, a long blooming period, and a bushy habit of growth; 'Hasse' can be used for a compact, dense hedge; 'Lanceolata' has a narrow pyramidal form, narrower

leaves with rusty undersides; 'Little Gem' has a dwarf upright form, probably to 30 feet tall, small leaves and flowers, is very slow-growing, flowers heavily at an early age and for a long time during the summer (5-months), and has bronze leaf-undersides. It will bloom when only three to four feet tall and is excellent as a pruned evergreen hedge, for use as a small street tree or for use as an espalier. 'Majestic Beauty' (patented) has large, dark green leaves, a pyramidal shape, and profuse flowering; 'Praecox Fastigiata' has upright, narrow growth habit; 'Victoria' is very hardy, has small flowers, and rust-red leaf-undersides. There are others, often difficult to see real differences among a number of cultivars.

Propagation is by cuttings (for the cultivars), grafting, or seed.

Pests

Scales of various types will infest twigs and leaves. Magnolia scale is the most common scale and can be one half-inch-across. Overwintering scales can be controlled with horticultural oil. Trees appear to grow fine even with heavy infestations, although they can be unsightly.

Tulip-poplar weevil (sassafras weevil) feeds as a leaf miner when young and chews holes in the leaves as an adult.

Magnolia borer is a problem on young nursery stock. It girdles the trunk usually just below the soil surface. Control is difficult but attainable with the proper material.

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. Raking up and disposing infected leaves may reduce leaf spots next year. Algae can also cause leaf spots.

Canker diseases will kill branches. Cankers on branches can be pruned out. Keep trees healthy with regular fertilization and by watering in dry weather.

Verticillium wilt may cause death of a few branches or, rarely, may kill the tree. Prune out dead branches and fertilize.