



Swietenia mahagoni Mahogany¹

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INTRODUCTION

This large, semievergreen tree forms a loose, rounded canopy and casts light, dappled shade, suitable for maintaining a lawn beneath (Fig. 1). It is one of south Florida's popular landscape and street trees. Mahogany can reach 75 feet in height with a 50-foot-spread but is more often seen at 40 to 50 feet tall and wide. The dense, strong wood of Mahogany is quite resistant to wind-damage on properly trained trees, making this tree all the more ideal for use as a shade tree or street tree. Trees planted along streets or in medians will form a beautiful canopy overhead. The five-inch-long, brown, woody fruit capsules hang from slender, fuzzy stalks in winter and split while still on the tree when ripe to release winged seeds.

GENERAL INFORMATION

Scientific name: *Swietenia mahagoni*

Pronunciation: swee-TEEN-ee-uh mah-HAH-go-nye

Common name(s): Mahogany, West Indies

Mahogany

Family: *Meliaceae*

USDA hardiness zones: 10B through 11 (Fig. 2)

Origin: native to North America

Uses: large parking lot islands (> 200 square feet in size); wide tree lawns (>6 feet wide); medium-sized parking lot islands (100-200 square feet in size); medium-sized tree lawns (4-6 feet wide); recommended for buffer strips around parking lots or for median strip plantings in the highway; reclamation plant; screen; shade tree; residential street tree; tree has been successfully grown in urban areas where air pollution, poor drainage, compacted soil, and/or

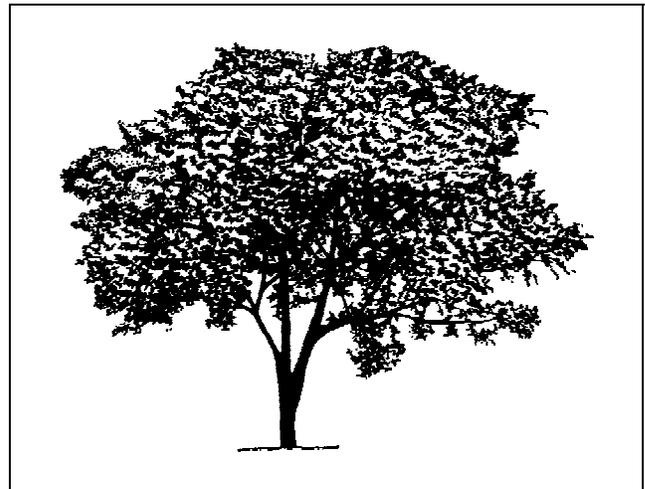


Figure 1. Mature Mahogany.

drought are common

Availability: generally available in many areas within its hardiness range

DESCRIPTION

Height: 40 to 50 feet

Spread: 40 to 60 feet

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

Crown shape: round

Crown density: moderate

Growth rate: fast

Texture: medium

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Figure 2. Shaded area represents potential planting range.

Foliage

Leaf arrangement: alternate (Fig. 3)

Leaf type: even pinnately compound

Leaflet margin: entire

Leaflet shape: lanceolate; ovate

Leaflet venation: banchidodrome; pinnate

Leaf type and persistence: evergreen; semievergreen

Leaflet blade length: 2 to 4 inches

Leaf color: green

Fall color: no fall color change

Fall characteristic: not showy

Flower

Flower color: green

Flower characteristics: inconspicuous and not showy; spring flowering

Fruit

Fruit shape: oval

Fruit length: 3 to 6 inches

Fruit covering: dry or hard

Fruit color: blue; brown

Fruit characteristics: does not attract wildlife; fruit, twigs, or foliage cause significant litter; persistent on the tree; showy

Trunk and Branches

Trunk/bark/branches: droop as the tree grows, and will require pruning for vehicular or pedestrian clearance beneath the canopy; not particularly showy; should be grown with a single leader; no thorns

Pruning requirement: requires pruning to develop strong structure

Breakage: resistant

Current year twig color: brown; green

Current year twig thickness: medium

Culture

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

Soil tolerances: clay; loam; sand; acidic; occasionally wet; alkaline; well-drained

Drought tolerance: high

Aerosol salt tolerance: high

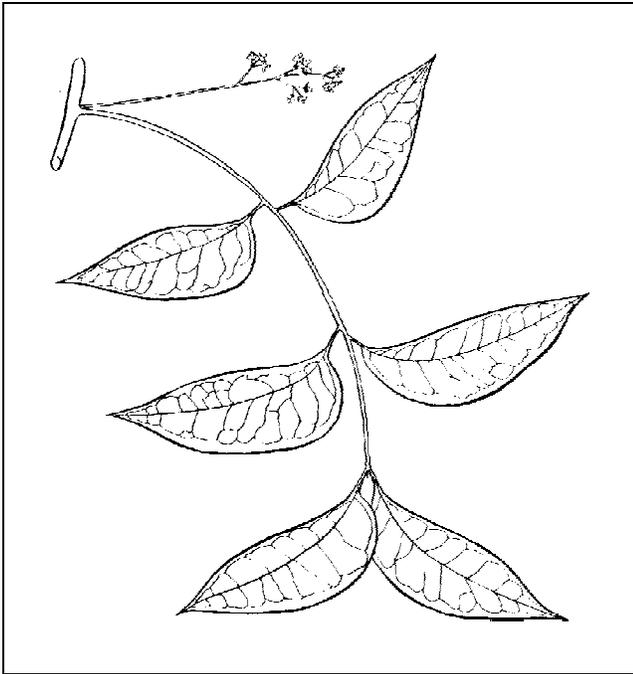


Figure 3. Foliage of Mahogany.

Other

Roots: surface roots can lift sidewalks or interfere with mowing

Winter interest: no special winter interest

Outstanding tree: not particularly outstanding

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

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

USE AND MANAGEMENT

A native of south Florida, Mahogany will grow in full sun or partial shade on a wide range of soil types, and is quite resistant to salt spray. Plants will respond with rapid growth to rich, well-drained soil and regular fertilizing. Roots can raise sidewalks and curbs when planted only five or six feet away. Root deflectors and barriers which direct roots to a deeper soil layer are recommended for this and other large-growing trees with surface root problems. Be sure that trees are planted and maintained with a central leader to develop a strong trunk and branch structure. Trees often develop several upright multiple leaders which significantly reduces the wind and storm tolerance of any tree, including Mahogany. Prune and train the tree while it is young to develop several major limbs spaced several feet apart along a central trunk. Do not allow branches to grow larger than about two-thirds the diameter of the trunk. This will increase the life span of Mahogany.

This and several other species of Mahogany are used in the lumber industry for fine cabinets and furniture due to the color, straight grain and durability of the wood. *Swietenia macrophylla* is a taller tree with a dominant, straight trunk which could be grown in Florida and used along the streets. There were several trees three feet in diameter at the U.S.D.A. research station south of Miami prior to hurricane Andrew.

Propagation is by seed.

Pests

Some insects can cause significant problems such as the tent caterpillars, tip moth, webworm, scale, leaf notcher, and leaf miner. Borers infest stressed trees.

Diseases

No diseases are of major concern.

Nectria infections on branches are often predisposed by some other stress or any injury to the tree. These infections can be seen in the branch crotches.