Liquidambar styraciflua 'Rotundiloba' 'Rotundiloba' Sweetgum[1]

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INTRODUCTION

'Rotundiloba' or Roundleaf Sweetgum grows to a height of about 75 feet and may spread to 50 feet (Fig. 1). The beautifully glossy, star-shaped leaves have rounded tips and turn deep purple in the fall (USDA hardiness zones 6 and 7) and early winter (USDA hardiness zones 8 and 9). Branches are covered with characteristic corky projections.

GENERAL INFORMATION

Scientific name: *Liquidambar styraciflua* 'Rotundiloba'
Pronunciation: lick-wid-AM-bar sty-rass-ih-FLOO-uh
Common name(s): 'Rotundiloba' Sweetgum
Family: *Hamamelidaceae*
USDA hardiness zones: 5B through 10A (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); recommended for buffer strips around parking lots or for median strip plantings in the highway; shade tree; specimen; sidewalk cutout (tree pit); residential street tree; no proven urban tolerance
Availability: somewhat available, may have to go out of the region to find the tree
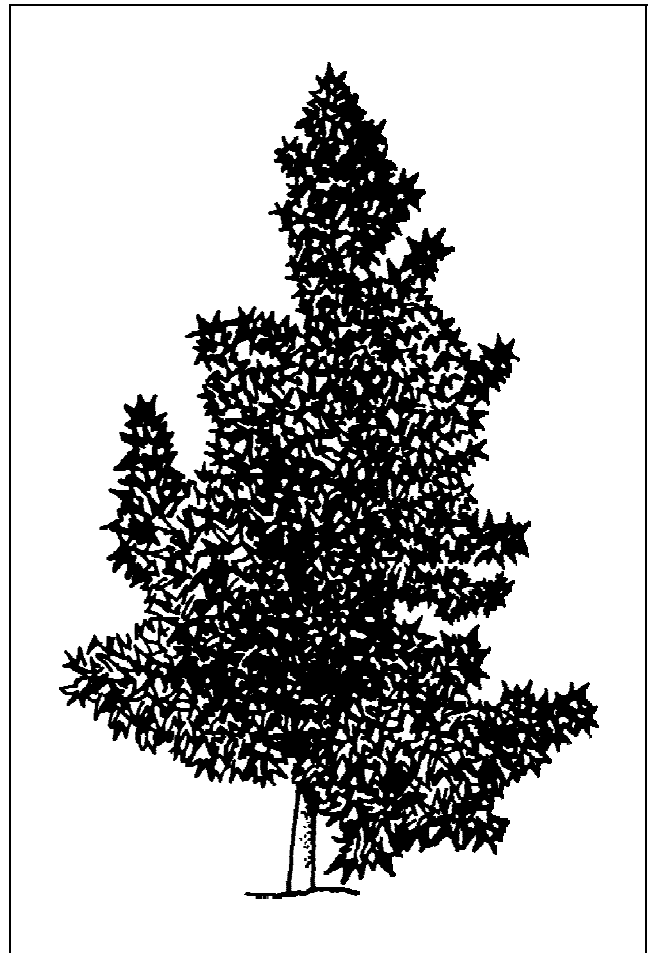

Figure 1. Middle-aged 'Rotundiloba' Sweetgum.

DESCRIPTION

Height: 50 to 70 feet
Spread: 35 to 45 feet

Figure 2. Shaded area represents potential planting range.

Crown uniformity: symmetrical canopy with a regular (or smooth) outline, and individuals have more or less identical crown forms
Crown shape: oval; pyramidal
Crown density: moderate
Growth rate: medium
Texture: coarse

Foliage

Leaf arrangement: alternate (Fig. 3)
Leaf type: simple
Leaf margin: lobed; entire
Leaf shape: star-shaped
Leaf venation: palmate
Leaf type and persistence: deciduous
Leaf blade length: 4 to 8 inches
Leaf color: green
Fall color: orange; purple; red; yellow
Fall characteristic: showy

Flower

Flower color: green; yellow
Flower characteristics: inconspicuous and not showy; spring flowering

Fruit

There is no fruit on this tree.

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: needs little pruning to develop a strong structure
Breakage: resistant
Current year twig color: brown; reddish
Current year twig thickness: medium
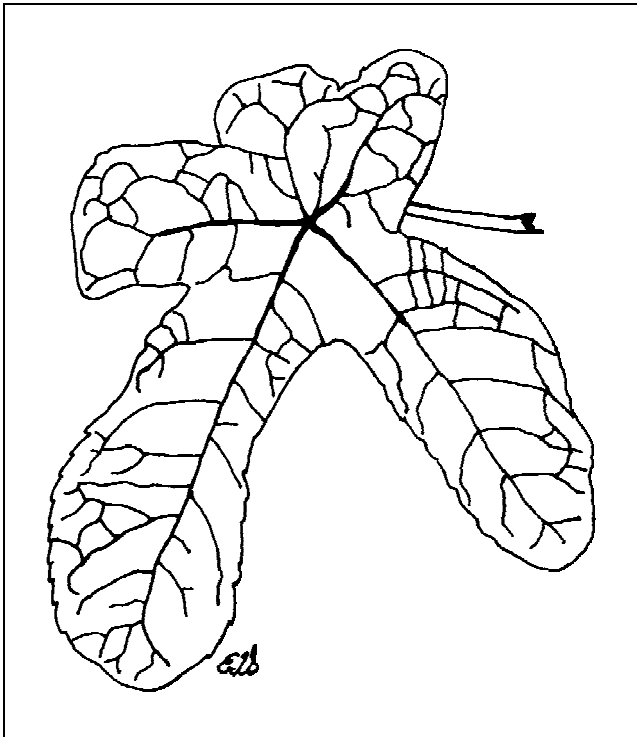**Wood specific gravity:** 0.52

Figure 3. Foliage of 'Rotundiloba' Sweetgum.

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 can lift sidewalks or interfere with mowing
Winter interest: tree has winter interest due to unusual form, nice persistent fruits, showy winter trunk, or winter flowers
Outstanding tree: tree has outstanding ornamental features and could be planted more
Invasive potential: little, if any, potential at this time
Verticillium wilt susceptibility: not known to be susceptible
Pest resistance: long-term health usually not affected by pests

USE AND MANAGEMENT

Sweetgum makes a nice park, campus or residential shade tree for large properties. Could be a superior tree to the species, especially for street tree use or near other paved surfaces, since 'Rotundiloba' is apparently fruitless. Be careful when locating Sweetgum as a street tree since its large, aggressive roots may lift curbs and sidewalks. Plant trees 8 to 10 feet or more from curbs, sidewalks and driveways.

Sweetgum is rarely attacked by pests, and tolerates wet soils. It is difficult to transplant in the fall and from well-drained field soil since roots can be coarse and deep. Consider planting from containers or transplanted when young. It is native to bottomlands and moist soils and tolerates only moderate drought. It is recommended only for acid soils since chlorosis develops on soils with a pH over 7.5. It grows very well in clay soils which hold moisture. *Liquidambar* spp. grows very well for several years after transplanting in parts of Texas and in other areas with a high pH subsoil but chlorosis often develops as some roots establish themselves in the alkaline soil.

Other cultivars have been selected for their fall color or growth habit, but they all set fruit: 'Burgundy' - burgundy red fall color, holds leaves late into fall; 'Festival' - narrow upright growth habit, peach-colored fall foliage; 'Palo Alto' - pyramidal, symmetrical growth, bright orange fall color.

Pests

Bagworm makes sacks by webbing together pieces of leaves. The insects live in the sacks while they feed. Small numbers of insects may be picked off by hand.

Fall webworm webs over portions of large branches or may completely cover small branches. The insects feed on leaves inside the nest. If practical, nests can be pruned out while small and when the insects are inside. A few nests in large trees are not serious.

Leaf miner causes brown blotches on leaves. If injury is caused by leaf miner the browned upper and lower leaf surfaces will be completely separate when the leaf is torn in two.

Cottony-cushion scale, Sweetgum scale, and walnut scale can infest the branches.

Tent caterpillars make nests to live in but leave the nests to feed. Prune out nests at the tips of small branches. Do not burn the nest while it is still in the tree since this will damage the tree and could start an uncontrolled fire.

Diseases

Sweetgum may be attacked by canker diseases. These diseases cause sunken areas on the trunk and some cause profuse "bleeding". Infected bark and sapwood will be brown and dead. There is no chemical control for canker diseases. Severely infected trees will die. Prune cankers out of lightly infected trees. Maintain tree health by watering and fertilizing.

Leaf spots of various types may attack Sweetgum but are not serious. Rake up infected leaves.