Liquidambar styraciflua ‘Rotundiloba’: ‘Rotundiloba’ Sweetgum

Edward F. Gilman and Dennis G. Watson

Introduction

‘Rotundiloba’ or Roundleaf Sweetgum grows to a height of about 75 feet and may spread to 50 feet. 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.

Figure 1. Middle-aged Liquidambar styraciflua ‘Rotundiloba’
‘Rotundiloba’ Sweetgum
Credits: Ed Gilman

General Information

Scientific name: Liquidambar styraciflua
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
Invasive potential: little invasive potential
Uses: specimen; street without sidewalk; shade; sidewalk cutout (tree pit); tree lawn > 6 ft wide; highway median; parking lot island 100-200 sq ft; parking lot island > 200 sq ft
Availability: somewhat available, may have to go out of the region to find the tree

Figure 2. Range


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Description
Height: 50 to 70 feet
Spread: 35 to 45 feet
Crown uniformity: symmetrical
Crown shape: pyramidal, oval
Crown density: moderate
Growth rate: moderate
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: red, yellow, orange, purple
Fall characteristic: showy

Flower
Flower color: yellow, green
Flower characteristics: not showy

Fruit
Fruit shape: no fruit
Fruit length: no fruit
Fruit covering: no fruit
Fruit color: no fruit
Fruit characteristics: no fruit

Trunk and Branches
Trunk/bark/branches: branches droop; not showy; typically one trunk; thorns
Pruning requirement: little required
Breakage: resistant
Current year twig color: reddish, brown
Current year twig thickness: medium
Wood specific gravity: 0.52

Culture
Light requirement: full sun, partial sun or partial shade
Soil tolerances: sand; loam; clay; acidic; slightly alkaline; well-drained; extended flooding
Drought tolerance: moderate
Aerosol salt tolerance: moderate

Other
Roots: can form large surface roots
Winter interest: yes
Outstanding tree: yes
Ozone sensitivity: unknown
Verticillium wilt susceptibility: resistant
Pest resistance: resistant to pests/diseases

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.