Liquidambar styraciflua 'Festival'
'Festival' Sweetgum[1]

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INTRODUCTION

This cultivar of Sweetgum grows in a narrow pyramid to a height of probably 60 feet but supposedly spreads only to about 20 feet (Fig. 1). The beautifully glossy, star-shaped leaves turn bright red, purple, yellow or orange in the fall (USDA hardiness zones 6 and 7) and early winter (USDA hardiness zones 8 and 9). On some trees, particularly in the northern part of its range, branches are covered with characteristic corky projections. The trunk is normally straight and does not divide into double or multiple leaders and side branches are small in diameter on young trees, creating a pyramidal form. The bark becomes deeply ridged at about 25-years-old. 'Festival' Sweetgum makes a nice conical park, campus or residential shade tree for large properties when it is young, developing a more upright oval canopy as it grows older.

GENERAL INFORMATION

Scientific name: Liquidambar styraciflua 'Festival'
Pronunciation: lick-wid-AM-bar sty-rass-ih-FLOO-uh
Common name(s): 'Festival' Sweetgum
Family: Hamamelidaceae
USDA hardiness zones: 7 through 9 (Fig. 2)
Origin: native to North America
Uses: large parking lot islands (> 200 square feet in size); wide tree lawns (>6 feet wide); recommended for buffer strips around parking lots or for median strip plantings in the highway; reclamation plant; shade tree; specimen; residential street tree; no proven urban tolerance
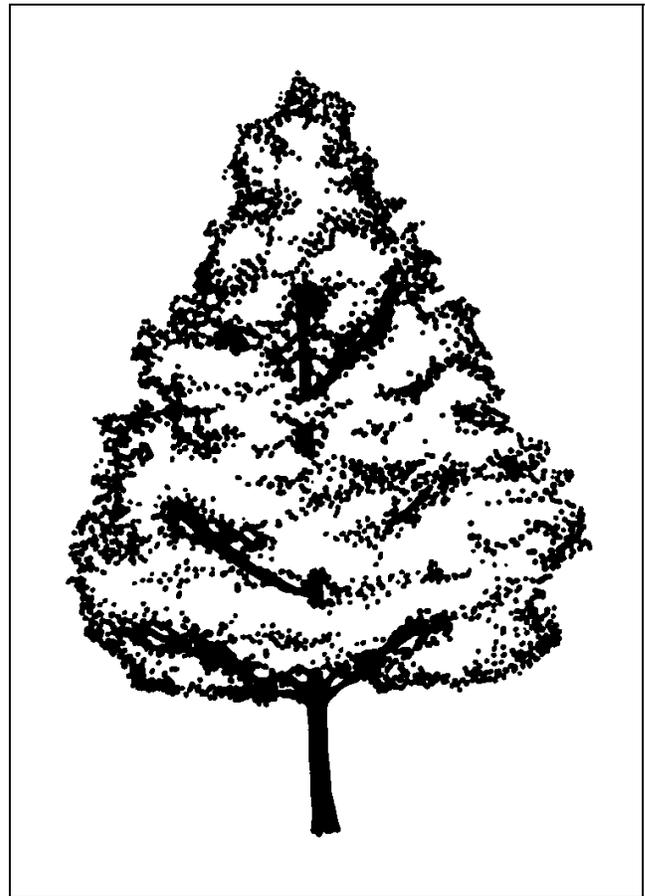

Figure 1. Young 'Festival' Sweetgum.

Availability: somewhat available, may have to go out of the region to find the tree

Figure 2. Shaded area represents potential planting range.

DESCRIPTION

Height: 40 to 60 feet
Spread: 18 to 25 feet
Crown uniformity: symmetrical canopy with a regular (or smooth) outline, and individuals have more or less identical crown forms
Crown shape: columnar; pyramidal
Crown density: dense
Growth rate: medium
Texture: coarse

Foliage

Leaf arrangement: alternate (Fig. 3)
Leaf type: simple
Leaf margin: serrate
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; red; yellow
Fall characteristic: showy

Flower

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

Fruit

Fruit shape: round
Fruit length: 1 to 3 inches
Fruit covering: dry or hard
Fruit color: brown
Fruit characteristics: attracts birds; attracts squirrels and other mammals; fruit, twigs, or foliage cause significant litter; persistent on the tree; showy

Trunk and Branches

Trunk/bark/branches: 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: brown; reddish
Current year twig thickness: medium
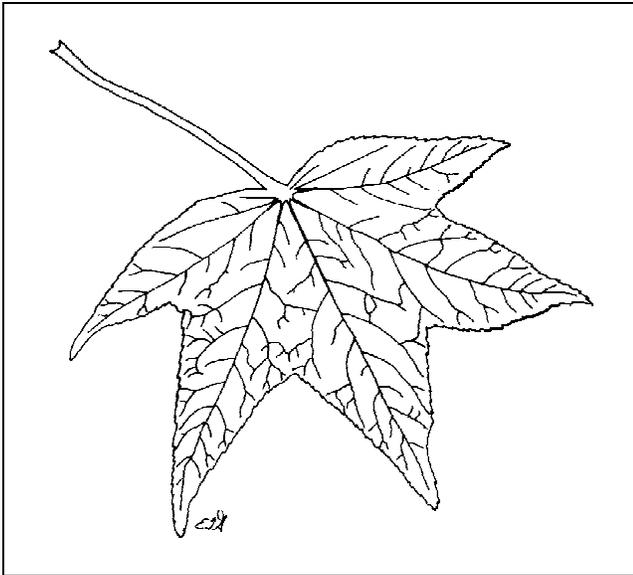**Wood specific gravity:** 0.52

Figure 3. Foliage of 'Festival' 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: not particularly outstanding
Invasive potential: seeds itself into the landscape
Verticillium wilt susceptibility: not known to be susceptible
Pest resistance: long-term health usually not affected by pests

USE AND MANAGEMENT

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. Some communities have large numbers of Sweetgum planted as street trees. Much of the root system is shallow (particularly in its native, moist habitat), but there are deep vertical roots directly beneath the trunk in well-drained and in some other soils. The fruit may be a litter nuisance to some in the fall, but this is usually only noticeable on hard surfaces, such as roads, patios, and sidewalks, where people could slip and fall on the fruit. The cultivar 'Rotundiloba' is fruitless. The tree should be planted only in soil with a pH of 7 or less. The seeds provide food for wildlife and will often readily germinate in shrub and groundcover beds, requiring their removal to maintain a neat landscape appearance.

Although it grows at a moderate pace, Sweetgum is rarely attacked by pests, and tolerates wet soils, but chlorosis is often seen in alkaline soils. Trees grow well in deep soil, poorly in shallow, droughty soil. It is difficult to transplant and should be planted from containers or transplanted in the spring when young since it develops deep roots on well-drained soil. It is native to bottomlands and moist soils and tolerates only some (if any) drought. Existing trees often die-back near the top of the crown, apparently due to extreme sensitivity to construction injury to the root system, or drought injury. The tree leafs out early in the spring and is sometimes damage by frost.

Cultivars have been selected for their fall color, leaf shape or growth habit: 'Burgundy' - beautiful, glossy green leaves, burgundy red fall color, holds leaves late into fall, narrow pyramid, less cold hardy, more adapted to the southern part of its range; 'Festival' - narrow upright growth habit, peach-colored fall foliage, less cold hardy, more adapted to the southern part of the range; 'Moraine' is reputed to be the most cold hardy; 'Palo Alto' - pyramidal, symmetrical growth, bright orange fall color; 'Rotundiloba' - round leaf tips, no fruit production, narrow pyramidal form. *Liquidambar formosana* has a broader spreading crown.

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. Use horticultural oil for some control.

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 because you will injure the tree.

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, causing premature defoliation, but are not serious. Rake up and destroy infected leaves to help control if there are no adjacent Sweetgum to add inoculum.