Liquidambar styraciflua (Sweetgum) Witch Hazel Family (Hamamelidaceae)

Introduction:

Sweetgum is an excellent urban tree provided it has a large area for root development. It has an attractive, uniform habit, dense, glossy green summer foliage and unique fall color, with several rich colors developing on a single tree. Spiky seed balls develop in autumn and persist through winter, swinging from branches on their long stems. Sweetgum has attractive bark appearing as corky scales in youth and becoming deeply furrowed with age.

Culture:

Sweetgum prefers deep, rich, moist, slightly acidic soil and full sun. It should be transplanted balled-and-burlapped in spring. Sweetgum may become chlorotic in high pH soil. Clay soil promotes surface roots. This tree is relatively pest-free but may be bothered by webworms. Bacterial scorch is a fatal and potentially serious disease of trees suffering from physiological stresses. Sweetgum's spiky seed balls can be quite messy in a managed (manicured) landscape.

Selected cultivars:

There are many cultivars of sweetgum, but only a few are commercially important. Winter hardiness can be a problem with some cultivars.

'Brotzman #1' - Selected for its corky bark and winter hardiness.

 $Burgundy^{TM}$ - Good red to purple fall color, but may not be as winter hardy as the species.

'Gold Star' - Variegated form of sweetgum with splotches of yellow over green.

'Gumball' - A multistemmed, slow-growing selection with an oval shape. Shrub-like habit.

'Oconee' - Is similar to 'Gumball,' but it has a more rounded habit and better fall color.

'Rotundiloba' - Leaves of this fruitless cultivar are lobed rather than pointed. This is the most commercially important selection of sweetgum.



Botanical Characteristics:

Native habitat: Southern and eastern U.S. and parts of the central U.S.

Growth habit: Pyramidal when young. At maturity, the crown is oval to rounded.

Tree size: Grows fast in moist soil, slower in dry soil. Can reach a height of 60 to 75 feet with a spread of at least two-thirds the height at maturity; can reach 120 feet tall in the wild.

Flower and fruit: While its flowers are insignificant, the fruit of sweetgum is a defining feature - clusters of long-stemmed, spiked balls persist through winter.

Leaf: Starfish-shaped, glossy leaves, bright green with a sweet smell. On a single tree, leaves may be yellow, red and purple in fall.

Hardiness: Winter hardy to USDA Zone 5.downy serviceberry often has a reddish cast. It becomes ridged and furrowed as the tree ages.

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Additional information:

Known since antiquity in Europe for its medicinal and aromatic qualities, sweetgum has long been valued in the New World. It is documented that in 1519 Montezuma shared xochiocotzoguahuitl (sweetgum) balsam with Cortés. Its genus name, *Liquidambar*, comes from the Latin *liquidus* (liquid) and ambar (amber) and refers to the bark's aromatic resin. Pioneer families used sweetgum as it has been used through the ages: for healing wounds, chewing, incense and perfumery. The resin was used in manufacturing drugs, soaps and adhesives during World War I and World War II. In the southern U.S. sweetgum is an important timber tree and is used primarily for veneer for furniture. The heartwood is pink and is referred to as redgum. The white sapwood is called sapgum. Although the wood is heavy, it is not durable when exposed to the elements.

Sweetgum makes a large irregular-crowned tree at maturity. The national champion sweetgum (136 feet) is in North Carolina.

This bottom land tree is common in western Kentucky. Seeds fall from the dangling, spiky seed balls while they are still attached to the tree. The seeds are lightweight and have a small wing that allows them to be carried by the wind. Because of this, sweetgum is often seen as a pioneer species on flood plains or in abandoned fields. There are no native sweetgum trees in the inner Bluegrass region.

The branches of some sweetgum trees can have unusually corky ridges. This is more noticeable when the trees are young.



Leaf in autumn



Fruit cluster