

## SWEETGUM

### *Liquidambar styraciflua* L.

Plant Symbol = LIST2

Contributed by: USDA NRCS National Plant Data Center



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#### Alternate names

Sweet gum, American sweet gum, red gum, bilsted, star-leaved gum, alligator-tree

#### Uses

*Ethnobotanic:* The sweetgum tree was used by the Cherokee, Choctaw, Koasati, Rappahannock and other Native American tribes for various purposes. The hardened gum, or rosin from the tree was used as chewing gum. A piece of the bark was knocked from the tree. After one week, the sap from the wound was hardened and could be collected and used for chewing gum. Tea was made from both the fruits and the bark. The hardened sap was rolled up and then placed in a dog's nose to treat distemper. A salve was made by mixing the plant with animal tallow for application to wounds, cuts, sores, bruises, and ulcers. The plant was boiled until a scum rose to the top. This scum was then mixed with the roots of *Obolaria virginica* and used as a dressing for cuts and bruises. The roots were boiled into a strong tea to treat skin sores that were possibly caused by small worms under the skin. A "drawing plaster" was made from the gum. Ten to a dozen drops of the sap were taken before meals to reduce fevers. The sap and inner bark were used to treat diarrhea and dysentery. The bark was used to make an infusion that was used as a sedative for nervous patients and for patients who were well in the day but sick during the night. The plant was used to treat colic, internal diseases and to "comfort the heart."

*Wildlife:* Goldfinches, purplefinches, mallard ducks, bobwhite quails, Carolina chickadees, yellow-bellied sapsuckers, white-throated sparrows, towhees, Carolina wrens, squirrels, and chipmunks eat the seeds of sweetgum trees. Beavers use the wood for constructing dams.

*Other:* Liquidambar are valued for their timber and for the aromatic sap, called styrax. The timber provides pulp, veneer and lumber. The wood is used in cabinetry, home interiors, boxes and utensils. The balsamic sap is used as an ingredient in both medicine and perfume.

#### Status

Please consult the PLANTS Web site and your State Department of Natural Resources for this plant's current status (e.g. threatened or endangered species, state noxious status, and wetland indicator values).

#### Description

*General:* Sweetgum is a deciduous tree that is a member of the Hamamelidaceae, or witch-hazel family. It is named after the sweet balsamic sap which, when exposed, hardens into a fragrant gum. The trees can reach 30 to 40 meters in height and spread from 15 to 20 meters. The mature bark is rough, deeply furrowed and grayish brown. Young twigs are rusty red and frequently develop wings of corky bark. The star-shaped leaves, somewhat resemble maple leaves, except that they are arranged alternately instead of opposite. The leaves are 18 cm wide with long, thin petioles (6-15mm). Actively growing leaves are fragrant when crushed. They are palmate in shape with five to seven lobes and saw-toothed margins. Glossy-green in summer, the leaves turn bright yellow to deep red in the fall. The undersides of the leaves are pale green with a coating of fine white hairs. The small, greenish inconspicuous flowers have no true petals. The woody, ball-shaped, pendulous, burr-like fruits (3-4 cm) contain numerous, small seeds (1 cm) that are winged at one end. The seeds are contained in beak-like capsules to protrude from the surface (1 to 2 per capsule).

*Distribution:* Sweetgum is common in the Coastal Plain and Piedmont sections of the Southeastern United States. For current distribution, please consult the Plant Profile page for this species on the PLANTS Web site.

Plant Materials <<http://plant-materials.nrcs.usda.gov/>>

Plant Fact Sheet/Guide Coordination Page <<http://plant-materials.nrcs.usda.gov/intranet/pfs.html>>

National Plant Data Center <<http://npdc.usda.gov>>

*Habitat:* Sweetgum trees occur in moist or wet woods, tidal swamps, along streambanks, in clearings and old fields, and in low swampy bottomlands where they often form pure stands.

### **Establishment**

Sweetgum is a hardy, ornamental tree that is valued for its shade as well as its lumber. They make attractive specimen trees all year and especially in the fall when the leaves turn brilliant colors before dropping in the fall. Young trees transplant best in the spring into well-watered soils. The roots are slow to develop. The trees may be planted in sun or part shade in soils that are medium to well drained and of medium to high fertility. The trees need medium to high moisture availability and are not suitable for dry areas. New trees volunteer readily from the seeds, however they generally do not germinate until the second year. The seeds are ripe when the fruit begins to lose its green color. Spread the fruits out to dry. When dry, they will open and release the seeds. Germination can be considerably increased if the seeds are prechilled for 15 to 90 days.

### **Management**

The trees are relatively trouble-free and generally do not require pruning. The fruits can look somewhat messy in fall and winter when they drop, especially onto a manicured lawn where they can also make mowing difficult. Avoid planting near a patio or sidewalk where the fruits can be painful when stepped on with bare feet.

### **Cultivars, Improved and Selected Materials (and area of origin)**

These plant materials are readily available from commercial sources. Contact your local Natural Resources Conservation Service (formerly Soil Conservation Service) office for more information. Look in the phone book under "United States Government." The Natural Resources Conservation Service will be listed under the subheading "Department of Agriculture."

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