Sycamore

The sycamore (*Platanus* species) is a deciduous tree that is often grown for the shade it produces and the handsome bark on its massive trunk. There are 10 species, but this fact sheet will focus on one species and one hybrid that are common to South Carolina: American planetree (*Platanus occidentalis*) and London planetree (*Platanus x acerifolia*). Both are adapted to all areas of South Carolina.

**General Information on Sycamores**

**Mature Height/Spread:** Sycamore is a massive tree that grows 70 to 100 feet tall with a similar spread. It has a pyramidal form in youth but develops a spreading, rounded and irregular crown with age.

**Growth Rate:** This tree grows at a moderate to rapid rate, and has a moderate to long life span.

**Ornamental Features:** Sycamores are valued for their massive size and are often used as shade trees. The cream- to olive-colored exfoliating bark is handsome in all seasons, but it is exceptional in winter when contrasted with the dark bark of other trees in a woodland setting. The leaf size varies, even on the same tree, and the fall color is yellow-brown. The 1-inch fruit hang from the tree on long stalks through most of the winter.

**Landscape Use:** Sycamores are too big for most home properties. They are primarily used for parks, large-scale landscapes or naturalized plantings along streams. They have been used extensively as street trees, and although they withstand difficult city conditions, they can create problems that require high maintenance. Leaf and twig litter, disease and aggressive roots must be considered when choosing this tree for high-traffic (pedestrian and vehicular) areas.
This tree prefers deep, moist, rich soils, but will grow in places undesirable to plant growth, such as areas with low soil oxygen and high pH. It prefers full sun or light shade.

Prune drooping branches on trees located near vehicular or pedestrian traffic. Eliminate the occasional double leader to promote a single trunk. Pruning healthy wood should be done in winter. Remove dead and broken wood when detected (any time of year) to reduce incidence of disease.

Problems: The most serious disease is anthracnose. Other diseases include canker, bacterial leaf scorch, powdery mildew and leaf spot. Insects that cause problems are aphids, sycamore lace bug, scales and borers. For more information on problems with sycamore, refer to the fact sheet HGIC 2011, Sycamore Diseases & Insect Pests.

Aggressive roots can raise sidewalks if planted too close. Plant at least 6 feet from the sidewalk or curb. Roots and dense shade created by the canopy of this tree prevent healthy growth of lawn grasses beneath it.

Keep this tree away from well-tended lawns, pavement and buildings. Sycamores create litter with their leaves, fruit and twigs. This is not such a problem when sited along streambanks or out-of-the-way places, but maintenance becomes an issue if located in turf areas or near pedestrian or vehicular traffic.

American Planetree (Platanus occidentalis)
The American planetree is also called sycamore, buttonwood and buttonball.

Mature Height/Spread: This tree can grow 75 to 100 feet with a similar or greater spread. Under ideal conditions it can attain heights of 175 feet and may have a trunk 10 to 14 feet in diameter.

Growth Rate: It grows at a moderate to rapid rate (2 feet per year) and is long-lived.

Ornamental Features: It is highly valued for its form and size, with its massive height and spread, huge trunk and large limbs. The growth rate rarely slows, and under ideal conditions this tree can become one of the most massive in Eastern North America. It usually develops one strong central trunk, but occasionally double leaders will develop.

The bark at the lower part of the trunk is red to gray-brown and scaly. The bark on the upper trunk peels in large flakes to expose smooth, lighter colored (white to creamy white) inner layers.

The leaves are cream-colored and wooly when they emerge in the spring. At maturity they are large, medium to dark green and are only wooly along the veins on the lower side. The fruit are seeds clustered into a round ball (1 inch) that hangs on a long, flexible stalk through most of the winter. They usually hang individually, but sometimes hang in pairs.

Landscape Use: The American planetree should be reserved for naturalized areas next to streams and rivers, or sites where litter and aggressive roots are not an issue. It needs ample space to develop.

This tree prefers deep, rich, moist, well-drained soils but will grow in almost anything. It grows in either high or low pH soils. Although it prefers moist soils, it tolerates moderate drought. It prefers sun or very light shade.

Problems: Anthracnose can be a serious problem in wet, cool springs. Bacterial leaf scorch, cankerstain, leafspot, canker and powdery mildew are other disease problems. Troublesome insects include aphids, sycamore plant bug, sycamore tussock moth, scales, borers and lacebugs.

Cultivars: There are no selections commercially available. When possible, select trees grown from parents native to your region.

London Planetree (Plantanus x acerifolia)
This hybrid is the result of a cross between P. occidentalis and P. orientalis. It is sometimes listed as P. x hybrida.

Mature Height/Spread: This tree grows 70 to 100 feet tall, 65 to 80 feet wide. It can reach 120 feet in height under ideal conditions.

Growth Rate: It grows at a moderate to rapid rate (2 feet per year) and has a moderate to long life span.
Ornamental Features: This tree is similar to American planetree with a few exceptions: The spread is not as great, bark is duller (but still showy) and fruit hang in pairs.

Landscape Use: London planetree should be reserved for naturalized areas next to streams and rivers, or sites where litter and aggressive roots are not an issue. It needs ample space to develop.

This tree prefers deep, rich, moist, well-drained soils but will grow in almost anything. It grows in either high or low pH soils. Although it prefers moist soils, it tolerates moderate drought. It prefers sun or very light shade.

Problems: London planetree suffers from most of the same disease and insect problems as American planetree. Cankerstain can be very serious on this tree. Some cultivars are somewhat resistant to powdery mildew and anthracnose. (Disease resistance means that infections are few, do not progress very far or do not occur.) Other problems with aggressive roots, litter and turf growth beneath the canopy are similar to American planetree.

Cultivars
- 'Columbia' and 'Liberty' are reportedly more resistant (not immune) to powdery mildew and eastern strains of anthracnose.
- 'Bloodgood' is somewhat resistant to anthracnose but susceptible to mildew.

Note: Chemical control of diseases and insects on large trees is usually not feasible since adequate coverage of the foliage with a pesticide cannot be achieved.