**Liriodendron tulipifera**

Tulip Tree, Tulip Poplar, Yellow Poplar, Canary Whitewood

**Magnoliaceae (Magnolia)**

Nomenclature: Royal Hort. Society

**Type** Tree, woody plant
**Hardy range** 4B to 9A
**Height** 65' to 90' / 19.80m to 27.40m
**Spread** 45' to 60' / 13.80m to 18.20m
**Growth rate** Average
**Form** Oval and rounded
**Exposure** Full sun
**Persistence** Deciduous

**Bloom Color** Green and yellow
**Bloom Time** Spring
The flowers are fragrant and showy.

**Leaf Color** Green
**Fall Color** Yellow
This plant has attractive fall colors.

**Fruit Color** Brown

**Environment**
This plant tolerates some drought and occasional wetness.
This plant will grow in dry to occasionally wet soil.
Suitable soil is well-drained/loamy, sandy or clay.
The pH preference is an acidic to neutral (less than 6.8 to 7.2) soil.

**Landscape Uses**
- Pollarding
- Specimen

**Attributes and Features**
- Pest tolerant
- Attracts butterflies
- Inconspicuous fruit
- Fruit can be a litter problem
- Sensitive to ozone

**Native Habitat**
East of the Mississippi River from New York to central Florida in stream bottomlands and lower slopes below 1000 feet elevation in the north but up to 4500 feet in the south. Populations in the southern portion of its range are usually associated with well-drained soils along streams and other moist spots. Rare on wet or dry sites. Common on north and east facing slopes.

**Additional Notes**
This plant typically grows with one trunk.
Little pruning is required.
This plant has low flammability.
National champion is 111 x 125 feet in Virginia.

**Culture Notes**
Tulip trees can be planted from containers at any time in the south but transplanting from a field nursery should be done in spring, followed by regular irrigation. Plants prefer well-drained, acid soil. Drought conditions in summer can cause premature defoliation of interior leaves which turn bright yellow and fall to the ground, especially on newly-transplanted trees. In extended dry weather in summer even mature trees loose yellow foliage. This can create a regular clean-up job in dry summers as foliage is always dropping. Trees are considered a nitrogen demanding species compared to many other natives.

Probably not a tree for sandy well-drained soil unless there is a water source underground or regular irrigation. Established trees can die from drought in dry soils. There are very large trees into central Florida (near Orlando) located adjacent to swampy sites. This plant is considered mostly allergy free and causes little or no allergy problems in most people. This tree serves as a larval food for the tiger swallow tail, a yellow and black butterfly.
Existing trees are occasionally left near new homes and other buildings in new developments. Roots damaged by construction equipment can decay quickly. This can leave the plant with few supporting roots in the years following construction despite a green canopy. The tree could fall over as a result. In addition, branches that are suddenly exposed to unlimited light when nearby trees are removed begin to grow rapidly. As a result, they could become too long and break. Keep them shortened with reduction cuts to help prevent breakage.

This is the state tree of Indiana and Tennessee. Wood weighs about 42 pounds per cubic foot. Wood is considered diffuse porous meaning that there is little difference in size of pores between spring and summer wood. Foliage summer nitrogen content on established trees in irrigated landscapes in California ranged from 1.2 - 2.8 percent.

**Pests, Diseases and Damaging Agents**

**Pests:** Aphids can build up to large numbers, leaving heavy deposits of honeydew and sooty mold on lower leaves, cars, and other hard surfaces below. Scales also occasionally cause some problems. Potentially resistant to the Asian Longhorn Beetle.

**Diseases:** Tulip tree is attacked by several cankers. branches dieback from the tip to the point of infection. Keep trees healthy and prune out infected branches. Leaf spots are usually not serious enough to warrant chemical controls. Powdery mildew causes a white coating on the leaves and is not usually harmful. Sooty mold makes a black coating on leaves and stems. Verticillium wilt causes wilting and death of leaves on infected branches.

This plant is sensitive to damage from ozone air pollution. Damage can occur in urban or rural areas because ozone can travel long distances away from where it is formed. Typical symptoms on deciduous trees are a flecking or stippling only on the upper side of the foliage between large veins. The small spots or flecks are white, tan or orange-red. Spots or flecks from one-eighth to one-quarter inch long appear on needles of sensitive conifers. Yellow bands that girdle the needle may form, eventually causing the tips of the needles to die and/or needles to drop from the plant. If you suspect ozone is causing damage on this plant, locate White Pines (*Pinus strobus*) in the area to see if they are damaged. White Pines are very sensitive to ozone damage and can serve as indicators of the presence of ozone in concentrations high enough to cause plant damage.

**Special Notes**

This plant has aggressive roots.