

# Tuliptree Scale

## *Toumeyella liriodendri*

### Description

Tuliptree scale is a soft scale insect pest of tulip poplar and magnolia. Mature female scale are about 5-10 millimeters long and can be larger. Tuliptree scale range from grey, yellow, orange, pink and even black. Sphere-like bodies of scales can be raised a couple of millimeters tall, giving stems a bumpy, knobbed appearance.

### Host Plants

- Linden
- Magnolia
- Poplar
- Redbud
- Tulip poplar

### Life Cycle

Female scale overwinter in an immature state, mature the subsequent summer and develop new eggs. New eggs hatch in late August to early September. Female scale can produce up to 3,000 new crawlers in one season, rapidly increasing population levels. Crawlers are dispersed by wind and birds. Once dispersed, crawlers must attach themselves to a suitable host within three days and begin feeding on the vascular system beneath the bark. One generation is produced each year except in the deep South where there may be several generations.

### Monitoring

Infested trees may develop leaf yellowing, premature leaf drop and branch dieback. During fall and winter, look for overwintering jet-black immature scale on twigs. In the spring, scout for developing females wherever honeydew and black sooty mold occur. Developing female scale may have a dramatically different appearance than mature females.



# Damage Symptoms



This scale is known to produce large amounts of honeydew, resulting in the growth of sooty mold on nearby foliage and bark. Along with sooty mold, branch dieback also is a good indicator that a tree or shrub is infested with this pest. Tuliptree scale can cause plants to decline rapidly and eventually die. If large numbers of scale are present, branches may have a bumpy appearance. Because of their round shape, tuliptree scale can look like warts on the branches.



## Integrated Pest Management

### BIOLOGICAL CONTROL

Natural enemies include ladybird beetles, predatory mites and small parasitic wasps. Control ant populations that feed on the honeydew because they protect scale insects from predators and parasitoids.

### CULTURAL CONTROL

Manage scale populations when detected before they become more widespread and difficult to control. Scale thrive on stressed plants. Proper fertilization and irrigation will promote a healthy plant. Do not over fertilize, though, because excessive fertilizer can increase scale populations, injure foliage and roots and cause other problems.

### CHEMICAL CONTROL

Please refer to [http://eppserver.ag.utk.edu/redbook/sections/trees\\_flowers.htm](http://eppserver.ag.utk.edu/redbook/sections/trees_flowers.htm) for the most up-to-date recommendations.

## Resources

Photo credits: Amy Fulcher, University of Tennessee

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<http://www.entomology.umn.edu/cues/Web/208TuliptreeScale.pdf>

Townsend, Lee. Tuliptree scale. University of Kentucky Extension publication ENTFACT-435. <http://www.ca.uky.edu/entomology/entfacts/ef435.asp>

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