

Magnolia or Tuliptree Scale

Written by: Brian Kunkel, Kayla Krentisky, Grace Ferry Date: March 2025 (updated)

Hosts

Magnolia scale is one of the largest soft scales found in the U.S. and feeds on the sap of magnolias, particularly star magnolia, lily magnolia, cucumber tree magnolia, and saucer magnolia. Tuliptree scale is often misidentified as magnolia scale, but it feeds on tulip tree (yellow poplar), magnolias, and sometimes lindens.



Figure 1: Magnolia Scale. Brian Kunkel, University of Delaware, Bugwood.org

Identification

The Magnolia scale is approximately 1/2 inch in diameter. The females are pink-orange to brown in color, while the males are white in color.

Overwintering nymphs are black with a median ridge. Magnolia scale excrete a waxy powder and copious amounts of honeydew; whereas, tuliptree scale only produces large amounts of honeydew. Large deposits of honeydew can give the plant a shiny appearance until the fungus, sooty mold, colonizes the honeydew turning it gray to black. Heavy infestation can cause branch dieback or plant death. Tuliptree scales are about 1/3 inch in diameter and may be grayish green to pinkish orange with black mottling.



Figure 2: Magnolia Scale. Sarah Vanek, Bugwood.org

Biology

Both overwinter as immature nymphs and resume feeding in the spring. Nymphs mature from late July to August; males emerge as fly-like insects and mate with females. Females give birth to crawlers during late August to September. Magnolia scale crawlers are typically active around 2,075—3,247 (2,746 peak) GDD50 and tuliptree scale crawlers between 2,016—3,212 (2,860 peak) GDD50. The crawlers eventually settle down on the plant to overwinter. Magnolia scale has only one generation per year. Natural enemies include lady beetles, predatory mites, and parasitic wasps. They attack both species.

Management Strategies

Scale control may need to be applied over several growing seasons, with proper timing. Applications should target newly emerged crawlers because once the scale settles, the waxy covering they excrete protects them from insecticides. Consequently, contact insecticides are less effective against settled nymphs and adults. Over-fertilization and plant stress provide situations favorable to scale populations; thus this should be avoided. High levels of infestations can lead to branch dieback or death of smaller trees. Branches that are highly infested may need to be pruned out to reduce sources of infestation to the rest of the tree. Contact your local cooperative extension office for recommended insecticides for this pest.



Figure 3: Tuliptree Scale. Chazz Hesselein, Alabama Cooperative Extension System, Bugwood.org

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