RESEARCH LABORATORY TECHNICAL REPORT



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Magnolia Scale

Magnolia scale (*Neolecanium cornuparvum*) is the largest scale species in the United States. This native insect is found throughout the eastern U.S. and feeds exclusively on magnolia species (*Magnolia* spp.). The most affected magnolia species are star magnolia (*M. stellata*), cucumber tree (*M. acuminata*), lily magnolia (*M. liliflora*), and saucer magnolia (*M. x soulangeana*), a hybrid variety of magnolia. Other magnolia species are less often attacked.

Description and Life Cycle

The magnolia scale is a soft scale – meaning that it has a waxy covering and does not have a hard body covering like armored scales. Magnolia scale nymphs overwinter as an aggregate on previous year twigs. As the temperature rises in spring, the nymphs secrete a powdery white covering over their bodies (Figure 1).

Figure 1: Magnolia scale with waxy coating



In the northeastern United States, nymphs begin to molt in late April or May. As the season progresses, magnolia scales differentiate into male or female scales (Figure 2). Female scales turn brown to purple in color, are covered in a white waxy covering like the nymphs, and remain on local branches. Throughout summer, the adult females lose the white, waxy covering and display a brownish-yellow coating of wax. Male scales also have a white, waxy appearance in early summer but develop into a small gnat-like insect that can disperse to find a mate. Female magnolia scales give birth to young nymphs in late August-early September. There is one generation per year.

Figure 2: Maturing female magnolia scales



Damage

Magnolia scale damage is caused by the insect sucking plant nutrients through its stylet – a needle-like specialized mouth part. Large infestations of magnolia scale produce high volumes of honeydew, which can lead to unsightly sooty mold and can attract stinging insects. Heavy infestations can also lead to branch dieback or reduced flower and foliage production.

Management

Light magnolia scale infestation should be controlled by either physically removing scales or pruning infested twigs and branches. If infestations are heavy, it is best to prescriptively treat plants. Please contact your local Bartlett Arborist Representative to learn about monitoring programs and management strategies.

