

Japanese Maple Scale

Chad M. Rigsby, PhD, Research Scientist

Japanese maple scale (JMS), *Lopholeucaspis japonica*, is an introduced pest on landscape ornamental trees and shrubs. It was first detected in Connecticut in 1914, but has been confirmed throughout the eastern United States [1]. JMS, an armored scale, secretes a hard covering over its body called a “test.” The test protects the insect as it pierces through bark to feed on plant cells.

Description and Life Cycle

Adult JMS is approximately 1/16” (1-2 mm) in length and shaped like an oyster shell. Female JMS are thicker than males and both males and females have a grayish-white, waxy test (Figure 1). Purplish-white eggs, held beneath the female, hatch over several weeks and tiny, purple crawlers (immature stage) emerge. Crawlers settle on the bark of trees and shrubs where they produce coverings and develop into adults. In warmer climates, two generations occur each year while a single generation occurs in colder climates [1].

Hosts and Damage

JMS has an extremely broad host range of woody trees and shrubs. Commonly affected trees include maple, hornbeam, redbud, dogwood, ash, apple, crabapple, *Prunus*, willow, linden, elm, and zelkova. It also infests boxwood, camellia, euonymus, holly, and privet.

Adults feed with a long, tube-like mouthpart that pierces through bark and into underlying parenchyma cells. Feeding activity damages the cells and diverts nutrients. If left unmanaged, small infestations will expand and lead to defoliation, dieback and eventual plant death (Figure 2).

Figure 1: Adult and immature (crawler) Japanese maple scale infesting a saucer magnolia



Management

Horticultural oil may be applied in the dormant season to reduce the overwintering population of JMS. However, treatments during the growing season must be applied when crawlers are active. Repeat visits for inspection, monitoring, and treatment are necessary. Contact your Bartlett Tree Experts Arborist Representative to learn about a customized management program.

Figure 2: Dieback on hedge due to Japanese maple scale infestation



Founded in 1926, The Bartlett Tree Research Laboratories is the research wing of Bartlett Tree Experts. Scientists here develop guidelines for all of the Company's services. The Lab also houses a state-of-the-art plant diagnostic clinic and provides vital technical support to Bartlett arborists and field staff for the benefit of our clients.

Reference

- [1] D.R. Miller, G.L. Miller, G.S. Hodges, and J.A. Davidson, "Introduced Scale Insects (Hemiptera: Coccoidea) of the U.S. and their Impact on U.S. Agriculture," Proceedings of the Entomological Society of Washington, vol. 107, pp. 123-158, 2005.