RESEARCH LABORATORY TECHNICAL REPORT

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Gloomy Scale on Maple

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Scale insects are an unusual group that look and behave very differently than most insect pests encountered on trees. Scale adults are small, immobile insects that live beneath a hard or soft waxy shell that is secreted by the insect. They have no visible legs, wings or antennae. Scales feed on plant sap by inserting a straw-like stylet into plant cells and removing the contents. Heavy scale infestations will stunt growth, reduce vitality and lead to branch dieback and decline (Figure 1). There are hundreds of species of scales that damage landscape plants.

Description

Gloomy scale (*Melanaspis tenebricosus*) is a particularly widespread and damaging scale found primarily on red, silver and Freeman maples as well as boxelders (Figure 1). It may also be found on other species including sweetgum, holly, and mulberry. It is an armored scale which secretes a hard gray covering approximately 1/16" in diameter that blends into the bark and often goes unnoticed until infestations become quite heavy (Figure 2). Gloomy scale spends the winter beneath the protective covering on the bark. In spring, it completes development and begins to lay eggs beneath the shell. Eggs hatch in late May and June and the immatures (nymphs), which are commonly referred to as crawlers due to the fact that they have legs, will disperse to other portions of the plant. Once crawlers settle and begin to feed, they produce the hard waxy covering that will protect the insect and make management more difficult. These crawlers will complete development in late summer and produce a second generation.

Figure 1: Heavy gloomy scale on a red maple in an urban setting

Figure 2: Gloomy scale infestation

Management

Horticultural oil applied in the dormant season will reduce the overwintering population of the pest and help to prevent light infestations from becoming damaging. Where infestations have approached damaging levels, insecticides must be applied during the crawler stage when the insect is vulnerable. Once the immature produces the waxy covering, insecticide applications may be less effective and product choices become more important.

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.