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Wax Scale

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Plants Attacked

Wax scale has well over 50 hosts, including Japanese and Chinese hollies, pyracantha, spirea, ivy, hemlock, euonymus, fruit trees, and boxwood.

Description of Damage

Infestations seldom kill plants directly, but reduce plant growth, seriously weakening them and leading to decline. Deposits of honeydew encourage rampant growth of the black sooty mold fungus, particularly on Burford or Chinese holly.

Identification

Mature adult female scales are large, up to 0.25 inch (6 mm) in diameter, bright white, and circular. They may reach only half that size on some hosts. Adult females are a brownish-purple color under their waxy covering. When young scales initially produce wax, it looks like an old-fashioned cameo pin (Fig. 1). The next instar is called the "dunce cap" stage due to the conical shape of the wax produced (Fig. 2). Dead scales will remain on the twigs, but they turn dull gray, appear dirty, and may be covered with sooty mold.

Hemiptera: Coccidae, *Ceroplastes ceriferus*

Life History

Mature females begin laying eggs in late April. They produce 1,500 to 2,000 eggs on average with some laying 3,000 or more eggs before dying. Egg hatch is delayed, usually occurring any time from June 1 to 23, depending on geographic location and climate. Some populations may vary, such as a few eggs hatching as late as July. The crawler stage settles on the twigs and stems of the host plant. Crawlers will only settle on leaves or fruit when populations are very dense and few choice places remain for establishment. Development through the cameo and dunce cap instars occurs during late July and August. New females mature by late August or September and overwinter. There is a single generation each year.

Figure 1. Cameo stage of young wax scale (United States National Collection of Scale Insects Photographs, USDA ARS, Bugwood.org).

Control

See the Virginia Pest Management Guide for Home Grounds and Animals (VCE 456-018) for current recommendations of registered insecticides for wax scale control. Apply materials June 10 to 30, after eggs have begun to hatch, and thoroughly wetting the foliage and bark with a full-coverage spray.

Adult wax scales are protected against insecticide treatments by their thick waxy coating. When adults are present, it's best to physically remove them by handpicking or pruning. In light infestations with only some adult wax scale present, pick them off the plant by hand. These scales can be discarded on the ground in the fall and early winter because the adults won't overwinter off the host plant. During February, March, and April, all removed scales should be destroyed as the females may survive long

enough to still lay eggs, and any hatching crawlers can move onto potential host plants.

Figure 2. Adult wax scale in the “dunce cap” stage (United States National Collection of Scale Insects Photographs, USDA ARS, Bugwood.org).

Branches with heavier infestations can be pruned out, but all pruned infested material must be destroyed. Wax scales on cut branches or picked from stems in late spring will still lay eggs and hatching crawlers are likely to infest any nearby host plants.

Remarks

The wax scale has not been found generally west of Danville, Lynchburg, Charlottesville, or Loudoun County.

Revision

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