COTTONY MAPLE SCALE

_Pulvinaria innumerabilis_ (Rathvon)

The cottony maple scale is one of the largest and most conspicuous soft scale insects that attack ornamental plants. Its favored host is silver maple, _Acer saccharum_. A large number of other deciduous trees are also attacked including other species of maple, such as boxelder, _A. negundo_; basswood, _Tilia americana_; white ash, _Fraxinus americana_; dogwood, _Cornus spp_; locust, _Robinia spp_; hackberry, _Celtis spp_; sycamore, _Platanus spp_; birch, _Betula spp_; elm, _Ulmus spp_; willow, _Salix spp_; and poplar, _Populus spp_.

**DESCRIPTION**

Eggs masses are conspicuously white and cottony in appearance. Each mass usually contains 1,000-1,500 eggs. Male scales are tiny, winged insects. Immature females are flat and inconspicuous. Mature females are pale to dark brown, convex, and about 3-6 mm long (Fig. 1). The cottony maple scale is most easily recognized by the characteristic egg masses on twigs and branches.

**LIFE HISTORY**

This soft scale overwinters as a second instar nymph on the bark of host twigs and branches. The female completes development in June and lays egg masses through late summer. They hatch into crawlers (first instar nymphs) from mid-June through mid-July, and migrate to the underside of host plant foliage where they insert their piercing-sucking mouthparts. They feed by withdrawing sap from vascular cells of the plant. This pest spends the remainder of the summer feeding on leaves. Male scales mature in late summer, mate with the female and then die. Just before leaf drop in the fall, nymphs move back to host plant twigs and branches to overwinter.

**DAMAGE**

Severely infested trees appear as though they were covered with a string of popcorn. Heavy scale insect populations withdraw plant fluid and cause dieback of twigs and branches. Under severe conditions an infestation may kill the entire tree. Also, when this soft scale feeds on leaves and twigs, a large quantity of honeydew is excreted. Honeydew promotes the growth of a black sooty mold, that imparts a blackened appearance to leaves, twigs, branches, and other substrates beneath an infested host plant. In some cases, premature loss of foliage may result from an infestation of this soft scale insect.

**MANAGEMENT**

Overwintering nymphs may be managed with an application of horticultural oil made in early spring before new growth starts as dormant treatment. Crawlers may be managed with an application of a registered insecticide made in late June and repeated according to label directions in early July. Certain insecticides may cause damage to soft maples; do not apply insecticidal soap to Japanese maple.

**WARNING**

Pesticides are poisonous. Read and follow directions and safety precautions on labels. Handle carefully and store in original labeled containers out of the reach of children, pets, and livestock. Dispose of empty containers right away, in a safe manner and place. Do not contaminate forage, streams, or ponds.
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Pest Sheets are intended to serve as a quick reference guide and should not be used as a substitute for product label information. Although every attempt is made to produce Pest Sheets that are complete, timely, and accurate, the pesticide user bears the responsibility of consulting the pesticide label and adhering to those directions.


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