

Understand and Manage

Cottony Maple Scale

Cottony maple scale, (*Pulvinaria innumerabilis*) is one of the largest and most conspicuous scale insects in this country. Its favored host are maple trees, although it has been found on a number of other species as well. Females are inconspicuous and overwinter on twigs, and in the spring they rapidly grow and produce their characteristic white egg sac. Damage comes from crawlers that appear in June and July when they migrate to the undersides of leaves, insert their mouthparts in or near the veins, and withdraw sap from the plant. Heavy infestations may kill weakened trees and cause branch dieback in healthy trees. Large amounts of honeydew are produced which eventually cause the leaves to be covered with grayish/black colored sooty mold. The sooty mold reduces the aesthetic features of maples and honeydew can become a nuisance as it coats patios, decks, and vehicles.

Biology

- Females grow rapidly in spring and produce hundreds of eggs.
- Adults emerge and mate as the leaves begin expansion in the spring.
- Eggs hatch in early summer and young scales migrate to the leaves.
- Scales mature in late summer.
- One generation per year.



Photo Credit: Eugene E. Nelson, Bugwood.org



Photo Credit: Nancy Gregory, University of Delaware, Bugwood.org

Susceptible Hosts

Silver maple – preferred host (*Acer saccharinum*), red maple (*A. rubrum*), boxelder (*A. negundo*), Alder (*Alnus*), Hackberry (*Celtis*), Dogwood (*Cornus*), Hawthorn (*Crataegus*), Beech (*Fagus*), Osage orange (*Maclura pomifera*), Apple (*Malus*), Mulberry (*Morus*), Sycamore (*Platanus*), Poplar (*Populus*), Peach, plum (*Prunus*), Pear (*Pyrus*), Oak (*Quercus*), Black locust (*Robinia pseudoacacia*), Willow (*Salix*), Linden (*Tilia*), Elm (*Ulmus*)

Diagnosis

- Cottony maple scale can produce large amounts of honeydew which can eventually be covered with sooty mold.
- Premature loss of foliage may occur with heavy infestations.
- Branch dieback may occur with heavy infestations.
- Mature females can be found on undersides of leaves near veins, and may reach 5mm in length.
- Mature females look like popcorn strung along the twigs. White egg sacs may be 1/4" to 1/2" in length and are visible in late spring to early summer.

Distribution

Cottony maple scales have been reported in almost every state.

TREATMENT:

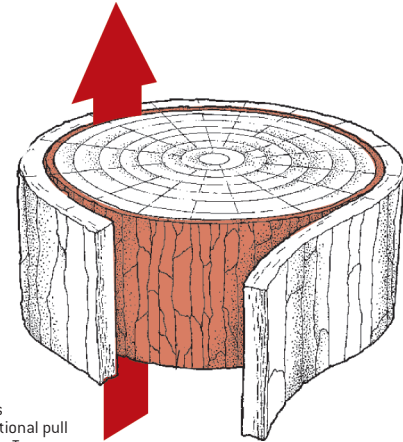
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Transtect™

Management Strategy Summary

Females grow rapidly in spring and produce hundreds of eggs. Eggs hatch in early summer and young scales migrate to the leaves. Xytect and Transtect soil applications must be timed to ensure product levels are within the tree at the time of the first generation crawler hatch and feeding. Arborists should use foliar sprays for immediate activity against crawlers or for management of overwintering females on twigs with dormant sprays. Xytect 10% as a tree injection is great for trees that cannot be treated with foliar sprays or other systemic options.

Transtect can be applied just before or during crawler emergence in the spring of the year. Proper timing and a combination of sprays and soil applied treatments may be required in the first year of treatment to get high pest infestations under control.



The tree's transpirational pull moves the Transtect from the soil/bark up into the canopy

Management Options

Products: Transtect (soil injection/bark spray), Transtect Infusible (trunk injection), Xytect (soil/trunk injection), Distance (foliar spray), Horticultural Oil (dormant spray)

Timing: Treatments with Transtect will usually occur around early spring. Xytect treatments can take place in early spring of the current year or fall of the previous year.

Depending on the severity of the issue, some of these treatment recommendations may be recommended over others.



Treatment of trees with Transtect is done via soil injection or bark spray

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