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Michigan State University Extension-Oakland County

Maple Petiole Borer



Symptoms and Effects

The maple petiole borer is an insect that can cause large numbers of leaves to drop to the ground in late May through June. The precise time of leaf drop will vary depending on the season. Larvae tunnel in the petiole (leaf stem). The leaf stems (petioles) usually break off near the leaf blade, and the breaking point is often darkened in color.

The disorder usually affects only sugar maples and often occurs very suddenly. However, only a few of the tree's leaves are actually involved, so this disorder has little effect on the health of the tree. You can usually accurately identify an infestation of maple petiole borer in the field. The time of year that it occurs and the green coloration of the leaf blade distinguish this disorder from drought, aphid or scale infestations, or other problems that cause early leaf drop. However, squirrels may occasionally cause leaf or twig defolia-

tion in early or midsummer. Thus, to identify maple petiole borer damage, cut a petiole near the leaf blade and examine the interior carefully for larval tunneling.

Life Cycle

Adult petiole borers are sawflies that appear in May and deposit their eggs in the maple petiole near the leaf blade. After hatching, larvae tunnel into the petiole for 20 to 30 days. This tunneling causes the stem to break off near the leaf blade and the leaves drop. Larvae remain in the portion of the petiole still on the tree for about 10 days. Larvae are about 1/3 inch long at this time. This portion then drops to the ground and the larvae move into the soil to pupate. They overwinter in the soil until the following spring.

Distribution and Frequency

The maple petiole borer is an introduced species that has extended its ranges from the northeastern states to the Great Lakes area and the Midwest. It is commonly found in southern Michigan, although it generally occurs at low levels and is usually overlooked. However, occasional outbreaks can appear, and leaf drop can be substantial. However, leaf drop rarely exceeds 25 to 30% of the leaves on a tree, even during peak years.



Control

Chemical treatment is not recommended because the maple petiole borer occurs infrequently and is unpredictable. Also, this disorder does not significantly affect tree health and appearance. Damage occurs over a short period of time, and it is too late for effective chemical control by the time you notice leaf drop. However, you can reduce maple petiole borer populations the following year if you

Rarely, is there sufficient leaf drop to cause any harm to the tree. Many of the larvae are parasitized by tiny wasps, which develop inside the body of the borer. In most years, these tiny wasps provide natural, biological control of this minor pest. There is a single generation of maple petiole borer each year in Michigan, so there is no chance of the problem continuing throughout the summer.



Source: University of Wisconsin, Urban Phytonarian Howard Russell, MSU Diagnostic Services, Landscape Alert June 3, 2005

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pick up and destroy infested leaf stems (especially the short sections without leaves) about 7 to 10 days after first leaf drop. Continue this stem cleanup throughout the leaf drop period. For such cultural controls to be effective, they must be practiced on all infested maples in the vicinity.

Would you like additional information?

Additional information is available on-line. Please see [MSU Extension-Oakland County's publications](#) as well as the [MSU Extension Bookstore](#) on campus.

Please contact our office (248/858-0880) for assistance.