



BIRCH CASEBEARER
Coleophora serratella (Linnaeus)

www.maineforestservice.gov • forestinfo@maine.gov • (207) 287-2431 • 1-800-367-0223 (in Maine)

Symptoms and Damage

The birch casebearer is an introduced species that was first recorded in Maine in 1927. The larvae or caterpillars of this small moth construct portable cigar-shaped cases from which they feed on the opening buds and foliage of paper, gray, and European white birches. Their feeding results in a tattering of leaves and partial to total defoliation of these trees depending on the severity of the infestation.

Severe feeding when buds are opening will kill developing leaves and shoot growth and result in partial to complete defoliation of the tree well into or through the entire summer. Defoliation that occurs early in the season may result in abnormally small leaves or clusters of leaves sparsely distributed over the tree.

Moderate populations will cause numerous holes in the leaves or a tattering of leaves with a brownish cast to the whole tree.

Hosts

Paper, gray, and European white birches

Detection

Birch twigs and branches should be examined prior to budbreak in the spring for presence of overwintering cases of this insect pest attached to crotches of twigs and in bark crevices of limbs. The cases are brown, curved (resembling a small boomerang), leathery and only about 1/10 inch long. Cases often occur in clusters protruding from the twigs.

Life Cycle

In the spring as buds swell and break the caterpillars in their cases move to the newly-opening buds to feed. As the caterpillar grows, they form new, larger, cigar (straight) cases as they feed on developing and fully-formed leaves. Caterpillars attach the case to the leaf surface and then mine the inner tissues of the leaf as far as they can reach without leaving the case. They then move to another place on the leaf to repeat the process. Mined areas are lighter in color at first and later turn brown or drop out to leave numerous holes in the leaves. Areas of the leaf mined by this species differ in appearance from those mined by other species in that casebearer mines are translucent, seldom have darker waste material in them and have a barely detectable hole in one surface. While pupating, cases are attached any place on the trees, on other plants, undergrowth, grass, etc.

The tiny nondescript tannish moths appear the first half of July, fly about, and lay eggs on the underside of leaves. These hatch in early to mid-August. The new, very tiny caterpillars make minute mines in the leaves for 2-3 weeks before making their first curved cases. They then feed slightly from the cases well into September before moving to overwintering sites on the twigs.

Control*

Spring. Pesticides such as Dipel, Foray or Biobit with *Bacillus thuringiensis* (Bt) as the active ingredient are registered for use against this pest. Apply when buds are swelling and opening for control. Best timing for spraying is determined by examining birches in early May and applying sprays when nearly all the cases have moved out onto the buds.

August. Although no protection of trees is needed in late summer, protection can be obtained for the next season by applying the same type of spray the last week of August (no later than Sept. 5). This spray will kill either those larvae still in mines or in new cases.

*NOTE: These recommendations are not a substitute for pesticide labeling. Read the label before applying any pesticide. Pesticide recommendations are contingent on continued EPA and Maine Board of Pesticides Control registration and are subject to change.

Caution

For your own protection and that of the environment, apply the pesticide only in strict accordance with label directions and precautions.