

Home and Horticultural **PESTS**

Brownheaded Ash Sawfly

The brownheaded ash sawfly (*Tomostethus multicinctus*) is a sporadic insect pest of green ash (*Fraxinus pennsylvanica*). Early season defoliation and an abundance of frass (or sawfly “poop”) may signal the presence of this insect, which is native to the eastern United States.

Soon after wasp-like adults emerge in April, females lay eggs inside of leaves. Upon hatching, larvae congregate in a massive group at the base of the tree (Figure 1) before moving up to consume leaves during May and June. Brownheaded ash sawfly larvae are 15 to 20 mm long and yellow-green with white and green stripes extending the length of the abdomen (Figure 2).



Figure 1 . Brownheaded ash sawfly larvae congregating at the base of a green ash tree.



Figures 2. Brownheaded ash sawfly larvae.

Although similar to caterpillars in appearance, they can be distinguished by the presence of prolegs on each abdominal segment, but there are no crochets or hairs on the feet.

Brownheaded ash sawfly larvae primarily feed on ash trees, leaving shot-hole or pin-hole damage on leaves (Figure 3). As they grow, larvae consume leaves and can defoliate trees (Figure 3). By June, fully developed larvae shed the paper-like skin that remains attached to the leaf (Figure 4). After migrating to the base of the tree, they enter the soil and form a protective cocoon. Brownheaded ash sawfly overwinter as mature larvae or pre-pupae, residing in silk-lined cells in the top portion of soil at the



Figure 3. Feeding damage caused by brownheaded ash sawfly larvae.

base of previously infested trees. Larvae gather in large groups at the base of trees (Figure 5). Brownheaded ash sawfly has one generation per year.

Insecticide spray applications are not warranted unless there is substantial damage, which will depend on the size and age of the tree. Alternatively, water spray may be applied with enough force to dislodge larvae and scatter them on the ground to be consumed by birds. Before treating, determine if there is sufficient damage to justify an insecticide application by assessing the number of larvae present. If necessary, apply an insecticide containing one of the following active ingredients: acephate, bifenthrin, carbaryl, cyfluthrin, lambda-cyhalothrin, permethrin, potassium salts of fatty acids (insecticidal soap), or pyrethrin. All are contact insecticides requiring thorough coverage of the tree canopy. Do not apply products containing the active ingredient, *Bacillus thuringiensis* subsp. *kurstaki* (e.g., Dipel) because they are not effective in controlling sawflies.



Figure 4. Shed skin of brownheaded ash sawfly.



Figure 5. Brownheaded ash sawfly larvae at the base of ash tree.

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