Pest Profile



Photo credit: D. Cappaert, Bugwood.org



Photo credit: Ilona L., BugGuide.net

Common Name: Dogwood Sawfly

Scientific Name: Macremphytus tarsatus

Order and Family: Hymenoptera and Tenthredinidae

Size and Appearance:

	Length (mm)	Appearance
Egg		Adult inserts eggs into the leaf in rows along the leaf veins.
Larva/Nymph	Approx. 25 mm	During the second larval stage (called an instar) the larvae has a powdery white appearance with a waxy coating; however, this is shed during last, sixth instar, when they appear to have generally smooth abdomen Final larval stages are generally black with yellow stripes across back with underside (ventral) side being solid yellow. Larvae have nine pairs of prolegs (unlike caterpillars that have 2-5 pairs). Sawfly larvae often live in groups and frequently demonstrate a collective defensive behavior of undulating together when threatened.
Adult	Approx. 20 mm	Adults vary in size and coloration from black to brownish. Abdomen often appears flattened. Stout body with broad waist that can differentiate them from other hymenopterans. Adults do not sting and feed on pollen and nectar.
Pupa		Sawflies undergo complete metamorphosis. Larvae pupate in the soil over winter and adults emerge in the spring.

Type of feeder: Larvae have chewing mouthparts.

Host plants: Ornamental and native dogwood trees and shrubs

Description of Damage (larvae and adults): Larvae can cause significant leaf defoliation when in large numbers, especially during last instar. Larvae can invade building siding if suitable wood debris is not available on the ground, which can in turn attract and lead to woodpecker damage. Adults feed on pollen and nectar.

Management: Often, predators and parasitoid wasps successfully regulate sawfly populations. In household landscapes, the larvae can be physically removed from plants and killed. Larvae can also be managed with a number of chemical controls such as spinosad or the conventional insecticide malathion. While sawflies resemble caterpillars or slugs, they are not, thus it is important to ensure the chemical control is labelled for their control. For example, BT (Bacillus thuringiensis) only works against true caterpillars and is ineffective on sawfly larvae.

References:

Liesch, P., & Mahr, S. (2017, April 21). Sawflies. Retrieved June 18, 2019, from https://wimastergardener.org/article/sawflies/ University of Wisconsin-Madison

Jesse, L. (2009, August 12). Dogwood Sawfly. Retrieved June 18, 2019, from https://hortnews.extension.iastate.edu/2009/8-12/sawfly.html Horticulture and Home Pest News, and Iowa State University Extension and Outreach.

DiTerlizzi, T. (2013, November 27). Species Macremphytus tarsatus - Dogwood Sawfly. Retrieved June 19, 2019, from https://bugguide.net/node/view/68065/bgimage Iowa State University - Department of Entomology