



White pine sawfly

Neodiprion pinetum

Order Hymenoptera, Family Diprionidae; conifer sawflies
Native pest

Host plants: Eastern white pine is preferred, but red pine is also susceptible.

Description: Adult sawflies are wasp-like. Mature larvae are approximately 25 mm long. They are pale yellow with black heads and have four rows of black spots from their head to their posterior end.

Life history: Females deposit eggs in needles in the spring. Larvae feed from late June to early August. After feeding, larvae drop to the ground and pupate. There are one to two generations a year.

Overwintering: Pupae in the soil.

Damage symptoms: Larvae feed in groups on both new and old needles, generally defoliating one branch before moving to another. They colonize trees of all sizes. They feed on both new and old needles. Consequently, trees can be completely defoliated and killed.

Monitoring: Look for signs of defoliated white pine branches from late June to early August. Look for groups of feeding larvae in areas where defoliation occurs. Also look for brown cocoons in the duff under defoliated trees.

Physical control: Remove small populations that are accessible, or dislodge with a powerful water spray.

Chemical control: Horticultural oil sprays are most effective against young larvae. Use a residual insecticide against older larvae present in large numbers. If larvae are nearly full grown, treatment should not be undertaken. Chemicals will not be as effective, and most of the damage that the plants sustain will already have been inflicted. Any sprays that are made should be directed at larval feeding aggregations only, if possible.

Biological control: No reports of natural enemies

Plant mortality risk: Low

Biorational pesticides: azadirachtin, horticultural oil, insecticidal soap, pyrethrins, spinosad

Conventional pesticides: acephate, bifenthrin, carbaryl, chlorpyrifos (nursery only), cyfluthrin, deltamethrin, fluralinate, imidacloprid, lambda-cyhalothrin, malathion, permethrin



White pine sawfly larva. (260)
Photo: David Laughlin



Larvae of dusky birch sawfly (top) and white pine sawfly (bottom). (261)
Photo: David Laughlin