



Whitespotted sawyer

Monochamus scutellatus

Order Coleoptera, Family Cerambycidae;
longhorned beetles, roundheaded borers
Native pest

Host plants: Eastern white pine is preferred, but other conifers including red and jack pine, balsam fir, larch, white, black and red spruces are also susceptible.

Description: Adult beetles are 18–25 mm long. Males are shiny black except for a small, round, white spot at the base of the elytra. Females may have mottled white spots on the elytra. Larvae are creamy-white grubs, 35–50 mm long when full grown, with a yellowish thorax and brown head.

Life history: Adults emerge between late May and August through circular holes 8–11 mm in diameter, and feed on needles and tender bark. Eggs are laid in chewed bark slits. Young larvae enter the tree through oval shaped holes in the bark and feed on inner bark, cambium and outer sapwood, excavating surface galleries that they fill with frass. Two years are required to complete one generation.

Overwintering: Larvae in galleries.

Damage symptoms: Adults beetles emerge from dead infested trees carrying pinewood nematode and fly to terminals on healthy trees. Adults feed on needles and tender twig bark. Larvae consume phloem and construct tunnels in wood. These wounds and the resulting branch flagging may appear serious, but the most damage results when beetles vector the pinewood nematode, *Bursaphelenchus xylophilus*. In their pathogenic stage, these nematodes attack fine feeder roots in trees and cause pine wilt disease. The symptoms of pine wilt disease are similar to drought. Trees are usually killed by the nematode.

Monitoring: Look for oval shaped larval entrance holes in bark and for large, circular exit holes produced by adults. Look for accumulated frass at base of trees beneath oval entrance holes. Also look for wilting or droughty symptoms caused by pinewood nematodes and pine wilt disease.

Chemical control: Control for the beetles themselves is normally unnecessary, because the larval stage is spent in dead or dying trees. However, since adults vector the pinewood nematode and since controlling the beetle vector is more effective than controlling the nematodes themselves, chemical control measures are necessary to kill adults.

Biological control: Few predators or parasitoids attack this borer.

Plant mortality risk: High, when pinewood nematode is vectored.



Fine excelsior type wood shavings caused by whitespotted sawyer feeding. (269)
Photo: Cliff Sadof



Whitespotted sawyer adult. (270)
Photo: Jill Pokorny



Pinewood nematode vectored by whitespotted sawyer. (271)
Photo: John Davidson

Biorational pesticides: None

Conventional pesticides: chlorpyrifos (nursery only), permethrin