



Forest Health Protection, Southern Region

VIRGINIA PINE SAWFLY,

Neodiprion pratti pratti (Dyar)

Importance. - Heavy defoliation by the Virginia pine sawfly for two or more years can weaken trees and make them more susceptible to other insects and diseases, particularly when associated with drought. In commercial shortleaf pine stands, the growth loss caused by two successive years of 50 percent defoliation can amount to one-third of the expected increment over a 4-year period. This sawfly is found from New Jersey to North Carolina. The insect prefers Virginia and shortleaf pines, but will occasionally feed on pitch and loblolly pines.

Identifying the Insect. - Larvae are pale green, with black head capsules, and about 1/10 inch (3 mm) long when newly hatched. Full-grown larvae are spotted or marked with longitudinal black stripes and are from 6/10 to 9/10 inch (16 to 23 mm) long. The adults have four membranous wings.



Larvae.

Identifying the Injury. - Young larvae feed gregariously on the previous year's foliage. They consume the outer portion of the needle, causing the remaining part to take on a strawlike appearance, which is characteristic of early sawfly feeding. Mature larvae consume the entire needle and may feed on the buds and tender bark.



Feeding damage on terminal.

Biology. - Adults emerge from cocoons in late October and early November. After mating, the female cuts a slit at the edge of the needle and inserts a small, white, oval egg. Several eggs are usually laid at evenly spaced intervals in each needle. Each female lays from 30 to 100 eggs. The eggs overwinter and hatch the following April. Around mid-May, the full-grown larvae drop to the ground and spin cocoons in the litter or surface soil. They pupate in late September. There is one generation per year.

Control. - Natural enemies, including a polyhedrosis virus, and adverse weather conditions seem primarily responsible for the drastic fluctuations in sawfly populations. Chemical insecticides can be used to control the sawfly.
