



Forest Health Protection, Southern Region

REDHEADED PINE SAWFLY,

Neodiprion lecontei (Fitch)

Importance. - The redheaded pine sawfly is an important pest in young, natural pine stands and plantations. Heavy defoliation can lead to growth loss and tree mortality. The redheaded pine sawfly occurs in southeastern Canada and throughout the eastern and southern United States. Loblolly and longleaf pines are preferred hosts, although shortleaf, pitch, and slash pines are also attacked.

Identifying the Insect. - The mature larva is easily identified by its bright red head. The body is about 1 inch (25 mm) long and pale whitish yellow to bright yellow in color, with 4 to 6 rows of black spots on the body. The cylindrical cocoon is reddish brown and about 1/2 inch (12 mm) long. The adults resemble flies. They have four transparent wings and vary from 1/5 to 2/5 inch (5 to 10 mm) in length.



Larvae.

Identifying the Injury. - Larvae feed in colonies containing a few to over a hundred larvae. Larval feeding generally occurs on larvae feed on the outer portion of the needles. The unconsumed portions of needles have a strawlike appearance. Older larvae strip branches of all foliage and sometimes feed on tender bark when foliage is scarce.

Biology. - This sawfly overwinters in the larval stage within cocoons located in the soil or duff. Adults emerge in the spring. The female lays approximately 120 eggs in rows on the needles of a single twig. Each egg is deposited in a small pocket sawed into the edge of the needle. Eggs hatch in about 2 to 4 weeks, and larvae feed gregariously for about 4 weeks. Larvae then drop to the ground and spin their cocoons. In most of the South, there are two generations per year, but in Florida there are usually three.

Control. - Outbreaks occur periodically and tend to subside after 1 to 2 years of heavy defoliation. Natural factors and climatic conditions help control populations. A polyhedrosis virus is being used to control outbreaks of the redheaded pine sawfly. Chemical insecticides also may be used.
