

# Forest Management Sheet INSECTS

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## **Common Insect Pests of Young Pine Trees and Recommended Controls**

Target Species: Leaf-cutting Ant, Regeneration Weevil and Pine Sawfly

#### **WHERE APPLICABLE:**

The Texas leaf-cutting ant or town ant is only found in the southeastern half of Texas and west-central Louisiana. The ants prefer deep sandy soils, but they can occur on other soil types. Regeneration weevils (pales and pitch-eating) can occur on most any site where pine timber has been recently harvested. Seedling damage by weevils is seldom a concern unless the time interval between harvest of pine sites and planting is less than six months. The shorter the interval between harvest and planting, the greater the possibilities for weevil damage. The redheaded pine sawfly can also attack seedlings on many site types, but outbreaks tend to be localized and short-lived and are usually ended by natural controls.

#### **DESCRIPTION:**

The Texas leaf-cutting ant gets its name because it collects green plant material and its colony consists of a cluster of mounds similar to a town or city. The green vegetation collected by the ants serves as a medium on which they culture a fungus -- their main source of food. These ants cause problems during the winter months when there is limited green vegetation available for them. The ants will clip needles, buds, and sometimes the entire stem of seedlings. Pine seedlings seldom survive the ravages of leaf-cutting ants. If ants are on or near a tract of land that is to be planted, the colony should be treated with "Volcano® Leafcutter Ant Bait," ideally four or more weeks before the trees are planted. To apply Volcano®, a specified amount (based on the size of the colony) of the bait should be broadcast over the central nest area. A one-pound bag of Volcano® is the smallest quantity available, but can treat two to four average-sized colonies.

Regeneration weevils (pales and pitch-eating) can also cause damage to young pine seedlings under certain conditions. These weevils damage young pine trees by feeding on the tender bark of the stem and roots. If their feeding girdles the stem, the seedling will die. Intensive site preparation that eliminates pinelogging debris (where weevils lay their eggs) tends to reduce weevil activity. On sites where weevils are likely to occur, delaying planting until the second planting season after harvest can prevent damage. However, landowners often want a tract planted as soon after harvest as possible for economic reasons. When weevils are expected to be a threat, it is recommended to plant seedlings treated with the insecticide Pounce®. For weevil control, this chemical is only registered for application in the nursery. An added benefit is that Pounce®-treated seedlings are protected from leaf-cutting ants and pine tip moth for about three months.

The redheaded pine sawfly can also attack young pine trees in East Texas. Adult sawflies are actually a wasp and the larval stage is similar to a caterpillar. The larvae feed on pine needles and when they completely defoliate a young tree, the tree often dies. Full-grown larvae are about an inch long, have a rust-red head, and the body is light yellow-green with six rows of black spots. If treatment is needed, Orthene® or Sevin® will provide good control.

#### **BENEFITS:**

If needed, following these control methods can prevent seedling damage, eliminate the need for replanting, thereby increasing timber revenue in the future.

#### **CONCERNS:**

Volcano®, registered for use against leaf-cutting ants in Texas and Louisiana, is nearly 100% effective, and safe and economical to use. Pounce treated seedlings and Orthene® or Sevin® are also safe, but all label mixtures and directions should be followed exactly.

### **COSTS:**

For town ant control, a one-pound bag of Volcano costs about \$35 plus shipping. Volcano® is available from Red River Specialties in Jasper, TX (409/384-7965) or Shreveport, LA (318/425-5944) and treatment information is available from your local TFS office. To prevent weevil damage, Pounce®-treated seedlings must be special ordered and are available from the Texas Forest Service Indian Mound Nursery (936/858-4202) or other sources for an additional cost of about \$3.50 per 1,000 seedlings. Orthene® or Sevin® are relatively inexpensive and can be obtained at your local feed store.





