

ZIMMERMAN PINE MOTH

Dioryctria zimmermani



Figure 1. Examine the trunk and branch whorls for resin flow and white pitch accumulation caused by larvae tunneling inside the main trunk.

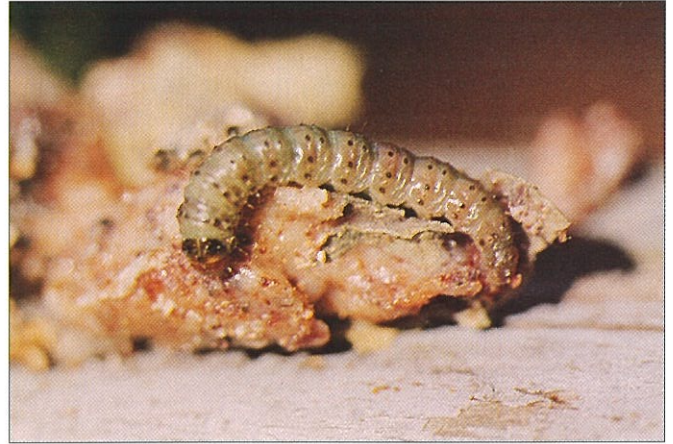


Figure 2. The larva feeds under the pitch globs and severs the vascular tissues. The reddish frass specks in the pitch are diagnostic for this pest.

SYMPTOMS: White to cream-colored pitch masses (Figure 1) accumulate at the whorl area where the branches join the main trunk. The presence of pink-red sprinkles (frass) inside the pitching resin (Figure 2) distinguishes the Zimmerman pine moth larva's attack from other borers or disease symptoms. The part of the tree above the pitch masses (Figure 1) still receives water from the tree's roots so it continues to grow, but because of the larva's tunneling, nutrients taken in through the tree's canopy do not travel below the girdled attack site. Because it is not getting nourishment, the trunk below the attack site does not increase in diameter; therefore, the top becomes susceptible to wind throw and breakage after a few years.

CAUSE: All pines are attacked, but Austrian and Scotch are most susceptible. The larva is the immature stage of a moth that is 5/8-inch long and has gray wings with mottled reddish and gray markings. Adults emerge from the tree mid-June through mid-September (peak emergence occurs in mid-August) and deposit eggs on rough areas on the trunk. The larvae hatch and spend the winter in little silken covers under bark flakes or resin. In early April through early May, the larvae tunnel into the wood. There is one generation per year.

SOLUTIONS: There are two windows of control. The best results have been in early April before the overwintering larvae start tunneling. The second window is mid-June through early September, when the adults start flying. All branches and the entire trunk should be thoroughly treated.