

Zimmerman Pine Moth

TREE DOCTOR TIPS

Zimmerman Pine Moth (*Dioryctria zimmermani*)

DESCRIPTION:

Zimmerman pine moths are 5/8" long with gray wings marked with mottled red and gray. Once a year, their larvae hatch and tunnel into trees, interfering with the tree's sap flow and weakening them. Eventually, wind may break the weakened tops. Primarily a pest in the Great Lakes states, although it is found out in Colorado and east into western PA and NY. The pest is active from mid-spring through September, with treatment periods in mid-spring and late summer/early fall.

HOSTS:

The larvae of Zimmerman pine moths attack all pines, but Austrian and Scots pines are most susceptible.

BIOLOGY AND SYMPTOMS:

Adult moths emerge from trees between mid-June and mid-September, with peak emergence in mid-August. Once a year, they deposit eggs on rough areas of tree trunks. After the larvae emerge, they overwinter in little silken covers under bark flakes or resin. From early April through early May, they tunnel into the wood. These time windows may shift by days or weeks depending on your geographic area and climate conditions. Consult with your arborist for a more accurate time frame based on your location.

The larvae leave white to cream-colored pitch masses in the whorl area where the branches join the main trunk. Pink-red sprinkles of frass and sawdust in the pitch distinguish this pest's attack from other borers or symptoms of disease.

The part of the tree above the masses still gets water from the roots, so it continues to grow. Nutrients do not travel below the girdled attack site, however, so the trunk does not increase in diameter. After a few years, the top becomes susceptible to breakage.

MANAGEMENT:

To manage these pests, thoroughly treat the entire trunk and all branches. There are two windows of opportunity to do this. For best results, treat in early April, before the overwintering larvae start to tunnel. The second treatment window is from mid-August through early September, when the adults start flying. Treatment window may vary based on location and climate conditions.

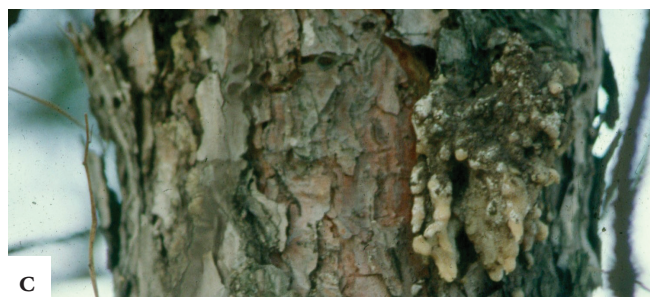
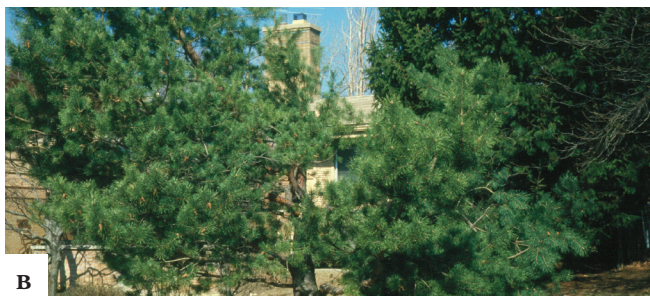


FIGURE A. ZIMMERMAN PINE MOTH DAMAGE

FIGURE B. ZIMMERMAN PINE MOTH DAMAGE, MAIN LEADER LOST

FIGURE C. ZIMMERMAN PINE MOTH PITCH MASS OVER 2 YEARS OLD

*The scientists at **The Davey Institute** laboratory and research facility support our arborists and technicians in diagnosing and prescribing based on the latest arboricultural science. For specific treatment and application details, your arborist may consult **The Davey Institute** PHC Handbook.*

