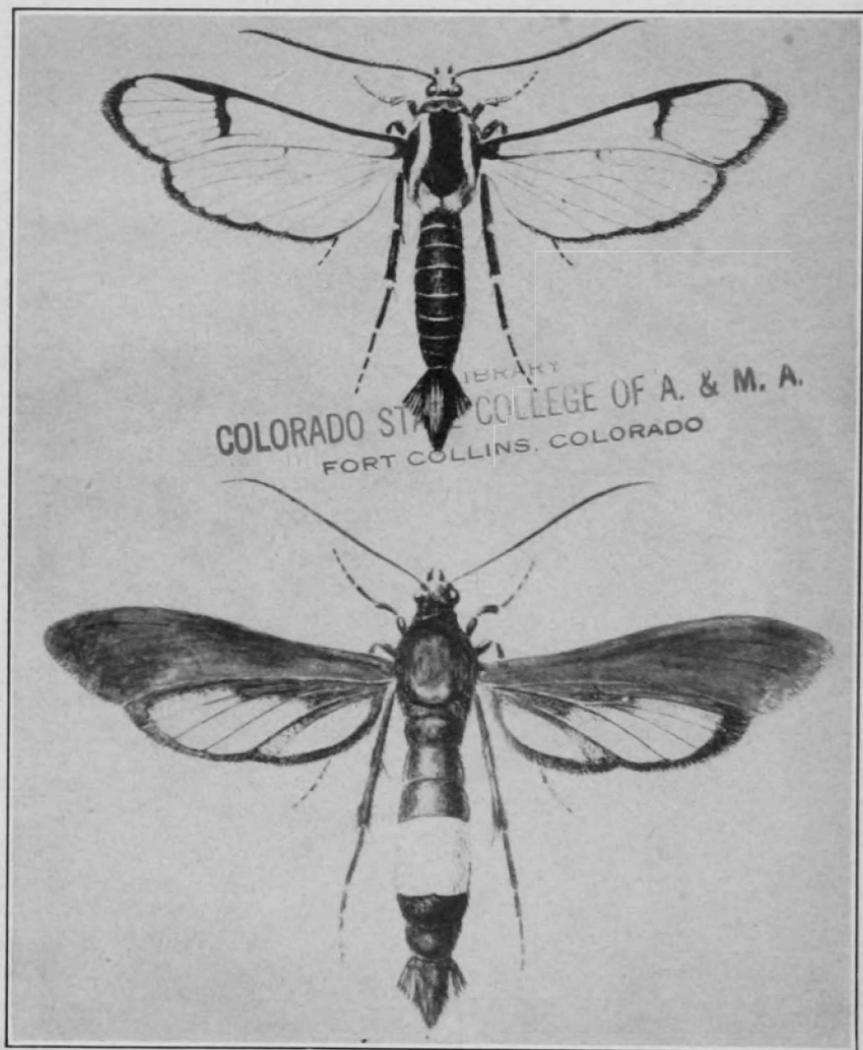


Peach-Tree Borer



Peach-Tree Borer Moth

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Peach-Tree Borer

Aegeria exitiosa Say

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Due to its insidious nature of attack, the peach-tree borer kills many cherry, peach, apricot and other stone-fruit trees in Colorado each season. This annual loss which is far greater than

most growers realize, can be simply and effectively eliminated by following the suggestions outlined in this circular. One to two cents invested in the proper insecticide may save the life of a producing tree.

Type of Injury

The white worms of this clear-winged moth feed within the bark of the peach and other stone fruits near or just below the surface of the soil. The external evidences of the injury are the masses of gum that exude where the injury occurs. This may be from 3 to 4 inches above the soil surface to 3 inches below. Brownish frass or sawdust is usually mixed with the gum and may show at the ground level. Trees may be partially or completely girdled. A heavy infestation may girdle a tree in one season. Successive light infestations may have about the same effect in time. Neglected orchards or orchards that have suffered from drouth or winter injury and are low

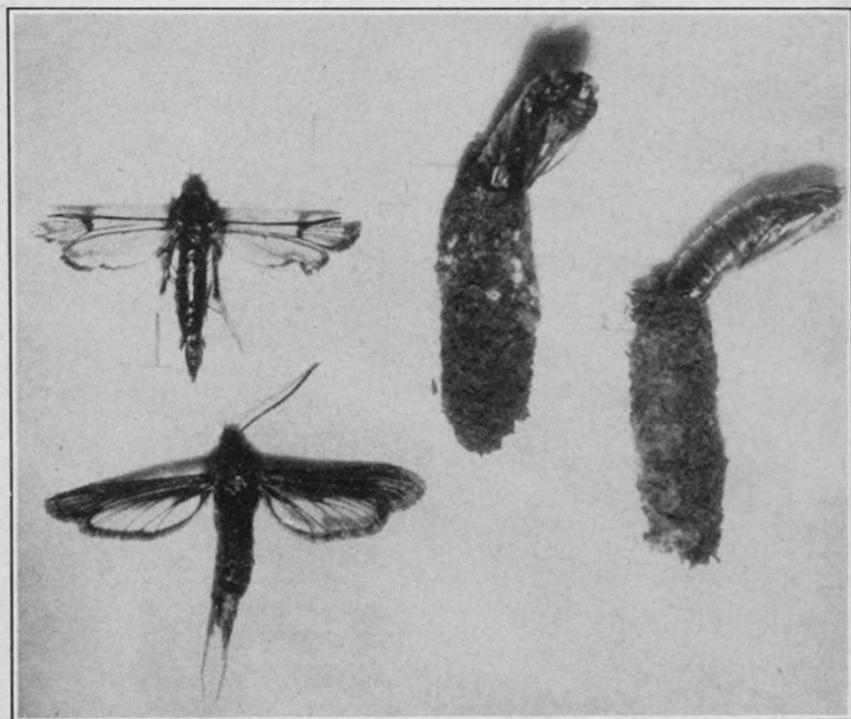


Larvae of peach-tree borer.

in vitality are most likely to be infested with borers. Especially good care should be tended young trees to keep them in a vigorous growing condition.

Appearance and Life Habits

The adult peach borers are black-and-yellow, clear-winged, wasp-like moths that are often seen flying about the bases of trees during the late summer and early fall. They lay their eggs mostly on the trunks of trees and within a few inches of the groundline. The small larvae immediately burrow into the soft bark, where they feed until maturity. The full-grown larva is about an inch in length and of a very light yellow color, except the head, which is dark reddish-brown.



Adults, cocoon, and pupal case of peach-tree borer.

The mature larva leaves the burrow and spins a silken cocoon in which it incorporates masses of sawdust and frass. These are on the surface of the bark just at the groundline, and in the soil. The empty pupae skins may often be seen protruding from these masses after the moths have emerged. The moths are most active during the heat of the day, and when seen flying in the sunlight are often mistaken for wasps.

The moths begin to appear in July, egg laying begins within a few days after the moths emerge. Moths continue emerging until September with the greatest number coming out in August.

All eggs hatch in the fall, but this long period of egg laying produces larvae of varying sizes to go into the winter.

The larger larvae, which may be as much as two-thirds grown, spend the winter in the burrow, but the smaller ones leave their burrows and spin silken hibernacula on the bark in which to winter. These are often seen on nursery stock. There is but one generation each year.

Control Measures

The most important control measure is to prevent infestations by keeping orchards well pruned and in good vigorous growing conditions. Infestations usually start in only a few trees and prompt treatment will prevent a general infestation of all trees.

Paradichlorobenzene Treatment.—PDB or paradichlorobenzene is a white crystalline substance having an ether-like odor. The vapors from PDB kill borers that are exposed under proper conditions. The fumes are harmless to man and domestic animals under ordinary conditions.

Successful use of PDB depends upon the accuracy and care in making treatment. The time of treatment must take into consideration soil temperature. A soil temperature of 60 degrees F., or higher, is necessary for several days following treatment. September is the most favorable month to apply PDB. Application should be made after the majority of eggs have hatched but early enough to have from 10 days to 2 weeks of soil temperature of at least 60 degrees. In the Palisade section the desirable time is just following fruit harvest and for Delta County and other peach sections just before fruit harvest. Some follow the practice of tearing the mounds down within 3 weeks for fear of injury, but the general practice is to allow them to remain until spring. They should be torn down then, or larvae may enter so high in the tree by next fall that it will be difficult to treat them satisfactorily.

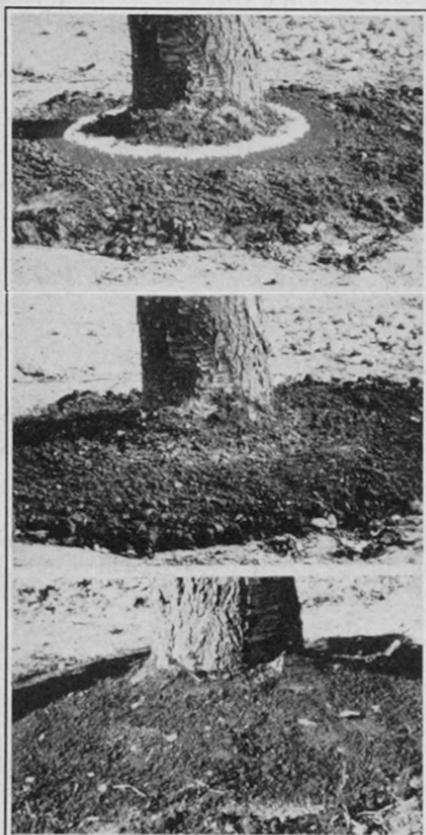
The amount of PDB required to treat a tree is based upon the age and size of tree as follows:

Trees 3 years	1/2 ounce PDB
Trees 4 years	3/4 ounce PDB
Trees 5 years	1 ounce PDB
Unusually large trees	1 1/2 ounces PDB

Preparing Soil for Treatment

To prepare a tree for treatment, grass and debris should be removed from around the trunk and the ground made smooth

and level. If borers are working above the ground level, draw in some fresh soil and pack it down firmly around the trunk so



Middle—Ground prepared for PDB treatment.

Top—PDB applied.

Bottom—PDB covered with soil, completing treatment.

that the earth is approximately level with the infested portion. By all means do not lower the ground level in preparing around the trees. If the ground level has been lowered the gas will penetrate below the point where the young larvae are feeding and unsatisfactory control will result and the material will be wasted. The PDB should then be placed around the tree in a ring about 1 inch from the tree. The material must not touch the trunk of the tree or injury may result. After placing a ring of PDB, a shovelful of well-pulverized soil should be sprinkled carefully over the crystals, from above, in a manner so as to avoid pushing them against the bark. Then be sure to mound the ground up at least 3 to 4 inches around the trees after application and pack down to aid in holding the gas around the base of the tree. Effectiveness of treatment depends on carefully mounding the dirt so as to confine gas to area infested with borers.

For peach-tree-borer control in cherry trees follow the same treatment recommended for peach trees.

Caution—Serious injury to trees may result from carelessness in applying PDB in too large quantities or too close to the trees.

Additional information concerning insect pests may be obtained from your County Extension Agent or by writing to the Extension Entomologist at Colorado State College, Fort Collins, Colorado.