

# How to Control PEACH TREE BORERS

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By J. G. Rodriguez

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# How to Control

## PEACH TREE

### BORERS

By

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# How to Control Peach Tree Borers

By J. G. Rodriguez

There are two species of borers that attack peach trees—the peach tree borer and the lesser peach tree borer. Both species of insects originally infested their native hosts, wild plums and cherries, but since the introduction of the peach to North America, they have shown a decided preference for this new host.

The adults of these borers are clear-winged moths with steel-blue and yellow or orange body markings, and are often mistaken for wasps as they fly about peach tree trunks (Fig. 1). It is difficult to distinguish between the two species, although the lesser peach tree borer is the smaller, as the name implies. The male and female of the adult lesser peach tree borer are almost identical, while the male and female of the peach tree borer are quite different, the female being larger and having a vivid orange band on the abdomen. It is difficult to recognize the adult male peach tree borer from the male or female lesser peach tree borer.

The borer or larvae of the two species are even more difficult to distinguish, particularly when not fully grown. As in the adult stage, the peach tree borer is the larger when fully grown. In the larval stage, the species can be distinguished in a practical manner by noting the location of the borer on the tree. Larvae of the lesser peach tree borers occur almost always high on the trunk, in the crotches, or on the lower branches; however, they are sometimes found at the ground line. The larvae of the peach tree borer, on the other hand, occurs predominantly below—but sometimes just above—the soil line of the trunk.

## Nature of Injury

Killing of trees can actually result from borer injury, young plantings being particularly susceptible. The cambium or inner layer of bark is attacked. The lesser peach tree borer usually gains entrance through an injured area in the bark. The first sign of borers is a jelly-like gum mixed with frass exuding from

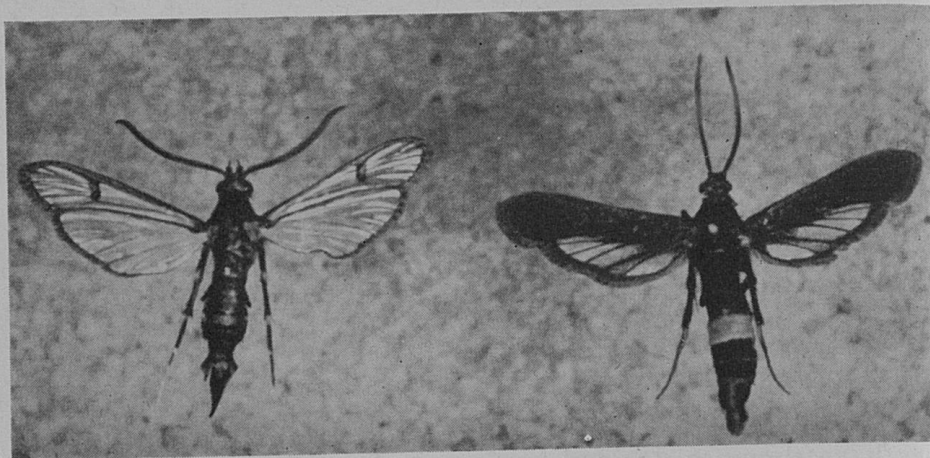


Fig. 1.— Male and female moths of the peach tree borer.

the burrow where the borer is feeding. Inspection of trees for borer injury is easier in the spring because the larvae become more active at this time and the exudation of gum from the burrows is quite conspicuous.

### Life History

Both species of borers develop from the egg to the larvae or borer, to the pupa, and to the moth or adult stages. The seasonal history of the two species is somewhat similar, yet different enough to influence control practices.

The eggs of both species are similar, usually a rich chestnut brown, although they may be lighter when freshly laid. The peach tree borer female lays eggs (an average of over 500 in her lifetime) not only on tree trunks, but also on vegetation near the trunk. The lesser peach tree borer, on the other hand, lays eggs carefully on the cracks or about the wounds of the tree. The eggs of both species hatch in 9 to 13 days and the small larvae move rapidly toward their respective areas of attack on the tree.

Both species of borers hibernate as partly grown larvae and feeding is resumed in the spring. In the case of the lesser peach tree borer, there are two broods annually; the spring-brood moths emerge in late April or early May, and the second brood adults have been observed laying eggs as late as October 30 in southwestern Kentucky. The peach tree borer begins emerging quite generally by early July.

It is evident, therefore, that lesser peach tree borer emergence

continues for about six months, and considerably more protection is required against this species than against the peach tree borer.

### Summer Treatment Control Measures

Experimental work has shown that parathion and DDT are the best materials available for control of these borers.<sup>1</sup> Parathion will control both species, but DDT is effective only on the peach tree borer.

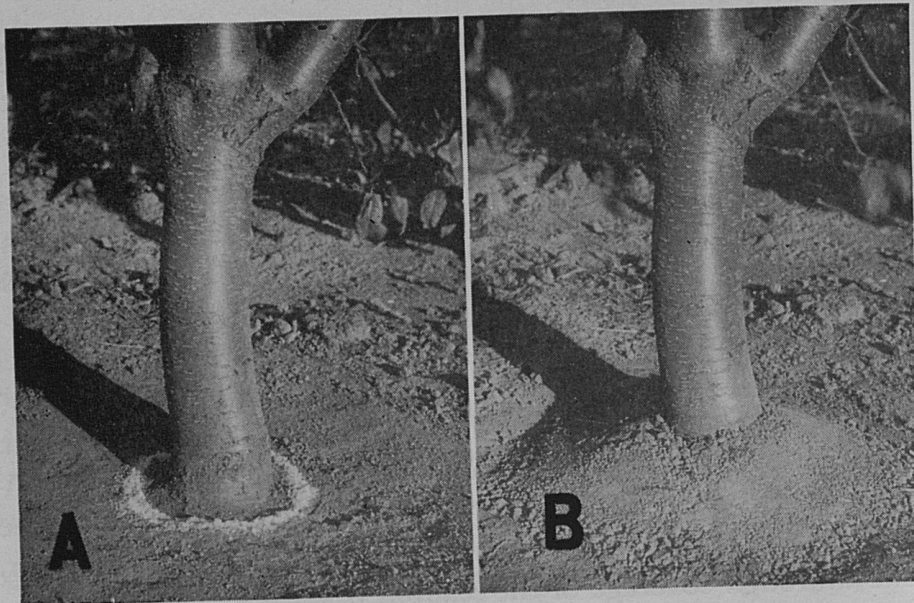
Begin summer treatment for control of both species of borers about June 10, using 3 pounds of 15 percent parathion per 100 gallons of water, and making at least four applications at 3-week intervals during the season. The second, third, and fourth applications in this plan are dual-control sprays and will control the peach tree borer population as well as the lesser peach tree borer. Make thorough coverage of the scaffold branches, and drench the trunk, allowing run-off to wet the soil at the base of the tree.

If only the peach tree borer is present, and particularly if it is not a serious infestation, DDT used at 6 pounds of 50 percent wettable material per 100 gallons will give effective control. Apply July 1, August 1, and September 1. Take care to cover the trunks, thoroughly, and to remove trash, weeds, and other vegetation from around tree trunks.

### Fall Treatment

A fall treatment of paradichlorobenzene (PDB) applied at soil level is effective only on the peach tree borer. Make application about October 1, when the soil is dry. Remove trash from the base of the tree trunk, remove gum if present, and place a band of crystals around the trunk, taking care to allow at least 2 inches between the band and the trunk (Fig. 2). One ounce of PDB is advised for treating trees 6 years of age and older, and from  $\frac{1}{2}$  to  $\frac{3}{4}$  ounce on trees from 3 to 5 years old, depending upon the size of the tree. Do not use more than  $1\frac{1}{2}$  ounces on any tree. Cover the crystals with about 3 inches of fine soil, piling it toward the trunk, then compact the mound with the back of a shovel. After 4 weeks, remove the soil from around trees less than 4 years

<sup>1</sup>J. G. Rodriguez and W. D. Armstrong, 1951. Peach tree borer control with sprays. Kentucky Fruit Notes 4(5):4-6.



**Fig. 2.—PDB Treatment for Peach Tree Borer**

(A) Ground leveled and PDB crystals placed around trunk. (B) Soil placed over PDB and packed with back of spade.

of age; on older trees, the mounds may be removed in the spring. For lesser peach tree borer control, paint the wounds with a mixture of PDB dissolved in crude cottonseed or miscible oil. Warm 2 quarts of oil, dissolve pound of PDB crystals (if miscible oil is used, add water to this mixture to make up to 1 gallon) and apply with a paint brush. Apply this treatment during the late fall or on warm winter days, painting only the gummy area. The gum should not be removed.

## Summary of Characteristics

### Lesser peach tree borer

Smaller than peach tree borer

Adult male and female almost identical

Larvae usually found high on trunk, in crotches or on lower branches, but sometimes at ground line.

Borer gains entrance through injured area in bark.

Eggs light to rich chestnut brown; hatch in 9 to 13 days.

Moth lays eggs on cracks or about the wounds of the tree.

Two broods annually—spring and fall.

### Peach tree borer

Adult female larger than male; has vivid orange band on abdomen

Adult male difficult to distinguish from male or female lesser peach tree borer

Larvae usually found below ground line, but occasionally just above.

Borer attacks sound bark.

Eggs light to rich chestnut brown; hatch in 9 to 13 days.

Moth lays eggs on tree trunks and on vegetation near the trunk.

One brood annually—early July.

