Controlled peachtree borer helps reduce canker incidence

LANCASTER - The lesser peachtree borer is a native insect which was first reported in Pennsylvania in the early 1900's. Traditionally, the lesser peachtree borer has ranked below the peachtree borer in importance among producers. In the northeast, however, it has become more of a problem in recent years. Besides infesting wounded areas of the tree until the entire branch or limb is girdled (resulting in limb death), lesser peachtree borer feeding activities can cause additional entrances for the damaging disease, peach (cytopora) canker.

Cytopora canker is a fungus disease which invades dead and injured tissue. Shortened tree life and the loss of 30 to 50 percent of the tree's fruit is a conservative estimate of the economic impact caused by peach canker. The disease has been identified in the Northeast United States since about 1900, but appears to be on the increase over the last ten years.

There appears to be a close association between the lesser peachtree borer and peach canker" reports Entomologist Larry A. Hull at Pennsylvania State University's Fruit Research Laboratory in Biglerville.

"Peach canker enters the tree through wounds, winter injury and pruning cuts," Hull explains. Severe winter injury caused by cold temperature damage to the trees over the past three years has made peach trees in the state more susceptible to peach canker.

Growers are able to surgically remove the cankered areas from the tree, then treat the tree with a fungicidal disinfectant to allow healing," he explains. "However, the lesser peachtree borer can bore through the wound callus taking the canker right along with it. In this instance, the fungus is spread by the lesser peachtree borer tunneling into the wood." Hull reports. A peach canker can girdle a tree and cause the death of the tree within two years after infection. Apparently, controlling the lesser peachtree borer is essential in helping to reduce the severity of cytopora canker.

Hull contends that now more than ever peach producers must understand insect pests, such as the lesser peachtree borer. "Not only must growers of fruit trees be able to identify this insect, they must also understand the insect's life cycle so that they can become better prepared to make proper

pest management decisions," Hull explains.

The lesser peachtree borer overwinters in various larval stages. In the spring, larvae feed until mature than burrow to the outer bark surface, leaving only a thin disc of bark. In Pennsylvania, moths of the lesser peachtree borer are in flight from mid May through October. Emergence peaks from early to mid June and mid to late August in northern areas of the United States.

During favorite weather, mating occurs within an hour after moths emerge. Egg laying follows shortly after mating. The female deposits eggs in cracks and crevices near injured bark from ground level to a height of eight feet (most are deposited within three to four above ground level). Eggs hatch in seven to 14 days, depending on temperature, and young larvae invade the wounded tissue to feed.

The larvae is about 0.7 mm long when newly hatched. The head is yellowish-brown and the body light tan. The length of the full-grown larvae is 20-26 mm. The head and thoracic shields are yellowishbrown with a white body. There are three pairs of short thoracic legs.



This peach is a result of a healthy tree. However, it's important to guard this tree from Cytopora canker, a fungus disease which invades dead and injured tissue. Shortened tree life and the loss of 30 to 50 percent of the tree's fruit is a conservative estimate of the economic impact caused by peach canker.

Larvae of the lesser peachtree borer are common at wounded or injured areas of the tree. They may be found in the trunk, scaffold innbs, or branches previously injured or diseased. Pruning wounds, areas damaged by disease or harvesting equipment, insect or winter-injured areas, or sunscalded bark are frequent

Once established, larvae feed on tender, growing wood at the margins of the injured area. If not controlled, they enlarge the wounded area until the entire branch or limb is girdled, resulting in limb death. Their feeding activities provide entrances for disease organisms such as peach

Control Measures

"Spray timing for controlling the lesser peachtree borer is important," Hull explains. "The first ten days and last ten days of June are critical in timing sprays for the first generation of the lesser peachtree borer. The second critical spray period is late August or early September when the second generation usually occurs," he says.

Hull points out that researchers in the eastern United States are conducting test work on peaches with Pydrin Insecticide (fenvalerate), a pyrethroid compound that just received federal registration for use on peaches. "Preliminary data shows that (Turn to Page D28)

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