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Stone fruit insects— control in home plantings

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Quick Facts

Peach tree borers can be a serious problem for peach, cherry and to a lesser extent, nectarine, almond and plum trees.

Peach tree borers are most vulnerable during egg laying and egg hatch; once larvae move under the bark, insecticides are ineffective.

Peach twig borers are larvae of a small moth that infest peach, nectarine, almond and apricot fruit.

Two species of weevils, the plum gouger and the cherry gouger, may injure plum and cherry, respectively.

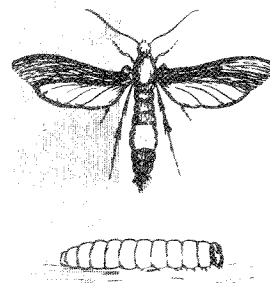
Leaf curling aphids are common in the spring on peach, plum and apricot.

Dormant oil sprays are useful for control of mites, aphids, and scales which overwinter on the tree.

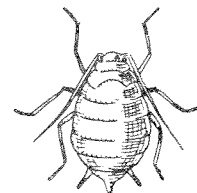
Peach Tree Borer

Peach tree (crown) borer (Service in Action sheet 5.566) can be a serious insect problem for peach, cherry, and to a lesser extent, nectarine, almond and plum trees throughout the state. The immature (larval) stage causes damage as the larvae tunnel underneath the bark through the sapwood. This injury can seriously affect the vigor of the tree and death can result from heavy infestations. Trees previously stressed, including recent transplants, are particularly vulnerable but peach crown borers are aggressive and healthy trees also can be attacked. Damage usually is confined to the lower trunk or just beneath the soil. Often oozing sap or a wet spot on the bark is externally visible.

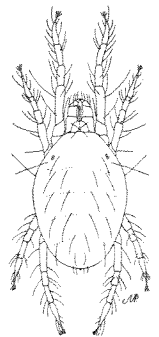
The ooze is clear or translucent often darkened by the sawdust-like excrement produced as the insect feeds. This ooze should not be confused with the the amber-colored gum produced by cytospora canker. Cytospora can invade branches and trunks of stone fruit trees (particularly peach) and often is confused with peach tree borer injury.



Peach crown borer.



Aphid.



Spider mite.

Several insects can injure stone fruits (peach, plum, cherry, apricot) in Colorado home plantings. Some of these insects are capable of seriously damaging fruit or threatening fruit tree vigor. These insects may need routine management to prevent serious losses. Many other insects are minor in importance or need only occasional treatment. These are best handled by regularly watching trees for development of pest problems and treating as problems start to develop.

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The most vulnerable stage of the peach tree borer is during egg laying and egg hatch. The adult stage is a free-flying, clear-wing moth that lays eggs in bark cracks. If a protective insecticide covers the trunk and base of the tree at this time, control is possible. Once eggs hatch and larvae move under the bark, insecticides are ineffective. Egg laying tends to occur from early July through September. Various Cooperative Extension codaphones or pest alerts give advice on flight occurrence in many areas of Colorado.

At present, chlorpyrifos (Dursban, Lorsban) and Lindane sprays are considered among the more effective treatments for controlling peach crown borer. However, lindane may be used only on nonbearing fruit trees. Chlorpyrifos is registered as a trunk treatment for peach and nectarine, but not other fruiting stone fruits. Thiodan (endosulfan) is labelled for peach crown borer control on all stone fruits but often is difficult for homeowners to purchase. Great care should be taken to prevent any of these treatments from reaching fruit or foliage.

Peach Twig Borer

Peach twig borers are larvae of small moths that can infest peach, nectarine, almond and apricot fruit. Peach twig borers also may tunnel into terminal twigs, killing the terminal new growth. This latter injury, although often quite visible, rarely causes any significant plant damage.

The presence of the insect may not be noticed until the fruit is harvested. The peach twig borer feeds at the stem end of ripening fruit. The resulting damage includes gouging and the appearance of a wet sawdust-like material. Occasionally the insect will tunnel well into the fruit.

There are three generations of the peach twig borer each year and generally the first generation (mid-June) is most injurious to apricot fruit, the second generation (mid-July) to peach fruit. Treatments for peach twig borer are best applied when egg laying/egg hatch coincides with the occurrence of developing fruit. Insect development updates are released via Cooperative Extension operated codaphones or pest alerts. Insecticides recommended for control of peach twig borer include Sevin and diazinon.

Gougers

Two species of weevils, the plum gouger and the cherry gouger, may be encountered in parts of Colorado and injure plum and cherry, respectively. The adult stage makes a small wound in the developing fruit into which it lays an egg. The newly hatched larvae then tunnel into the fruit and feed upon the pit. Fruit damage usually is not extensive and is marked by small external scars.

Plum gougers and cherry gougers are best managed by spraying trees with a malathion-methoxychlor fruit spray when the adult weevils

appear on trees and begin to lay eggs. This usually occurs shortly after fruit set. Adult weevils can be detected by shaking branches over a sheet to collect the insects. Dislodged weevils typically "play dead" and will remain motionless for several minutes.

Plant Bugs and Stink Bugs

Several species of bugs can injure fruit by feeding upon developing fruit, particularly lygus bugs and Campylomma bugs. Fruits injured by these insects typically fail to develop around the injury site. Scars and distortions typically result from these injuries, including a condition called "cat-facing" of peaches. Among stone fruits, peaches and apricots are most frequently injured.

Problems with these insects usually occur in localized areas. Lygus bug problems often are associated with location near alfalfa hay or other crops in which plant bugs breed. In general, the best timing for insecticide applications directed at plant bugs is immediately prior to bloom. A second petal fall application also may be necessary. Recommended insecticides for control of the various plant bugs include diazinon, Sevin and malathion. **Insecticides should not be sprayed during bloom** to prevent heavy losses of honeybees, which are important for pollination.

Aphids

Several species of aphids infest stone fruits. These insects are most commonly observed early in the season on new growth. Leaves heavily infested at this time often become distorted. Aphids, however, may occur throughout the season. When abundant, they may damage the tree by removing large amounts of sap during feeding. Aphids also excrete sticky "honeydew" on leaves and fruit, which promotes mold development.

Often aphids are kept under control by various natural enemies, such as ladybird beetles. If not, insecticides such as malathion or diazinon may be used for control. Many aphids overwinter on trees as eggs and these may be killed with dormant oil applications. Dormant oils are the best means to manage leaf curling aphids such as the green peach aphid.

Scales

Several species of scales occur on stone fruits and controls are often needed every few seasons to reduce scale infestations. Summer insecticide applications often are relatively ineffective for scale control since these applications must be timed to coincide with the brief period of scale egg hatch. Shortly after hatching, scale insects secrete a waxy covering protecting them from insecticides.

Management of scale insects is best achieved through use of dormant oils to kill overwintering stages of these insects. Dormant oils are best applied in spring, on days when temperatures exceed 50° F, before buds have opened.

Mites

Various kinds of spider mites may feed on the leaves of fruit trees. In a backyard setting, mite control is best achieved by the use of dormant oils. Diazinon and malathion applications made early in the season also may help suppress mites. Use of Sevin (carbaryl) on mite susceptible trees should be avoided.

One species of mites, found most frequently on plum, and choke cherry, causes small warty pouch galls on leaves. This injury, although conspicuous, does very little injury and controls are not recommended.

Table 1: Generalized timing for stone fruit insecticide applications.

Timing	Treatment
Pre-bud break	Dormant oil for control of overwintering stages of scales, mites, and aphids.
Pre-bloom	Aphids, plant bugs and stink bugs, if needed.
Mid-June	Twig borer in apricot. Aphids, plum gouger, cherry gouger, and mites if needed.
Early July	First application for peach tree borer. Peach twig borer in peach, if needed.
Early August	Second application for peach tree borer.

Table 2: Preharvest intervals for insecticides used on stone fruits.

Insecticide	Preharvest interval (days)
carbaryl (Sevin)	peaches (1), plums (1), cherries (1), apricots (3), nectarines (3), almond (0)
diazinon	10 days, all stone fruits except almond (0)
malathion	cherries (3), plums (3), peaches (7), apricots (7), nectarines (7), almond (0)
methoxychlor	cherries (7), plums (7), apricots (21), peaches (21), nectarines (21), almonds (not registered)
endosulfan (Thiodan)	apricots (20), nectarines (30), peaches (30), cherries (21), plums (7), almonds (not after petal fall)

Related Publications

Service in Action sheet 2.800, *Backyard orchard management: insect and disease spray guide*, should also be consulted when treating stone fruits. Additional information is included as to when to make applications, mixing and application instructions, and pesticides to use for control of both insects and diseases.