

Homeowner Peach & Plum Insect and Disease Control

Diseases

Brown rot is a serious peach disease. The fungus that causes it overwinters in twig cankers and in mummified fruit that is either left hanging on the tree or has dropped to the ground. The fungus becomes active in early spring or about the time the buds are showing pink.

Brown rot attacks the blossom, twig, and fruit. This early infection of the twig and blossoms makes centers from which the fungus may infect the fruit during rainy periods throughout the growing season. Direct your spraying and sanitation controls toward these sources of infection. Remove old mummified fruit from the tree and ground before spring for brown rot control.

Scab is a fungus disease. It overwinters in shallow injured areas on the twigs. Infected areas on the fruit appear as greenish black spots. You will begin seeing these spots about 3 weeks after petals fall. The greenish black spots appear only on the skin; they do not enter the flesh of the fruit. Severe damage causes the peach to crack open.

Peach leaf curl is caused by a fungus. Infected leaves get larger and tend to curl. The leaves drop from the tree, weakening it so that it may not hold and develop its fruit. Peach leaf curl does not occur regularly on most peach and plum trees. A dormant fungicide applicator is necessary to control this disease.

Bacterial spot is caused by bacteria. It overwinters in shallow wounds on the twigs. The disease may occur on leaves, twigs, and fruit. On the leaves, it causes light tan spots. The center of the spots drops out, looking like a shot hole. It

spreads mainly by wind and rain. If control is needed, contact your county Extension office. This disease is difficult to control.

Insects

Heavy infestations of **San Jose scale** and **white peach scale** insects severely damage peach and plum trees. Control with dormant oil sprays during late winter or early spring but before bud break. The insecticides used during spring and summer cover sprays will control the immature insects that come out now. Adding 1 teaspoon of household detergent per gallon of spray helps ensure good coverage when making scale control applications.

The worm stage of the **oriental fruit moth** bores into the terminals, or tips, of the peach tree branches. Their tunneling causes the terminals to die back 4 to 6 inches. The worms enter the fruit after the terminal branches harden and become less attractive to them.

Plum curculio is a dark brown snout beetle that overwinters underneath leaves, brush, and other debris near the peach orchard. The beetles become active about the time peaches begin to bloom. They fly to the trees to feed on buds, shucks, and newly set fruit. Egg laying punctures by adult beetles and larvae feeding in the fruit cause most damage.

Catfacing insects, such as tarnished plant bugs and stink bugs, attack the fruit of peaches and plums during the blooming period or any time the fruit is small and tender. Their damage causes the fruit to be misshaped, deformed, or "catfaced." The first four cover sprays after shuck split are very important in preventing catfaced damaged fruit.

In flight, the **peach tree borer** adult looks like a wasp. But it is one of the clear wing moths. These moths are active during the day (late May through mid September). Females are attracted to borer infested trees or trees that have bark wounds as egg laying sites. The eggs hatch in 5 to 10 days. Young larvae (white to dirty white, with a brown head) bore their way into the bark, where they feed until winter. The larvae spend the winter in this area and start feeding again the next spring. Larval damage is usually noted from 2 to 3 inches below the soil line to 10 inches above the soil line. Signs of damage include a gummy substance on the outer bark within the range given above. The gum is a mixture of sap, brownish frass (borer droppings), and sawdust. These symptoms are like those of phytophthora root rot, so be careful in deciding what the problem is.

To control the peach tree borer, follow these steps:

1. Begin with the petal fall spray (see the spray schedule on the back of this information sheet). Cover all scaffold branches, the main trunk, and an area of soil right around the trunk base. Do this for other sprays in the schedule, using one of the insecticides listed.
2. For trunk sprays, make two applications of thiodan 9.7 percent E.C. (Thiogard 3) during the season. To apply, mix 2 tablespoons per gallon of water and cover the trunk from the scaffold branches to the soil line. Do not spray the tree's canopy only the trunk. Make the first trunk spray about the second week in June. Adjust this date within your orchard to allow 30 days between application and harvest. Make the second spray about the first of August. You may also have to adjust this date.

Sanitation

A good sanitation program can greatly improve the control of diseases and insects by keeping them from getting started. These tips are simple, inexpensive, and effective:

1. Remove all dead branches and rotted and mummified fruit from trees.
2. Remove leaves, bark, sticks, and plant debris near trees.
3. Remove any swollen branches from plums.
4. Prune trees properly to allow better air circulation

Spray Suggestions

Controlling tree size makes them easier to spray. Pruning reduces the tree's height as well as its number of limbs. This allows better air movement and increases the chances of getting good coverage. Apply sprays as a mist of fine droplets, with enough pressure to completely cover twigs, leaves, blossoms, and fruit. Do not apply early season sprays at temperatures below 55 °F.

Sprays in addition to those recommended in the spray schedule might be needed if warm, wet weather stays for long periods. As a general rule, make extra applications after a rain of $\frac{1}{2}$ inch or more within 24 hours of an application. Never use a sprayer for peach and plum trees that you used to apply 2,4 D weed killers.

Be careful in applying pesticides. Always follow all manufacturers' recommendations and suggestions.

**Number of Gallons To Mix Per Application
Based on Tree Size**

Gallons	Tree Size in Feet	
	Height	Spread
$\frac{1}{2}$ - 1	5 - 8	3 - 6
1 - 2	8 - 10	4 - 8
4 - 5	10 - 15	8 - 15
8 - 10	15 - 20	15 - 25

Spray Schedule To Control Diseases and Insects

Time of Application	Material To Use Per Gallon of Water
Dormant ¹ – Before buds swell in spring Peach leaf curl Scale	2 cups liquid lime sulfur Superior type oil - follow label directions for mixing.
Beginning of bloom	2 tbsp Captan 50% WP (fungicide)
Petal fall – After ¾ or more of the petals have fallen	6 tbsp Sulfur 80% WP (fungicide) or 2 tbsp Captan 50% WP (fungicide) or Chlorothalonil at label rate ⁵ (fungicide) or Immunox 1/2 fl oz. (fungicide) ⁶ plus 3 tbsp Sevin 50W WP (insecticide) (1 day) ² and 1 tbsp permethrin 10% EC (insecticide) ⁴ or 2 tsp Malathion 50% EC (insecticide) (7 days) ²
Shuck fall ³ and at 10–to 14–day intervals until harvest. The interval may need to be shorter if there are frequent rains.	Same as petal fall except for chlorothalonil. We especially recommend you use immunox 2 weeks before and up to harvest for brown rot control.
Early Dormant – Late fall after leaf drop	Chlorothalonil or lime sulfur, especially needed if peach leaf curl or plum pockets have been a problem.

WP - wettable powder
tbsp - tablespoon
EC - emulsifiable concentrate
tsp - teaspoon

- ¹ Use only if peach leaf curl or scale has been a problem the year before. If needed, the materials may be applied together. Follow label precautions.
- ² The time that must pass from last application until harvest.
- ³ Shuck fall is the stage when all flower parts have fallen from the newly formed fruit. It occurs 5 to 7 days after petal fall.
- ⁴ A number of commercial formulations contain per methrin insecticide. Not all formulations may be used on peaches or plums. An example of one you can use on peaches is Hi Yield Garden, Pet and Livestock Insect Control. Be sure to check the label of the product you buy for use patterns on peaches and plums.
- ⁵ A number of liquid commercial insecticide formulations contain solvents. Do not mix chlorothalonil with them.
- ⁶ Do not apply Immunox more than seven times per season.

Read pesticide labels closely and observe all crops, directions, and precautions.

The information given here is for educational purposes only. References to commercial products or trade names are made with the understanding that no discrimination is intended toward other products that may also be suitable and that have maintained label clearance.

Revised by **Dr. Alan Henn**, associate Extension professor, Entomology and Plant Pathology

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