



PLUMS/PRUNES PESTS/DISEASES AND SPRAY SCHEDULE

For help in identifying home orchard problems or for more complete information on specific fruit pests or diseases, contact your county's WSU Extension office.

Pesticide Use

Washington State Law (RCW 15.09.060) states that property owners must control horticultural pests on their property. Help commercial orchards by maintaining good care and pest management practices for your desired fruit trees.


- Do not apply pesticides until a specific insect or disease has been positively identified. Using wrong or unnecessary sprays can be a loss of resources and can pose a hazard to people and the environment.
- Apply pesticide sprays only at the proper time of tree, bud, or pest development. Sprays applied at the wrong time are also ineffective. Vary products during the season and in following seasons to minimize pest resistance.
- Homeowners should not make foliar applications to trees over 10 ft tall. Consult a commercial pesticide applicator for treatment of trees and shrubs over 10 ft. tall.
- Always carefully read and follow label directions of the product you use. The Label is the Law.
- For more information about protecting pollinators: <https://agr.wa.gov/getmedia/6144c435-c1ad-4092-afe3-436bdd627e41/388-tenwaystoprotectbeesfrompesticides.pdf>

Major Insects	Parts affected	Major Diseases	Parts affected
Aphids Hop aphid is yellowish to dark green. The leaf curl plum aphid is dark green to reddish in early spring and fall, and pale green in the summer. Infested leaves and shoots are curled and distorted. Heavy infestations can result in curled leaves and death of forming flowers and fruit.	Flowers, Leaves, fruit See spray schedule below	Armillaria root rot A fungus where leaves are smaller-than-normal, leaf yellowing, premature leaf drop, and branch dieback, often on only a portion of the tree. Honey-colored mushrooms often grow near the base of infected trees in the fall. Infected trees may also exhibit a	Leaves, branches, trunk, roots <u>No Chemical Management recommended</u> Armillaria root rot




Honeydew is produced by insect. Leaves may be covered with dark sooty mold.		dark black line in the infected area encircling the base of the plant	
Apple-and-thorn skeletonizer Adult is a small dark-brown or reddish-brown moth. Caterpillars are yellow green. Leaves are rolled into a cone and tied with webbing. Damaged leaves are brown and papery and drop prematurely.	Leaves See spray schedule below	Bacterial canker Bacteria overwinters where dark canker areas may develop and expand in early spring. Infected tissues may produce gum. Cankers often girdle twigs and branches, causing dieback above the lesion.	Trunks, branches, buds <u>No Chemical Management recommended</u> Bacterial canker
Brown marmorated stink bugs Young stink bugs, or nymphs, are black with a red-and-black striped abdomen. Older nymphs are dark with white bands on body, legs, and antennae. Adults are a little over 1/2" long, with a shield-shaped body. Body color on adults is mottled gray and brown, while the legs and antennae have alternating dark and light bands. The abdomen also has dark and light bands which are visible at the edge of the wings. Sunken areas and deformities (cat facing) on the surface of the fruit are typical symptoms.	Buds, flower, fruit, seeds, seed pods, stems, leaves, fruit <u>No Chemical Management recommended</u> Brown marmorated stink bug	Black knot Infections of twigs are elongated olive-green, corky knots. They turn black and hard as they mature. Every year they expand lengthwise. The fungus can stunt and kill limbs as it grows around the twig or branch.	Twigs <u>No Chemical Management recommended</u> Black knot
Earwigs Both males and females have pincers at the rear. Largely beneficial, feeding on many pests such as aphids and mites as well as decaying plant material. Damage to leaves is small to large holes. Fruit damage consists of shallow, irregular chewed areas on the surface.	Leaves See spray schedule below	Brown rot A fungus where flowers wilt and die. The brown blossoms remain attached to the twigs, becoming covered with a grayish-brown fungal growth. Infected twigs develop sunken, elongate cankers with gumming. Leaves on girdled shoots turn brown. Infected fruit show small brown spot which enlarges and becomes covered with gray-brown fungus. Fruit may dry and harden into mummies.	Flowers, twigs, leaves See spray schedule below
Fruit tree leafrollers Leaves that are rolled and tied in place with webbing, often with frass in the webbing. Damaged leaves are often near shoot tips and hallow surface damage may be seen on the fruit. Fruit tree leafrollers are pale to dark green with a	Leaves, shoot tip, fruit See spray schedule below	Crown gall Caused by a soilborne bacterium. Young galls are fleshy, white, enlarged masses. Older galls are hard, dark brown, woody or corky in appearance. Small galls are	Crown, Roots, Stems <u>No Chemical Management recommended</u> Crown gall

shiny black head. The adult fruittree leafroller moth is mottled tan and brown. The pandemis adult is light tan with darker bands on the wings.		essentially harmless. Large galls on the crown may weaken or girdle trees.	
Leafhoppers Nymphs are usually less than 1/10" long and white to greenish or yellowish in color. Adults are white and about 1/8" long. Often leaves white to yellow speckling or mottling. Produce honeydew, a sweet, sticky material. Heavy infestations may result in premature leaf drop and small fruit.	Leaves <u>No Chemical Management recommended</u> Leafhoppers	Cytospora canker The fungi initially create small cankers but enlarge quickly and may streak up and down stems. Leaves on the dead twigs turn color and droop, but often remain attached. The canker itself appears as a dark, sunken area of dead bark and wood. Amber gumming is often present.	Leaves, Twigs, branches <u>No Chemical Management recommended</u> Cytospora canker
Pacific flatheaded borer The larvae are white or cream-colored with broad, flattened heads. They can reach up to 1" in length. The adult borer is a dark, coppery-brown beetle. The broad, flattish adults are about 1/4" to 1/2" long.	Bark <u>No Chemical Management recommended</u> Pacific flatheaded borer	Plum pockets Leaves and shoots may be discolored (reddish to yellow) and curled or twisted. Fruit develops small, white spots which enlarge. Spots turn reddish to velvety gray. The fruit becomes distorted and discolored. Its leathery skin may later become covered with whitish fungal spores.	fruit, twigs, and leaves <u>No Chemical Management recommended</u> Plum pocket
Peach twig borer Caterpillars are reddish-brown with black heads and yellowish rings on the body. The larva often burrows into the stem end of young fruit. Pits of infested fruit are often split. They may also feed on the fruit surface. The adult moth is dark gray and about 1/3" long.	Shoots and Fruit See spray schedule below	Russetting Fruit initially show shiny areas on the surface where normal wax is lacking. The shiny area develops into a brown, corky or scabby area just before fruit harvest.	Fruit See spray schedule below
Peachtree borer A dark, bluish, clear-winged moth which somewhat resembles a wasp or hornet. Female has dark forewings and a red-orange band on the abdomen. Larva burrow beneath the bark. Jelly-like gum mixed with dirt and pellets of excrement are signs of feeding.	Leaves, bark, trunk See spray schedule below	Shothole (Coryneum blight) A fungal disease appearing as small, purplish, round to oval areas on leaves, which expand into brown spots with light centers. The spots often drop out giving a "Shothole" appearance. One or more large brown spots may develop which can involve large portions of the fruit.	Leaves, fruit See spray schedule below

Pear slug (pear sawfly) Larval stage of a glossy, black sawfly. Pupa are covered with dark green to black slime. Pear slugs skeletonize leaves. Severe infestations can cause defoliation, weaken trees, and affect fruit development.	Fruit See spray schedule below	Silver leaf Fungus causing leaves to turn silvery to ashy in color. Margins may curl slightly upwards. Affected branches have a dark staining in the heartwood. Fruiting bodies are only on dead wood. The shelf-like fruiting bodies push through the bark and are light brown to purple on the upper surface and pinkish to purple beneath.	Leaves, branches, bark <u>No Chemical Management recommended</u> Silver leaf
Scale Insects San Jose scales are about 1/16" across. The female is gray with a yellow spot in the center. The crawlers are yellow. Fruit develops sunken spots surrounded by reddish areas. Lecanium scales are shiny brown and found on twigs. The turtle-shaped adults are 1/8"-1/4" across with light markings, while the crawlers are more flat. Both scales produce large amounts of honeydew.	Twigs, branches, leaves, fruit See spray schedule below	Virus diseases Symptoms variable, depending on the virus strain and the cultivar affected. Trees infected with a virus may show symptoms including decline, collapse, or breakage, which may be confused with root rots or other disease problems.	Leaves <u>No Chemical Management recommended</u> Virus Diseases
Shothole borer Small brown to black, stubby-nosed beetles that bore into bark and lay eggs along a narrow gallery paralleling the grain of the wood. Sawdust-like frass (excrement) is present. The emerging adults leave tiny round "shotholes"	Bark, base of leaves, twigs <u>No Chemical Management recommended</u> Shothole borer		
Spider mites Pale yellowish or green to red or brown. Feed typically on the underside causing a whitish, yellow, or brown stippling. Severe damage results in a bronzed appearance. Heavy infestations may cause leaf drop. Feeding is usually accompanied by webbing on leaves and between leaves and twigs.	Leaves See spray schedule below		

Spotted-wing Drosophila Red eyes with a yellow-brown body. Darker bands may be visible on abdomen. Male flies have a distinctive dark spot on the leading edge of the wing near the tip. Scars left may appear as indented, soft spots on the fruit surface. Small white or cream-colored larvae hatch and feed in the fruit which softens and collapses.	Fruit See spray schedule below		
Spray Schedule			
Growth Stage	Pest/Disease	Non-Chemical and Chemical Control/Management	Notes
 <p>Dormant/Delayed dormant stage: In late winter, just as buds begin to show first green tissue</p>	Overwintering aphids, mites, peach twig borer and scale	Aphids Spider mites Peach twig borer Scale	An important stage for pest control. When daytime temperature is between 45 - 55 F, with no frost forecast overnight. Finish spraying by noon to insure good dry time.
	Shothole (Coryneum blight)	Shothole Coryneum blight	These are the most important stages and chemical spray for pest control. Spray to completely wet the tree.
	Aphids	Aphids	
	Brown marmorated stink bugs	Brown marmorated stink bugs	

C045 – Spray Schedule for Plums

 <p>Pre bloom stage: Buds show color, but before flowers open</p>	Brown rot	Brown rot	
	Peach twig borer	Peach twig borer	
	Powdery mildew	Powdery mildew	
	Scale	Scale	
	Shothole (Coryneum blight)	Shothole Coryneum blight	
 <p>Bloom: When flowers are open</p>	Brown rot	Brown rot	Apply in the evening after bees have stopped foraging for the day.
 <p>Petal Fall or Shuck: Just as dead flowers fall away from young fruit</p>	Aphids	Aphids	This is a critical time for managing pest problems.
	Brown marmorated stink bugs	Brown marmorated stink bugs	
	Brown rot	Brown rot	
	Leafrollers	Fruittree leafroller	
	Peach twig borer	Peach twig borer	
	Powdery mildew	Powdery mildew	
	Shothole (Coryneum blight)	Shothole Coryneum blight	

C045 – Spray Schedule for Plums

Summer	Earwig	Earwig	
	Peachtree borer	Peachtree borer	
	Spotted winged Drosophila	Spotted winged Drosophila	
Fall Prior to rainy weather, usually October	Shothole (Coryneum blight)	Shothole Coryneum blight	Left over fruit: Remove remaining fruit from the tree, seal in black garbage bags. Leave in sun for two weeks to kill larvae.

Adapted from Chelan-Douglas Counties County Extension
2019 Crop Protection for Tree Fruits in Washington

For Pesticide Safety see: <https://tfrec.cahnrs.wsu.edu/admin/pesticide-safety-handling/>

To report unsprayed trees at homes or on abandoned orchards contact: Spokane County Horticultural Pest and Disease Board: email: PestBoard@spokanecounty.org