



CHERRIES 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>

C042 – Spray Schedule for Cherries

Major Insects	Parts affected	Major Diseases	Parts affected
Black cherry aphids Causes twisted and deformed leaves and stunted shoots. Fruits may be distorted. Produce honeydew, a sweet, sticky material.	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 dark black line in the infected area encircling the base of the plant.	Leaves, branches, trunk, roots <u>No Chemical Management recommended</u> Armillaria root rot
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 and fruit 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 See spray schedule below
Brown Marmorated Stink Bug 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 <u>No Chemical Management recommended for adults</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, branches <u>No Chemical Management recommended</u> Black knot
Cherry bark tortrix One generation per year. Eggs are laid singly on the bark surface. Larvae penetrate the bark feeding on living tissue of the tree's bark. Larvae construct a frass tube (key indicator) consisting of fecal pellets and webbing.	Bark See spray schedule below	Brown rot blossom blight and fruit rot A fungus where wilted brown blossoms and leaves remain attached to the twigs, becoming covered with a gray-brown fungus. Infected twigs develop sunken, elongate cankers with gumming. Small brown spots initially show which rapidly enlarges and often becomes covered with	Flowers, leaves, fruit, twigs See spray schedule below

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		fungus. Fruit may dry and harden which serve as a source of infection in the spring.	
Cherry fruit fly <u>Required control in Spokane County</u> Adults are brown to black flies with white bands across the abdomen. The wings are clear with distinctive dark bands. Eggs are laid beneath the skin of the fruit. Larvae are tapered, cream-colored to white maggots.	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 essentially harmless. Large galls on the crown may weaken or girdle trees.	Crown, Roots, Stems <u>No Chemical Management recommended</u> Crown gall
Cutworms and Armyworms Larvae of noctuid moths. Fruit damage-small to large holes in the fruit surface. Armyworm typically feed during the day, Cutworms at night.	Leaves, bud before blooming, fruit See spray schedule below	Cytospora canker Fungi initially create small cankers but enlarge quickly and may streak up and down the 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
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.	Flowers, shoot tips, leaves, fruit See spray schedule below	Dead bud Bacterial canker with initial symptoms are death of buds on lower branches of the affected trees. This begins prior to leafing out. Slight gumming may occur at the base of killed buds. Repeated loss of buds can cause trees to become misshapen and have a reduced fruit yield.	Buds, flowers, leaves, fruit See spray schedule below
Leafhopper Suck plant juices, often causing white to yellow speckling or mottling. Produce honeydew, a sweet, sticky material. Rarely cause serious damage to plants, but heavy infestations may result in premature leaf drop and small fruit.	Leaves <u>No Chemical Management recommended</u> Leafhopper	Gumming (Gummosis) Amber colored, gooey globs beneath the bark, around nodes, at the crotch, on larger branches, or on the trunk.	Trunks, branches <u>No Chemical Management recommended</u> Gumming gummosis
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 may be skeletonized or chewed.	Leaves and shoot tip See spray schedule below	Leaf Spot Purple to reddish-brown spots on leaves. Underside of the spots may produce cream-colored to pinkish masses of spores. Can result in minor to severe defoliation, which	Leaves, fruit, stems See spray schedule below


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			may affect fruit development. Spots may occur on fruit stems causing fruit to drop.	
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. Eggs are laid on the tree and then larva burrow beneath the bark. Jelly-like gum mixed with dirt and pellets of excrement are signs of feeding. Foliage may be yellowed as if nitrogen-deficient.	Leaves, bark, trunk See spray schedule below		Little cherry <u>Required control in Spokane County</u> Virus causing smaller than normal, slow to ripen, and somewhat pointed or triangular. Dark-fruited varieties may not ripen past the bright red stage. Lighter varieties may have pinkish fruit. Foliage on affected trees may be lighter in color than normal.	Fruit, leaves <u>No Chemical Management recommended</u> Little cherry
Pear slug/Cherry slug (pear sawfly) Larval stage of the glossy, black sawfly. They are covered with a dark green to black slime. Pear slugs skeletonize leave.	Leaves and fruit See spray schedule below		Mottle Leaf Virus effects leaves, which are puckered and mottled with light green to yellow blotches between the veins. Leaves may be smaller and some shothole symptoms. Fruit generally small and slow to ripen.	Leaves, fruit, shoots <u>No Chemical Management recommended</u> Mottle leaf
San Jose Scale Yellow crawlers are easily spread by wind, birds, or people. Infestation of wood may cause death of limbs or the entire tree. Fruit develops sunken spots surrounded by reddish areas.	Trunk, limbs, leaves and fruit See spray schedule below		Necrotic rusty mottle Slower to leaf out and bloom in the spring. Terminal buds may be killed and leaf and flower buds open irregularly. Leaves begin to show angular purplish to brown spots. The spots may dry and drop out, giving leaves a tattered appearance. Severely affected leaves develop a yellowish mottling along the veins and often drop. In the fall, remaining leaves turn mottled yellow and green, dropping prematurely.	Leaves, terminal buds, flowers <u>No Chemical Management recommended</u> Necrotic rusty mottle
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		Powdery Mildew Fungus continues with multi-cycle infections though spring and early summer until the productions of new leaves and shoots cease. Can cause russetting on fruits	Leaves, fruit See spray schedule below



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Spider mites (Twospotted) Color pale yellowish or green to red or brown. Feed typically on the underside causing a whitish, yellow, or brown stippling. Severer 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	Prunus necrotic ringspot A virus that results in brown, sunken, necrotic spots; chlorotic (yellowish to white) blotches or other patterns; or dark rings etched on the leaf. The spots may drop from the leaf, giving it a "shothole" appearance. The disease is spread via infected pollen and by grafting.	Leaves <u>No Chemical Management recommended</u> Necrotic ringspot
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	Shothole (Coryneum blight) A fungus disease where leaves are initially small, purplish, round to oval areas which expand into brown spots with light centers. The spots often drop out giving a "Shothole" appearance. Fruit may develop one or more large brown spots which can involve large portions of the fruit.	Leaves, fruit See spray schedule below
		Verticillium wilt A soilborne fungus that results include suddenly wilted yellow or brown foliage which hangs on the branches and dieback of twigs and branches. Infections are often on only one side of the tree or scattered throughout the canopy. Affected branches typically show dark streaking in the xylem.	Roots, leaves, twigs, branches <u>No Chemical Management recommended</u> Verticillium wilt
		Witches-broom (Cherry leaf curl) A fungal disease that results in discolored (red to brown), thickened, and curled or puckered leaves. Branches develop large, dense, broomlike tufts of foliage that typically do not produce flowers or fruit. Whitish fungal growth may be present on the underside of curled leaves.	Leaves, flowers, fruit <u>No Chemical Management recommended</u> Witches broom cherry leaf curl

Spray Schedule

Growth Stage	Pest/Disease	Non-Chemical and Chemical Control/Management	Notes
Dormant Stage: Before buds show and activity in late winter	Bacterial canker	Bacterial canker	When daytime temperatures reach 40 - 45 F. Finish spraying by noon to insure good dry time. Fungicide used as dormant spray may burn young leaves.
	Shothole (Coryneum blight)	Shothole coryneum blight	
	Dead bud	Dead bud	
	Gummosis	Gumming gummosis	
 <p>Delayed dormant stage: In late winter, just as buds begin to show first green tissue</p>	Overwintering scales, aphids and mites.	San Jose scale Black cherry aphid Spider mites	<p>These are the most important stages and chemical spray for pest control. Spray to completely wet the tree.</p> <p>When daytime temperature is between 45 - 55 F, with no frost forecast overnight. Finish spraying by noon to insure good dry time.</p>
	Brown rot, blossom blight and fruit rot	Brown rot blossom blight and fruit rot	<p>Apply in the evening after bees have stopped foraging for the day.</p> <p>For Brown rot and Leaf Spot, apply just before blossoms</p>
	Leaf Spot	Leaf spot	

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	<p>Pear slug</p>	<p>Pear slug</p>	<p>open, at full bloom, and when most or all of the blossom petals have fallen.</p> <p>Chemical control Pear slug measures are rarely necessary except for very severe infestations. Apply when larval damage approaches 25% defoliation.</p>
 <p>Petal Fall or Shuck: Just as dead flowers fall away from young fruit</p>	<p>Apple and thorn skeletonizer</p> <p>Aphids</p> <p>Brown marmorated stink bugs</p> <p>Brown rot blossom blight and fruit rot</p> <p>Cutworms and Armyworms</p> <p>Leaf spot</p> <p>Leafrollers</p> <p>Powdery mildew</p> <p>San Jose scale</p> <p>Shothole (Coryneum blight)</p> <p>Spider Mites</p>	<p>Apple and thorn skeletonizer</p> <p>Black cherry aphid</p> <p>Brown marmorated stink bug</p> <p>Brown rot blossom blight and fruit rot</p> <p>Cutworms and Armyworms</p> <p>Leaf spot</p> <p>Leafrollers</p> <p>Powdery mildew</p> <p>San Jose scale</p> <p>Shothole Coryneum blight</p> <p>Spider mites</p>	<p>This is a critical time for managing pest problems.</p> <p>Management of Brown marmorated stink bug is most effective against very young nymphs (immature insects).</p> <p>For Brown rot and Leaf spot, apply just before blossoms open, at full bloom, and when most or all of the blossom petals have fallen.</p>
<p>Late Spring and Early Summer</p>	<p>Brown marmorated stink bugs</p>	<p>Brown marmorated stink bug</p>	

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	Cherry fruit fly	Cherry fruit fly	<p>Cherry fruit fly is a major pest of cherries. It is present mid-May to the last of July.</p> <p>Cherry fruit fly preventative sprays should be started when cherries turn from light green to yellow green.</p>
	Earwig	Earwigs	
	Peachtree borer	Peachtree borer	
	Spotted winged Drosophila	Spotted wing Drosophila	
<p>Fall</p> <p>Before fall rains and during early leaf fall, usually October</p>	Bacterial canker	Bacterial canker	<p>Left over fruit: Remove remaining fruit from the tree, seal in black garbage bags. Leave in sun for two weeks to kill larvae.</p> <p>If any fruit is left on the tree, it must be sprayed for 4 weeks after normal harvest time.</p>
	Cherry bark tortrix	Bark tortrix	
	Powdery mildew	Powdery mildew	
	Shothole (Coryneum blight)	Shothole coryneum blight	

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

