

PEST MANAGEMENT CHART FOR BACKYARD SOFT FRUIT TREES

For Central Washington

Michael R. Bush, Extension Entomologist, Yakima County

Marianne C. Ophardt, Retired Urban Horticulturist, Benton County

Pests listed here do not necessarily require control each and every year. Fruit tree pest history and monitoring your tree's health & fruit quality are better indicators of the need to control. Choose non-chemical management as your first choice. Some pests may require pesticide sprays to provide supplemental control. This list may not include all products registered for use. Homeowners must refer to the pesticide label before they purchase & apply a pesticide to confirm that the product may be applied to backyard fruit trees.

PEST PROBLEM	CROPS	PRODUCTS*	MANAGEMENT GUIDELINES AND APPLICATION TIMINGS
Mite populations grow and peak by late spring or summer. Mite feeding on the leaf surface can cause leaf bronzing, yellowing and premature leaf drop.	Apricot, Cherry, Peach, Plum	Horticulture/ Petroleum oils -or- Insecticidal soaps -or- Azadirachtin	In most seasons, mites are controlled by natural enemies such as predatory mites. If mite damage was experienced in previous season, apply horticultural oils at the dormant to delayed dormant (February & March) to control overwintering eggs. During the growing season, conserve natural enemies by avoiding broad-spectrum insecticides. Insecticidal soaps may require multiple applications and thorough coverage especially on undersides of leaves. Avoid tree stress, especially improper irrigation. Mites may be washed off trees by heavy rains or with several applications of a strong stream of water.
Aphids Aphid populations often infest newly emerged leaves and shoots in the spring. Aphid feeding results in sticky honeydew, sooty mold on fruit surfaces, leaf curling, shoot malformation and even tree stunting.	Apricot, Cherry, Peach, Plum	Horticultural/ Petroleum oils -or- Insecticidal soaps -or- Azadirachtin -or- Imidacloprid	Aphid problems are often associated with vigorous growth on young trees. If aphids were a problem in the previous season, apply horticultural oils at the dormant to delayed-dormant period to control overwintering aphid eggs. In most seasons, aphids are controlled by natural enemies like lady beetles and lacewings. Conserve natural enemies by avoiding broad spectrum insecticides. Homeowners can prune out heavily infested shoots and water sprouts to reduce aphid populations. Most aphid species leave fruit trees for summer plant hosts. During the growing season, apply insecticide sprays only when aphids are present. For best results, apply insecticides before infested leaves curl up. Homeowners may also be able to wash aphids from tree with strong stream of water before infested leaves curl up. This systemic product is applied to the ground around the base of the tree. Best applied in the autumn if aphids become a problem during the growing season. One application provides 12-month control.
Scale Insects Scale insect feeding can result in sticky honeydew and may devitalize and even kill twigs and branches.	Apricot, Cherry, Peach, Plum	Horticultural/ Petroleum oils -or- Imidacloprid	Scale insect populations often take several years to build to damaging levels. Prune out and destroy localized infestations. Some scale insects can be rubbed off by hand. Should your tree develop a history of damage by scale insects, it would be prudent to apply horticultural oils at the dormant to delayed dormant season to control overwintering scales. Note that this same application will reduce problems with mites and aphids as well. This systemic product is applied to the ground around the base of the tree. Best applied in the autumn if scale insects become a problem during the previous season. One application provides 12-month control.
Bacterial Canker Forms elliptical cankers and gumming on trunk and branches that girdle and kill branches. Dead buds and leaf spots may also occur.	Apricot, Cherry, Peach, Plum	Copper products	This disease can be a problem in cool, wet conditions. Never prune during wet, moist weather. Avoid getting water in tree canopy. Properly prune tree to open canopy to light and air penetration. Apply copper during the dormant stage in late winter before the buds start to swell. Spray trunk, limbs and twigs thoroughly. Apply copper again at leaf fall in autumn. Prune out & destroy infected branches during dry weather. Cut well below visible cankers and sterilize pruning shears between cuts.
Cherry Fruit Fly This is the key insect pest in cherries. The immature stage, or maggot, bores into the fruit as cherry ripens.	Cherry	Spinosad -or- Imidacloprid -or- Malathion	Trapping adults with yellow sticky traps, picking off and disposing all infested fruit and fruit on the tree after harvest can reduce fruit fly populations, but pesticide applications are necessary to protect cherry fruit. Apply every 10 days beginning when cherry fruit begins to soften and show yellow coloration (mid to late May) or when yellow sticky traps capture first adult Cherry Fruit Fly. Be sure to follow the pre-harvest interval on insecticide products. FMI, see <i>The Western Cherry Fruit Fly and Your Backyard Cherry Tree</i> FS125E http://cru.cahe.wsu.edu/CEPublications/FS125E/FS125E.pdf

Peachtree Borer The whitish larvae of this moth burrow in to the base of host trees and feed on the cambium. Feeding can girdle the tree base, especially on young trees.	Apricot, Cherry, Plum, Peach	Esfenvalerate -or- Cyhalothrin	Keep base of tree free of weeds and injuries to the bark. In the home orchard, it may be quicker and cheaper to control this pest by digging out the larvae with a sharp knife or kill it with a short wire. Apply pesticide in the first week of July and again the first week of August. Use a coarse spray to cover the bark of lower limbs, branch crotches, trunk and base of tree.
Powdery Mildew A gray-white fungus that colonizes buds, leaves & entire shoots. Leaves curl, distort, brown, become brittle and die. Mildew causes fruit russeting.	Cherry, Peach	Sulfur products -or- Propiconazole -or- Myclobutanil	Proper pruning and tree spacing to provide good air circulation and minimize high humidity. Homeowners can also plant less susceptible varieties. Homeowners can prune and destroy the whitish infected buds and shoots early in spring to prevent fruit infection later in the season. Apply fungicides at bud cluster when buds start to open and at the pink stage just before blossoms open.
Peach Leaf Curl This fungal disease causes young leaves to turn yellow to reddish. Leaves/ shoots become thick or crisp & covered with white coating of fungal spores.	Peach	Copper products -or- Sulfur products -or- Chlorothalonil	Apply before buds swell in February. Apply again in late November or early December. Up to three applications may be needed for susceptible varieties. Remove and destroy infected leaves or shoots when they first appear and before spores form.
Coryneum Blight (AKA Shothole) A fungal disease that can cause twig cankers, dead gummy buds, and lesions on leaves and fruit. Lesions on leaves can dry out and drop off giving leaves a "shothole" appearance.	Apricot, Cherry, Peach, Plum	Copper products -or- Chlorothalonil	Apply in late winter as buds begin to swell. Do NOT use lime sulfur on apricots. Apply at delayed dormant in early spring when flower buds just begin to open. Apply again when ¾ of blossoms have dropped from tree. Apply in October before autumn rains. Proper pruning and tree spacing will maximize good air circulation and minimize leaf moisture. Keep irrigation water from contacting tree canopy. Prune out and destroy dead buds and cankered twigs.
Peach Twig Borer Brown and cream-ringed caterpillars bore into twigs and shoot terminals early in the spring. May bore into shoots and ripening fruit later.	Apricot, Peach, Plum	Spinosad -or- Esfenvalerate	Apply in early spring at the dormant to delayed dormant stage. Early in the season, cut out and destroy flagging twigs to prevent larvae from infesting fruit later in the season. Apply at petal fall. Never apply Spinosad or Esfenvalerate on or near blooming plants; apply these products in the evening after bees have stopped foraging to minimize bee poisoning.
Earwig Earwigs chew holes in leaves and may stunt shoot growth. Earwigs will also feed on ripening fruit, leaving shallow, scalloped areas on the surface.	Apricot, Peach	Carbaryl	Keep weeds from growing around the base of trees. Remove plant debris, bark, boards, trash and other substrates that earwigs can hide under from beneath fruit trees. Trap earwigs with "Tanglefoot Stickum" applied to the surface of tightly wrapped plastic wrap at the base of trees. Earwigs can also be trapped in moist newspaper rolls placed in the crotches of trees. These rolls may be opened each morning over a pail of soapy water to dispose of earwigs. Carbaryl can be sprayed on trunks and crotches of trees in early spring when earwig activity is first observed.

^{*}All products are listed as active ingredients; often there are multiple trade names for each active ingredient so homeowners must refer to product label. For a listing of trade name products available to homeowners in Washington State, consult Master Gardeners or visit this website: http://pep.wsu.edu/hortsense/.

Please note that in the State of Washington, homeowners are legally responsible for controlling the spread of horticultural pests and diseases, particularly if commercial orchards are found in your neighborhood. If you are unable or unwilling to accept this responsibility, please consider replacing fruit trees with other shade tree or flowering plant varieties.

For further information on Home Orchard Pest Management do not hesitate to contact your local Master Gardener Program at your WSU Extension Office. For Benton/Franklin County, call 509-735-3551 or (509) 736-2726. For Yakima County call 509-574-1600.