



Stone Fruit Programs

Major Diseases

Bacterial canker or gummosis

Bacterial canker or gummosis (*Pseudomonas syringae*) is a serious disease of cherry in the Pacific Northwest. It is particularly damaging to young trees and can result in replanting issues if un-managed. Spread of the pathogen is favored by cool, moist weather. Optimum timing for control of bacterial gummosis is in late winter before trees break of dormancy and spring frost, and wet weather occur. In the fall, apply most materials before autumn rains or after October 1.

Brown rot

Brown rot is a serious disease of stone fruit when wet conditions occur in the orchard. The disease is caused by the fungus *Monilinia fructicola* although other species (i.e. *M. laxa* and *M. fructigena*) have been reported in other regions. There are both floral and fruit phases of the disease. Brown rot is explosive and highly favored by rain events during bloom (blossom infection) and immediately prior to harvest (fruit infection). Many fungicide materials are effective on both brown rot and powdery mildew. Use the products list on the bloom table for brown rot, as they are effective, and mildew sprays are not recommended at this stage of tree growth. Neither iprodione nor fenbuconazole are first-rate powdery mildew materials. Always follow fungicide resistance management guidelines. Current resistance management guidelines are available at <https://www.frac.info>

Coryneum blight (shothole)

Coryneum blight or shothole, caused by *Wilsonomyces carpophilus*, is a fungal disease of minor importance in the Pacific Northwest. The fungus overwinters in twig cankers. Spores are produced on canker surfaces during early spring rains (or over-the-canopy irrigation) and are splashed to foliage and fruit where they germinate, infect, and cause small lesions. The lesions are small and circular. Necrotic lesion centers may drop giving heavily infected leaves a "shothole" appearance. The disease is managed using fungicide programs early in the growing season.

Peach leaf curl

Peach leaf curl, which is caused by the fungus *Taphrina deformans*, is a relatively common disease of minor economic importance. The disease first appears as reddish areas on the leaf surface; these areas eventually pucker, blister, and become severely deformed. Defoliation may occur. Symptoms typically appear about 2 weeks after bud break. Wet and cool weather during and immediately after bud break favors the disease.

Powdery Mildew (Stone Fruit)

Powdery mildew of soft fruit is caused by a fungus (*Podosphaera pannosa*) different from the powdery mildew of cherry. If unmanaged losses due to powdery mildew can become quite severe. The fungus attacks both fruit and foliage and survives winter on bud scales. Conidia produced on bud scales serve as primary inoculum. Fruit are most susceptible to infection prior to pit hardening. The disease is managed with fungicide spray programs.

Major Insects

Leafrollers (Pandemis, Obliquebanded)

Pre-bloom applications of pesticides can be effective and will also conserve natural enemies for leafroller and biological control agents of other pests, such as aphids. If treatments for leafrollers were applied at pink and/or bloom, sampling to determine the density of surviving leafrollers should be completed prior to deciding to apply additional controls at this timing. Most products listed act primarily as stomach poisons versus direct contact to residues, therefore, complete coverage is very important to achieve maximal control. Repeating an application of any product should be based on the leafroller population surviving previous treatments. Use the leafroller models on the WSU Decision Aid System (<https://decisionaid.systems>) for the optimum timing. Additional Details about Leafrollers (Pandemis, Obliquebanded)

Peach twig borer

Use the phenology model on the the WSU Decision Aid System (<https://decisionaid.systems>) to time insecticides.

Plum aphids

Several different aphid species can attack stone fruit. They are generally not a problem when a regular spray program is used to control other insects. The most effective of these programs would be a delayed-dormant spray of oil with an appropriate pesticide. After the aphids become active and leaves begin to curl they are more protected and harder to control. Attempts at late season control can disrupt predators.

Low populations in the orchard early in the season may be beneficial in attracting predators. Later in the season, predators and migration to summer hosts should keep populations at acceptable levels. Aphids returning from summer hosts in the fall lay overwintering eggs on stone fruit. Fall-applied aphicides may prevent egg-laying, and thus next year's spring population. [Additional Details about Plum aphids](#)

San Jose scale

San Jose scale can be a minor pest if adequately controlled, or escalate into a major problem if not. It primarily infests the trunk and limbs, but scale crawlers will settle on the fruit. Damage to this season's crop may become serious, but ultimately the infestation of wood may cause death of limbs or the entire tree. Oil plus an organophosphate in the delayed dormant spray provide control; if the organophosphate is omitted (oil only), monitor the trees carefully and add one of the listed materials if scale become numerous. [Additional Details about San Jose scale](#)

Shothole borer

Good sanitation (removing large wood prunings, dead limbs, and woodpiles from the orchard) is the most effective management tactic. Insecticides are only effective against adults. Beetles begin flying in late April and are active through May. The second generation flight begins in late July or early August. Yellow sticky traps placed on orchard borders will detect adult beetle activity. Spraying the border trees (rows) with high water volumes will protect the remainder of the orchard in many situations where external sources are the primary problem. [Additional Details about Shothole borer](#)

White apple leafhopper

Adults fly from late May until frost. Monitor nymphs on the underside of leaves. Egg parasitoid *Anagrus spp.* attacks overwintering and summer eggs. Only control this indirect pest when necessary. [Additional Details about White apple leafhopper](#)

Spray Schedule

Dormant

Disease	Chemical	Rate per Acre	REI	PHI	MOA	Crops	Eff.	Notes
Coryneum blight (shot-hole)	chlorothalonil Bravo Ultrex	See Label	12 h	none listed	M5	apricot, peach, nectarine, plum	NR	
	fixed copper Champ WG	See Label	24 h	0 d	M1	apricot, peach, nectarine, plum	NR	
	copper hydroxide Kocide 3000	See Label	48 h	0 d	M1	apricot, peach, nectarine, plum	NR	
	ziram Ziram Granuflo 76WDG	6-8 lb	48 h	30 d	M3	apricot, peach, nectarine	NR	
Peach leaf curl	chlorothalonil Bravo Ultrex	See Label	12 h	none listed	M5	apricot, peach, nectarine	NR	
	fixed copper Champ WG	8 lb	24 h	0 d	M1	apricot, peach, nectarine	NR	
	ziram Ziram 76DF	See Label	48 h	30 d	M3	apricot, peach, nectarine	NR	

Efficacy numbers denote the relative efficacy of a pesticide against a given pest on a 1 to 4 scale with 1 being low and 4 high efficacy. This information is based primarily on research conducted with WSU researchers in Washington.

Delayed dormant

Insect	Chemical	Rate per Acre	REI	PHI	MOA	Crops	Eff.	Notes
European red mite	petroleum oil- dormant petroleum oil- dormant	1-1.25 % v/v	12 h	none listed		peach, nectarine, apricot, plum	3-4	Targeting overwintering eggs at this timing. Oil is indispensable for an integrated mite control program. Avoid spraying oil during cool (lower than 45°F), damp, or windy weather. Adequate agitation is required. Do not use over 5 gallons of oil per acre on mature trees. Organic
Green peach aphid	esfenvalerate + petroleum oil- dormant Asana XL + petroleum oil- dormant	6-8 fl oz 1-1.25 % v/v	12 h	none listed	3A	peach, nectarine	NR	May cause increased mite problems, especially when used after delayed dormant.
	petroleum oil- dormant petroleum oil- dormant	1-1.25 % v/v	12 h	none listed		peach, nectarine, apricot, plum	NR	Organic
San Jose scale & Lecanium scale	pyriproxyfen + petroleum oil- dormant Esteem 35WP + petroleum oil- dormant	4-5 oz 1-1.25 % v/v	12 h	none listed	7C	peach, nectarine, apricot, plum	NR	
	petroleum oil- dormant petroleum oil- dormant	1-1.25 % v/v	12 h	none listed		peach, nectarine, apricot, plum	NR	Organic

Efficacy numbers denote the relative efficacy of a pesticide against a given pest on a 1 to 4 scale with 1 being low and 4 high efficacy. This information is based primarily on research conducted with WSU researchers in Washington.

Prebloom

Disease	Chemical	Rate per Acre	REI	PHI	MOA	Crops	Eff.	Notes
Brown rot	azoxystrobin Abound	12-15.5 fl oz	4 h	0 d	11	peach, nectarine, apricot, plum	NR	Abound is extremely phytotoxic to certain apple varieties. See Application Directions, Resistance Management, and Attention information on the label.
	penthiopyrad Fontelis	14-20 fl oz	12 h	0 d	7	peach, nectarine, apricot, plum	NR	

Disease	Chemical	Rate per Acre	REI	PHI	MOA	Crops	Eff.	Notes
	pyraclostrobin + boscalid Pristine	10.5-14.5 oz	12 h	0 d	11,7	peach, nectarine, apricot	NR	
	azoxystrobin + difenoconazole Quadris Top	12-14 fl oz	12 h	0 d	11, 3	peach, nectarine, apricot, plum	NR	The azoxystrobin component of Quadris Top is extremely toxic to certain apple varieties. See label for further information.
	metconazole Quash	2.5-4 oz	12 h	14 d	3	peach, nectarine, apricot, plum	NR	
	myclobutanil Rally 40WSP	5 oz	24 h	0 d	3	peach, nectarine, apricot, plum	NR	
Coryneum blight (shothole)	azoxystrobin Abound	11-15 fl oz	4 h	0 d	11	peach, nectarine, apricot, plum	NR	Abound is extremely phytotoxic to certain apple varieties. See Application Directions, Resistance Management, and Attention information on the label.
	chlorothalonil Bravo Ultrex	See Label	12 h	none listed	M5	peach, nectarine, apricot	NR	
	captan Captan 50WP	See Label	24 h	0 d	M4	peach, nectarine, apricot, plum	NR	
	penthiopyrad Fontelis	14-20 fl oz	12 h	0 d	7	peach, nectarine, apricot, plum	NR	
	pyraclostrobin + boscalid Pristine	10.5-14.5 oz	12 h	0 d	11,7	peach, nectarine, apricot	NR	
	azoxystrobin + difenoconazole Quadris Top	12-14 fl oz	12 h	0 d	11, 3	peach, nectarine, apricot, plum	NR	The azoxystrobin component of Quadris Top is extremely toxic to certain apple varieties. See label for further information.

Disease	Chemical	Rate per Acre	REI	PHI	MOA	Crops	Eff.	Notes
	myclobutanil Rally 40WSP	5 oz	24 h	0 d	3	peach, nectarine, apricot, plum	NR	
	pydiflumetofen Miravis	3.4 - 5.1 fl oz	12 h	0 d	7	nectarine	NR	
Insect	Chemical	Rate per Acre	REI	PHI	MOA	Crops	Eff.	Notes
Grape mealybug, mealy plum aphid, leaf curl plum aphid	diazinon Diazinon 50W	4 lb	4 d	21 d	1B	peach, nectarine, apricot, plum	NR	
	phosmet Imidan 70W	4 lb	7 d	14 d	1B	peach, nectarine, apricot, plum	NR	
Leafrollers (Pandemis, Obliquebanded)	chlorantraniliprole Altacor EVO Insect Control	3-4.5 oz	4 h	10 d	28	peach, nectarine, apricot, plum	4	
	spinetoram Delegate WG	4.5-7 oz	4 h	see note	5	peach, nectarine, apricot, plum	4	PHI for apricot is 14 d; 1 d for peach, nectarine, and plum. This is a stomach poison so complete coverage is very important for efficacy. Repeat applications of product should be based on pest pressure and the efficacy of the initial treatments based on sampling.
	Bacillus thuringiensis subsp. kurstaki DiPel DF	See Label	4 h	0 d	11B2	peach, nectarine, apricot	3	This product is a stomach poison so complete coverage is very important for efficacy. Repeat applications of product should be based on pest pressure and the efficacy of the initial treatments based on sampling. Organic
	spinosad Entrust SC Naturalyte Insect Control	8 fl oz	4 h	1 d	5	peach, nectarine, apricot, plum	NR	PHI is 14 d on apricot; 1 d for peach, nectarine, and plum. Entrust is a spinosad formulation registered for organic production. Some leafroller populations have developed resistance to spinosad products and repeated use of these products during the growing season could result in reduced levels of control. Organic

Insect	Chemical	Rate per Acre	REI	PHI	MOA	Crops	Eff.	Notes
	spinosad Success	4-8 fl oz	4 h	see note	5	peach, nectarine, apricot, plum	3-4	PHI for apricot is 14 d; 1 d for peach and nectarine; and 7 d for plum. This product is a stomach poison so complete coverage is very important for efficacy. Repeat applications should be based on pest pressure and the efficacy of the initial treatments based on sampling. Some leafroller populations have developed resistance to spinosad products and repeated use of these products during the growing season could result in reduced levels of control.
Lecanium scale	diazinon Diazinon 50W	4 lb	4 d	21 d	1B	peach, nectarine, apricot, plum	NR	
	pyriproxyfen Esteem 35WP	4-5 oz	12 h	14 d	7C	peach, nectarine, apricot, plum	NR	
Oriental fruit moth	OFM pheromone dispensers; + E-8-DODECEN-1-YL ACETATE; Z-8-DODECEN-1- OL; Z-8-DODECEN-1-YL ACETATE CheckMate OFM Dispense	See Label	none listed	none listed		peach, nectarine, apricot, plum	NR	Organic
Peach twig borer	chlorantraniliprole Altacor EVO Insect Control	1.5-2.2 oz	4 h	10 d	28	peach, nectarine, apricot, plum	NR	
	spinetoram Delegate WG	3-7 oz	4 h	see note	5	peach, nectarine, apricot, plum	NR	PHI for apricot is 14 d; 1 d for peach, nectarine, and plum. This product is a stomach poison so complete coverage is very important for efficacy. Repeat applications of product should be based on pest pressure and the efficacy of the initial treatments based on sampling.
	Bacillus thuringiensis subsp. kurstaki DiPel DF	See Label	4 h	0 d	11B2	peach, nectarine, apricot, plum	NR	This product is a stomach poison so complete coverage is very important for efficacy. Repeat applications of product should be based on pest pressure and the efficacy of the initial treatments based on sampling. Organic

Insect	Chemical	Rate per Acre	REI	PHI	MOA	Crops	Eff.	Notes
	spinosad Entrust SC Naturalyte Insect Control	8 fl oz	4 h	1 d	5	peach, nectarine, apricot, plum	NR	PHI is 14 d on apricot, 1 d for peach, nectarine, and on plum. Entrust is a spinosad formulation registered for organic production. Some leafroller populations have developed resistance to spinosad products and repeated use of these products during the growing season could result in reduced levels of control. Organic
	spinosad Success	4-8 fl oz	4 h	see note	5	peach, nectarine, apricot, plum	NR	PHI for apricot is 14 d; 1 d for peach and nectarine; and 7 d for plum. This product is a stomach poison so complete coverage is very important for efficacy. Repeat applications should be based on pest pressure and the efficacy of the initial treatments based on sampling.
Peach silver mite	propargite Omite 30WS	5 lb	2 d/sweet cherry, 5 d nectarine	14 d	12C	nectarine	NR	

Efficacy numbers denote the relative efficacy of a pesticide against a given pest on a 1 to 4 scale with 1 being low and 4 high efficacy. This information is based primarily on research conducted with WSU researchers in Washington.

Bloom

Disease	Chemical	Rate per Acre	REI	PHI	MOA	Crops	Eff.	Notes
Brown rot	azoxystrobin Abound	12-15.5 fl oz	4 h	0 d	11	peach, nectarine, apricot, plum	NR	See Application Directions, Resistance Management, and Attention information on label. Abound is extremely phytotoxic to certain apple varieties.
	captan Captan 50WP	See Label	24 h	0 d	M4	peach, nectarine, apricot, plum	NR	
	penthiopyrad Fontelis	14-20 fl oz	12 h	0 d	7	peach, nectarine, apricot, plum	NR	
	pydiflumetofen Miravis	3.4 – 5.1 fl oz	12 h	0 d	7	peach, nectarine	NR	

Disease	Chemical	Rate per Acre	REI	PHI	MOA	Crops	Eff.	Notes
	pyraclostrobin + boscalid Pristine	10.5-14.5 oz	12 h	0 d	11,7	peach, nectarine, apricot, plum	NR	
	azoxystrobin + difenoconazole Quadris Top	12-14 fl oz	12 h	0 d	11, 3	peach, nectarine, apricot, plum	NR	The azoxystrobin component of Quadris Top is extremely toxic to certain apple varieties. See label for further information.
	iprodione Rovral 4F	1-2 pt	24 h	none listed	2	peach, nectarine, apricot, plum	NR	Apply at 5% bloom. Apply again at full bloom or petal fall if disease-conducive weather occurs.
	metconazole Quash	4 oz	12 h	14 d	3	apricot	NR	
Coryneum blight (shothole)	pydiflumetofen Miravis	3.4 - 5.1 fl oz	12 h	0 d	7	peach, nectarine	NR	
Insect	Chemical	Rate per Acre	REI	PHI	MOA	Crops	Eff.	Notes
Leafrollers (Pandemis, Obliquebanded)	Bacillus thuringiensis subsp. kurstaki DiPel DF	See Label	4 h	0 d	11B2	peach, nectarine, apricot, plum	3	Use when predicted high temperatures are >65 degrees for 3+ days. Bt has a short residual activity, and may require 2-3 applications per generation. Organic

Efficacy numbers denote the relative efficacy of a pesticide against a given pest on a 1 to 4 scale with 1 being low and 4 high efficacy. This information is based primarily on research conducted with WSU researchers in Washington.

Petal fall

Disease	Chemical	Rate per Acre	REI	PHI	MOA	Crops	Eff.	Notes
Brown rot	azoxystrobin Abound	12-15.5 fl oz	4 h	0 d	11	peach, nectarine, apricot, plum	NR	Abound is extremely phytotoxic to certain apple varieties. See Application Directions, Resistance Management, and Attention information on the label.
	micronized sulfur 80% Acoidal Micronized Sulfur WDG	See Label	24 h	none listed	M2	peach	NR	Do not apply to apricots. Organic

Disease	Chemical	Rate per Acre	REI	PHI	MOA	Crops	Eff.	Notes
	captan Captan 50WP	See Label	24 h	0 d	M4	peach, nectarine, apricot, plum	NR	
	penthiopyrad Fontelis	14-20 fl oz	12 h	0 d	7	peach, nectarine, apricot, plum	NR	
	pydiflumetofen Miravis	3.4 – 5.1 fl oz	12 h	0 d	7	peach, nectarine	NR	
	pyraclostrobin + boscalid Pristine	10.5-14.5 oz	12 h	0 d	11,7	peach, nectarine, apricot, plum	NR	
	azoxystrobin + difenoconazole Quadris Top	12-14 fl oz	12 h	0 d	11, 3	peach, nectarine, apricot	NR	The azoxystrobin component of Quadris Top is extremely toxic to certain apple varieties. See label for further information.
	metconazole Quash	2.5-4 oz	12 h	14 d	3	peach, nectarine, apricot, plum	NR	
	myclobutanil Rally 40WSP	5 oz	24 h	0 d	3	peach, nectarine, apricot, plum	NR	See label for specific use recommendations. Place into solution before adding oil.
	Notes: Do not apply to apricots.							
Coryneum blight (shothole)	iprodione Rovral 4F	1-2 pt	24 h	none listed	2	apricot	NR	
	azoxystrobin Abound	11-15 fl oz	4 h	0 d	11	peach, nectarine, apricot, plum	NR	Abound is extremely phytotoxic to certain apple varieties. See Application Directions, Resistance Management, and Attention information on the label.
	chlorothalonil Bravo Ultrex	See Label	12 h	none listed	M5	peach, nectarine, apricot, plum	NR	Apply no later than shuck split.

Disease	Chemical	Rate per Acre	REI	PHI	MOA	Crops	Eff.	Notes
	penthiopyrad Fontelis	14-20 fl oz	12 h	0 d	7	peach, nectarine, apricot, plum	NR	
	pydiflumetofen Miravis	3.4 - 5.1 fl oz	12 h	0 d	7	peach, nectarine	NR	
	pyraclostrobin + boscalid Pristine	10.5-14.5 oz	12 h	0 d	11,7	peach, nectarine, apricot, plum	NR	
	azoxystrobin + difenoconazole Quadris Top	12-14 fl oz	12 h	0 d	11, 3	peach, nectarine, apricot, plum	NR	The azoxystrobin component of Quadris Top is extremely toxic to certain apple varieties. See label for further information.
Powdery Mildew (Stone Fruit)	azoxystrobin Abound	11-15 fl oz	4 h	0 d	11	peach, nectarine, apricot, plum	NR	Abound is extremely phytotoxic to certain apple varieties. See Application Directions, Resistance Management, and Attention information on the label.
	penthiopyrad Fontelis	14-20 fl oz	12 h	0 d	7	peach, nectarine, apricot, plum	NR	
	pydiflumetofen Miravis	3.4 – 5.1 fl oz	12 h	0 d	7	peach, nectarine	NR	
	azoxystrobin + difenoconazole Quadris Top	12-14 fl oz	12 h	0 d	11, 3	peach, nectarine, apricot, plum	NR	The azoxystrobin component of Quadris Top is extremely toxic to certain apple varieties. See label for further information.
	metconazole Quash	2.5-3.5 oz	12 h	14 d	3	peach, nectarine, apricot, plum	NR	
	myclobutanil Rally 40WSP	5 oz	24 h	0 d	3	peach, nectarine, apricot, plum	NR	See label for specific use recommendations. Place into solution before adding oil.
	Notes: Do not apply to apricots.							

Insect	Chemical	Rate per Acre	REI	PHI	MOA	Crops	Eff.	Notes
Grape mealybug, mealy plum aphid, leaf curl plum aphid	phosmet Imidan 70W	4 lb	7 d	14 d	1B	peach, nectarine, apricot, plum	NR	
Leafrollers (Pandemis, Obliquebanded)	chlorantraniliprole Altacor EVO Insect Control	3-4.5 oz	4 h	10 d	28	peach, nectarine, apricot, plum	4	
	spinetoram Delegate WG	4.5-7 oz	4 h	see note	5	peach, plum	4	PHI is 14 d on apricot; 1 d for peach, nectarine, and plum. This product is a stomach poison so complete coverage is very important for efficacy. Repeat applications of any product should be based on pest pressure and the efficacy of the initial treatments based on sampling.
	Bacillus thuringiensis subsp. kurstaki DiPel DF	See Label	4 h	0 d	11B2	peach, nectarine, apricot, plum	3	Use when predicted high temperatures are >65 degrees for 3+ days. Bt has a short residual activity and may require 2-3 applications per generation. Organic
	spinosad Entrust SC Naturalyte Insect Control	8 fl oz	4 h	1 d	5	peach, nectarine, apricot, plum	NR	PHI is 14 d on apricot; 1 d for peach, nectarine, and plum. This product is a stomach poison so complete coverage is very important for efficacy. Repeat applications of any product should be based on pest pressure and the efficacy of the initial treatments based on sampling. Organic
	methoxyfenozide Intrepid 2F	8-16 fl oz	4 h	7 d	18A	peach, nectarine, apricot, plum	3	
	spinosad Success	4-8 fl oz	4 h	see note	5	peach, nectarine, apricot, plum	3-4	PHI for apricot is 14 d; 1 d for peach and nectarine; and 7 d for plum. This product is a stomach poison so complete coverage is very important for efficacy. Repeat applications should be based on pest pressure and the efficacy of the initial treatments based on sampling. Some leafroller populations have developed resistance to spinosad products and repeated use of these products during the growing season could result in reduced levels of control.
Oriental fruit moth	chlorantraniliprole Altacor EVO Insect Control	2.2 oz	4 h	10 d	28	peach, nectarine, plum	NR	

Insect	Chemical	Rate per Acre	REI	PHI	MOA	Crops	Eff.	Notes
	spinetoram Delegate WG	4.5-7 oz	4 h	see note	5	peach, nectarine, apricot, plum	NR	PHI is 14 d on apricot; 1 d for peach, nectarine, and plum. This product is a stomach poison so complete coverage is very important for efficacy. Repeat applications of any product should be based on pest pressure and the efficacy of the initial treatments based on sampling.
	spinosad Entrust SC Naturalyte Insect Control	8 fl oz	4 h	1 d	5	peach, nectarine, apricot, plum	NR	PHI is 14 d on apricot; 1 d for peach, nectarine, and plum. This product is a stomach poison so complete coverage is very important for efficacy. Repeat applications of any product should be based on pest pressure and the efficacy of the initial treatments based on sampling. Organic
	phosmet Imidan 70W	4 lb	7 d	14 d	1B	peach, nectarine, apricot, plum	NR	
	spinosad Success	4-8 fl oz	4 h	see note	5	peach, nectarine, apricot, plum	NR	PHI for apricot is 14 d; 1 d for peach and nectarine; and 7 d for plum. This product is a stomach poison so complete coverage is very important for efficacy. Repeat applications should be based on pest pressure and the efficacy of the initial treatments based on sampling.
Peach twig borer	chlorantraniliprole Altacor EVO Insect Control	1.5-2.2 oz	4 h	10 d	28	peach, nectarine, apricot	NR	
	spinetoram Delegate WG	7 oz	4 h	see note	5	peach, nectarine, apricot, plum	NR	PHI is 14 d on apricot; 1 d for peach, nectarine, and plum. This product is a stomach poison so complete coverage is very important for efficacy. Repeat applications of any product should be based on pest pressure and the efficacy of the initial treatments based on sampling.
	Bacillus thuringiensis subsp. kurstaki DiPel DF	See Label	4 h	0 d	11B2	peach, nectarine, apricot, plum	NR	Use when predicted high temperatures are >65 degrees for 3+ days. Bt has a short residual activity and may require 2-3 applications per generation. Organic
	spinosad Entrust SC Naturalyte Insect Control	8 fl oz	4 h	1 d	5	peach, nectarine, apricot, plum	NR	PHI is 14 d on apricot; 1 d for peach, nectarine, and plum. This product is a stomach poison so complete coverage is very important for efficacy. Repeat applications of any product should be based on pest pressure and the efficacy of the initial treatments based on sampling. Organic

Disease	Chemical	Rate per Acre	REI	PHI	MOA	Crops	Eff.	Notes
	captan Captan 50WP	See Label	24 h	0 d	M4	peach, nectarine, apricot, plum	NR	
	penthiopyrad Fontelis	14-20 fl oz	12 h	0 d	7	peach, nectarine, apricot, plum	NR	
	pydiflumetofen Miravis	3.4 – 5.1 fl oz	12 h	0 d	7	peach	NR	
	pyraclostrobin + boscalid Pristine	10.5-14.5 oz	12 h	0 d	11,7	peach, nectarine, apricot, plum	NR	
	azoxystrobin + difenoconazole Quadris Top	12-14 fl oz	12 h	0 d	11, 3	peach, nectarine, apricot, plum	NR	The azoxystrobin component of Quadris Top is extremely toxic to certain apple varieties. See label for further information.
	metconazole Quash	2.5-4 oz	12 h	14 d	3	peach, nectarine, apricot, plum	NR	
Coryneum blight (shothole)	azoxystrobin Abound	11-15 fl oz	4 h	0 d	11	peach, nectarine, apricot, plum	NR	Abound is extremely phytotoxic to certain apple varieties. See Application Directions, Resistance Management, and Attention information on the label.
	captan Captan 50WP	See Label	24 h	0 d	M4	peach, nectarine, apricot, plum	NR	
	penthiopyrad Fontelis	14-20 fl oz	12 h	0 d	7	peach, nectarine, apricot, plum	NR	
	pydiflumetofen Miravis	3.4 - 5.1 fl oz	12 h	0 d	7	peach, nectarine	NR	

Disease	Chemical	Rate per Acre	REI	PHI	MOA	Crops	Eff.	Notes
	pyraclostrobin + boscalid Pristine	10.5-14.5 oz	12 h	0 d	11,7	peach, nectarine, apricot, plum	NR	
	azoxystrobin + difenoconazole Quadris Top	12-14 fl oz	12 h	0 d	11, 3	peach, nectarine, apricot, plum	NR	The azoxystrobin component of Quadris Top is extremely toxic to certain apple varieties. See label for further information.
	ziram Ziram Granuflor 76WDG	6 lb	48 h	30 d	M3	peach, nectarine, apricot	NR	
Powdery Mildew (Stone Fruit)	azoxystrobin Abound	11-15 fl oz	4 h	0 d	11	peach, nectarine, apricot, plum	NR	Abound is extremely phytotoxic to certain apple varieties. See Application Directions, Resistance Management, and Attention information on the label.
	micronized sulfur 80% micronized sulfur 80%	See Label	24 h	none listed	M2	peach	NR	Organic
	penthiopyrad Fontelis	14-20 fl oz	12 h	0 d	7	peach, nectarine, apricot, plum	NR	
	pydiflumetofen Miravis	3.4 – 5.1 fl oz	12 h	0 d	7	peach, nectarine	NR	
	azoxystrobin + difenoconazole Quadris Top	12-14 fl oz	12 h	0 d	11, 3	peach, nectarine, apricot, plum	NR	The azoxystrobin component of Quadris Top is extremely toxic to certain apple varieties. See label for further information.
	metconazole Quash	2.5-3.5 oz	12 h	14 d	3	peach, nectarine, apricot, plum	NR	
	myclobutanil Rally 40WSP	5 oz	24 h	0 d	3	peach, nectarine, apricot, plum	NR	See label for specific use recommendations. Place into solution before adding oil.
	lime sulfur/calcium polysulfide lime sulfur/calcium polysulfide	See Label	48 h	0 d	un	peach, nectarine, plum	NR	Do not apply to apricots. Organic

Disease	Chemical	Rate per Acre	REI	PHI	MOA	Crops	Eff.	Notes
	Notes: Do not apply to apricots.							
	pyraclostrobin + boscalid Pristine	14.5 oz	12 h	0 d	11,7	apricot	NR	
Insect	Chemical	Rate per Acre	REI	PHI	MOA	Crops	Eff.	Notes
Leafrollers (Pandemis, Obliquebanded)	chlorantraniliprole Altacor EVO Insect Control	3-4.5 oz	4 h	10 d	28	peach, nectarine, apricot, plum	4	
	spinetoram Delegate WG	4.5-7 oz	4 h	see note	5	peach, nectarine, apricot, plum	4	PHI is 14 d on apricot; 1 d for peach, nectarine, and plum. The product is a stomach poison so complete coverage is very important for efficacy.
	Bacillus thuringiensis subsp. kurstaki DiPel DF	See Label	4 h	0 d	11B2	peach, nectarine, apricot, plum	3	Use when predicted high temperatures are >65 degrees for 3+ days. Bt has a short residual activity and may require 2–3 applications per generation. This product is a stomach poison so complete coverage is very important for efficacy. Organic
	spinosad Entrust SC Naturalyte Insect Control	8 fl oz	4 h	1 d	5	peach, nectarine, apricot, plum	NR	PHI is 14 d on apricot; 1 d for peach, nectarine, and plum. The product is a stomach poison so complete coverage is very important for efficacy. Organic
	methoxyfenozide Intrepid 2F	8-16 fl oz	4 h	7 d	18A	peach, apricot, plum	3	
	spinosad Success	4-8 fl oz	4 h	see note	5	peach, nectarine, apricot, plum	3-4	PHI for apricot is 14 d; 1 d for peach and nectarine; and 7 d for plum. This product is a stomach poison so complete coverage is very important for efficacy. Repeat applications should be based on pest pressure and the efficacy of the initial treatments based on sampling. Some leafroller populations have developed resistance to spinosad products and repeated use of these products during the growing season could result in reduced levels of control.
	Notes: Repeat applications of any product should be based on pest pressure and the efficacy of the initial treatments based on sampling.							
Peach twig borer	chlorantraniliprole Altacor EVO Insect Control	1.5-2.2 oz	4 h	10 d	28	apricot	NR	

Efficacy numbers denote the relative efficacy of a pesticide against a given pest on a 1 to 4 scale with 1 being low and 4 high efficacy. This information is based primarily on research conducted with WSU researchers in Washington.

Late spring and summer

Insect	Chemical	Rate per Acre	REI	PHI	MOA	Crops	Eff.	Notes
Leafrollers (Pandemis, Obliquebanded)	chlorantraniliprole Altacor EVO Insect Control	1.5-2.2 oz	4 h	10 d	28	apricot	4	

Efficacy numbers denote the relative efficacy of a pesticide against a given pest on a 1 to 4 scale with 1 being low and 4 high efficacy. This information is based primarily on research conducted with WSU researchers in Washington.

Preharvest

Insect	Chemical	Rate per Acre	REI	PHI	MOA	Crops	Eff.	Notes
Peach twig borer	chlorantraniliprole Altacor EVO Insect Control	1.5-2.2 oz	4 h	10 d	28	peach, nectarine	NR	
Oriental fruit moth	chlorantraniliprole Altacor EVO Insect Control	2.2 oz	4 h	10 d	28	nectarine, apricot	NR	

Efficacy numbers denote the relative efficacy of a pesticide against a given pest on a 1 to 4 scale with 1 being low and 4 high efficacy. This information is based primarily on research conducted with WSU researchers in Washington.

Summer

Disease	Chemical	Rate per Acre	REI	PHI	MOA	Crops	Eff.	Notes
Brown rot	azoxystrobin Abound	12-15.5 fl oz	4 h	0 d	11	peach, nectarine, apricot, plum	NR	Abound is extremely phytotoxic to certain apple varieties. See Application Directions, Resistance Management, and Attention information on the label.
	micronized sulfur 80% micronized sulfur 80%	See Label	24 h	none listed	M2	peach, plum	NR	Apply 2-3 weeks after shuck fall. Do not apply to apricots. Organic
	captan Captan 50WP	See Label	24 h	0 d	M4	peach, nectarine, apricot, plum	NR	
	penthiopyrad Fontelis	14-20 fl oz	12 h	0 d	7	peach, nectarine, apricot, plum	NR	
	pydiflumetofen Miravis	3.4 – 5.1 fl oz	12 h	0 d	7	peach, nectarine	NR	
	pyraclostrobin + boscalid Pristine	10.5-14.5 oz	12 h	0 d	11,7	peach, nectarine, apricot, plum	NR	
	azoxystrobin + difenoconazole Quadris Top	12-14 fl oz	12 h	0 d	11, 3	peach, nectarine, apricot, plum	NR	The azoxystrobin component of Quadris Top is extremely toxic to certain apple varieties. See label for further information.
	metconazole Quash	2.5-4 oz	12 h	14 d	3	peach, nectarine, apricot, plum	NR	
Powdery Mildew (Stone Fruit)	azoxystrobin Abound	11-15 fl oz	4 h	0 d	11	peach, nectarine, apricot, plum	NR	
	micronized sulfur 80% micronized sulfur 80%	See Label	24 h	none listed	M2	peach, nectarine, plum	NR	Apply 2–3 weeks after shuck fall. Do not apply to apricots. Organic

Disease	Chemical	Rate per Acre	REI	PHI	MOA	Crops	Eff.	Notes
	penthiopyrad Fontelis	14-20 fl oz	12 h	0 d	7	peach, nectarine, apricot, plum	NR	
	pydiflumetofen Miravis	3.4 – 5.1 fl oz	12 h	0 d	7	peach, nectarine	NR	
	azoxystrobin + difenoconazole Quadris Top	12-14 fl oz	12 h	0 d	11, 3	peach, nectarine, apricot, plum	NR	The azoxystrobin component of Quadris Top is extremely toxic to certain apple varieties. See label for further information.
	metconazole Quash	2.5-3.5 oz	12 h	14 d	3	peach, nectarine, apricot, plum	NR	
	myclobutanil Rally 40WSP	5 oz	24 h	0 d	3	peach, nectarine, apricot, plum	NR	
	lime sulfur/calcium polysulfide lime sulfur/calcium polysulfide	See Label	48 h	0 d	un	peach, nectarine, plum	NR	Do not apply at temperatures above 84°F. Allow 30 days to elapse between lime-sulfur and oil sprays. Do not apply to apricots. Organic
Insect	Chemical	Rate per Acre	REI	PHI	MOA	Crops	Eff.	Notes
Leafrollers (Pandemis, Obliquebanded)	chlorantraniliprole Altacor EVO Insect Control	3-4.5 oz	4 h	10 d	28	peach, nectarine, plum	4	
	spinetoram Delegate WG	4.5-7 oz	4 h	see note	5	peach, nectarine, apricot, plum	4	PHI is 14 d on apricot, 1 d for peach and nectarine, and 7 d on plum. This product is a stomach poison so complete coverage is very important for efficacy.
	Bacillus thuringiensis subsp. kurstaki DiPel DF	See Label	4 h	0 d	11B2	peach, nectarine, apricot, plum	3	Apply when warm weather is predicted for 3 or more days. This product is a stomach poison so complete coverage is very important for efficacy. Two or three applications per pest generation may be required to achieve adequate control. Repeat applications of any product should be based on pest pressure and the efficacy of the initial treatments based on sampling. Organic

Insect	Chemical	Rate per Acre	REI	PHI	MOA	Crops	Eff.	Notes
	methoxyfenozide Intrepid 2F	8-16 fl oz	4 h	7 d	18A	peach, nectarine, apricot, plum	3	
	spinosad Success	4-8 fl oz	4 h	see note	5	peach, nectarine, apricot, plum	3-4	PHI for apricot is 14 d; 1 d for peach and nectarine; and 7 d for plum. This product is a stomach poison so complete coverage is very important for efficacy. Repeat applications should be based on pest pressure and the efficacy of the initial treatments based on sampling. Some leafroller populations have developed resistance to spinosad products and repeated use of these products during the growing season could result in reduced levels of control.
	Notes: Repeat applications of any product should be based on pest pressure and the efficacy of the initial treatments based on sampling.							
	carbaryl Sevin XLR Plus	2-3 qt	12 h	3 d	1A	apricot	NR	
McDaniel spider mite, twospotted spider mite, European red mite	bifenazate Acramite 50WS	0.75-1 lb	12 h	3 d	un	peach, nectarine, apricot, plum	NR	
	clofentezine Apollo 4SC	4-8 fl oz	12 h	21 d	10A	peach, nectarine, apricot	NR	This product is most effective on the egg stage; does not control adult spider mites.
	spirodiclofen Envidor 2SC	18 fl oz	12 h	7 d	23	peach, nectarine, apricot, plum	NR	
	hexythiazox Savey 50DF	3-6 oz	12 h	28 d	10A	peach, nectarine, apricot, plum	2-4	
	fenbutatin oxide Vendex 50WP	1-2 lb	48 h	14 d	12B	peach, nectarine, plum	NR	

Insect	Chemical	Rate per Acre	REI	PHI	MOA	Crops	Eff.	Notes
Peach twig borer	chlorantraniliprole Altacor EVO Insect Control	1.5-2.2 oz	4 h	10 d	28	peach, nectarine, apricot, plum	NR	
	spinetoram Delegate WG	4.5-7 oz	4 h	see note	5	peach, nectarine, apricot, plum	NR	PHI is 14 d on apricot; 1 d for peach, nectarine, and plum. This product is a stomach poison so complete coverage is very important for efficacy. Repeat applications of any product should be based on pest pressure and the efficacy of the initial treatments based on sampling.
	phosmet Imidan 70W	4 lb	7 d	14 d	1B	peach, nectarine, apricot, plum	NR	
	methoxyfenozide Intrepid 2F	8-16 fl oz	4 h	7 d	18A	peach, nectarine, apricot, plum	NR	
	carbaryl Sevin XLR Plus	2-3 qt	12 h	3 d	1A	peach, nectarine, apricot, plum	NR	
	spinosad Success	4-8 fl oz	4 h	see note	5	peach, nectarine, apricot	NR	PHI is 14 d on apricot, 1 d for peach and nectarine, and 7 d on plum. This product is a stomach poison so complete coverage is very important for efficacy. Repeat applications of any product should be based on pest pressure and the efficacy of the initial treatments based on sampling.
Peachtree Borer	Peach Tree Borer pheromone Isomate-P	See Label	none listed			peach, nectarine, apricot, plum	NR	Apply dispensers in late June or when the first moths are caught in pheromone traps. Place dispensers in upper half of canopy.
San Jose scale	diazinon Diazinon 50W	4 lb	4 d	21 d	1B	peach, nectarine, apricot, plum	3-4	
Shothole borer	esfenvalerate Asana XL	14.5 fl oz	12 h	14 d	3A	peach, nectarine, apricot, plum	4	Sanitation is the most effective management for shothole borer.

Insect	Chemical	Rate per Acre	REI	PHI	MOA	Crops	Eff.	Notes
White apple leathopper	carbaryl carbaryl	2 pt	12 h	3 d	1A	peach, nectarine, apricot, plum	NR	
Peach silver mite	propargite Omite 30WS	5 lb	2 d/sweet cherry, 5 d nectarine	14 d	12C	nectarine	NR	

Efficacy numbers denote the relative efficacy of a pesticide against a given pest on a 1 to 4 scale with 1 being low and 4 high efficacy. This information is based primarily on research conducted with WSU researchers in Washington.

Preharvest and harvest

Disease	Chemical	Rate per Acre	REI	PHI	MOA	Crops	Eff.	Notes
Brown rot	azoxystrobin Abound	12-15.5 fl oz	4 h	0 d	11	peach, nectarine, apricot, plum	NR	Abound is extremely phytotoxic to certain apple varieties. See Application Directions, Resistance Management, and Attention information on the label.
	micronized sulfur 80% micronized sulfur 80%	See Label	24 h	none listed	M2	peach, nectarine	NR	See label—Potential Fruit and Leaf Injury. Do not spray above 85 F or if temperatures will exceed 85 F within 3 days of application. Organic
	captan Captan 50WP	See Label	24 h	0 d	M4	peach, nectarine, apricot, plum	NR	
	penthiopyrad Fontelis	14-20 fl oz	12 h	0 d	7	peach, nectarine, apricot, plum	NR	

Disease	Chemical	Rate per Acre	REI	PHI	MOA	Crops	Eff.	Notes
	azoxystrobin + difenoconazole Quadris Top	12-14 fl oz	12 h	0 d	11, 3	peach, nectarine, apricot, plum	NR	The azoxystrobin component of Quadris Top is extremely toxic to certain apple varieties. See label for further information.
	metconazole Quash	2.5-4 oz	12 h	14 d	3	peach, nectarine, apricot, plum	NR	
Powdery Mildew (Stone Fruit)	azoxystrobin Abound	11-15 fl oz	4 h	0 d	11	peach, nectarine, apricot, plum	NR	Abound is extremely phytotoxic to certain apple varieties. See Application Directions, Resistance Management, and Attention information on the label.
	penthiopyrad Fontelis	14-20 fl oz	12 h	0 d	7	peach, nectarine, apricot, plum	NR	
	azoxystrobin + difenoconazole Quadris Top	12-14 fl oz	12 h	0 d	11, 3	peach, nectarine, apricot, plum	NR	The azoxystrobin component of Quadris Top is extremely toxic to certain apple varieties. See label for further information.
	lime sulfur/calcium polysulfide lime sulfur/calcium polysulfide	See Label	48 h	0 d	un	peach, nectarine, plum	NR	Do not apply to apricots. Organic
Insect	Chemical	Rate per Acre	REI	PHI	MOA	Crops	Eff.	Notes
Oriental fruit moth	chlorantraniliprole Altacor EVO Insect Control	2.2 oz	4 h	10 d	28	peach, plum	NR	
	spinetoram Delegate WG	4.5-7 oz	4 h	see note	5	peach, nectarine, apricot, plum	NR	PHI is 14 d on apricot; 1 d for peach, nectarine, and plum. This product is a stomach poison so complete coverage is very important for efficacy. Repeat applications of any product should be based on pest pressure and the efficacy of the initial treatments based on sampling.
	spinosad Entrust SC Naturalyte Insect Control	8 fl oz	4 h	1 d	5	peach, nectarine, apricot, plum	NR	PHI is 14 d on apricot; 1 d for peach, nectarine, and plum. This product is a stomach poison so complete coverage is very important for efficacy. Repeat applications of any product should be based on pest pressure and the efficacy of the initial treatments based on sampling. Organic

Insect	Chemical	Rate per Acre	REI	PHI	MOA	Crops	Eff.	Notes
	spinosad Success	4-8 fl oz	4 h	see note	5	peach, nectarine, apricot, plum	NR	PHI is 14 d on apricot, 1 d for peach and nectarine, and 7 d on plum. This product is a stomach poison so complete coverage is very important for efficacy. Repeat applications of any product should be based on pest pressure and the efficacy of the initial treatments based on sampling.
Peach twig borer	spinetoram Delegate WG	4.5-7 oz	4 h	see note	5	peach, nectarine, apricot, plum	NR	PHI is 14 d on apricot; 1 d for peach, nectarine, and plum. This product is a stomach poison so complete coverage is very important for efficacy. Repeat applications of any product should be based on pest pressure and the efficacy of the initial treatments based on sampling.
	spinosad Entrust SC Naturalyte Insect Control	8 fl oz	4 h	1 d	5	peach, nectarine, apricot, plum	NR	PHI is 14 d on apricot; 1 d for peach, nectarine, and plum. This product is a stomach poison so complete coverage is very important for efficacy. Repeat applications of any product should be based on pest pressure and the efficacy of the initial treatments based on sampling. Organic
	spinosad Success	4-8 fl oz	4 h	see note	5	peach, nectarine, apricot, plum	NR	PHI is 14 d on apricot, 1 d for peach and nectarine, and 7 d on plum. This product is a stomach poison so complete coverage is very important for efficacy. Repeat applications of any product should be based on pest pressure and the efficacy of the initial treatments based on sampling.

Efficacy numbers denote the relative efficacy of a pesticide against a given pest on a 1 to 4 scale with 1 being low and 4 high efficacy. This information is based primarily on research conducted with WSU researchers in Washington.

?>