

News/What to Watch For:

Watch for stink bug, tarnished plant bug, and boxelder bug on peaches, especially early-ripening varieties; look on the undersides of apple leaves for white apple leafhopper nymphs; attach double-sided sticky tape to San Jose scale-infested limbs to monitor for crawler activity

Spray timing dates for codling moth and peach twig borer, page 4

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Insect and Disease Activity/Info

APPLE AND PEAR

White Apple Leafhopper



A bit of damage from leafhopper feeding can be seen now, but activity is light because we are in between generations. Second generation egg hatch is just around the corner. In general, feeding on the foliage will not affect apple yield or tree health, but this pest can become a nuisance to pickers late in the season during apple harvest.

If you are seeing some damage now and did not treat this pest earlier, expect to see numerous leafhoppers starting in mid-August. They will certainly be a nuisance if not suppressed before then. Look on the undersides of leaves starting early next week for newly hatched nymphs and plan a treatment, if necessary, soon after hatching.

STONE FRUITS

Coryneum Blight

Peach harvest is approaching, and as peaches become softer, they become more susceptible to infection by the fungus that causes coryneum blight (*Wilsonomyces carpophilus*). So

far, we have not observed much early season infections on fruit. These infections appear as a scab-like spot with a red halo. Sometimes, there is also a gummy ooze.

Infections that occur later in the season appear as sunken, brownish spots (shown at right). They may become larger and more sunken during storage. Our lack of rainfall has helped to prevent spread, but a single 4-hour rain is enough to cause infections.

If disease pressure is high, consider a fungicide application prior to wet weather.



Greater Peachtree Borer

Trap catches have increased over the last several weeks. If you have had a problem with this pest, and have not made an insecticide application (to the lower trunk only), it is not too late.

Western Cherry Fruit Fly

Cherry harvest is underway or just about finished. Homeowners should remove and destroy all fallen fruit, and if possible, pick your cherry trees clean to remove egg-laying sites for late-emerging fruit flies. Commercial growers with fruit remaining on trees may want to consider a post-harvest application.

Degree Day Accumulations and Insect Development

Upcoming Monitoring/Insect Activity

By Insect (in alphabetical order)		By Host (see abbrev. at left)	
Codling moth (CM)	2nd gen. egg-hatch begins at 1100 DD (after biofix)	Apple	CM, FB, OBLR, SM, WALH
Fire blight (FB)	Prune out strikes in July 18-24" down		
Obliquebanded leafroller (OBLR)	2nd gen. flight begins at approx. 1500 DD (base 50)	Cherry	OBLR
Peach twig borer (PTB)	2nd gen. egg-hatch begins at 1200 DD after biofix	Peach	PTB, SM
Spider mite (SM)	Look for damage on leaves closest to ground first		
White apple leafhopper (WALH)	Look for nymph and adult activity; look for stippling on leaves	Pear	FB
San Jose scale (SJS)	Second generation crawlers active at 1916 DD (base 50)		

Degree Day (DD) Accumulations and Insect Phenology

([click here](#) for more information on degree days)

March 1 - Tuesday, July 29

County	Location	*GDD50	Codling Moth - 2nd Gen.			Peach Twig Borer - 2nd gen.		
			DD (post biofix)	% Egg Hatch	% Moth Flight	DD (post biofix)	% Egg Hatch	% Moth Flight
Box Elder	Perry	1653	1525	40	77	1276	11	61
Cache	North Logan	1312	1133	1	17	817	0	0
	Providence	1337	1170	3	21	878	0	1
	Smithfield	1387	1232	5	32	876	0	1
Carbon	Price	1569	1355	15	51	1069	0	15
Davis	Kaysville	1613	1411	22	62	1229	7	54
Grand	Castle Valley	2293	1902	89	100	1376	32	84
Salt Lake	SLC	1809	1644	60	88	1410	39	88
	West Valley City	1843	1667	63	90	1979	100	12 (3rd)
Tooele	Erda	1979	1674	65	91	---	---	---
	Grantsville	2052	---	---	---	---	---	---
	Tooele	1916	1668	89	100	1481	556	95
Utah	Alpine	1480	1262	7	36	992	0	8
	Genola	1632	1454	28	67	1189	4	44
	Lincoln Point	1504	1331	12	48	1107	1	23
	Orem	1603	1491	34	75	1217	6	51
	Payson	1677	1503	36	77	1281	13	66
	Provo	1640	1451	28	67	1196	5	46
	Santaquin	1596	1449	28	67	1212	6	48
	West Mountain	1580	1410	22	62	1156	3	35
Weber	Pleasant View	1750	1607	53	85	1329	22	76

*GDD50 (growing degree days base 50) are degree days since March 1, calculated using 50 F as the lower threshold value. This number is used for insects that develop at temperatures above 50 F only.

Spray Timing

Please check this chart each week for updated dates. These dates are forecasted using the average temperature for each site.

Codling Moth, First Generation (end first generation at 1020 DD; begin 2nd at 1100)

County	Location	End Protection (1st Generation)	Begin Protection (2nd Generation)
Box Elder	Perry	July 10	July 14
Cache	North Logan	July 22	July 27
	Providence	July 21	July 24
	Smithfield	July 24	July 26
Carbon	Price	July 16	July 20
Davis	Kaysville	July 13	July 16
Grand	Castle Valley	July 2	July 4
Salt Lake	SLC	July 7	July 11
	West Valley City	July 6	July 9
Tooele	Erda	July 6	July 10
	Tooele	July 9	July 13
Utah	Alpine	July 17	July 23
	Genola	July 10	July 16
	Lincoln Point	July 13	July 17
	Orem	July 10	July 14
	Payson	July 10	July 14
	Provo	July 18	July 22
	Santaquin	July 12	July 16
	West Mountain	July 12	July 15
Weber	Pleasant View	July 7	July 11

Peach Twig Borer (Ending protection (egg hatch) date corresponds to 800 DD. For 2nd generation, if you had moderate to severe PTB damage last year, use the earlier spray date; if you had very little PTB damage last year, use the later date to start sprays. These two dates correspond to 1200 and 1360 degree days after biofix, or 5% and 28% egg hatch.

County	Location	Start Protection (large pop.-2nd gen.)	Start Protection (small pop.-2nd gen.)
Box Elder	Perry	July 26	August 3
Cache	All locations	August 13	August 21
Carbon	Price	August 3	August 10
Davis	Kaysville	July 28	August 4
Grand	Castle Valley	July 9	July 15
Salt Lake	Salt Lake City	July 22	July 28
	West Valley City	July 21	July 27
Tooele	Tooele	July 20	July 26
Utah	Alpine	August 6	August 13
	Genola	July 29	August 5
	Lincoln Point	July 31	August 7
	Orem	July 28	August 4
	Payson	July 26	August 2
	Provo	July 29	August 5
	Santaquin	July 29	August 5
	West Mountain	July 29	August 4
Weber	Pleasant View	July 25	July 31

Spray Materials - Commercial Applicators

Target Pest	Host	Chemical	Example Brands	Amount per acre	REI	Comments
Codling moth	apple, pear	acetamiprid deltamethrin methoxyfenozide phosmet spinetoram thiacloprid codling moth virus	Assail Battalion Intrepid Imidan Delegate Calypso Virosoft, etc	3.4 oz 7-14 oz 16 oz 5.33 lbs 6-7 oz 4-8 oz ---	12 h 12 h 4 h 5 d 4 h 12 h ---	<ul style="list-style-type: none"> ensure good coverage for effective control virus must be applied every 7 days
Powdery mildew	apple	potassium bicarbonate myclobutanil trifloxystrobin triflumizole fenarimol boscalid/pyraclostrobin	Kaligreen Rally Flint Procure Rubigan Pristine	2.5-3 lb 5 oz 2-2.5 oz 8-16 oz 12 oz 14.5-18 oz	4 h 24 h 12 h 12 h 12 h 12 h	
Spider mites	apple, peach	abamectin bifenazate difocol fenpyroximate spiroadiclofen	Agrimek Acramite Kelthane Fujimite Envidor	10-20 oz .75-1 lb 4 lb 32 oz 16-18 oz	12 h 12 h 4 h	
White apple leafhopper	apple	acetamiprid clothianidin imidacloprid thiacloprid	Assail Clutch Provado Calypso	1.1-1.2 oz 0.5-0.75 oz 4-8 oz 2-4 oz	12 h 12 h 12 h 12 h	
Woolly apple aphid	apple	endosulfan diazinon	Thionex Diazinon	3-4 lbs 4 lbs	24 h 4 d	
Western cherry fruit fly	cherry	carbaryl malathion imidacloprid spinosad spinosad	Sevin Malathion Provado Success, Entrust GF-120	1 pint 12 oz 2 oz see label see label	12 h 12 h 12 h 4 h 4 h	GF-120, when applied every 7 days, can provide 100% control.
Coryneum blight	peach	captan azoxystrobin trifloxystrobin pyraclostrobin	Captan Abound Gem Pristine	5 lb 11-15 oz 6-8 oz 10.5-14.5 oz		<ul style="list-style-type: none"> only apply before a wet weather event if disease pressure is high in the orchard Abound is phytotoxic to apples
Greater peachtree borer	peach, nectarine, apricot	chlorpyrifos endosulfan esfenvalerate	Lorsban 4EC Thionex Asana	see label see label see label	4 d 24 h 12 h	use Lorsban only once/year; keep trees protected until mid-Sept.
Peach twig borer	peach, nectarine, apricot	Bt methoxyfenozide phosmet spinosad spinetoram tebufenozide	Dipel Intrepid Imidan Entrust Delegate Confirm	see label 2 pints 4 lbs 4-8 oz 4.5-7 oz 16-30 oz	4 h 4 h 5 d 4 h 4 h 4 h	Continue until harvest
Walnut husk fly	walnuts	cyfluthrin phosmet spinosad spinetoram permethrin	Baythroid Imidan GF-120 Delegate Ambush	2.4-2.8 oz 4.33-8.5 lb. 20 oz 3-7 oz 16-24 oz	12 h 5 d 4 h 4 h 12 h	

Spray Materials - Residential Applicators

Note that these treatments are only recommended if you know you have the particular pest in your trees.

Target Pest	Host	Chemical	Example Brands	How Often	Comments
Aphids	apple, pear, peach, plum, cherry	azadiractin hort. oil imidacloprid insecticidal soap malathion	Azatin variety Bayer Advanced Safer, M-Pede Malathion	once as necessary	
Codling moth	apple, pear	azadiractin carbaryl esfenvalerate malathion permethrin pyrethrin spinosad	Azatin Sevin, Bonide Fruit Tree Spray Ortho Bug-B-Gone Malathion Bayer Advanced Dust Concern Multi-Purpose, Green Light	Most are applied every 7 days, but read the label. Continue through harvest or until Sept. 15.	<ul style="list-style-type: none"> • Rotate among chemical classes to prevent resistance. • to reduce number of sprays, time them so that none are applied in between generations
Spider mites	most trees	hard spray of water fenbutatin-oxide horticultural oil insecticidal soap	Vendex variety variety	repeat only as necessary	
White apple leaf-hopper	apple	insecticidal soap kaolin clay carbaryl permethrin	variety Surround Sevin Bonide Eight	one-two applications	targeting nymphs provides best suppression
Woolly apple aphid	apple	carbaryl hort. oil malathion	Sevin variety Malathion		
Western cherry fruit fly	cherry	carbaryl esfenvalerate malathion pyrethrin spinosad spinodad	Sevin Ortho Bug-B-Gone Malathion Concern Multi-Purpose Ferti-Lome, Green Light, etc. GF-120	Most are every 7 days. Continue until harvest.	
Greater peachtree borer	peach, nectarine	esfenvalerate	Ortho Bug-b-Gone		treat lower trunk only until mid-Sept.
Peach twig borer	peach, nectarine	Bt carbaryl esfenvalerate malathion pyrethrin pyrethrum spinosad	Dipel Sevin Ortho Bug-B-Gone Malathion variety Pyganic Entrust	Most are every 7 days. Continue until harvest.	<ul style="list-style-type: none"> • Rotate among chemical classes. • to reduce number of sprays, time them so that none are applied in between generations
Walnut husk fly	walnuts	spinosad esfenvalerate malathion permethrin	GF-120, Gardens Alive Bulls-eye Ortho Bug-B-Gone malathion Bayer Advanced Dust	Most are every 7 days. Continue until harvest.	

Precautionary Statement: Utah State University Extension and its employees are not responsible for the use, misuse, or damage caused by application or misapplication of products or information mentioned in this document. All pesticides are labeled with ingredients, instructions, and risks. The pesticide applicator is legally responsible for proper use. USU makes no endorsement of the products listed herein.

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