

News/What to Watch For:

“June drop” will be happening soon for peach and apple fruits. If the fruit was not thinned enough, the drop may be greater than usual.

Aphids, such as green peach aphid, black cherry aphid, and rosy apple aphid, will be leaving fruit trees in the next few weeks for alternate weed hosts.

Updated Codling Moth and Peach Twig Borer Spray Dates and Residential Products, pgs 5-7.

JUST THE BASICS

APPLE & PEAR

- *Fire blight strikes* should be pruned out.

PEACH/NECTARINE, APRICOT, CHERRY

- Continue to watch for *coryneum blight*, and apply a fungicide before or right after 4+ hr rains.

- Start spraying for *cherry fruit fly* when cherry fruits develop a salmon blush color.
- Soon, time to treat for *peach twig borer* (see pg 6).
- Not time yet for greater peachtree borer.
- Consider foliar iron application if iron chlorosis is becoming severe.

Backyard Grower Information

APPLE, PEAR

Codling Moth

Hosts: apple, pear

- **protect fruit during rapid egg hatch; see pg 5**

For the most part, later this week and next week, most sites will be in the “period of greatest egg hatch.” What this means is that 75% of all eggs for the first generation will be hatching in that time period. So if you applied a treatment for the start of egg hatch, be sure to re-apply once or twice during the date range shown on the table.

Also during that time period, take some time to inspect your fruit for any codling moth activity. Typically, with the smaller-sized fruit, larvae will enter through the calyx (blossom) end, so you may not be able to tell that there is a “worm” in the apple until it starts pushing out frass (sawdust-like excrement).



Backyard Grower Information, continued

Fire Blight

Hosts: apple, pear

- **continue to prune out wilted shoots, and dispose of pruning debris**



Fire blight infections are now easy to spot, with entire shoots or fruit clusters wilting and turning brown (apple) or black (pear).

Prune out all infections as they are found. This will not only prevent the infections from becoming larger, but also reduce the inoculum (source of bacteria) in the area. For infections that are caught early, remove twice the length of the visible symptoms.

Prune in dry weather only. To be safe, wipe pruners with disinfecting wipes between cuts. Dispose of pruning cuts.

San Jose Scale

Hosts: apple, pear; most other fruits under high infestation

- **prepare to treat crawlers using dates at right**



After crawlers hatch (in the next 3-4 weeks), they may move to settle on the fruit to feed.

This armored scale attacks all fruit trees, but in Utah, it is most common on apple. It is an immobile insect that looks like a small pimple or large pepper flake, and feeds on tree sap through a straw-like mouthpart.

It can be found on fruit as well as the bark of twigs, branches, and the main trunk. They are often difficult to see with the naked eye; a 10-20x hand lens helps.

If you applied a dormant oil spray, keep in mind that most overwintering adults will survive that spray. So a treatment targeting newly hatched nymphs (called crawlers) will need to be applied.

Each adult female lays approximately 200 eggs. The crawlers are bright yellow, and slow-moving. They walk or are windblown to new sites to settle on twigs or fruit, insert their mouthparts, and feed for the remainder of their lives. Once they form their hard outer covering, they are more resistant to pesticides.

If the scale population is left untreated, the fruit becomes small and deformed. The tree loses vigor and branches may start to die. It is primarily a problem in standard-sized, poorly pruned trees.

Treatment timing windows

- Cache, Carbon, northern Box Elder Counties, and high elevation areas: June 30 - July 7
- Grand County (Moab): June 2 - 7
- Warmer Wasatch Front locations: June 18 - 23
- Cooler Wasatch Front locations: June 24 - June 29
- Iron County: June 23 - 28

(If your area is not listed and you would like to know, please contact me at marion.murray@usu.edu.)

PEACH/NECTARINE, APRICOT, PLUM, CHERRY

Coryneum Blight

Hosts: peach/nectarine, apricot, plum

- **apply fungicide between rains**

Continue to be mindful of rainfall (4+ hours needed) and apply fungicide before or immediately after. (Only if you have not applied a fungicide in the last 2 weeks.) Once the hot, dry weather starts, coryneum infections will stop.

Backyard Grower Information, continued

Peach Twig Borer

Hosts: peach/nectarine, apricot

- *treatment dates for many Utah locations are listed on page 6*



Unlike codling moth on apples, peach twig borer pest appears to be more sporadic in Utah, and some locations have a low enough population that trees do not need to be treated. If you are not sure, you will have to wait until you harvest your fruit this summer to see if you should spray for PTB next year.

Peach twig borer larvae prefer to bore into succulent twigs. Later in the season, when twigs become hardened off and unpalatable, larvae enter fruit as the “second best option.” In short, the first generation bores into succulent twigs (hence, its name) while later generations move on to the ripening fruit.

If you know that peach twig borer is a pest of your fruit, you may need to apply insecticide regularly so that your tree is

protected throughout each generation. If you have only seen a few fruits damaged, you can get away with a single (or no) application for each generation (up to 2 well-timed sprays).

Sprays for the first generation will protect shoots from being attacked while later sprays will protect fruit from being attacked. Treatment options are the same as for codling moth, and on the last page.

Western Cherry Fruit Fly

Hosts: cherry

Western cherry fruit fly is a serious pest of tart and sweet cherries. Although residential growers can “tolerate” several wormy cherries, please keep in mind that a commercial growers’ crop can be rejected by the processing plant if worms are detected. If residential trees are adjacent to commercial orchards, they should be treated for cherry fruit fly, or else removed.



Treatment for western cherry fruit fly—the worms in the fruit—should begin as soon as cherries develop a salmon blush color. Tart cherries in most locations are still green, while sweets are coloring up. It is important to monitor your own trees for color change.

Commercial Grower Information

APPLE & PEAR

Codling Moth

Hosts: apple, pear

Be sure to time treatments so that fruit is particularly protected during the “period of greatest egg hatch” as shown on page 5.

In the next few weeks, monitor your orchard for codling moth injury by inspecting fruits for entries. Determine a

percentage of infected fruit, and adjust your spray material and/or timing for the second generation. Keep in mind that most infected fruit affected in the first generation will drop to the ground, but you want to be diligent about protecting fruit during the 2nd and 3rd generations, when the populations will be larger.

Options for codling moth can be found by [clicking here](#).

Commercial Grower Information

Fire Blight

Hosts: apple, pear

Continue to prune out infections. Wipe pruners with disinfecting wipes between cuts. If moisture is predicted after pruning, remove the debris rather than leaving it in the orchard. If conditions are hot and dry, it is OK to leave the debris on the ground.

San Jose Scale

Hosts: apple, pear

SJS is not usually seen in Utah's commercial orchards except in spotty outbreaks in Box Elder and Utah counties. For best control, crawlers should be treated during the first generation using Esteem (an insect growth regulator). For more severe infestations, treat crawlers during the second generation, as well.

Southern Utah County locations: June 18 - 24

Box Elder County: June 22 - 27

Options for San Jose scale can be found by [clicking here](#).

STONE FRUITS

Peach Twig Borer

Hosts: peach/nectarine, apricot

See updated spray timings on page 6.

Options for peach twig borer can be found by [clicking here](#).

Western Cherry Fruit Fly

Hosts: cherry

Treatment for western cherry fruit fly should begin as soon on cherries develop a salmon blush color. It is important to monitor your own trees for color change. If you have several different varieties, start treatment when the earliest variety

western cherry fruit fly is only able to insert eggs into fruit after it turns a salmon blush color.



has started to color up. Be sure to watch the fruit color in the sunniest location.

Many cherry growers have used the organic product, GF-120, with great success. GF-120 must be applied every 7 days. It is applied from a spray tank attached to a 4-wheeler, using a large nozzle that produces large droplets. Therefore, complete coverage is not necessary. The idea is that the flies will be attracted to the droplets, feed on the product, and the insecticide (spinosad) will kill them.

Options for western cherry fruit fly can be found by [clicking here](#).

Spray Timing Information - Codling Moth

Please check this table at each advisory as the information may change as the dates get closer. Many more locations can be viewed on the [Utah Climate Center TRAPs website](#) (select location; select codling moth).

Codling Moth, First Generation

The **“Period of Greatest Egg Hatch”** is the time period in which 75% of all eggs of this generation will hatch. Be sure that fruit is protected during this period.

County	Location	Backyard Growers	Option for Commercial Growers - Delayed First Cover		Period of Greatest Egg Hatch
		Apply first spray	Apply oil	Apply first insecticide	
Box Elder	Perry	passed	passed	June 5	June 4 - June 23
	Tremonton	May 31	passed	June 10	June 9 - June 25
Cache	Logan Airport	June 5	June 3	June 15	June 14 - unknown
	River Heights	May 31	May 29	June 11	June 10 - June 28
Carbon	Price Airport	June 2	May 31	June 11	June 10 - June 27
Davis	Kaysville	passed	passed	June 4	June 3 - June 20
	Farmington	passed	passed	passed	May 27 - June 15
Grand	Moab	passed	passed	passed	May 14 - June 2
Iron	Cedar City Airport	passed	passed	June 5	June 4 - June 23
Juab	Nephi	June 2	June 1	June 12	June 11 - June 27
Millard	Delta	passed	passed	June 1	May 31 - June 19
Salt Lake	Benches/Cooler sites	passed	passed	June 3	June 2 - June 17
	Most areas	passed	passed	passed	May 22 - June 11
Sanpete	Ephraim	June 5	June 3	June 16	June 15 - unknown
Sevier	Monroe	passed	passed	passed	May 23 - June 16
Tooele	Erda Airport	May 30	May 29	June 9	June 8 - June 24
	Grantsville	passed	passed	June 1	May 31 - June 18
Uintah	Vernal Airport	June 2	May 31	June 12	June 11 - June 29
Utah	Alpine/Highland	May 31	May 29	June 10	June 9 - June 27
	American Fork	passed	passed	June 5	June 4 - June 21
	Genola	passed	passed	June 4	June 3 - June 22
	Lincoln Point	passed	passed	June 6	June 5 - June 23
	Orem/Lindon	passed	passed	June 3	June 3 - June 18
	Payson	passed	passed	June 2	June 1 - June 19
	Provo Airport	passed	passed	June 4	June 3 - June 19
	Provo Canyon	passed	May 29	June 8	June 7 - June 22
	Santaquin	passed	May 29	June 8	June 7 - June 24
	Tickville (Oak Springs)	June 7	June 6	June 15	June 14 - June 29
West Mountain	passed	passed	June 2	June 1 - June 18	
Weber	Ogden Airport	passed	passed	June 2	June 1 - June 19
	Pleasant View	passed	passed	June 1	May 31 - June 18
Wasatch	Heber City	June 10	June 8	June 19	June 18 - unknown
Washington	New Harmony	June 2	May 30	June 10	June 9 - June 26
Wayne	Capitol Reef	passed	passed	passed	May 22 - June 10
	Torrey	passed	passed	June 1	May 31 - June 17

Spray Timing - Peach Twig Borer

Peach Twig Borer, First 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 300 and 360 degree days after biofix, or 5% and 16% egg hatch.) End of egg hatch, where you should “keep fruit protected up to” is at 800 degree days.

County	Location	Start Date (lots of injury last year)	Start Date (little injury last yr)	Keep Fruit Protected Up To:
Box Elder	Perry	June 15	June 19	not yet known
	Tremonton	not yet known	not yet known	not yet known
Cache	Logan Airport	not yet known	not yet known	not yet known
	River Heights	not yet known	not yet known	not yet known
Carbon	Price Airport	not yet known	not yet known	not yet known
Davis	Kaysville	June 12	June 15	not yet known
	Farmington	June 6	June 10	not yet known
Grand	Moab	May 29	June 1	June 20
Iron	Cedar City Airport	not yet known	not yet known	not yet known
Salt Lake	Benches/Cooler sites	June 11	June 14	not yet known
	Most areas	June 4	June 8	June 29
Sanpete	Ephraim	not yet known	not yet known	not yet known
Sevier	Monroe	June 8	June 12	not yet known
Tooele	Erda Airport	not yet known	not yet known	not yet known
	Grantsville	June 12	June 15	not yet known
Uintah	Vernal Airport	not yet known	not yet known	not yet known
Utah	Alpine/Highland	not yet known	not yet known	not yet known
	American Fork	June 13	June 16	not yet known
	Genola (CHF)	June 13	June 17	not yet known
	Lincoln Point	June 14	June 18	not yet known
	Orem (Lindon)	June 10	June 13	not yet known
	Payson	June 12	June 15	not yet known
	Provo Airport	June 11	June 14	not yet known
	Provo Canyon	June 13	June 16	not yet known
	Santaquin	June 13	June 16	not yet known
	Tickville (Oak Springs)	not yet known	not yet known	not yet known
	West Mountain	June 11	June 14	not yet known
Washington	New Harmony	June 13	June 17	not yet known
Weber	Ogden Airport	June 12	June 15	not yet known
	Pleasant View	June 9	June 13	not yet known
Wasatch	Heber City	not yet known	not yet known	not yet known
Wayne	Capitol Reef	June 2	June 5	June 25
	Torrey	June 10	June 14	not yet known

Spray Materials - Residential Applicators

Note that these treatments are only recommended if you know you have the particular pest in your trees. We recommend learning about specific pests, and scouting your trees at least once/week.

Target Pest	Host	Chemical	Example Brands	Comments
Codling moth	apple, pear	<i>Conventional</i> carbaryl acetamiprid malathion gamma-cyhalothrin <i>Soft/organic</i> spinosad codling moth virus	Sevin, Bonide Fruit Tree Spray, etc. Ortho Max Flower, Fruit, and Veg. Malathion Spectracide Triazicide Green Light, Gardens Alive Bull's Eye, Monterey Cyd-X	acetamiprid: every 14 days carbaryl: every 14 - 21 days malathion: every 7 days gamma-cyhalothrin: every 14 days spinosad: every 7 days codling moth virus can only be purchased online; store in fridge or freezer
San Jose scale	apple	<i>Soft/organic</i> hort. oil insecticidal soap neem oil	many options Safer's EcoSmart, others Concern, Garden Safe, others	two applications during crawler stage, spaced 5-7 days apart, should be enough
Powdery mildew	apple, peach, cherry	<i>Conventional</i> myclobutanil <i>Soft/organic</i> neem oil potassium bicarbonate	Spectracide Immunox Garden Safe, Fertilome Triple Action Kaligreen, Monterey Bi-Carb	myclobutanil: lasts 14 days; repeat once neem oil: repeat 1 to 3 times every 5 days potassium bicarbonate: repeat 1 to 3 times every 7 days
Aphids	all	<i>Conventional</i> acetamiprid <i>Soft/organic</i> oil (1%) insecticidal soap	Ortho Max Flower, Fruit, and Veg. Many products, EcoSmart Safer's, Bayer Natria, Bonide	oil: allow 4 hours-time for application to dry before temps reach 85 or above. oil and soap: spray needs to cover aphids to be effective
Coryneum blight	peach, apricot	<i>Conventional</i> chlorothalonil captan myclobutanil	Fung-onil, Ortho Max Disease Control Captan Spectracide Immunox	Apply once at shuck split stage chlorothalonil: do not use after shuck split captan, Immunox: use as a preventive before a rain
Peach twig borer	peach, apricot	<i>Conventional</i> carbaryl acetamiprid malathion gamma-cyhalothrin <i>Soft/organic</i> spinosad	Sevin, Bonide Fruit Tree Spray, etc. Ortho Max Flower, Fruit, and Veg. Malathion Spectracide Triazicide Green Light, Gardens Alive Bull's Eye, Monterey	One to 2 applications per generation, depending on prior injury level acetamiprid: every 14 days carbaryl: every 14 - 21 days malathion: every 7 days gamma-cyhalothrin: every 14 days spinosad: every 7 days

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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