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## Pesticide Updates

Azinphos-methyl (Guthion) 6-year phase-out, with no use after September 30, 2012:

- application currently prohibited within 60 ft of permanent bodies of water and within 60 ft of occupied dwellings (does not include farm buildings)
- aerial application currently prohibited. Applications on cherries for “pick-your-own”/”U-pick” harvesting prohibited
- preharvest interval (PHI) for “pick-your-own” apple and pear harvesting is 33-44 days depending on rate
- use on peaches and nectarines prohibited

Changes in Imidan labels will occur after June 2008 including:

- lengthening REIs and risk mitigation
- lower seasonal maximum application rates
- a 25-foot buffer zone around occupied dwellings for ground applications,
- a 50-foot buffer zone around occupied dwellings for aerial applications,
- protective entry restrictions for pick-your-own operations

Kelthane manufacturing ended in June of 2006. Suppliers will sell the product until stock runs out.

This is the first Tree Fruit IPM Advisory of the 2007 growing season. The information included in this advisory is provided to help you optimize management of insects and diseases in your orchard. We welcome your feedback on this advisory, including any information you would like to know more about.

The “Utah Pests” logo shown in the upper right is a new emblem developed for the group that represents the IPM programs (insects and diseases) and the Utah Plant Pest Diagnostic Lab. Our new web site, [www.utahpests.usu.edu](http://www.utahpests.usu.edu), is designed to serve you with easy-to-find pest information including fact sheets, slide shows, research reports, images, and more. We have three new, comprehensive fact sheets (western cherry fruit fly, codling moth, and greater peachtree borer) with a fourth available soon (peach twig borer).

## Degree Day Accumulations

Degree day accumulations were started on March 1. Because of the below average temperatures in early March, tree and pest development has progressed slowly so far. The warming trend predicted for this week will speed up heat units and development of trees and pests.

As of Wednesday, March 14

County	Location	Base 40	Base 50
<b>Box Elder</b>	Perry	46	16
<b>Cache</b>	North Logan	36	12
	River Heights	36	12
<b>Davis</b>	Kaysville	59	20
<b>Salt Lake</b>	SLCC	73	28
	West Valley City	77	27
<b>Utah</b>	Alpine	60	19
	Genola	60	19
	Lincoln Point	50	15
	Payson	48	22
	Provo	65	21
	Santaquin	57	20
	West Mountain	65	24
<b>Weber</b>	Pleasant View	49	18

“Base 40” and “base 50” refer to the lower temperature threshold at which certain insects develop. “Base 50” degree days apply to: codling moth and peach twig borer. “Base 40” degree days apply to; western cherry fruit fly and oblique-banded leafroller.

# General Information

When to Hang Pheromone Traps/Look for Insects (in order by occurrence):

Codling Moth	Hang traps at 100 degree days (base 50)
Campylomma Bug	Egg hatch begins at first pink
Apple Aphids	Eggs hatch by 1/4" green
White Apple Leafhopper	Eggs hatch at first pink
Peach Twig Borer	Hang traps at 300 degree days (base 50)
Western Cherry Fruit Fly	Hang traps at 750 degree days (base 40)

Pheromone traps may be purchased at a variety of retailers ([www.aptivinc.com](http://www.aptivinc.com))

## Delayed-Dormant Pesticide Sprays

The periods for delayed-dormancy (when trees begin to break dormancy) are

Apples: between bud-swell and 1/4" green

Pears: bud-swell through cluster bud

Peaches and Nectarines: bud swell through pink bud

A delayed-dormant spray for insect and disease control can often be very effective in commercial and home orchards. It is well suited to an IPM program because it is applied before bees and spider mites enter the canopy. (Spider mite flare-ups can be common when pyrethroids such as esfenvalerate and permethrin are used that also kill predatory mites).

A 1.5% application of horticultural mineral oil can help reduce overwintering populations of adult pear psylla, European red mites, campylomma bug, and the following:

### INSECTS

**Peach twig borer** caterpillars overwinter within the tree cambium and emerge in early spring to seek the first flush of new growth. If you saw significant twig borer damage last season, apply treatment when flower buds swell and show color. Mix dormant oil with one of the following materials to control the young caterpillars as they emerge:

Commercial: esfenvalerate (Asana), endosulfan (Thionex), methidathion (Supracide)

Homeowners: Ortho Bug-B-Gon or Ortho Max

**Green peach aphid and apple aphid:** These insects overwinter as eggs on tree limbs. Eggs hatch as tree buds open. Good coverage of limbs with oil will suffocate eggs and hatching nymphs. Add esfenvalerate (Asana), diazinon, or thiamethoxam (Actara) for long-lasting aphid control.

**San Jose scale** overwinters on limbs as adults. Oil plus chlorpyrifos (Lorsban), methidathion (Supracide) or pyriproxyfen (Esteem) will provide early season control.

### DISEASES

**Coryneum blight (shothole):** A delayed-dormant application can help if you know your trees (cherries, peaches, nectarines) had this disease last season. Petal fall or shuck-fall sprays can be made as well, though copper should not be applied after leaf-out since it can be phytotoxic.

Commercial: fixed copper (Cuprofix), copper sulfate, chlorothalonil (Bravo)

Homeowner: Bonide, Ortho Garden Disease Control

**Peach leaf curl** is uncommon in Utah, but if you had a problem with it last year and did not make a fall treatment for it, then a spring application might be advisable.

Commercial: copper, chlorothalonil (Bravo, Daconil), sulfur  
Homeowners: Bonide, Daconil, Hi-Yield Sulfur Spray

**Fire blight:** Now is a good time to prune out all blighted limbs of your apple and pear trees (remove or destroy the debris). Make cuts 18 inches below the infection site. (Sterilize pruners with 10% bleach between cuttings.) Do not apply copper sprays after leaf-out due to phytotoxicity.

Commercial: copper hydroxide (Kocide, Nu-cop)

Homeowner: High Yield Brand Copper Fungicide, Bonide Liquid Copper

**Powdery mildew:** In apples and pears, this disease overwinters underneath the bud scales, so as buds open and young leaves emerge, they can be exposed to infection. Treatments should begin around first pink for apples and pears, and around petal-fall for peaches and nectarines.

Apples/Pears:

Commercial: triamifon (Bayleton), Funginex, Rally, Rubigan, trifloxystrobin (Flint), triflumizole (Procure), lime sulfur  
Homeowner: Bonide, Hi-Yield Sulfur Spray

Peaches/Nectarines:

Commercial: Flint, azoxystrobin (Abound), myclobutanil (Rally), Rubigan, Funginex, sulfur  
Homeowner: Bonide, Hi-Yield Sulfur Spray

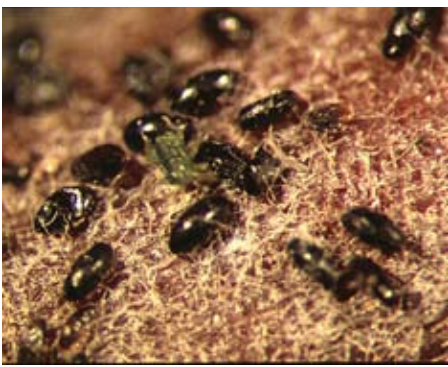
## Insects



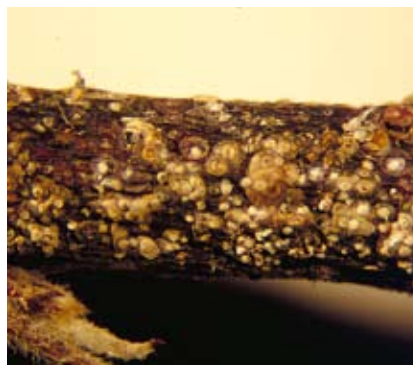
**Green apple aphid**



**Peach twig borer larva**



**Apple aphid eggs**



**San Jose scale**



**Adult pear psylla**

## Diseases



**Coryneum blight canker**



**Fire blight canker**

**Precautionary Statement:** All pesticides have benefits and risks, however following the label will maximize the benefits and reduce risks. Pay attention to the directions for use and follow precautionary statements. Pesticide labels are considered legal documents containing instructions and limitations. Inconsistent use of the product or disregarding the label is a violation of both federal and state laws. The pesticide applicator is legally responsible for proper use.

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