UNIVERSITY OF IDAHO **EXTENSION UPDATE**

Tree Fruit Pest Advisory

University of Idaho, U.S. Department of Agriculture, and Idaho counties cooperating.
2011 Issue 6

Protect Yourselves

Codling Moth
The critical window where 70 to 80 percent of larva hatch occurs will be coming to an end early next week. Applicators that overlapped sprays will have the best results. Continue your applications through the date listed below using the recommended schedule on your chemical label (example: 7-10 Days). For sites with high populations of moths, switch to a different chemical family for the second generation. Begin the second week of July and continue spraying through August 1st.

Peach Twig Borer
Borer treatments have begun. Critical Spray dates are listed below for local treasure Valley Areas. See page two for more on this pest.

San Jose Scale (SJS) crawlers have emerged. Most effective treatments begin around June 27th. Esteem has shown to work the best, and for homeowners, horticultural oil or carbaryl. Homeowners, two application should be enough.
Apply a cover spray at 600 DD, sometimes with the second cover spray of CM.

Fire Blight: Thunderstorms bring more than humidity during warm weather. They also carry Fire blight in their wind. Not a big deal when no flowers are open to infect. However, Thunderstorms also bring hail. Fire blight can enter into any damaged tissue, pruning wound, or flower. Therefore, beware of thunderstorms.

Blister Mites on Apples and Pear leafs: Damage from blister mites is obvious at this time of year. These minute, 4-legged mites feed inside the blisters that form on the leaves, and in late summer, migrate to leaf buds to continue feeding and overwinter. The blisters will turn brown (apple) to black (pear) as the summer progresses. Note that there is nothing to do for treatment at this time of year, but post-harvest and delayed dormant sprays can effectively control this pest.

Degree Day "No biofix" (6/28/11)

Station/Elev.	CM	Spray through	PTB
Boise(2716)	661	July 5	6/28-7/15
Caldwell(2418)	682	July 6	6/27-7/13
Emmett(2390)	638	July 8	6/29-7/15
Mt. Home(3002)	659	July 9	6/28-7/15
Nampa(2635)	624	July 7	6/29-7/15
Ontario OR(2188)	706	July 6	6/26-7/13
Parma(2290)	681	July 6	6/28-7/15
Paye/Weis(2126)	632	July 8	6/29-7/15

Look out for:

- If your cherries are turning straw yellow or have a salmon blush begin applications of pesticides.
- Fire blight infections are being seen throughout the valley. Prune these out during dry weather; cutting back 12" from the infected area into clean wood.

Peach Twig Borer

Tony McCammon

Peach twig borer (PTB) attacks apricots, nectarines, plums and prunes, as well as peaches.

Larval feeding in terminal shoots causes leaves to wilt (flagging) and stops growth. Damage may occur especially on young trees with high degree of late season vegetative growth. Larval feeding in fruit renders it unfit for sale and may introduce microorganisms that cause rotting.

PTB overwinter as young larvae under the bark of the trunk or branches in silken cases. First generation larvae emerge in the spring (bloom to petal fall) and chew into developing buds and terminals. Full grown Larvae are about 1/2 inch long and chocolate brown in color with dark heads.

Spring generation PTB feed on shoots, but second generation larvae prefer the fruit about the time pits begin to harden. Larvae generally enter the fruit at the stem end, where two peaches touch, or where leaves touch the fruit.

Control:

Proper timing of insecticidal sprays is crucial for the most effective and efficient use of materials. Pheromone traps and temperature modeling should be used to assist in timing summer sprays.

A tiny wasp, *Pentalitomastix pyralis*, is a parasitoid of the PTB egg. After hatching, the larva develops normally until maturity. Then, the parasitoid egg in the body of the twig borer is activated and divides several times, producing 25 to 50 larvae. Adult wasps are active in the orchards at shuck fall.

Adult moth on peach (E. Beers)

Larval damage (flagging shoot) (H. Riedl)

Larva in hollow twig (E. Beers, 2009)

Larva damage to peach (H. Riedl)

Early sprays aimed at the young larvae give the best overall control. The best times to spray are the prebloom and petal fall stages. However these sprays will disrupt natural predators of other orchard pests which are active at this time. Bees are also active and every precaution must be taken to prevent pollinator injury.

Delaying sprays until first summer generation larvae are present can help conserve natural enemies of specifically the green peach aphid and improve control of that pest. Larvae of the overwintering generation of PTB do not feed on fruit and, unless numbers are extremely high, cause little economic injury to trees.

Commercial applicators: Based on protection interval reapply one of the following products until harvest.

Belt (flubendiamide) 3-4oz/acre
Altacor (clorantraniliprole) 3-4.5oz/acre
Delegate (imidacloprid) 4.5-7oz/acre
Imidan (phosmet) 4.25oz/acre
Voliam Flexi (thiamethocam+Altacor) 4-7oz/acre

Homeowner Application:

Conventional:
acetamiprid: every 14 days
carbaryl: every 14 - 21 days
malathion: every 7 days
permethrin: every 14 days

Organic/Soft
spinosad: every 7 days
Kaolin clay (Surround) as a repellent every 3-5 days

WashingtonCounty UNIVERSITY OF IDAHO **EXTENSION UPDATE**

By University of Idaho Extension, Washington County. www.pnwpestalert.net

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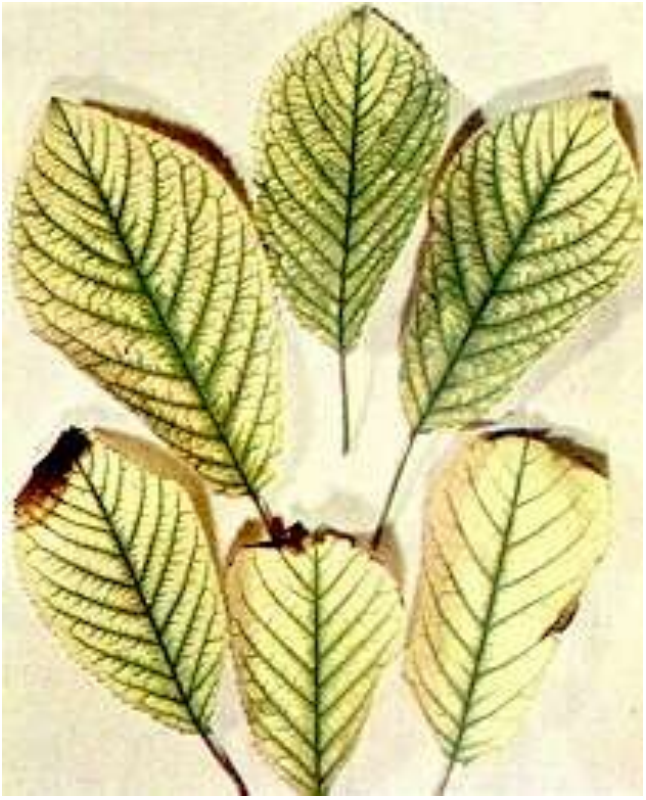
Other Common Pests

Weevil Damage
Adapted from Marion Murray USU
Notched feeding on leaves is a classic sign of feeding by adult root weevils. In Idaho, the most common species is the strawberry root weevil (Otiorhynchus ovatus).

The primary concern is root feeding by larvae in young orchards. Heavy root weevil feeding can stunt young trees. Where trees are being planted in sites of known weevil activity, control may be warranted. The best timing is in spring, using a soil drench.



Iron Deficiency
Tony McCammon

Symptoms of iron deficiency are visible now, especially on peaches. New leaves are chlorotic (yellow) while the mid-veins remain green (called "interveinal chlorosis"). Iron is a nutrient necessary for the formation of chlorophyll. Lack of chlorophyll means reduced photosynthesis, and reduced tree vigor.

Iron deficiency is not caused by a lack of iron in the soil, but rather the soil pH. Idaho soils are very alkaline, with pH measurements ranging from 7.5 to 8.5. In high pH, iron is insoluble, and therefore not available within the water that roots are absorbing. Our irrigation water is also of the same pH. Therefore, trying to reduce soil pH to manage iron deficiency is difficult. Frequent springtime irrigation or prolonged soil wetness can increase the problem.

Chelated iron can be applied to the soil or foliage, but results are often unpredictable. Soil applications should be made in the spring at the first flush of leaves, and worked into the root zone. Foliar sprays (0.1%) with a spreader-sticker can provide quicker but temporary results. Avoid applications when fruit are present because staining may occur.

On small operations amending the soil and lowering pH can also remedy the problem.

WashingtonCounty

This issue concludes the 2011 Pest Advisory. Good luck with your fruit crops this year. Please be aware of other PNW pest alerts on specific key issues and alert me of any such problems in your orchards. Here are just a few other forecasted dates to be aware of.

Walnut Husk Fly (Parma Model) Spray from July 25-August 25 with an insecticide recommended for walnut husk fly that is also registered on peaches (Spinosad, acetamiprid, Neem, esfenvalerate, permethrin). Control may be needed for a few years to completely get control of the population.

Peach Tree Borer, Apply an insecticide on July 10th and again on August 10th to the tree trunk and ground around the base. (Carbaryl, Malathion, Permethrin, Lorsban, Thionex, Asana)

For more information please contact me:
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ALWAYS read and follow the instructions printed on the pesticide label. The pesticide recommendations in this UI publication do not substitute for instructions on the label. Pesticide laws and labels change frequently and may have changed since this publication was written. Some pesticides may have been withdrawn or had certain uses prohibited. Use pesticides with care. Do not use a pesticide unless the specific plant, animal, or other application site is specifically listed on the label. Store pesticides in their original containers and keep them out of the reach of children, pets, and livestock.

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