

Small Fruit Update



May 16, 2006

[Event Calendar](#) [Small Fruit Cold Storage Reports](#) [Weather Forecast](#) by Rufus La Lone

This is one long Update—must be a lot happening. We've had some record-breaking heat in the Willamette valley and Southwest Washington. This is one way to suppress fungal diseases.

Crop Updates:

Seems to be an unusual amount of variation in bloom timing between fields and regions this year in all the crops. It could make for a long harvest season. We're also running well behind last year in degree-day units ([Click here](#) to go to the NWIPM home page and then click on **degree-day pop up link** for area totals).

Oregon blackberries: Marionberries are at 10% bloom or above in many fields. First bloom applications of fungicides for fruit mold control are beginning. It's about 60 days from 10% to harvest in Marions, which would put the start of harvest around mid July (about 10 days late). Some Kotata fields are close to full bloom. Water is going everywhere.

British Columbia raspberries: Early fruiting varieties have started to bloom.

Whatcom County raspberries: Willamette's are around 10% bloom. Lateral growth hasn't pushed much. Meekers are still sluggish. Meeker bloom is getting real close so insecticide applications for fruitworm should go on this week. Still seeing clay colored weevils and yellow rust is becoming more visible. Fruitworm feeding is evident in many fields. Overall crop quality and quantity is looking to be below average. Some drip system injection fertilizer applications are starting since there's been no rain to move the dry fertilizer in. (A contributor comment, "Things have been pleasantly boring. It's the lull before the storm.")

Oregon/Southwest Washington raspberries: Meeker bloom is averaging around 20%. Older fields are still looking poor while some of the younger fields look like they'll produce a good crop. Yellow rust isn't getting much of a chance to get started in this hot weather. Water stress is showing, as is some root rot induced cane collapse. A lot of great bee activity.

British Columbia blueberries: Blueberries blooming profusely. Early varieties are starting to enter the green berry stage.

Whatcom County blueberries: Blueberries are having a long bloom. Variety bloom timing is all over the board. Should finish off the bloom with this great weather and great bee flights.

Oregon blueberries: Great pollination weather. Dukes are past 50% bloom. Some fields are quite a ways past it. Elliots are at peak bloom. Rabbiteye's are around 10%. The late season frosts haven't appeared to affect the crop too much; it's still looking to be in good shape.

British Columbia strawberries: Strawberry bloom is now heading toward 100%. Some frost damage to primary blossoms from a week ago, secondary blossoms were mostly ok. Looks like we will be right on with strawberry harvest starting on 15 June as usual in Langley, which is mid Fraser Valley.

Whatcom County strawberries: Strawberries are starting to bloom. The frosts thinned some of the early blossoms. Pockets of weevil damage are evident.

Oregon/SW Washington strawberries: This hot weather is bringing the bloom out very quickly. Well past peak bloom. There's a lot of variation in bloom timing due to field age and weather but it looks like harvest should start around the 10th of June.

Degree Day Information Now Available: In cooperation with Dr. Len Coop at Oregon State, we've put together a chart of **degree day information that is updated daily** at 8 AM for a number of sites throughout the Northwest small fruit growing region. This information can be used to **compare crop and insect development stages to previous years**, predict harvest dates and more accurately time pest control applications. Within this chart are links to more in-depth weather and pest information. [Click here](#) to go to the NWIPM home page and then click on **degree-day pop up link**.

Crop Water Use/Irrigation Decisions: The warm, dry weather and developing crops are bumping up crop water use. According to the Evapotranspiration models as of last Sunday, raspberries used from 0.51 inches of water in Lynden to 0.91 inches in Forest Grove. Those numbers are sure to be even higher this week with the warm temp's and extensive sunshine. Blueberry use last week ranged from 0.20 inches (Lynden) to 0.36 inches (Forest Grove). But with green fruit on the plants and continued warm weather, water use has risen very rapidly this week. For ongoing Northwest crop water use information, [click here](#) to go to Agrimet.

New pest Information

Insects/Mites

1) Raspberry Beetle (formerly Western Raspberry Fruitworm), northern raspberries: Beetle feeding is evident in many fields. A lot of growers are applying prebloom insecticides for control this week. This insect has the potential to be a major harvest fruit contaminant.

- 2) **[Aphids](#), blueberries:** In British Columbia, where the presence of Scorch virus makes aphid control a critical issue, aphid populations have increased this week and the first winged aphids have been recovered.
- 3) **[Unidentified Scale Species](#), blueberries:** Robin Rosetta, OSU IPM Extension agent, has come across an unusual scale species on blueberries. It has now been reported in at least three locations in Oregon. The extent or potential economic impact of this insect is still unknown. The egg sacks now present in the fields are white and fuzzy, like a mealy bug, but the insect is thought to be a scale. Scale will suck plant juice from the leaves, which can weaken a plant. But more troublesome will be the honeydew and black sooty fungus that will appear once the insects are in full operation. It can be a fruit contaminant. **If you know of any other occurrences** of this insect, [click here](#) to send us an email. We'll pass on any information received to the small fruit bug police (that is, the OSU entomologists....).
- 4) **[Obliquebanded Leafrollers](#), northern blueberries:** Numbers of caterpillars are increasing in many fields. Scout to assess damage levels. Bt formulations can be applied for control while bees are present.
- 5) **[Obliquebanded Leafrollers](#), southern raspberries and blueberries:** Larvae are presently pupating and becoming less numerous in the fields. Control measures are most likely not needed (or too late) at this time.
- 6) **[Orange Tortrix Leafrollers](#), southern caneberries:** While pheromone trap counts of adults are increasing rapidly in many fields, actual larval populations are decreasing.
- 7) **[Clay colored weevil](#), northern raspberries:** Reports are of continued weevil feeding activity in raspberries.
- 8) **[Weevils](#), strawberries:** We're at the very beginning of adult emergence in southern strawberry fields. We're finding more pupae than larvae and some of the pupae are showing a color change. For more weevil information, click on these links: [Rough Strawberry root weevil](#), [Black Vine root weevils](#), [Strawberry root weevils](#).
- 9) **[Rough Strawberry root weevil](#), southern raspberries:** Significant numbers of young adult rough strawberry root weevils have been found in a raspberry field. This is another indication that adult emergence is now occurring. Adults begin egg laying approximately 30 days after emergence and should be controlled before egg laying begins.
- 10) **[Strawberry Crown Moth](#), southern strawberries and caneberries:** This is about the time to get out the pheromone traps for Crown Moth. Control measures can be very effective but need to be closely timed to adult emergence as determined by trap counts.

Diseases

- 1) **[Phragmidium Rust](#), Evergreen blackberries:** So far this year we've had great weather conditions for suppressing this disease. While it is present in some Himalaya blackberries at a low rate, virtually none has been found in Evergreens. Last year, the disease showed an affinity for the floral bracts, so stay on the lookout as we go into bloom. Fungicide applications are recommended if the leaves will remain wet for a long period of time from either weather or irrigation.
- 2) **[Scorch virus](#), [Shock virus](#), blueberries:** Virus symptoms (leaf, blossom and shoot blighting) are now present in many of the region's fields. If you're seeing symptoms, get your samples in to the lab! **Free virus testing: In B.C.:** Growers can submit up to 10 free samples per field for Scorch/Shock virus testing. Contact [Sonja Ring](#) (Blueberry Council) (604) 613-2133. **In U.S.:** Contact [Bob Martin](#) (USDA small fruit virologist) (541) 738-4041.
- 3) **[Alternaria Fruit Rot](#), southern blueberries:** As blueberry bloom starts to finish in Oregon and SW Washington, its time to consider whether you need to prevent alternaria and anthracnose problems from showing up in the fruit. Alternaria can infect the fruit beginning at the end of bloom and throughout the fruit development stage, up until harvest. Infections remain latent until the fruit ripens. Infected fruits exhibit a shriveling or caving-in of the side of the berry and can become watery in storage.
- 4) **[Anthracnose Ripe Rot](#), southern blueberries:** If you've had problems with anthracnose, prevention of a reoccurrence needs to begin at petal fall. **Symptoms:** First, blighting of shoot tips; then, a few flowers turn brown or black. Leaf spots, when they occur, are large or small and roughly circular. As infected berries ripen, the flower end may soften and pucker. Under warm and rainy conditions, salmon-colored spore masses form on infected berries. After harvest, spore masses form rapidly on infected fruit when in cellophane-covered baskets or in plastic clamshell packs.

Cropwork:

- All Caneberries:** 1) Can start applying fungicides for fruit mold control around 10-15% bloom. 2) Scout for rust and treat as needed. 3) Bring in bees around 10-15% bloom. 4) (southern growing areas) Can put out pheromone traps for strawberry crown moth.
- Raspberries:** 1) (northern growing areas) Scout for Clay colored weevil. 2) Can put out pheromone traps for leafroller monitoring. 4) (northern growing areas) Scout for raspberry beetle and control as needed. 5) Scout for mites. 6) Scout and treat for yellow rust as needed.
- Evergreen Blackberries:** 1) Can apply fungicide for prevention of blackberry rust infections. 2) Can apply sulfur for redberry mite control.
- Kotatas/Chesters/Boysenberries:** Can apply Aliette/phosphite for Downey Mildew control.
- Blueberries:** 1) Scout for virus symptoms. 2) Scout for secondary Mummyberry infections (dying vegetative tips). 3) Can apply fungicide for fruit mold control. 4) Scout for scale (see insect section above). 5) After petal fall, can treat for alternaria and/or anthracnose fruit rot.
- Strawberries:** 1) Check weak areas for root weevil larvae, strawberry crown borers or root disease problems. 2) Can apply slug bait 3) Can apply fungicide application to prevent fruit mold at 10% bloom. 4) Scout for virus symptoms (distorted leaves/new growth). 5) Scout for aphids. 6) Scout for two-spotted mites and cyclamen mites. 7) (southern growing areas) Can put out pheromone traps for strawberry crown moth.

Ongoing Pest Information

Insects

- 1) **[Mites](#), raspberries.**
- 2) **[Aphids](#), strawberry.**
- 3) **[Redberry Mites](#), Evergreen blackberries.**
- 4) **[Winter Moth](#), blueberries.**

Diseases

1) Yellow rust, raspberries. 2) Mummyberry, blueberries. 3) Cane and Leaf Rust, blackberries. 4) Stamen Blight, blackberries.