

# Small Fruit Update



## Providing Northwest berry growers with the information they need when they need it.

The Small Fruit Update is sent out weekly during the growing season by [Peerbolt Crop Management](#) and is funded entirely by the Northwest berry growers and industry through their commissions and councils.

May 22, 2012

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Audio & print story:

### [The Secret Life of California's World-Class Strawberries](#)

(5/17, NPR) Explaining the needs of fumigation to the public.

[The Weather Cafe](#) by Rufus La Lone [Small Fruit Cold Storage Report](#)

Another week, another weather pattern. We're back to rainy and cool weather. It's good for those fields that were too dry following the dry spell. Unfortunately it's also good for fungal diseases. The last couple of years, with wet springs, we've had issues with green berry botrytis in blueberries. Keep an eye out for it now especially if the wet, cool pattern lasts any length of time. Then again—mites and powdery mildew will be suppressed this week.

In the Willamette Valley we're quickly moving out of bloom phase in June bearing strawberries and all but late season blueberries. While the bees move over to the raspberries and blackberries that are around 25% bloom on average.

There's some red fruit showing in the strawberries. So—now we'll see if there's enough workers around to bring the crop in. Never a dull moment.

Tom Peerbolt, SFU Editor

### **Spotted Wing Drosophila Statement**

We're continuing to get indications of an increased risk to berry crops from SWD this year & the harvest season is getting close. The monitoring survey has recovered unexpected & unexplained very high trap count spikes from two Willamette Valley cherry orchard in field locations:

- In one field, one trap recorded 29 males and 104 females last week (*This week's check of the same trap again has over 100 but hasn't been fully counted & recorded in the database yet.*)
- The other field had 3 traps with a total recorded in one day last week of 820 males and 365 females.

### Disseminating information for:

#### Washington

[Washington Red Raspberry Commission](#)  
[Washington Blueberry Commission](#)  
[Washington Strawberry Commission](#)

#### Oregon

[Oregon Raspberry and Blackberry Commission](#)  
[Oregon Blueberry Commission](#)  
[Oregon Strawberry Commission](#)

#### British Columbia

[Fraser Valley Strawberry Growers Association](#)  
[Raspberry Industry Development Council](#)  
[B.C. Blueberry Council](#)

#### National

[North American Blueberry Council](#)

We'll be watching closely see if a clearer pattern emerges. Strawberry fields haven't shown this type of high numbers but are rising in counts and fruit is coloring. Keep alert. We'll be starting to do some fruit checks for larvae soon. The SWD Update below has more details.

## Regional Reports

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*These reports are from individuals within the region and are their particular observations. They are included to give an impression of the present 'state of the industry' and regional activities.*

### British Columbia, Fraser Valley (Monday, 5/21)

- **Blueberries:** Getting some wet weather for a good part of this week. Hopefully it doesn't go overboard. With the really warm soil growth response should be excellent. Reka pretty well done and fruit sizing, Dukes starting to size some terminal berries, 1613s full bloom to early fruit. A couple of fungicide applications are on as well as a good portion of nitrogen in the last week preceding the moisture. Lots of shock out there with some scorch symptoms are showing up now. An incredible amount of pollination all last week with very good bee activity. I wish the moisture had held off for a few days more. Weevils targeting new plantings.
- **Raspberries:** Early flowers now on Meeker raspberries so fungicides should be ramping up for this week. Nitrogen got on last week. Big time rust potential out there so preventative sprays are needed. Considerable clay coloured weevil activity on new shoots, unfortunately. These guys really are the bane of our existence here in the Fraser valley.

### Northern Washington, Whatcom County

- **Raspberries:** (Friday, 5/18) Second year raspberry fields are almost universally ugly. A few growers have decent fields but an alarming number look like root rot (but that's not it). Pre-bloom clean-up sprays are going on nightly. We're midway through second split of raspberry fertilizer. Great weather has made everything very tolerable except for those weak second year reds. Anyone else have this problem?
- **Raspberries:** (Monday, 5/21) Looks wet thru Thursday. Lots of fertilizer went on the raspberries last week, as well as pre-bloom and first fungicide. Willamettes and older Meekers are into early bloom.
- **Blueberries:** (Friday, 5/18) Maintenance sprays are ongoing in blues. Light botrytis pressure so far with this dry weather. A lot of rain is supposedly coming so people are spraying ahead of it.
- **Blueberries:** (Monday, 5/21) Second bloom fungicide is on the blues. Rekas and Duke are past full bloom. Bluecrop, 1613's, Bluejay, Jersey, Draper and Liberty are all at full bloom. Very few leafrollers left after the pre-bloom cleanup insecticide. Shock virus, winter damage, botrytis, and mummyberry continuing to take a toll in some fields. Good bloom overall.
- **Strawberries:** (Monday, 5/21): The first fungicide bloom application to prevent fruit mold is on the strawberries. The second is due this week if the weather clears. Watch for weevils and lygus bugs.

### Northern Washington, Skagit County (Saturday, 5/19)

- **Raspberries:** We are into raspberry bloom in Skagit county. The dry, warm weather means that fields have also been drying rapidly, and growers are firing up irrigation systems. Have seen yellow rust around in raspberry, as well.
- **Strawberries:** Fresh market strawberries grown on plastic are sizing up well, and we will probably start harvest the week after next. The old favorites (Albion and Seascape) are doing well; Palomar is also

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## Blueberry Ripe Fruit Diseases—Time now to prevent

- **Time for preventative fungicide applications:** [Alternaria Fruit Rot](#)

(Photos below by Caroline Teasdale)

As blueberry bloom starts to finish, it's 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 become watery in storage.



· **Time for preventative fungicide applications: [Anthracnose Ripe Rot](#)**

(Photos below by Caroline Teasdale)

If you've had problems with Anthracnose, prevention of a recurrence begins 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.



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## Pest Alerts

· **Time to scout for and evaluate if management action is needed: [Powdery Mildew](#) Strawberries.**

(Photos below by Tom Peerbolt)

- Dry, warm, humid conditions favor powdery mildew in strawberries. We're seeing the disease beginning to get going in some area fields.



**Time to scout for and evaluate if management action is needed: [Yellow mites](#) Raspberries**

(Photos below by Tom Peerbolt)

- This early season mite is smaller and paler than two-spotted mite and has less webbing. It is being found at treatable levels in raspberries in all growing regions.



**Time to scout for and evaluate if management action is needed:**

**[Blackberry Rust](#) (Phragmidium Rust) Evergreen blackberries**

- This disease is of economic threat to only to Evergreen blackberries where it can be devastating. There are reports of it being present in fields at this time. Treatment is recommended. Rally (myclobutanil) is particularly effective.

**Time to scout for and evaluate if management action is needed:**

**[Yellow Rust](#) Raspberries**

- Evaluate disease incidence and stage to determine whether (and when) fungicide applications are warranted.

**Prime time to scout for (and not do a darn thing about):**

**[Shock virus](#), Blueberries.**

- Infection symptoms are becoming more visible in many fields.
- This disease is vectored by pollinators.
- There is no treatment or cure.

- Infected bushes generally display symptoms for one year and then return to productivity.

**Time to scout for and prevent:** [Mummyberry](#), all blueberries.

**Fields at risk should have a protective fungicide on the susceptible tissue at this time to minimize infections.**

- We have periods when plant tissue is continually wet for the 12 hours or more required for infection.
- Our temperatures are often in the optimal range for infections to take place (50-57°F / 10-14°C).
- [Mummyberry primer from MSU](#)
- Secondary infection symptoms are showing up in fields.

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## Spotted Wing Drosophila Update for 5-22-12

*This Update is a collective effort. It is composed by Peerbolt Crop Management with contributions from OSU, USDA-ARS, WSU, B.C. Ministry of Agriculture and various Northwest berry industry people.*

SWD Information Websites

[Peerbolt Crop Management](#)

[Oregon State Univ.](#)

[B.C. Ministry of Ag.](#)

[WSU Westside](#)

[WSU Eastside](#)

## Information from Amy Dreves

*Amy is an Oregon State University entomologist working with SWD and is very involved in getting the latest information on the pest out to growers. She can be reached at 503-737-5576 or [amy.dreves@oregonstate.edu](mailto:amy.dreves@oregonstate.edu).*

- [Click here](#) for Issue one of the “Shoo Fly Newsletter”. Put together by Amy Dreves and the OSU SWD team with information on monitoring, trap design and other applied SWD research.
- OSU extension reports the first SWD catch in Wasco County (*fruit growing region east of Portland, up the Columbia river*), much earlier than last year. A trap located in a wild blackberry in the lower Mill Creek area contained a single female SWD. .
- Betsy Beers, WSU entomologist, reported SWD have been captured in the Omak/Okanogan region. In addition, there have been captures in the Prosser area.

## WSU SWD Workshop

- **May 23~** 1-3 pm, WSU Mt. Vernon Northwest Washington Research and Extension Center 16650 State Route 536, Mount Vernon, WA. No cost, RSVP to Colleen Burrows by [email](#) or phone (360) 676-6736 ext. 22. [Click here](#) for more information.

## General Comments

- We continue with getting higher and more consistent trap counts earlier this year in the Willamette valley.
- Two Willamette Valley cherry orchard locations in the past week that recorded unexpected/unexplained very high trap count spikes:
  - In one field, one trap recorded 29 males and 104 females last week.
  - Another field had 3 traps with a total recorded in one day last week of 820 males and 365 females.
- Many of these flies appear to not be overwintering adults but new adults that have emerged this year.

## SWD in the news

- [SWD risk to Oregon early fruit heightened](#) (5/18, Capital Press)

## Regional Monitoring (South to North)

### Oregon Public Scouting Program count for the week ending on 5/18

*(Number of traps checked this period in the crop in parentheses).*

*This scouting program and reporting system are being funded by a USDA SCRI grant, and a Northwest Center for Small Fruits Research grant*

- **Linn County: Strawberries (3):** no males/2 females.
- **Polk County: Cherries (2):** 2 males/3 females.

- **Marion County: Strawberries (16):** none. **Cherries (3): 820 males/365 females.**
- **Clackamas County: Strawberries (2):** none. **Honeysuckle (1):** none.
- **Yamhill County: Cherries (5):** no males/1 female.
- **Multnomah County: Strawberries (5):** no males/ 3 females. **Cherries (1):** no males/1 female. **Blackberries (1):** 1 male/3 females. **Salmonberries (3):** 1 male/2 female.

### Southwest Washington Public Scouting Program for the two weeks ending on 5/4

- **Clark/Cowlitz/Lewis Counties: Strawberries (9):** no males/ 7 females. **Cherries (2): 29 males/105 females.**

### Eastern Washington

- [Click here](#) for the WSU Eastern Washington SWD reporting site.

**Latest report from the WSU site: Friday, May 18:** *“Two new regions have first catch. Three new traps were positive for SWD today, two in the Tri-Cities area, and one in the Union Gap/Zillah area. This is four regions to date. It’s likely we will soon have sustained catch in most areas, since the captures range from the far north to the far southeast. You can wait until your region has a positive catch, but you may also consider protecting your cherries as soon as they reach what we suspect is the susceptible stage: FIRST PINK.*

### Western Washington--WSU Extension Scouting Program

*This scouting program & reporting system are being coordinated by Whatcom County Extension & funded in part by the Washington Red Raspberry Commission.*

- Scouting has not yet been started
- [Click here](#) for information on the program.
- In addition to fields being covered by the Raspberry Commission funding, scouting services will be available on a fee for service basis.
- If you are interested in services, contact Colleen Burrows at 360-676-6736 x 22 or [cburrows@wsu.edu](mailto:cburrows@wsu.edu).

## SWD Management Material Resources

### **Oregon and Washington**

- **Blueberries:** [SWD pesticide options and information](#)
- **Raspberries and blackberries:** [SWD pesticide options and information](#)
- **Strawberries:** [SWD pesticide options and information](#)

**British Columbia** (6/28/11): [SWD Management in BC Berry Crops](#) (with insecticide options listed)

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## Additional, Ongoing Pest Management and IPM Information

### **Diseases**

- **Scout for: [Phytophthora Root Rot](#) raspberries** *There are reports of primocane collapse in regional fields that is suspected of being caused by Phytophthora.*

### **Insects/Mites**

- **Scout for: [Raspberry Beetle](#), northern raspberries.** *This small beetle can cause fruit damage and be a major contaminant in northern raspberry fields.*
- **Scout for: Root Weevils, strawberries.** *Larvae of [Black Vine](#), [Rough Strawberry](#), [Strawberry Root Weevils](#) are now being recovered from some strawberry fields.*
- **Scout for: Mites in raspberries: [Twospotted mites](#)**
- **Scout for: [Winter Moth/Bruce Span Worm](#) blueberries**
- **Scout for: [Clay Colored Weevils](#) northern raspberries and blueberries:** *This early emerging species is a pest in northern growing areas where it feeds on newly emerging shoots and buds.*
- **Scout for: [Strawberry Crown Moth](#) southern strawberries:** *Infested plants will have a weakened crown and often will break off with a pull on the top growth.*
- **Scout for: [Azalea Bark Scale](#), southern blueberries.**
- **Scout for: [Blueberry Gall Midge](#), blueberries. .**

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## Industry News/Resources

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### Newsletters/ Berry Reports

- [BC Blueberry IPM Newsletter](#) (5/18) Weekly by Carolyn Teasdale, [ES Cropconsult](#). Sponsored by the BC Blueberry Council.
- [New Jersey Blueberry Bulletin](#) (5/14) Weekly by Gary Pavlis, Rutgers blueberry agent.
- [Michigan State Extension news for Blueberries](#) (5/14)
- [The Source](#) (5/21) Market reports from The Produce News
- [National Berry Report](#) A daily-updated fresh market statistics report on all berry types hosted and maintained by the California Strawberry Commission

### Magazine compilations

- The Packer's Market scope: [blueberries](#) [blackberries](#) [raspberries](#) [strawberries](#)  
Recent stories and fresh market pricing for the various berries from The Packer.
- Growing Produce: [recent berry articles](#)

### Berry Research Blogs

- [Strawberries and Caneberries blog](#) by Mark Bolda, UC Davis Berry Extension Agent. **Most recent entry: 5/5--Sap Feeding Beetles on Strawberry** Reports on recent insect and disease research and observations in California.
- [Team Rubus](#) by Gina Fernandez, North Carolina State Small Fruit Specialist. **Most recent entry: 5/18—Blackberry crop after 2012 freeze** Reports on issues in blackberries and raspberries from the Southeast.
- [The NC Blueberry Journal](#) by Bill Cline, North Carolina researcher and extension specialist, **Most recent entry: 4/16—Glyphosate herbicide injury in blueberries** Reports on issues in blueberries from the Southeast.

### Breeding

- [Berry World unveils new raspberry variety](#) (5/16, FreshPlaza)

### Farm Bill

- [Farm bill vote possible in June](#) (5/17, Capital Press)

### Labor

- [Labor squeeze feared](#) (in PNW) (5/17, Capital Press)
- [Immigration stalls as opportunities wane on the U.S.-Mexican border](#) (5/16, Bloomberg News)

### The West

- (California) [Brown's revised budget cuts \\$2.5 million from CDFA](#) (Cal. Dept. of Food & Agriculture) (5/17, Capital Press)
- [Oregon ag has winners, losers in primary](#) (5/17, Capital Press)
- (California) [Strawberry festival attracts 50,000-plus](#) (5/21, The Packer)
- [New strawberry soil fungicide for California](#) (5/16, Growing Produce) This is a soil application form of Serenade (A proprietary *Bacillus subtilis* strain)

### National

- [Blueberry Council targets moms in summer campaign](#) (5/16, The Packer)
- [Berries business update briefs](#) (5/8, The Packer)

### International

- [International Blueberry Organization chooses officers](#) (5/17, The Packer)

## Event Calendar

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For more comprehensive event calendar, [click here](#).

- **May 23— WSU SWD Workshop** ~ 1-3 pm, WSU Mt. Vernon Northwest Washington Research and Extension Center 16650 State Route 536, Mount Vernon, WA. No cost, RSVP to Colleen Burrows by [email](#) or phone (360) 676-6736 ext. 22. [Click here](#) for more information.
- **June 3-7 — International Raspberry Organization Conference** ~ Abbotsford, BC. Plans are being made for the one day 8th IRO conference and for raspberry tours in the Fraser Valley and in NW Washington.
- **June 13 — OSU Strawberry Open House** ~ [Click here](#) for the details on the agenda.

*More information on the below events will be coming as they get closer. They'll be at the North Willamette Research and Extension Center in Aurora.*

- **July 11 — OSU Caneberry Open House**, starting at 1pm
- **July 12 — OSU Blueberry Field Day**, from 1 to 5pm
- **July 20 and 21 — Oregon Berry Festival** ~ Portland, [Click here](#) for the Website. Sponsors and vendors are welcome!

## **Crop Work**

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### **All crops**

- Vole management.
- Weed management.
- Fertilizer program.
- Can put out monitoring traps for Spotted Wing Drosophila.

### **Blueberries**

- Scout for Winter Moth/Spanworm and treat as needed.
- (Northern areas) Scout for Clay Colored Weevil feeding and treat as needed.
- Scout for mummyberry and treat as needed.
- Scout for leafroller larvae feeding.
- Scout for virus symptoms and send in samples for testing as needed.
- Have bees in.
- Scout for scale insects.
- Scout for Azalea Bark Scale in southern blueberries
- Scout for Blueberry gall midge damage.
- Can apply fungicides for fruit/blossom rot from 10% bloom through the end of bloom.
- After petal fall, can treat for alternaria and anthracnose prevention if needed.

### **Blackberries**

- Scout for virus symptoms and send in samples for testing as needed.
- Burn back primocanes as needed.
- Can put out pheromone trap to monitor for leafrollers.
- Have bees in by 10% bloom.
- Can apply fungicides for fruit/blossom rot from 10% bloom through the end of bloom.

### **Evergreen Blackberries**

- Scout for and treat as needed for Blackberry rust.

### **Raspberries**

- Burn back primocanes as needed.
- (northern areas) Scout for Clay Colored weevils.
- Scout for virus symptoms and send in samples for testing as needed.
- Scout for Cane Blight and Cane Botrytis symptoms.
- Can apply a phosphite material for stronger root growth and root rot prevention.
- Can put out pheromone traps to monitor for leafrollers.
- Scout for Yellow Rust and assess treatment options.
- Scout for spider mites and treat as needed.
- Have bees in by 10% bloom.
- Can apply fungicides for fruit/blossom rot from 10% bloom through the end of bloom.

### **Strawberries**

- Watch for weak growing areas and check plants for weevil larvae, root rot and/or cold damage.
- (Southern strawberries) Can scout for Strawberry Crown Moth larvae.
- Can apply phosphite materials to strengthen root systems
- Can apply fungicide starting at 10% bloom for fruit/blossom rot.
- Scout for weevil adults and notching (South).
- Can apply slug bait as needed.
- Scout for Powdery Mildew and treat as needed.
- Scout for Two Spotted Spider Mites and predatory, beneficial mites.

- Scout for aphids.

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## Archived Small Fruit Updates

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(For older Updates [click here](#).)

[05-15-12](#)

[05-08-12](#)

[05-01-12](#)

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This document is a guide and not intended as a recommendation or endorsement.

Consult with your supplier, field representative, or pest consultant.

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