

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 15, 2012

Table of Contents

- [Regional Reports](#)
- [Pest Alerts](#)
- [Spotted Wing Drosophila Update](#)
- [Ongoing Pest Management](#)
- [Industry News](#)
- [Event Calendar](#)
- [Crop Work](#)

[Pollination video](#)

Thanks to Gwendolyn Ellen with Oregon State's Integrated Plant Protection Center for passing on this amazing video

[International Raspberry Association](#)

June 3-7 The IRO will be having their 8th world conference in Abbotsford, B.C. and Lynden, WA. [Click here](#) for information

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

The weather has been great across the region this past week, with a couple of glitches. Wednesday night saw an unexpected plunge in temperatures down to as low as 29F in some Willamette Valley field locations. Some spotty damage has been reported. After that the Willamette Valley temperatures headed the other way with 85-90F highs Saturday through Monday. Biggest concern right now is making sure fields don't suffer from dry soils.

Take a look at the pollination video link above. Pollination is a perspective that we often forget about in the day to day pressures and business aspects of growing these crops.

Tom Peerbolt, SFU Editor

Regional Reports

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, 5/14)

- **Blueberries and raspberries:** Tremendous pollination weather the last 3 days with a continuation for the foreseeable future. Have to unbelievably think about irrigation this week in both raspberries and blueberries. But fields are drying fast. Our biggest concern may be that temperatures change too radically and stress plants or bees. Dry weather will put a bit of a crimp in dry nitrogen application efficiencies which were slated to go on this week in blues and raspberries. Watch mite numbers in raspberries.

Northern Washington, Whatcom County (Tuesday, 5/14)

- **Raspberries:** Raspberries are trying to grow laterals, however the long wet spell (all winter) seems to have taken a toll, many fields will be pretty thin. Younger fields on higher ground look very good. Trying to

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](#)

wrap up the pre-bloom sprays in time for the first bloom spray. Raspberry beetle feeding is easy to find. Some leaf feeds are causing a burn. Deer are liking all the new growth.

- **Blueberries:** Most blues are past full bloom. The weather has been great, 60's and 70's, a few leafrollers, lots of shock and winter damage/pseudomonas. Side hill edging with herbicides and fertilizing is going on. 2nd and 3rd round of fungicides are going on this week.
- **Strawberries:** 1st round of fungicides are finally going on the strawberries. Looks like an average bloom. Weevil spots are real easy to find. Oh yeah, we got some black-eyed susans (*black/dead blossoms from frost*) in the strawberries too, took a lot of the first big blossoms. Bummer.

Eastern Washington (Tuesday, 5/15)

- **Blueberries:** We had some close to freezing temperatures last week in Eastern Washington and a few growers initiated frost protection efforts, but it appears we largely escaped any cold weather damage. We had from near record low temperatures at the end of last week to near record high temperatures this week. Most blueberry plants are in some stage of bloom and conditions are excellent for pollination. I have not heard of any shortages of bees.
- **General observation for all Washington state blueberries:** (Tuesday, 5/15) *From Alan Schreiber, Washington State Blueberry Commission Executive:* It seems that we have largely escaped winter injury and have had minimal damage from frost this year. Current conditions for pollination seems to range from good to excellent. If we get through pollination, the stage is set for a large crop this year.

Willamette Valley, Oregon and SW Washington

- **Strawberries:** (Monday, 5/14) Last Wednesday night we had temperatures below freezing and woke up to black, frost killed blooms. Damage seems to be spotty. Now after the three days of highs in the mid and upper 80's the bloom has exploded and is past 50%. Could have a short harvest season for a lot of fields.
- **Blackberries, processed:** (Tuesday, 5/15) Everyone has a different definition of first bloom but according to mine Marion first bloom was May 11. Last year it was May 20, putting us 9 days ahead of last year at this point. Last year harvest started on July 18 so it should start on July 9 this year. One of my heat unit charts has harvest starting July 6 and the other one on July 8, it all seems to be coming together for a more normal start time. Most guys are getting on their pre-bloom sprays and bees should be coming in the end of the week. Have not seen any more rust in the evergreens, the guys that had it earlier knocked it out pretty good.



Marionberry blackberry field on May 14 Photos by Bill Dinger

[Click here](#) to go back to the top of this newsletter.

Minor Blueberry Pests

Azalea bark scale (in Oregon and Southwest Washington) and Blueberry gall midge are both becoming quite visible in blueberries right now. While they both can cause economic damage in certain specific situations, in the vast majority of cases they don't require control measures at this time.

- **Scout for:** [Azalea Bark Scale](#), southern blueberries. (Photos below) *This scale's telltale bright white egg sacs on the branches of infested plants are now very apparent in some southern blueberry fields. The*

red eggs are visible in the second photo. If they build up too heavily they can drip honeydew onto the fruit reducing fruit quality. It's a minor pest that can be managed with either dormant season oil applications or using Esteem(pyriproxyfen), an insect growth regulator.(Photos by Tom Peerbolt).



Scout for: [Blueberry Gall Midge](#), blueberries. . (Photos below). The midge's larvae feed on and can kill the new growing tips. Although very visible the damage is usually not economic. In new fields it can sometimes stunt plants enough to justify insecticide treatments but in most fields it isn't necessary. In fact its sometimes beneficial in getting plants to branch out. (Photos by Caroline Teasdale)



Pest Alerts

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

[Powdery Mildew](#) southern strawberries.

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



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

Yellow mites, raspberries

- 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

- Yellow rust is now changing spore stages from black overwintering spores (teliospores) to yellow/orange colored 'blisters' (spermagonia) on the top surface of leaves.
- This is followed closely by a very visible, almost day-glow orange/yellow spore stage (aecia).
- The fourth spore stage (uredinia) appears later in the season as yellow 'dust' on the bottom of leaves. This last stage is the one that multiplies quickly and can quickly defoliate canes if left untreated.
- 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.

Prime 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.

[Click here](#) to go back to the top of this newsletter.

Spotted Wing Drosophila Update for 5-15-12

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](#)

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

- Trap counts continue to indicate a much higher winter survival rate than previous years.
- With a few exceptions, most locations are not showing any increase in numbers over the previous weeks. The most likely explanation for this is that we're still catching primarily the overwintering generation. The first 2012 hatch hasn't yet shown up.
- A couple of locations are showing a different pattern:
 - The red colored entry below in Linn County where OSU entomologist Amy Dreves is catching high numbers in wild habitat sites.
 - One of our client cherry orchard traps (that aren't included in the public data below) had a single trap count this week of 29 males/ 104 females. We don't have a good explanation for this anomaly but it is cause for concern and will be watched closely to see if it's an indication of a possible early season threat to nearby strawberries and caneberries.
- With no ripening fruit in the fields there is no reason to apply any insecticides at this time.

SWD in the news

- (Prince Edward Island) [Pest threatens P.E.I. blueberry crops](#) (5/10, CBC News)
- [Fly threatens New England Fruit](#) (5/7, Fresh Plaza)

Regional Monitoring (South to North)

Oregon Public Scouting Program count for the week ending on 5/11

(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 (7):** no males/3 females. **Cherries (3): 1 male /9 females.** **Raspberries (4):** 1 male /1 female . **Blackberries (6):** no males/4 females. **Blueberries (3):** no males/1 female. **Tayberries (1):** none. **Peaches + (1):** no males/2 females. **Grapes (2):** none. **Plums (2):** 1 male /6 females. **Wild Habitat (16): 23 males/150 females.** **Other caneberries (4): 1 male/9 females.** **Apples (1):** no males/1 females. **Pears (1): 2 males/16 females**
- **Polk County: Cherries (4):** none.
- **Benton County: Cherries (3):** no males/1 female . **Raspberries (1):** none. **Peaches + (1):** 1 male /1 female . **Wild Habitat (8):** 1 male/5 females. **Nectarine:** 2 males /6 females .
- **Marion County: Strawberries (15):** none. **Cherries (3): 9 males/5 females.**
- **Clackamas County: Strawberries (2):** 4 males/2 females. **Honeysuckle (1):** None.
- **Yamhill County: Raspberries (5):** none.
- **Multnomah County: Strawberries (5):** none. **Cherries (1):** no males/1 female. **Blackberries (1):** no males/4 females. **Salmonberries (3):** 0 males/2 females.

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

- **Clark/Cowlitz/Lewis Counties: Strawberries (10):** no males/ 6 females. **Cherries (2):** no males/2 females.

Other Regional Monitoring Programs have not yet begun seasonal reporting.

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)

[Click here](#) to go back to the top of this newsletter.

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.*

Industry News/Resources

Newsletters/ Berry Reports

- [BC Blueberry IPM Newsletter](#) (5/4) Weekly by Carolyn Teasdale, [ES Cropconsult](#). Sponsored by the BC Blueberry Council.
- [Oregon Blueberry Update](#) –Quarterly newsletter from the Oregon Blueberry Commission
- [New Jersey Blueberry Bulletin](#) (5/7) Weekly by Gary Pavlis, Rutgers blueberry agent.
- [Michigan State Extension news for Blueberries](#) (5/14)
- [The Source](#) (5/9) 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: 5/10—Rotating Cross Arm Trellis** 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.

Food Safety

- [All hands on deck to implement FSMA \(Food Safety Modernization Act\) in 2012](#) (5/11, Food Navigator)
- [CDC: Foodborne illnesses decline but food safety still crucial](#) (5/11, MSN.com)

Farm Bill

- [Industry to Congress: Remember specialty crops in farm bill](#) (5/10, The Packer)
- [United Fresh, Specialty Crop Farm Alliance urge senate vote on farm bill](#) (5/11, Fruit Grower News)

Labor

- [Farmers stand up to labor inspectors](#) (5/10, Capital Press)

Technology

- [New technology to track supply chain temperature](#) (5/9, Food Production Daily)
- [ScoringAg releases field hydrocooler](#) (for smaller growers—removes field heat quickly) (5/9, The Packer)

[Click here](#) to go back to the top of this newsletter.

The West

- [New ARS research position in tug-of-war](#) (5/15, Capital Press)
- [South Korean blueberry market beckons \(for Oregon growers\)](#) (5/10, Capital Press)
- [Oregon, western states return from Asia with high hopes](#) (5/2, Oregon Dept. of Ag.)
- [California pest protection to suffer with budget deficit](#) (5/15, The Packer)

National

- (Florida) [Blueberry season to finish with low volumes](#) (5/8, FreshPlaza)

International

- (E.U.) [Rejecting GM could boost food ingredient prices](#) (5/9, Food Manufacture.co.uk)
- [Direct exports raising Chilean blueberry grower returns, says Bluewave](#) (5/14, FreshFruitPortal)
- [Hortifrut gains McDonald's blueberry deal](#) (5/15, Fresh Fruit Portal)

Event Calendar

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.
- **New Information: 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
- **New Posting: July 20 and 21 — Oregon Berry Festival** ~ Portland, [Click here](#) for the Website. Sponsors and venders are welcome!

Crop Work

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.
- Plan for pre-bloom aphid control where scorch virus transmission is an issue.
- Scout for virus symptoms and send in samples for testing as needed.
- Bring in bees around 10-15% bloom.
- 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.
- Bring in bees around 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.
- Can apply a phosphite material for stronger root growth and root rot prevention.
- Scout for Yellow Rust and assess treatment options.
- Scout for spider mites and treat as needed.
- Bring in bees around 10% bloom.
- Can apply fungicides for fruit/blossom rot from 10% bloom through the end of bloom.
- Scout for Cane Blight and Cane Botrytis symptoms.

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.

[Click here](#) to go back to the top of this newsletter.

Archived Small Fruit Updates

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

[05-08-12](#)

[05-01-12](#)

[04-24-12](#)