

Small Fruit Update



News and opinions from [Peerbolt Crop Management](#) and [BerriesNW](#) sent out weekly during the growing season, and sporadically when we have something to share in the off season.

June 22, 2010

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Other links

[Video link of the week](#): Fall Creek Farm & Nursery won an award from the OSU Family Business Program for Medium (sized) Family Business of the year. This is an interview with the family about the business.
[Upcoming Meetings](#)
[Small Fruit Cold Storage Report](#)

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

Blueberries:

- (6/22) Some color starting in Dukes. Visible scars on early formed fruit due to hail damage are becoming much more evident as ripening and sizing proceeds.
- Blueberries starting to turn blue in the Eastern Fraser Valley for the early varieties; bird protection going up; fruit sizing slowly and nicely, always a bit of fruit rot in the mix. I had some good solid blocks of time to put fungicides on; so, here's to hoping... Weeds doing just great with constant moisture. Anyone used wind machines to dry off plants?

Raspberries:

- (6/22) Raspberries probably won't see machines in the Abbotsford area till mid to late next week. Baby fields may pick this weekend. If solar energy ever returns to earth ripening may speed up and change this. Last pre-harvest fungicides going on later this week and pre-harvest cleanups sprays are targeted for late week to weekend.
- (6/22) Weak raspberry fields starting to turn out ripe fruit. Just very early varieties are harvesting commercially. We've got great primocane growth so far. No extreme temps, so no sunburns all around.

Strawberries: (6/22) The fruit is coming in with volume. Most everything in B.C. is going fresh. We're into the third pick by now.

Disseminating information for:

Washington

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

Oregon

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

British Columbia

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

Whatcom County, Northern Washington

Blueberries:

- (6/22) Blueberries are sizing nicely. Cedar waxwings everywhere!
- (6/22) Aphids were pretty universal in blueberry fields until the last 3 days of spray. Worm pressure is fairly light in most fields. Fly traps are not showing any SWD. I checked some traps in Skagit County yesterday that were basically clean after a one week set. That is either due to bad weather or GREAT spraying.

Raspberries:

- (6/22) Raspberry bloom is well spread out, should be an interesting harvest. Some root rot symptoms are evident, but it's still too cool to have the stress hit hard yet. Pre-harvest cleanup sprays have just begun. We've needed to change some cleanup materials for berries going into Canada. They don't have an mrl (maximum residue level) for bifenthrin anymore. So, we're switching to Mustang Max. Makes for some anxiety to be switching from something that worked so well.
- (6/22) Reds are actually starting to look like that color now. Not much sugar in them at all yet. The first fields will start on Friday with a clean-up pick. No significant fruit will come in for about 6 days, at least. 73 degrees- forecast with a chance of rain. Great fungal conditions.

Strawberries: (6/22) Picking of Totems started at the end of last week. We're waiting now for the Hoods to ripen. Looks like a light crop.

Skagit County, Northern Washington

Blueberries, raspberries & strawberries: (6/22) Things are beginning to turn. Strawberry harvest started in some fields today, and the crop looks surprisingly good. Raspberries are coming. The quality looks off, as does yield. Slugs are looking great. Blueberries were ahead, now they're about normal. Most varieties have "split" ripening, with a gap in the middle. It'll make for an interesting harvest. Finding fruit flies in the traps, but no red eyes, so, we're not pushing the panic button, yet. Sky was unusually bright this afternoon, caused my eyes to hurt. Discovered a thing called the "sun".

As bad as it is for the small fruits, others have trouble also. Examples:

- Seed crops have lost over 30%. Another 30% damaged.
- Potatoes have lost over 25% of crop, with up to 50% suffering some damage.
- Corn has lost only about 5 - 8 %, but crop is looking very poor. None will be "knee high by the 4th of July".
- Wheat has about 75% showing rust.
- Spring Barley is...well it's not planted yet; so, no losses. Does anyone have, or know of a 90 day wonder barley?? All I can say is that the newer fungicides, when applied properly, are not much short of a miracle.

Willamette Valley, Oregon and SW Washington

Blueberries: (6/22) At Salem we anticipated Duke pick around June 26 but have since pushed back to early July. Duke clusters are sizing and ripening nicely with some decent sweetness to the berries despite the cool weather. First blue was observed in Bluejay and Bluegold on June 18. Draper shows the rare blue fruit now as well. With Duke at a vulnerable SWD stage we went ahead with a broad-spectrum insecticide despite trap counts at zero. Aphid (low pressure) is the only other insect pest we have observed. Dark berries (green berry botrytis) appear to be abating now, which is probably a good thing.

Blackberries: (6/22) Marions are sizing up nicely and, despite the pollination problems, have a decent shape. Some are turning red, but we are still at least two weeks away from harvest. Still blooming too- not many stragglers, but enough to harvest if conditions are right. Should be a very spread out harvest with light picks all the way through. Because of the cool temps, the weaker canes are hanging in there and producing fruit. I still think that if we get some stress those canes will collapse and produce nothing. First bloom sprays should be going on evergreens by the end of the week.

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Field Day / Meeting Information

- **June 30 — OSU Caneberry Field Day:** 1-5 pm at the North Willamette Research Station in Aurora. [Click here](#) for the agenda and other details.
- **July 8 — PARC Agassiz Berry Field Day,** 2-4 pm at the PARC Abbotsford Farm, 510 Clearbrook Road, Abbotsford. Updates on raspberry & strawberry breeding programs, blueberry cultivar evaluations, Spotted Wing Drosophila, berry research and industry issues...and ice cream too! For more information contact Chaim Kempler, 604-796-1716 Chaim.Kempler@agr.gc.ca.
- **July 8 — WSU Mount Vernon NWREC Field Day and NW Agricultural Research Foundation Advisory Meetings** ~2-8 pm. [Click here](#) for attached schedule of events.
- **July 14 — OSU Blueberry Field Day:** 1-5 pm at the North Willamette Research Station in Aurora. Details TBA.

- **New Information--July 14 — UC Davis Precision Ag Workshop:** Full day at the UC Davis campus. \$50 registration fee. [Click here](#) for details. “The workshop will cover fertility and yield variability, practical uses of remote sensing, soils electrical conductivity, yield monitors, and site-specific weed control. There also will be an overview of concepts and techniques used to identify and manage in-field variability.”
- **July 27–29 — 3rd annual PNW Engineering Solutions for Specialty Crops Conference~** Tri Cities, WA. Topics to be covered include: the path and cost of commercialization, alternative equipment power sources, data collection and decision assist technologies, format will include presentations, open mike, roundtable discussions, field tours and participation at the WSU Sunrise Orchard Field Day. [See site for details.](#)

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Alert

Weather conditions are improving. However ---- in most of the region, especially Northern Washington and British Columbia, the cool and wet conditions conducive to fungal disease development continue.

- **Strawberries:** Processed crop is coming in the Willamette Valley and SW Washington. Extended dry periods and the slow ripening has actually allowed for some nice fruit to come in. Northern Washington fields haven't started picking yet.
- **Blueberries:** Major threats to the fruit continue to be from botrytis, Alternaria, and Anthracnose with the botrytis green fruit mold being the most visible threat, primarily in Duke. Fungicide applications for this symptom at this stage are deemed of limited, unknown value, but this is an on farm decision depending on the grower's judgment of field conditions and potential efficacy of the application.
- **Raspberries and blackberries:** Bloom is done in Marions and southern raspberries. In the south, raspberry harvest is starting with decent fruit in the fields. The northern fields will start within the next two weeks. Stay on top of getting ripe fruit out of the field ASAP. It should be a long harvest season, which will help this.

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Industry News/Resources

Newsletters

- **The Source**, market updates from The Produce News for 6/21: [Click here](#).
- **B.C. Blueberry Council Blueberry IPM Newsletter** for 6/19: [Click here](#).
- **Michigan State IPM Fruit Newsletter** for 6/22: [Click here](#).
- **New Jersey Blueberry Bulletin** for 6/14: [Click here](#). “Duke harvest is started and Bluecrop should begin in about 2 weeks.”
- **Michigan State Blueberry Newsletter** for 6/22: [Click here](#). “Harvest of early varieties, such as Bluetta and Weymouth, begins today, Monday, June 21, 2010. This is at least a week ahead of normal.”
- **U.S. Highbush Blueberry Council Bluespaper** for June, 2010: [Click here](#).

West

- **Grower outreach specialist joins California Strawberry Commission:** [Click here](#) (6/18, The Packer)
- **(Eastern Washington) Packing plant built in record time:** [Click here](#) (6/18, freshplaza.com)
- **(California) Bumper blueberry crop:** [Click here](#) (6/10, freshplaza.com) More than 30 million pounds.

National

- **U.S. cracks down on farmers who hire children:** [Click here](#) (6/18, N.Y. Times)
- **Nutrition researcher Jim Joseph dies:** [Click here](#) (6/17, The Packer)
- **Feds crack down on child labor:** [Click here](#) (6/21, GrowingProduce.com)
- **As expected, ADHD (& pesticides) article confuses many parents:** [Click here](#) (6/22, Clarionledger.com)
- **(Michigan) Expect small fruit crops this year:** [Click here](#) (6/17, Fruit Grower News) Except for blueberries...
- **Louisiana passes strawberry “farm of origin” label law:** [Click here](#) (6/18, The Packer)
- **(Maine) Blueberry growers fear outbreak of worms, beetles:** [Click here](#) (6/17, Bangor Daily News)

International

- **Possible Chinese market for Maine blueberries:** [Click here](#) (6/21, freshplaza.com)
- **(China) Blueberries may benefit people with liver diseases:** [Click here](#) (6/18, sifynews.com)

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Pest Alerts

- **[Orange Tortrix Leafrollers](#), southern blackberries and raspberries:** The larval hatch that causes our major crop contaminant problems has started in caneberry fields in SW Washington and Oregon. Fields that have been recording high adult pheromone trap counts are at high risk of having larval contaminant problems at harvest. Control materials containing active ingredients specifically targeted at leafroller larvae such as *Bacillus thuringiensis* and Spinosad are much more effective on these larvae when they're small. If the bees are out, a broad spectrum insecticide is also an option.
- **[Strawberry Crown Moth](#), southern strawberries/caneberries:** The first SCM adult was picked up in a pheromone sticky trap in an Oregon field this week. First control treatments should be timed to go on 10-14 days after first consistent trap catches.
- **[Slugs](#), strawberries:** The wet conditions combined with ripening fruit are bringing out a bumper crop of slugs. Slug control materials are being used by many growers. With ripe fruit in the field, be sure to follow label directions carefully to avoid any fruit contamination.
- **[Birds](#), blueberries and some southern strawberries and caneberries:** There's a high population of Cedar Waxwings throughout the region that have been causing damage to strawberry crops and can be expected to move into blueberries and, possibly, caneberries as the fruit ripens. This species can sometimes be even more difficult to manage than starlings. Have bird management tactics in place and check to evaluate their effectiveness.

Pest management---Spotted Wing Drosophila Update for 6-22-10

[Click here](#) for information links. Thanks to the OSU SWD website, Amy Dreves (OSU) and Denny Bruck (USDA-NWCSFR) for contributing information, links and comments.

Alert: Field Sanitation! We're seeing cull piles of strawberries and raspberries building up already around fields in harvest. A key to managing SWD is going to be keeping fields as clean of potential fruit hosts as possible. Getting improved fruit handling and cull disposal protocols in place early could mean the difference between a successful season and a train wreck.

Organic SWD Management materials update:

GF-120, an attract-and-kill material, has been often mentioned as an organic SWD management tool ([Click here](#) for the GF-120 label). After recently conducting controlled lab trials on the efficacy of GF-120, Denny Bruck, USDA-ARS entomologist has made the following observations:

- If given no other potential food choices, SWD adults are attracted and killed by GF-120.
- If given the option of ripe fruit along with GF-120, the GF-120 was not effective in preventing egg-laying by the adults & larval infestation of the fruit.
- These trials indicate that, if ripe fruit is present, GF-120 should not be relied upon as a stand-alone control of SWD.
- It still might be of economic benefit if used in close conjunction with other management materials.

Other organic insecticide options:

- The only organically approved insecticides that have shown efficacy on SWD are:
 - Entrust, a material containing the active ingredient spinosad. [Click here](#) for the [Entrust](#) label.
 - Pyganic, with the active ingredients, Pyrethrins. [Click here](#) for the label for Pyganic EC 5.0.
- While both of these materials will kill SWD, their major drawback is very little residual activity.
- If used, repeated applications will most likely be needed.
- Given the limited options, managing insect resistance to the materials used is critical. Avoid the repeated use of just one material. Rotate...or in this case...alternate.
- Testing is ongoing. Dr. Bruck, at the USDA Northwest Center for Small Fruits Research in Corvallis, in collaboration with many others at WSU, OSU, and UC Davis, is working hard to come up with more and better options.

SWD Related News (Compiled by the [OSU SWD website](#))

- **(California) New pest SWD forcing some farmers to turn to pesticides:** [Click here](#) (6/19, L.A. Times)
- **(California) Fruit pest moving northward:** [Click here](#) (6/18, Woodland Daily Democrat)

- **(Oregon) Cherry harvest begins as growers watch for vinegar fly:** [Click here](#) (6/18, Western Farmer-Stockman)
- **(N. Carolina) SWD Trapping in North Carolina-no sign of vinegar flies:** [Click here](#) (5/2, NC Small Fruit, Specialty Crop, and Tobacco IPM News by Hannah J. Burrack, Assistant Professor and Extension Specialist)
- **(California) Living with the pests of summer:** [Click here](#) (6/21, The Vacaville Reporter)

General Comments

- Numbers of flies have increased in many regions, both males and females.
- Females are still outnumbering males by at least 3 to 1.
- There are still no verified reports to date of any crop damage in the northwest due to SWD.
- There are scattered reports from homeowners reporting high numbers of SWD in home fruit tree sites. In most cases, the high numbers of SWD have been confirmed and ID verified. ([Dr Amy Dreves](#), Oregon State Univ.)
- Identification of larvae recovered from fruit is becoming a serious issue. So far, regular fruit fly larvae, Cherry Fruit Fly larvae, and Current Cane Borers have all been reported as potential SWD larvae. Some larvae are still being reared out to properly identify.
- SWD reporting and life cycle dynamics are both changing as monitoring programs get in place, fruit ripening and harvest begins and pesticide applications are applied.

Northwest monitoring weekly update — North to South

The following information comes primarily from public monitoring programs. Number of crop types, fields and traps varies greatly so the numbers should be viewed as indicators only. This pest can be very site specific. Any treatment decisions should be based on monitoring data/observations gathered directly from the field to be treated & the individual grower's best judgment.

- **British Columbia:** From the 6/19 B.C. Blueberry IPM Newsletter: "Low levels of flies were caught in Ladner, Surrey, Aldergrove, Matsqui and Eastern Fraser Valley fields this week. Traps are set up in blueberry, raspberry, blackberry & strawberry fields." [Click here](#) for the complete newsletter with a table of trap counts.
- **Whatcom & Skagit Counties, Northern WA:**
WSU Extension in Whatcom & Skagit Counties have organized an SWD public monitoring program placing traps in fields of growers who have volunteered to share information. [Click here](#) to go to an interactive mapping site with trap numbers & locations.
 - **Whatcom County:** No SWD adults recovered this past week.
 - **Skagit County: Raspberry:** 5 males, 5 females. **Blackberry:** 2 females. **Cherry:** 1 male, 3 females.
- **SW Washington & Western Oregon**
The Washington berry commissions and the Oregon Department of Ag. along with the USDA, OSU extension, and Peerbolt Crop Management have supported and organized the survey from which the following information is taken. Grower identification as well as specific field sites are anonymous. [Click here](#) to go to the PCM SWD site for regularly updated monitoring data from these counties. [Click here](#) to go to the OSU Extension SWD population county mapping site.
 - **Clark, Cowlitz & Lewis Counties, Southwest WA: Cherry:** 3 males, 1 female. **Raspberry:** 3 females. **Strawberry:** 1 female.
 - **Multnomah & Washington Counties, OR: Cherry:** 1 female. **Salmonberry:** 3 males, 9 females.
 - **Yamhill & Clackamas Counties, OR: Cherry:** 1 male, 1 female.
 - **Polk & Marion Counties, OR: Cherry:** 3 females.
 - **Linn & Lane Counties, OR: Blueberry:** 14 females.
 - **Douglas County, OR: Cherry:** 2 females. **Peaches:** 2 females. **Fig:** 2 females.
 - **Jackson & Josephine Counties, Southern OR: Cherry:** 10 females, **Peaches:** 1 male, 1 female, **Blueberry:** 8 females, **Wild Blackberry:** 3 males, 3 females. **Fig:** 4 females.

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Ongoing Pest Management Information

Insects

- **[Aphids/Scorch virus](#) northern blueberries:** The Blueberry Council is, again, providing free Scorch and Shock virus testing to all B.C. blueberry growers. Bloom is the best time to look for symptoms. [Click here](#) for the sample submission.
- **Root Weevils:**
 - For more information on our major pest weevil species, click on the following: [Black Vine](#), [Rough Strawberry](#), and [Strawberry Root Weevils](#).
- **[Clay Colored Weevils](#) northern raspberries.**
- **[Winter Moth/ Bruce Spanworm](#) blueberries.**
- **[Leafroller larvae](#) blueberries.**

- [Redberry Mite](#) evergreen blackberries.
- [Blueberry Gall Midge](#), blueberries.
- [Raspberry Beetle](#), northern raspberries.
- [Twospotted Spider Mites](#), northern raspberries.
- [Yellow Mites](#), northern raspberries.
- [Azalea Bark Scale](#), southern blueberries.

Diseases

- [Alternaria Fruit Rot](#), blueberries.
- [Anthracnose Ripe Rot](#), blueberries.
- [Powdery Mildew](#), strawberries.
- [Blackberry Rust](#) (Phragmidium Rust) evergreen blackberries.
- [Yellow Rust](#), raspberries.
- [Mummyberry](#) blueberries.
- [Phytophthora Root Rot](#) raspberries.
- [Shock virus](#), blueberries.
- [Scorch virus](#), British Columbia blueberries.

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Crop work

All crops—

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

Blueberries—

- Scout for fruit disease symptoms and/or disorders.
- Scout for leafroller larvae feeding.
- Scout for aphids and treat as needed. In particular in northern growing areas where aphids vector Scorch virus.
- Scout for scale insects.
- Scout for weevils and weevil notching.
- Scout for virus symptoms & send in samples for testing as needed.
- Can apply fungicides for fruit/blossom rot.
- After petal fall, can treat for Alternaria and Anthracnose prevention if needed.

Blackberries—

- Scout for virus symptoms & send in samples for testing as needed.
- Can apply fungicides for fruit/blossom rot.
- Can apply clean up insecticide just before harvest for crop contaminant management.
- Scout for Phragmidium Rust in evergreen blackberries.
- Scout for Cane and Leaf Rust.
- Put out pheromone traps for leafrollers.
- Scout for leafroller larvae and treat as needed to prevent fruit contaminant problems.

Raspberries—

- Can apply fungicides for fruit/blossom rot.
- Can apply clean up insecticide just before harvest for crop contaminant management.
- Scout for Yellow Rust and assess treatment options.
- Scout for spider mites and treat as needed.
- Scout for virus symptoms & send in samples for testing as needed.
- Put out pheromone traps for leafrollers.
- Scout for aphids and treat as needed.
- Scout for leafroller larvae.

Strawberries—processed harvest ongoing in SW Washington and Oregon

- Watch for weak growing areas and scout for weevil larvae, Strawberry Crown Moth larvae, root rots and/or cold damage.
- Scout for virus symptoms/send in sample for testing to confirm.
- Scout for Powdery Mildew and treat as needed.

- Scout for Twospotted Spider Mites and predatory, beneficial mites.
- Scout for aphids.
- Scout for weevil adults and notching.
- Scout for fruit quality issues such as mold.
- Plan to put out pheromone traps for Strawberry Crown Moth in southern fields.

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Archived Small Fruit Updates

These are Small Fruit Updates from the last month (for older Updates [click here](#))

[06-15-10](#)

[06-08-10](#)

[06-01-10](#)

[05-25-10](#)