

# 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.*

**August 14, 2012**

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## Field Days Next Week

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- **August 23—USDA-ARS Blueberry Field Day** ~ 1-4 PM Lewis-Brown Horticultural Research Farm, 33447 DE Peoria Road, Corvallis, OR [Click here](#) for details. For information, call David Bryla 541-738-4094 or email Dave at [david.bryla@ars.usda.gov](mailto:david.bryla@ars.usda.gov)

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

## U.S. Department of Labor

*The last couple of seasons have seen a major increase in farm 'visits' by the [Federal Department of Labor](#). They're charged with enforcing the [Fair Labor Standards Act](#)—mostly checking on child labor, minimum wage, and other related regulations. That's their job. They've got options in deciding how to best perform it.*

*A primary option they've chosen is to demand grower cooperation by embargoing a grower's fruit. In the words of the Capital Press, "The U.S. Department of Labor is blocking the shipment of perishable fruit from farmers it accuses of labor violations, threatening to hold the goods until the producer pays a fine and signs a consent agreement admitting guilt." ([Click here](#) for DOL's investigation/enforcement process including the "Hot Goods" provision).*

*Where's the 'due process' when a grower has to admit guilt or risk losing his crop? [Here's a link](#) to the Department of Labor's complaint hotline.*

*Below are some background stories and resources for growers. If*

## 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](#)

you've got other links or information to help Northwest berry growers and processors deal with this situation please sent them along and I'll share them.

Tom Peerbolt, SFU Editor

### Related links

- [Walden: Labor tactics 'way over the top'](#) (8/13, Capital Press)
- [Labor crackdown waylays crops](#) (8/9, Capital Press)
- [Oregon Farm Bureau alerts growers to DOL crackdown](#) (8/2, Capital Press)
- [Washington Farm Labor Association](#)

### [Click here to go directly to the weekly SWD Report](#)

#### *Main SWD messages this week:*

- Adult trap numbers are down this last week. Likely a reaction to the heat.
- We also have pulled traps out of many post harvest fields (raspberries particularly).
- Pressure continues to increase.
- Ripe fruit from now through the end of the season needs to be protected from potential SWD larval infestation.

### 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** (Thursday, 8/9)

- **Blueberries:** We're into the Bluecrop harvest now. Looks to be average. There are some fruit sizing issues. Draper were picked this past week with some very good quality fruit. Most plantings are juvenile fields so total yields are small but per acre yields are impressive even with less than ideal pollination on this variety. Liberty is about 10 days from first pick.
- **Raspberries:** The last of the raspberries will be coming off by this weekend. Lots of yellow rust out there and considerable two-spotted mite activity. Mites may have to be addressed in some fields. New cane growth is a bit more variable than I would like to see. But hopefully the next couple months will provide good growth conditions.

#### **Northern Washington, Whatcom County** (Thursday, 8/9)

- **Blueberries:** Duke blueberry harvest is going well up here. Good quality and size in spite of the shock virus. Rekas are next but not quite ready. Still fighting the birds.
- **Raspberries:** Willamettes done, Meekers done or very close to it, Wakefield still chugging along. Tonnage is down considerably. Time for summer vacation.
- **Strawberries:** Strawberries are renovated and mostly fertilized, some insecticides going on, keep watering.

#### **Willamette Valley, Oregon and SW Washington**

- **Blackberries, processed:** (Tuesday, 8/14): We finished Marions on August 13. Started on July 12, one month season is typical. We'll probably start Evergreens on August 20. Spraying for SWD weekly, hope that is enough. Crop looks good at this point, not sure how it will look after the heat wave.
- **Blueberries:** (Thursday, 8/9) *(This information is from Bernadine Strik, OSU Small Fruit Horticulturist)*  
From the **OSU North Willamette Research and Extension Station:** We are seeing considerable soft fruit due to recent hot weather. On Sat. Aug. 4 temperatures reached 103F at the NWREC after temps in the low 80s the prior week. Of the dozen or so cultivars we grow, Liberty, appeared to be particularly sensitive due to its physiology or stage of ripening. The week following the high temperature, plants showed symptoms of drought stress (tight leaf angle and soft or wrinkled fruit). Our soil moisture measurements indicated that percent water content was "normal". Our deduction is that root uptake of water could not keep up with plant evaporative losses. Our research has shown that Liberty has a high top to root ratio which may aggravate such a situation. More research is needed to understand cultivar differences and how to mitigate crop damage under these types of conditions. Of note is that we also see some sun damage in highly exposed Elliott fruit – pretty rare for this cultivar. It is evident that heat damage is more severe when temperatures suddenly change. Our Liberty harvest is almost done (concentrated ripening with the heat), we will start hand harvest of Aurora this week and machine harvest of Elliott next week.

## Event Calendar

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

- **August 17—Sutherlin Blackberry Festival, Sutherlin, OR.** [Click here](#) for the website.
- **New Listing: August 21—OSU/USDA Caneberry Open House: Late Season Ripening Cultivars and Advanced Selections** ~ 3 -5. OSU North Willamette R and E Center. An informal event walking through the breeding plots, discussing cultivars and advanced selections. Bernadine Strik and Chad Finn. For information contact Bernadine at 541-737-5434.
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- **September 12—Washington Red Raspberry Commission** ~ Location TBA. For more details, call (360) 354-8767 or [email](#) Henry Bierlink.
- **September 18—Oregon Raspberry and Blackberry Commission** ~ 5:30 pm at Langdon Farms. Call (541) 758-4043 or [email](#) Philip Gutt for more information.
- **September 27—Oregon Strawberry Commission** ~ 5:30 pm at Langdon Farms. Call (541) 758-4043 or [email](#) Philip Gutt for more information.
- **October 2-5—North American Blueberry Council/US Highbush Blueberry Council Meetings** ~ St Louis, Mo. [Click here](#) for relevant information and agendas.

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## Leaf/tissue analysis and Soil testing

*Post harvest is the best time to do most soil and leaf testing for nutrient management planning. Nutrient levels are at their lowest and you can get the best information on what nutrients the recent crop might have had too much or too little of.*

- **Blueberries:** Leaf/tissue testing and pH monitoring are most critical. Complete soil tests don't correlate well with plant needs as leaf/tissue tests. [Click here](#) to view OSU's Blueberry Nutrient (and testing) Guidelines.
- **Blackberries and Raspberries:** While annual soil testing has been the industry norm, Oregon State's updated nutritional guide recommends annual leaf/tissue testing, with soil tests done just every few years. [Click here](#) to view OSU's Caneberry Nutrient (and testing) Guidelines.

## Crop Management Related Information

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- **Insect I.D. Person hired at the OSU Plant Clinic**
  - Bill Gerth has been given a 0.2 FTE appointment in Botany and Plant Pathology with the Plant Clinic and will be doing insect and other invertebrate identifications for OSU Extension.
  - There is no charge for an insect/arthropod ID. [Click here](#) for the form that should be filled out.
  - If you have an insect, spider, or other arthropod sample for ID, please send them to the Plant Clinic at: OSU Plant Clinic, 1089 Cordley Hall, 2701 SW Campus Way, Corvallis, OR 97331.
  - For questions about the insect ID function, call the Plant Clinic at 541-737-3472. Bill can be contacted directly at [william.gerth@oregonstate.edu](mailto:william.gerth@oregonstate.edu).
- [Falconer working blueberries in SW Washington](#) (8/8, OPB)
- [Disease defense for organic blueberries](#) (8/9, Growing Produce)
- [New organic strawberry guide available](#) (8/2, Growing Produce)
- [Brown Marmorated Stink Bug in Oregon](#) (OSU website) *Excellent resource site for BMSB information.*

## Spotted Wing Drosophila Update for 8-14-12

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*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

## Spotted Wing Drosophila comments

From Tom Peerbolt—This applies to the southern growing areas I'm directly familiar with. They could be true for other areas as well but I can't speak to that directly.

- We're sampling ripe Himalayan blackberries along field borders for assessing the risk to the adjacent field.
- We're identifying field specific border areas that are potential initial infestation points to be monitored by adult traps and fruit sampling now and in future years.
- Many processors are now sampling fruit and rejecting some crop loads based on detection of larvae.
- Insecticide spray intervals need to be shortened in order to maintain the same equivalent level of control as achieved earlier in the season.
- Be prepared. Be conservative and pro-active. If you or your neighbors had SWD pressure last year, expect higher pressure this year. Take all reasonable precautions to minimize the risk this insect poses to your crop.

## SWD in the News

- [Discovery may lead to better lure to detect fruit fly](#) (8/10, phys.org)
- [SWD alert in Ontario](#) (Canada) (8/9, AgAnnex)

## Regional Monitoring (South to North)

### Oregon and SW Washington Public Scouting Program

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

#### Adult Apple Cider Vinegar trapping results

*I've been reporting these in detail until now and am going to discontinue doing so. The adult trap numbers, while valuable in giving an overall impression of population dynamics, don't correlate well with the actual larval infestations now being found. The links below are the best context in which to view the adult trap count dynamics—in a chart form by county quadrants and crops along a timeline rather than single week counts.*

- [Click here](#) for the Home page for the Western Oregon and SW Washington Spotted Wing Drosophila Survey.
- [Click here](#) to go directly to the county quadrant crop SWD charts.

## Eastern Washington

- [Click here](#) for the WSU Eastern Washington SWD reporting site.
- **Latest report from the site--Wednesday, August 8: "SWD in Stemilt Hill region: A trap from Stemilt Hill was found to contain SWD today."**

## Columbia Gorge

Report from [Steve Castagnoli](#), OSU Hood River Extension

- **The latest report: August 4: "Spotted wing Drosophila (SWD) -Total SWD trap catch this week was substantially up from the previous week, with 240 males and 289 females versus 68 and 182, respectively, the week before. Trap catch continued to be widely distributed and included traps in the lower and upper Hood River Valley and the White Salmon Valley. Several traps in commercial orchards had SWD. The highest numbers were from traps near unmanaged cherries, wild blackberries, or both."**

Report from [Lyn Long](#), OSU Wasco County Extension

- **The latest report: August 11: "The trend is similar to the past few weeks with Dallesport orchards and garden sites with the highest infestation levels."**

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## British Columbia

From the August 10 Blueberry IPM Newsletter done weekly by Carolyn Teasdale ([ES Cropconsult](#)) for the [BC Blueberry Council](#)):

- [Click here](#) for the full newsletter with trap counts and insecticide options.

- “SWD pressure remains very high. It is imperative that all growers manage this pest.
- SWD larvae were found in ripe berries this week, particularly in unsprayed fields.
- Regional SWD trap catches are slightly lower this week than last week. However, SWD trap catches are reduced by hot weather, as experienced last weekend in the Fraser Valley.
- All fields with ripe or ripening fruit are susceptible to SWD damage. SWD females lay their eggs in ripe and ripening berries. The larvae that feed inside blueberries are a serious harvest contaminant. Fruit may be rejected or downgraded if it contains SWD larvae.”
- [Click here](#) for the August 11 SWD report from the BC Ministry of Agriculture.

## **Guidelines for checking the fruit for SWD larvae**

### **Rutgers instructions for checking for SWD larvae in blueberries**

- A recent edition of the Rutgers Blueberry Bulletin lays out their step by step instructions for checking blueberry fruit for SWD.
- It uses the same type of salt water method we’ve listed below but includes a lot of more specific details that might be helpful in standardizing this process especially for fruit receiving stations/processors.
- [Click here](#) for the 7/23/12 newsletter. The method is on pages 4 and 5.

### **Suggested methods**

*These suggestions are based on techniques that various public researchers and industry personnel have been developing over the past couple of years. If any of you have ideas for improvements to these protocols, please pass them along.*

#### **For scouts/field checking ([We have created a video of this larvae-checking method.](#)):**

1. Collect a sample of fruit to be tested (Strawberries: 25-30 per sample, Caneberries/blueberries: 75 per sample)
2. Put fruit in a gallon size sealable plastic bag.
3. Pour in enough of the salt water solution to allow the fruit to float (solution is: 1 cup of salt per gallon of water).
4. Mark bag with field code/date.
5. For a quick check in the field after a designated period of time (at least 15 minutes) holding the baggie up to light. This helps to see the larvae in the solution
6. For a more thorough examination, after a designated period of time (at least 15 minutes), pour the fruit and salt solution out into a shallow tray and use a piece of wire mesh screen to hold the fruit down making it easier to separate the larvae from the fruit.

#### **For processors or fruit handling stations:**

1. Collect a two pound sample of fruit to be tested.
2. Put the sample into a shallow tray and cover with the salt water solution (1 cup of salt per gallon of water).
3. After a designated period of time (at least 15 minutes) use a piece of wire mesh screen to hold the fruit down to make it easier to separate the larvae from the fruit.

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## **SWD Management Resources**

- [WSU Spotted Wing Drosophila in Western Washington](#)
- [Spotted Wing Drosophila \(SWD\) Management in B.C. Berry Crops](#)
- SWD pesticide options for Oregon and Washington berry crops.
  - Blueberries: [click here](#). Strawberries: [click here](#). Caneberries: [click here](#).
- [NC Spotted Wing Drosophila—General Information and resources](#)

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# Industry News/Resources

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## Newsletters/ Berry Reports

- [BC Blueberry IPM Newsletter](#) (8/10) Weekly by Carolyn Teasdale, [ES Cropconsult](#). Sponsored by the BC Blueberry Council.
- [New Jersey Blueberry Bulletin](#) (8/4) Weekly by Gary Pavlis, Rutgers blueberry agent.
- [Michigan State Extension news for Blueberries](#) (8/6)
- [The Source](#) (8/13) 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. **Recent entry: 7/30—Tip dieback in Arapaho blackberry variety** Reports on recent insect and disease research and observations in California.
- [Team Rubus](#) by Gina Fernandez, North Carolina State Small Fruit Specialist. **Recent entry: 8/1—Meet 'Von' a new thornless blackberry** Reports on issues in blackberries and raspberries from the Southeast.
- [NC Small Fruit and Specialty Crop IPM](#) by Hannah Burrack, NCSU extension entomologist. **Recent entry: 7/31—Another reason to appreciate bees and wasps in grapes.**

## Breeding

- [New blueberry varieties being prepped for sale](#) (8/1, USDA/ARS)

## Labor

- [California farm labor contractor sued](#) (8/8, Growing Produce)

## Research

- [Healthful crop research begins at North Carolina greenhouses](#) (8/9, The Grower)

## Technology

- [Convergence of standards, technologies creates food safety conformance](#) (8/8, Plant Engineering)
- [iCropTrak \(version 2.7\) released](#) (8/13, Press Release) An improved farm planning module for iPads.

## Food/Farm Politics

- [\(Food Safety\) Rules delayed, governing denied](#) (8/11, New York Times-editorial)
- [Vilsack fears farm aid will be 'embroiled in tax, sequester fight](#) (8/12, The Hill)

## The West

- [Bad weather causes problems for local raspberry crop](#) (8/8, KGMI)
- ['Disappointing' year for Whatcom raspberry harvest](#) (8/7, The Bellingham Herald)
- [Novices buy Bainbridge blueberry farm](#) (8/13, Capital Press)

## National

- [Drought takes toll on Midwestern produce crops](#) (8/9, The Grower)
- [Lower Michigan supplies keep blueberry markets firm](#) (8/8, The Packer)

## International

- [Peru: Over 500 hectares \(1,250 acres\) of blueberries within a year](#) (8/13, FreshPlaza)
- [British blueberry production set to soar in 2012](#) (8/9, FreshPlaza)

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## **Crop Work/Pest Management Activities**

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### **All crops**

- Pay attention to new plantings of all berries for weeds, water, insects, diseases, and nutrient deficiencies.
- Maintain SWD monitoring and management plan. ([blueberries](#), [raspberries](#), [blackberries](#), [strawberries](#))
- Weed management.
- Post-harvest—soil and leaf test for evaluation of nutrients.

- [OSU's Blueberry Nutrient \(and testing\) Guidelines](#)
- [OSU's Caneberry Nutrient \(and testing\) Guidelines](#).
- Post harvest—can treat for SWD management if field is adjacent to vulnerable fruit crop.
- Scout for Root Weevil adults [Black Vine](#), [Rough Strawberry](#), [Strawberry Root Weevils](#).

## Blueberries

### *Harvest ongoing*

- Maintain [bird damage management](#).
- Scout for weevil notching on leaves and for adult weevils.
- Scout for [leafroller larvae](#) feeding.
- Stay on top of [Aphids/Scorch Virus](#) management where Scorch virus transmission is an issue.
- Scout for virus symptoms and send in samples for testing as needed. ([Scorch](#), [Shock](#)).
- Scout for [Blueberry Gall Midge](#) damage.
- After petal fall until harvest starts, can treat for Alternaria and anthracnose prevention if needed.
- Scout for berry symptoms like green fruit botrytis, hail damage, [Mummyberry](#), etc.
- Can apply clean up insecticide just before harvest for crop contaminant management.
- Can treat for [Alternaria Fruit Rot](#) and [Anthracnose Ripe Rot](#) prevention if needed.

## Raspberries

### *Harvest finished in south, finishing in north*

- Scout for weevils and treat as needed ( [Black Vine](#), [Rough Strawberry](#), [Strawberry Root Weevils](#)).
- (North) Scout for [Raspberry Fruitworm](#) feeding symptoms.
- Scout for virus symptoms and send in samples for testing as needed ([RBDV](#), [TRsV](#))
- Scout for [fruit mold](#) and treat as needed.
- Scout for [Yellow Rust](#) and assess treatment options.
- Scout for [Two-spotted Mites](#) and treat as needed.
- Scout for [Aphids](#) and treat as needed.
- Scout [for leafroller larvae](#).

## Blackberries

### *Harvest ongoing*

- Scout for leafroller larvae ([O.T.](#), [OBLR](#)) and treat as needed to prevent fruit contaminant problems.
- Scout for virus symptoms and send in samples for testing as needed. ([RBDV](#))
- Can apply clean up insecticide just before harvest for crop contaminant management.
- Scout for and treat as needed [Blackberry rust](#) in Evergreen blackberries.
- Scout for [Twospotted Spider Mites](#) and treat as needed in susceptible cultivars.
- Can apply horticultural oil for [Redberry Mite](#) management at green fruit stage in susceptible cultivars.
- Can apply fungicides for [fruit/blossom rot](#) through the end of bloom.
- Scout for [Cane and Leaf Rust](#).
- Scout for [aphids](#) and treat as needed.

## Strawberries

### *Processed harvest (June bearers) finished throughout region. Fresh market harvest ongoing.*

#### All strawberries

- Evaluate weak growing areas and check plants for weevil larvae, root rot and/or cold damage.
- (South) Can scout for [Strawberry Crown Moth Larvae](#) ..
- Scout for weevil adults and notching.

#### Processed market-June bearers—finished harvesting

- [Weed Control at strawberry renovation](#) (6/26/12, Michigan State Extension)
- Mow and treat immediately for [SCM/SWD](#) if needed.
- Mow and renovate 2-4 weeks after harvest unless pest pressure require mowing and treating sooner.

#### Fresh market-still harvesting

- Scout for [Lygus Bugs](#).
- Scout for fruit damage symptoms like cat facing, [slug damage](#), anthracnose, etc.
- Can apply slug bait as needed.
- Scout for [Powdery Mildew](#) and treat as needed.
- Scout for [Twospotted Spider Mites](#) and predatory, beneficial mites.

- Scout for [aphids](#), lady beetles, aphid mummies (parasitized aphids), and other beneficial insects that feed on aphids.
- Scout for fruit quality issues such as mold ([Botrytis](#)).

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## **Archived Small Fruit Updates**

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

[08-07-12](#)

[08-01-12](#)

[07-25-12](#)

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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.