

# 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.

September 4, 2013

Week 36

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- [Spraying BC blueberries with a High Clearance Sprayer](#) (You Tube)
- [Oregon growers warned about Brown Marmorated Stink Bug](#) (8/29, Growing Produce) More information below in the grower resources section

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

*It's time for us to go to an every other week schedule with the Small Fruit Update. Thanks to all of you who have contributed information this season and thanks to all the commodity commissions and councils who support this publication financially.*

*A couple of specific questions we'd appreciate feedback on:*

- *All of you who pay assessments into the commissions & councils—is this a good use of your money?*
- *We've been expanding the size of the SFU as well as including more photos. Do you have trouble with download times and/or opening any of the links?*

*As always any feedback on any subject from you is valued.*

[Click here](#) to email us or call the office at 503-289-7287.

Tom Peerbolt, SFU Editor

### 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](#)

# Regional crop information

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## British Columbia, Fraser Valley (Tuesday, 9/3)

- **Blueberries:** A lot of split Elliotts as a result of the last Wednesday-Thursday rains. Those who were finished first pick suffered less but some of the second pick on was impacted as well where it was ready. This week looks damp as well, so the Elliott crop could see more trouble. Could be some significant losses. Liberty wrapping up. Overall, I think the Liberty fruit has been smaller sized this season and especially late picks. Starting the fall renovation work in a lot of fields - weed cleanup, sawdust application, some early fungicides.

## Whatcom County, Northern Washington (Saturday, 8/31)

- **Blueberries:** We recovered some SWD larvae from an Elliott field that was on a 7 day insecticide application schedule. While there was pressure from surrounding blackberries and raspberries the grower had also switched to a cannon sprayer this year. Is there a possible issue with inconsistent coverage?? Is Mustang Max over used? Where will I fit with Obama care? I know, I know...all good questions. Recent rain has hurt what's left of the 1st pick Elliotts. Just getting going again now. Maybe this will take enough fruit away from market to give it some strength. Upcoming rain is of great concern for fruit quality. Labor shortage is an increasingly big problem.

## Willamette Valley, Oregon and SW Washington (Monday, 9/3)

- **Blackberries:** Will be picking evergreens for the sixth time tonight. For sure one more pick and probably an additional to finish. Yields won't be anything exceptional but nothing to complain about either. Quality has been decent but could have done without the rain showers and high humidity. The battle with SWD continues, not the time to skip a spray, pressure is high. Finishing up training on the early season blacks, should have been done a while ago but labor is extremely tight.

## Grower resources

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### Soil fumigation and soil borne disease field day in Whatcom County

**September 9** —From [Tom Walters](#), Walters Ag Research: "There will be a soil fumigation and soil borne disease field day Monday, Sep 9, 1-4 PM. We'll meet at the Maberry Packing field on the west side of Sunrise road, about 1/8 mile north of Birch Bay-Lynden Road. Representatives from Trident will be on hand to talk about their experiences fumigating under the new EPA REDs, a Terra-Link rep will be present to talk about their experiences in BC, and a representative from Evergreen Implement will be there to give information on the Imants fumigation rigs, which have been very effective elsewhere. We'll also have an update on the bed/broadcast fumigation plots, thoughts on root removal and more. Hope to see you there."

### [Brown Marmorated Stink Bug in Oregon](#) (OSU website)

Excellent resource site for BMSB information and the place to report any sightings of this potential berry pest.

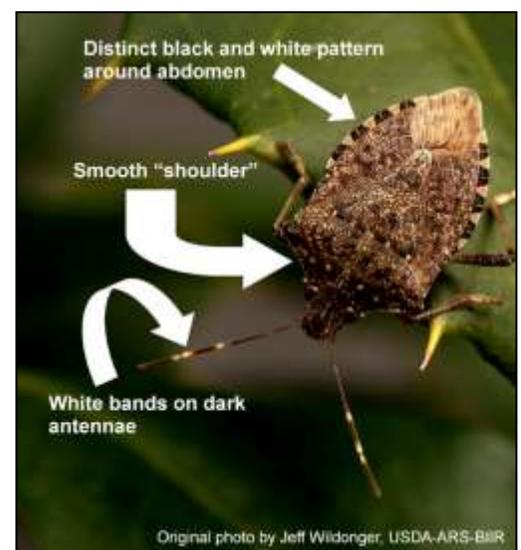
### [Stop BMSB website](#)

Site of the USDA SCRI project on BSMB. Everything you always wanted to know about...

### [BMSB Video Series](#)

How to I.D. and what type of damage to look for

- Check out Part 8: "Host plants and damage in the Pacific Northwest"



## 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.

**New overview and supplement to the OSU nutrient management guides.** From Bernadine Strik, OSU Berry Specialist: *"Please share this with growers. I think it will be handy having this info all in one relatively short (6 page) handout:*

- I've added new information on time of sampling in some of the new crops.
- Also, amount of nutrients removed in fruit at harvest and when pruning blueberries.
- Please note that I decided not to do this as an official OSU Extension publication at this time.
- As we get more info in on tissue testing research in blueberry and blackberry and nutrient removal this information will be added and used to update our existing nutrient management guides."
- [Click here](#) for this supplement. The full nutrient guides are linked below.

## Resources for identifying diseases and insects

- **British Columbia:** [Instructions on how to submit blueberry tissue to the BC Ministry of Agriculture Plant Diagnostic lab for insect or disease testing.](#)
- **For submitting samples to the Oregon State Plant Clinic** [click here.](#)

## Maximum Residue Levels (MRL's) for exported berries

*The following lists cover MRLs for the US, Canada, Japan, Korea and Taiwan.*

- [Blueberries](#) (Updated March 11, 2013)
- [Caneberries](#) (Updated March 11, 2013)
- [Strawberries](#) (Updated February 15, 2013)

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## Spotted Wing Drosophila resources for 9-4-13 Week 36

***Regional grower warning—Continued high risk of economic crop damage to berry crops in Oregon, Washington and British Columbia***

*The risk of economic damage from this insect is higher than in any of the previous three seasons we have dealt with it.*

### New Information relevant to SWD management

#### New Oregon SWD label

*This label can be used immediately.*

- New Oregon 24 C Malathion 8 Aquamul special use label: [Click here.](#)
- Explanatory letter: [Click here.](#)

#### Insecticide Rainfastness

[Rainfast characteristics of fruit crop insecticides](#) (Originally posted 6/3/13, MSU Extension)



## Monitoring berries for SWD larvae

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

1. Collect a sample of fruit to be tested (caneberries/blueberries: 50 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), hold 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.

## SWD information websites

[Peerbolt Crop Management](#)

[Oregon State Univ.](#)

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

[WSU Westside](#)

[WSU Eastside](#)

[WSU Extension SWD degree day model for Whatcom and Skagit Counties](#)

## SWD management material resources

### Oregon and Washington

- **Blueberries:** [SWD pesticide options and information](#) updated 4/15/13
- **Raspberries and blackberries:** [SWD pesticide options and information](#) updated 4/15/13
- **Strawberries:** [SWD pesticide options and information](#) updated 4/15/13

### British Columbia

- [Spotted Wing Drosophila \(SWD\) management in B.C. berry crops](#) updated 7/3/12

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## Industry news/resources

### Newsletters/ Berry reports

- [BC Blueberry IPM Newsletter](#) (8/30) Weekly by Carolyn Teasdale, [ES Cropconsult](#). Sponsored by the BC Blueberry Council.
- [Michigan State Extension Blueberry News](#) (9/4)
- [The Source](#) (9/3) Marketing report from *The Produce News*.
- [National Berry Report](#) Daily fresh market berry reports. Hosted by the California Strawberry Commission, this report is generated from data from the USDA Agricultural Marketing Service and is updated daily.

### Magazine compilations

- The Packer: [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](#) by Mark Bolda, UC Davis Berry Extension Agent. **Recent entry: 8/28—New Primocane blackberry variety Prime Ark ‘Freedom’** Reports on recent insect and disease research and observations in California.

- [Team Rubus](#) by Gina Fernandez, North Carolina State Small Fruit Specialist. **Recent entry: 8/15—Late summer fertility in blackberry** *Reports on issues in blackberries and raspberries from the Southeast.*

#### Politics & Ag

- [Immigration advocates vow big Washington rallies to press reform](#) (9/2, The Hill)

#### Health

- [Blueberries may decrease diabetes risk](#) (9/2, Fresh Fruit Portal)
- [Eating a variety of berries can prevent memory loss](#) (8/29, Atlanta Blackstar)

#### West

- [California berry landscape changes](#) (8/27, The Packer)
- [Drought disaster declared in California](#) (9/4, Ag Professional)

#### International

- [Blueberry magazine to connect international supply chain](#) (9/2, Fresh Fruit Portal)
- [Chile's key legal issues for fruit exporters](#) (9/3, Fresh Fruit Portal)
- [Hortifrut reports strong results in H1](#) (9/2, Fresh Fruit Portal)

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## Event Calendar

- **New Posting: September 9 — Soil fumigation and soil borne disease field day in Whatcom County** ~ 1-4 pm, Maberry Packing. See details above under Grower Resources. Contact [Tom Walters](#) for further information
- **September 11 — Washington Red Raspberry Commission** ~ 1 pm, Bellewood Acres, Lynden, WA. Call 360-354-8767 or [email Henry Bierlink](#) for more information.
- **New Posting: September 17 — Oregon Raspberry and Blackberry Commission** ~ 6 pm at [Langdon Farms Golf Club](#). [Click here](#) for the agenda. Call 541-758-4043 or [email](#) Phillip Gutt for more information.
- **September 24 — Oregon Blueberry Commission** ~ 12 pm, at Chemeketa Events at Winema, Building 48, Room 210.
- **September 24 — Oregon Strawberry Commission** ~ 6 pm [Langdon Farms Golf Club](#). Call 541-758-4043 or [email](#) Phillip Gutt for more information.
- **October 2-4 — US Highbush Blueberry Council, Fall Meeting** ~ in Wilmington, NC. [Click here](#) for agenda and online reservation links
- **October 23 — Washington Red Raspberry Commission** ~ in Lynden, WA. Call 360-354-8767 or [email Henry Bierlink](#) for more information.

## Crop work/Pest management activities **Week 36**

### 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 if field is adjacent to vulnerable fruit crop.
- Scout for Root Weevil adults [Black Vine](#), [Rough Strawberry](#), [Strawberry Root Weevils](#).

### Blueberries

#### Harvest ongoing

- Scout for leaf symptoms—poor growth, nutrient deficiencies, water stress, herbicide damage, etc & determine if actions are needed.
- 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.
- Scout for berry symptoms like green fruit botrytis, hail damage, [Mummyberry](#), etc.

## Raspberries

### **Processed harvest finished**

Scout for cane collapse symptoms & determine cause ( [Phytophthora Root Rot](#), Verticillium, crown borers, overwatering, etc.)

#### *Post harvest*

- Scout for [Yellow Rust](#) and assess treatment options.
- Scout for [Two-spotted Mites](#) and treat as needed.

#### *For late season, fresh market:*

- Scout for weevils and treat as needed ( [Black Vine](#), [Rough Strawberry](#), [Strawberry Root Weevils](#)).
- 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](#), [Yellow mites](#) and treat as needed.
- Scout for [aphids](#) and treat as needed.
- Scout for [leafroller larvae](#).

## Blackberries

### **Mid season processed harvest finished/Late ripening variety 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](#))
- Scout for and treat as needed [Blackberry Rust](#) in Evergreen blackberries.
- Scout for [Twospotted Spider Mites](#) and treat as needed in susceptible cultivars.
- Scout for [Cane and Leaf Rust](#).
- Scout for [aphids](#) and treat as needed.
- Scout for cane collapse symptoms & determine cause ( [Phytophthora Root Rot](#), Verticillium, crown borers, overwatering, etc.)

## 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.
- Apply main fertilizer application as needed.

#### **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](#)).

## Archived Small Fruit Updates

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

[35-SFU08-27-13](#)   [34-SFU08-20-13](#)   [33-SFU08-13-13](#)

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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