

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 20, 2013

Week 34

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[Berry Farmers Seek to Rescind 'Hot Goods' Settlements](#)

(8/19, Capital Press)

[Negotiations Continue Between Sakuma Farms, Workers](#)

(8/13, Capital Press)

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

Regional crop information

The season winds down, although there's still a fair amount of fruit to come in. Weather remains warm and dry across the Northwest.

- Processed raspberry harvest is done on the west side of the mountains.
- Blackberries are into machine harvested Evergreens in the Willamette Valley.
- Hand harvest of Chesters, Triple Crowns and other late ripening blacks continues.
- Willamette Valley blueberries are well along in Elliots, Aurora and some Rabbiteyes.
- Fraser Valley areas are still machine harvesting Bluecrop, Bluejay, 1613's. With Liberty and Elliots are also getting going.

Continued good quality and reasonable yields.

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](#)



Grower resources

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

Some Michigan berry growers are presently coping with major SWD issues due in part to major amounts of rainfall immediately following insecticide applications. Knowledge of the rainfastness of our commonly used materials is essential for information for us to have on hand also. Sooner or later it'll be needed.

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

[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.*

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 & 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.

Miticides for raspberries and blackberries (originally posted 7-25-12)

From Joe DeFrancesco, OSU small fruit pesticide specialist: "With so many registered miticides for caneberries, I put together a product chart with pertinent information to help growers decide which one to use." [Click here](#) for Joe's caneberry miticide chart.

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 8-20-13 Week 34

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 (copied from Grower Resources area above)

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Insecticide Rainfastness

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[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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Pest management activities

Scout for: [Mummyberry](#), blueberries. [Mummyberry primer from MSU.](#)

- Evaluate the level of mummyberry infections and the areas of the field that are infected.
- Infected fruit is now easy to distinguish.
- The infected fruit colors earlier, shrivels, whitens and drops from the bushes easily when disturbed.
- The inside of an infected berry will be filled with white fungal mycelium.
- Use this yearly mummyberry information to assess and plan next year's Mummyberry prevention program.



Right now is an excellent time to scout for the mummyberry, especially if you've got weed mat.

Scout for and treat as needed: [Yellow rust](#), raspberries.

Yellow rust left untreated at this time of year can defoliate raspberry primocanes potentially impacting next year's yields & overwintering hardiness. The black overwintering spore stage now showing up is resistant to fungicides—if you've got a serious problem, treat ASAP.



Scout for: [Aphids](#), blueberries.

- The action threshold for aphids in blueberries is very low in any area where [Scorch virus](#) is a concern.
- Aphids spread Scorch Virus and killing the aphids is the most effective way to prevent new infections.
- In areas where Scorch Virus is not a concern, the potential economic damage from aphids is much less and larger populations can be tolerated before management actions are taken.
- With Scorch Virus, infected bushes **do not** return to productivity and should be removed ASAP to limit the disease spread.

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Industry news/resources

Newsletters/ Berry reports

- [Whatcom Ag Monthly](#) for August *Published by WSU Whatcom County Extension. Excellent articles on water issues.*
- [BC Blueberry IPM Newsletter](#) (8/16) *Weekly by Carolyn Teasdale, [ES Cropconsult](#). Sponsored by the BC Blueberry Council.*
- [New Jersey Blueberry Bulletin](#) (8/12) *Weekly newsletter by Gary Pavlis, Rutgers blueberry agent.*
- [Michigan State Extension Blueberry News](#) (8/19)
- [The Source](#) (8/19) *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 entries: 8/12—Presentations from twospotted mite management meeting now available; 8/6—Fusarium wilt of strawberry** *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.*
- [NC Small Fruit IPM](#) by Hannah Burrack, North Carolina Extension Entomologist. **Recent Entry: 7/24—End of harvest concerns in blueberries** *Reports on recent insect research and observations in North Carolina.*

Technology

- [Extreme magnification provides insight on threatening pests](#) (8/14, Growing Produce)

Pollination

- [A World Without Bees](#) (8/19 issue of Time Magazine) *A subscriber passed along a copy of this article in Time Magazine. For the online version you'll need to subscribe, [click here](#).*
- [The trouble with beekeeping](#)....(8/9, Time Magazine) *Companion piece by the author of the above article. Some of the contents: Wild bees are in even more trouble than honey bees/Are robotic bees in our future?*

Research/Plant Breeding

- [Columbian experts aim to bridge blackberry "technological divide"](#) (8/16, Fresh Fruit Portal)

Immigration & Labor

- [California's \\$43 billion farms see labor in immigrant fix](#) (8/14, Bloomberg)

Politics & Ag

- D.C. Watch: [Food stamp program divides House](#) (8/19, Ag Professional)

Regulatory Issues

- [Will the Food Safety and Modernization Act \(FSMA\) change the way you grow?](#) (8/19, The Packer)
- [FDA to prepare Environmental Impact Statement on proposed produce rule](#) (8/16,FDA.gov)
- [Genetic engineering produces a genuine monstrosity](#) (8/14, Forbes) *"Government regulation has run amok & threatens advances in agriculture"*

Food Safety

- [Researchers weigh costs and benefits of food risk communication](#) (8/19, Food Navigator)
- [Utilizing the newly proposed imported food safety rules as a risk management tool](#) (8/20, Food Safety Magazine)

Pesticide Issues

- [New pesticide labels to better protect bees](#) (8/16, Ag Professional)

Marketing

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West

- ['Climactic Schizophrenia' bad news for California](#) (8/19, Ag Professional)

North America

- Prince Edward Island: (Wild blueberries) [Blueberry growers expecting above average season](#) (8/16, Fresh Plaza)

International

- Argentina: [New quality label for blueberries in 2014](#) (8/19, Fresh Plaza)

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Event Calendar

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

- **September 11 — Washington Red Raspberry Commission** ~ 1 pm, Bellewood Acres, Lynden, WA. Call 360-354-8767 or [email Henry Bierlink](#) 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. Details and registration coming soon.
- **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 34

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.
- 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

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](#)).
- (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](#), [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](#))
- 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.
- 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

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

[33-SFU08-13-13](#) [SFU08-06-13](#) [SFU07-30-13](#)

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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