

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.

April 2, 2013

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[Blueberry production could rise 50% by 2018, but will that be enough?](#) (4/1, Fresh Fruit Portal)

[Chilean blueberry industry and production recap 2012-13](#) (4/1, Fresh Fruit Portal)

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

It's the first week in April in the Willamette valley. Our [field scouts](#) are trained and [getting SWD monitoring traps set up](#), blueberry bloom is starting with bees getting active, raspberry and blackberry fields are greening up, strawberries are sending up flower trusses.

...and [mummyberry apothecia](#) are dispersing spores, [shock virus symptoms](#) are showing up, rust in raspberries has 'broken dormancy' (entered [the spermaogonia stage](#)), and those water mold (phytophthora) spores are swimming around looking for roots to infect.

Here we go...

Tom Peerbolt, SFU Editor

Regional Crop Information

Disease Alerts

- 1) [Mummyberry](#) blueberries Time to be in prevention mode! In fields with a history of mummyberry now's the time to be implementing your management program and keep it going as consistently as possible all the way through the end of bloom. We're still in the initial infection stage for this disease.

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](#)

2) **Vector management: [Scorch virus](#)** – Areas with confirmed scorch virus present.

This season is running a week or so ahead of the last couple of years so I'm including this alert earlier.

Blueberries, Vector (aphid) management

- From an April, 2011 B.C. Pest Alert: “Blueberry scorch virus is transmitted by aphids. An effective aphid control program should be used by all growers. *Fields should be treated before bloom with a registered aphicide to control the over-wintering aphids before they reproduce and disperse.*”
- Click on the blue link above for full information from the B.C. Ministry of Agriculture. Check with your berry management specialists, both public and private, for more specific recommendations and selection of appropriate management materials.
- You can also email the B.C. Blueberry Council's research coordinator, [Karina Sakalauskas](#) (or call her at (604) 613-2133) for information.

3) **Time to scout for: [Shock virus](#)** – southern blueberries.

- Symptoms are just becoming 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.



Early Shock virus symptoms in Oregon blueberries (Photos by Tom Peerbolt)

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, 4/1)

Continuing good weather and warm temps have dried out a lot of fields and pushed along development. A shower on this warm soil would really get things ahead.

- **Blueberries:** Seeing some early pink bud and leaves opening up on lighter soil fields of Bluecrop, Reka and even Dukes. Into the second round of mummyberry sprays. Some fertilizer starting to go on this week.
- **Raspberries:** We're going to start shoot-burning raspberries this week. Fertilizer will start late in the week or next weekend.

Whatcom County, Northern Washington (Monday, 4/1)

- **Blueberries:** Getting fertilizer on the blues now as well as the second Indar in application for mummyberry control.
- **Raspberries:** We jumped on the raspberry fertilizing last week. We also began raspberry shoot burning late last week. We are planting new fields as fast as we can work the ground.
- **Strawberries:** Strawberry row narrowing still in process. Lack of reported insect sightings has us concerned, where are those critters?

Skagit County, Northern Washington (Monday, 4/1)

- **Raspberries:** Raspberries also moving along now. Chemainus primocanes about 4" high. Meeker a little behind that. We will cane burn this week.
- **Blueberries:** Today at WSU-Mount Vernon, several varieties are in or nearly in bloom:
 - Bluejay is at about 5% bloom.
 - Reka not yet blooming, but has many blossoms very close to bloom.
 - Bluecrop and Duke have the occasional open flower, less than 1%.
 - Bluetta is 5% bloom.
 - Rubel is 1-5%.

All varieties have nice even bud break, no evidence of cold injury yet. Great weather for bee flights, too. Saw some winter moth webbing. Also saw some actual spider webs too, though.

Willamette Valley, Oregon and SW Washington

Other than the weather stuff the usual field work continues on schedule, spraying, fertilizer and some mowing and tilling. All continues to look good but am worried about when we are going to make up the lack of rainfall, July??????

- **Strawberries:** (Friday, 3/29) Fertilizer is on many fields as well as phosphite applications. The weak fields and/or weak spot within fields are pretty obvious at this point—the growth is so much slower.
 - In the day neutral Albions, there are already some open blooms although many have frost damaged centers. Just shows their potential for early harvests.
 - In the June bearers, a Honeoye field as well as in some Hoods, we've got some flower separation showing. The trusses are pushing in all the fields I've seen.
- **Blueberries:** (Friday, 3/29) Nice looking week ahead. I just stopped in at the North Willamette Station in Aurora to check out blueberry bloom stage in the demonstration block. Earliblue were less than 5%. Duke are into pink bud stage although I think other areas in the valley are further along.

Blueberry bud development—Western Willamette Valley 3-29-13 *(photos by Tom Peerbolt)*



Patriot

Duke

Draper

Liberty

Elliott

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- **Blackberries:** (Monday, 4/1) A couple pictures this week to show how much farther ahead we are this year over last. First one is of Marionberries on April 1, 2012 and second is of Marionberries on April 1, 2013. According to degree day models, 2013 is seven days ahead of 2012 (and 2011) but about normal with the 30 year average. Also, still behind 30 year normal rainfall. Salem airport records show 9.25 inches behind since January 1 and 3.38 inches behind since October 1.



Marionberries last year—April 1, 2012 (photos by Bill Dinger) Marionberries this year—April 1, 2013



Black Diamond blackberries—April 1, 2013 (photos by Bill Dinger)

Spring Weather Risks

Pictorial blueberry growth stages with temperature damage thresholds

- [Blueberry growth stages and critical spring temperatures](#) (Michigan State Extension)
- The relevant stages & temperature thresholds from the chart:
 - **Bud swell:** “Visible swelling of buds; scales separated. Can tolerate 10-15 F (-12 to -9 C).”
 - **Tight cluster:** “Individual flowers distinguishable. Can tolerate 20-23 F (-7 to -5 C).”
 - **Early pink bud:** “Expanding flowers are readily visible and have separated. The pink corolla tubes (petals) are short and closed. This bud stage can tolerate 23 to 25°F (-5 to -4°C).”

Early Spring Weather Management Information

- [Using your sprinkler system to protect blueberries from freezes](#) (Eric Hansen, Michigan State Small Fruit Specialist)
- (All berries) [Frost protection: Tips & Techniques](#) (Kathy Demchek, Penn State)

Nutrient Management

We're getting into a traditional time for applying fertilizer. Many growers still apply the first blueberry application just before the buds break. Research has shown that the plant takes up very little nitrogen before late April. Recommended timing for split applications in the Willamette Valley is 1/3 in late April, 1/3 in mid-May and 1/3 in mid-June.

[Click here](#) For OSU's "Nutrient Management in Blueberries" (16 page pdf).

[Click here](#) for OSU's "Nutrient Management Guide—Caneberries" (8 page pdf)

Food Safety Events

Oregon Food Safety Training Offered

by the Oregon Raspberry & Blackberry, Blueberry, and Strawberry commissions

- [Click here](#) for the website with registration and detailed information.
- Class is free of charge but RSVP is required.
- **Dates & locations:**
 - **April 4** North Willamette Research Extension Center – 15210 NE Miley Rd., Aurora
 - **April 9** Unger Farm Store – 34880 SW Johnson School Rd, Cornelius
 - **April 18** Woodburn Fertilizer – 868 N Front Street, Woodburn
 - **April 23** Scenic Fruit Co. – 7510 SE Altman Rd., Gresham
 - **May 2** Riverbend Organic Farm – 35711 Helms Dr., Jefferson
 - **May 7** Willamette Valley Fruit Co. – 2994 82nd Ave NE, Salem
 - **May 16** HBF International – 310 NE Kirby St, McMinnville
 - **May 21** Western Star Grange Hall #309 – 30423 Tangent Dr., Albany

FDA Informational Workshops on the Proposed FSMA Rules

The Food Safety Modernization Act will significantly impact growers, packers and processors in the coming years. Members of the food industry have the opportunity to submit comments to FDA on the proposed rules that will be used to regulate the food industry in the coming years. There is a need to be familiar with the proposed rules in order to submit relevant comments to FDA by the May 16, 2013 deadline. A multi-state team involving universities and regulatory agencies in partnership with FDA is offering five opportunities to review the proposed rules. FDA will be presenting information and offering input throughout the workshop."

- [Click here](#) for the flyer with more details on the meetings.
- Cost is \$20 with a registration cutoff date of 4 days prior to the meeting date.
- **Remaining dates & locations:**
 - **April 15** WSU Snohomish County Extension, Everett, WA
 - **April 17** Unitarian Universalist Church, Eugene, OR
 - **April 19** Four Rivers Cultural Center, Ontario, OR

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Crop/Growing Information

- California: [Growers seek alternatives to fumigant](#) (3/29, The Packer)

Pest Management

- [Battling bacterial blight in blueberries](#) (3/8, Growing Produce) *This article is based on a past issue of the Small Fruit Update. Read the attached comment for a correction to the article.*
- [Oregon State University Plant Clinic Aprils Highlights](#) *The usual diseases they get samples of in April. These include: Blueberry shock virus, Pseudomonas bacterial blight in blueberries, Phytophthora root rot & mummyberry.*
- [Integrated pest management resources at MSU](#) (4/1, MSU Extension)

- [Brown Marmorated Stink Bug: BMSB--Resources for identifying them and their hosts](#) (4/1,MSU Extension) *While BMSB has been recovered from various sites in the northwest, there has not been any actual documented economic berry crop damage. This information is provided due to the potential damage from this insect based on its activities on these crops in the eastern U.S.*
- [Spotted Wing Drosophila: SWD national survey for caneberry growers will guide options for controls](#) (4/1,MSU Extension) *I was aware of this survey but thought it was being done just for the eastern U.S. The wording of this doesn't make that distinction—fill it out if you want your input included on this vital issue.*

Ongoing Possible Field Management Activities

All crops

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

Blueberries

- **Treat for [Mummyberry](#) as needed.** (See Alert at top of newsletter) *You can scout for sprouting mummyberries on the ground but they can be very difficult to find. Base treatments on plant stage, environmental conditions and the past history of the field and surrounding fields.*
- **Scout for [Pseudomonas \(Bacterial Blight\)](#)** Water-soaked lesions in some fields that then develop into reddish brown to black cankers.
- Scout for leafroller larvae feeding.
- Scout for Shock virus symptoms in southern area fields.
- Plan for pre-bloom aphid control where scorch virus transmission is an issue.
- Make preparations for bringing in bees around 10% bloom.
- **[Winter Moth/ Bruce Span Worm](#) blueberries:** Scouting for winter moth larvae should start as soon as the buds start swelling. We've had reports in problems beginning this last week. More of an ongoing issue in the northern growing regions but also an occasional, locally severe problem in some Oregon and SW Washington fields.
- **[Scale](#) blueberries:** A dormant oil or Esteem (pyriproxyfen) can be used while blueberries are dormant.

Blackberries

- Scout for [Purple Blotch](#) lesions in Marion berries to assess field disease levels for later treatments.
- Can apply lime sulfur for [Redberry Mites](#) and/or disease management.
- Can drench for [crown borer](#) management.

Evergreen Blackberries

- Can apply lime/sulfur for [blackberry rust](#).

Raspberries

- Burn back primocanes as needed.
- (northern areas) Scout for Clay Colored Weevil feeding and treat as needed.
- Scout for mites.
- Can still apply Ridomil for Phytophthora root rot management.
- Can still drench for crown borer management.

Strawberries

- Can apply phosphite material.
- Watch for weak growing areas and check rots for [weevil larvae](#), [root rot](#) and/or cold damage.

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Industry News/Resources

Newsletters/ Berry Reports

- [Michigan State Extension Blueberry News](#) (4/2)
- [The Source](#) (4/2) Market reports 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'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](#) by Mark Bolda, UC Davis Berry Extension Agent. **Recent entry: 3/28—Verticillium in blackberries.** Reports on recent insect and disease research and observations in California.
- [Strawberries and Vegetables](#) by Surendra Dara, UC Davis Extension Specialist. **Recent entry: 3/26—Compatibility of the entomopathogenic fungus, *Beauveria bassiana*, with some fungicides commonly used in strawberries**
- [Team Rubus](#) by Gina Fernandez, North Carolina State Small Fruit Specialist. **Recent entry: 3/27—Growing interest in raspberry crops in Mexico** 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: 3/27—Plan to monitor insect pests in 2013** Reports on insect issues in the Southeast.

Pollination issues

- [Food prices could rise as bees die off](#) (4/1, MSN.com)

Breeding/Research

- [New cherry/plum hybrid hits Europe](#) (3/26, Growing Produce)
- Shipping fresh strawberries: [Study shows effectiveness of Tectrol pallet covering](#) (3/29, The Packer)

Technology

- [Need help finding natural enemies? There's an app for that](#) (3/6, Growing Produce)

Marketing

- [Frozen food myths debunked](#) (3/29, Post Bulletin)
- [Fruit & vegetable prices to show moderate inflation](#) (3/26, The Packer)

Food Safety

- [Questions about food safety rules get some answers](#) (3/27, The Packer)
- [Fewer people may be getting sick from contaminated food](#) (3/26, Food Safety News)

Labor & Immigration

- [House group nears immigration deal](#) (4/1, Politico)

West

- [Supporters tell lawmakers about benefits of OSU statewide services](#) (3/27, Capital Press)
- [Oregon Berry Festival on July 12 & 13 in Portland has vendor booth spaces available](#)
- [California snowpack only 52 percent of normal](#) (3/29, Capital Press)

North America

- [Cold pushes Southeast blueberry deals back](#) (3/27, The Packer)
- Georgia: [Blueberry growers manage cold weather, anticipate record crop](#) (3/29, Fresh Plaza)

International

- [New Website launched by the Chilean Blueberry Committee](#) (3/27)

Event Calendar

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

- **April 10 — Washington Red Raspberry Commission** ~ Puyallup, WA. Call 360-354-8767 or [email](#) Henry Bierlink for more information.
- **New posting: April 11 — WSU Skagit County Extension Berry Breakfast & Workshop** ~ 8-noon, 11768 Westar Lane, Suite A, Burlington WA 98233. For directions [click here](#). \$5 with RSVP, \$10 at the door. Breakfast & lunch provided, 3 pesticide credits applied for. Please RSVP with Talea Price by Monday, April 8th. tprice@co.skagit.wa.us

- **April 16 — Oregon Strawberry Commission** ~ 6 pm [Langdon Farms Golf Club](#). Call 541-758-4043 or [email](#) Phillip Gutt for more information.
- **April 22-23 — International Blueberry Organization's 2nd Annual Meeting** ~ Santiago, Chile. [Click here](#) for the website with the agenda and registration information.
- **April 30 — Oregon Raspberry & Blackberry Commission** ~ 6 pm [Langdon Farms Golf Club](#). Call 541-758-4043 or [email](#) Phillip Gutt for more information.
- **New posting: May 6 — Oregon Blueberry Commission** ~ Noon at [Chemeteka Community College](#), Chemeteka Events at Winema, building 48, room 210. For more details call (503) 364-2944 or email [Lisa Ostlund](#).
- **New posting: June 5 — OSU Strawberry Open House** ~ 1-4:30 pm, North Willamette Research & Extension Station, Aurora Details TBA
- **June 18-20 — Berry Health Benefits Symposium** ~ Charlotte, North Carolina. [Click here](#) for registration and agenda information.
- **New posting: July 10 — OSU Caneberry Open House** ~ 1-5 pm, [North Willamette Research & Extension Station](#), Aurora Details TBA
- **New posting: July 12-13 — Oregon Berry Festival** ~ Portland, Sponsored by the Oregon berry commissions as well as many Oregon berry farms and berry related businesses. [Click here](#) for the website with a schedule of events and more details.
- **New posting: July 17 — OSU Blueberry Field Day** ~ 1-5 pm, [North Willamette Research & Extension Station](#), Aurora Details TBA
- **New posting: July 19 - 20 — Northwest Raspberry Festival** ~ Lynden, Sponsored by the Lynden Chamber of Commerce. [Click here](#) for the website with a schedule of events and more details.

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Archived Small Fruit Updates

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

[SFU03-26-13](#) [SFU03-19-13](#) [SFU03-13-13](#)

This document is a guide and not intended as a recommendation or endorsement.
Consult with your supplier, field representative, or pest consultant.