

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.

March 25, 2014

Week 13

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[Q & A: South Korean Blueberry Market Snapshot](#) (3/21, Fresh Fruit Portal)

[Blueberry Family Health foundation](#) “The mission of the Blueberry Family Health Foundation is to improve the lives of children and families by supporting research, education and wellness initiatives. The Blueberry Family Health Foundation’s work will begin with this clear vision – To End Type 2 Diabetes In Children.”

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

A few more of those sunny days in the 60’s (16-20 C) in the Willamette Valley and we would have been getting into a flush of blueberry bloom. However—we’re back into the rain with highs in the mid 50’s (10-15 C) for this week. This will slow it down. Did see the first bumble bees this last week though.

Also, we’re into perfect mummyberry infection weather with a lot of apothecia open, long periods of leaf wetness and temperatures in the 50’s (10-15 C). I know this is sounding like a broken record (for those of us who remember records) but it is the critical time to stay with the program.

Winter damage is now becoming obvious in some blackberry and strawberry fields. Still no confirmations of any serious blueberry cold damage problems.

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](#)

Blueberry Disease Alert

Mummyberry (blueberries)- Time to be in prevention mode! In fields with a history of mummyberry and at green tip stage, 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.

- **So, what is "green tip stage"?** [Click here](#) for a chart from Michigan State of the various stages of blueberry growth development.
- [Mummyberry primer from MSU](#)

Raspberry & Blueberry Disease Alert

Phytophthora Root Rot: As soils warm and saturate, conditions are ideal for the spores of Phytophthora to spread from plant to plant. All precautions should be taken to inhibit the disease in fields at risk with soil drenches of Ridomil and doing whatever you can to keep roots out of the saturated soil zone.

Raspberry & Blackberry Insect Alert

- [Raspberry Crown Borer](#) We saw an upswing in reports of crown borer damage last year. If you've had issues or it's been a few years since you've treated, now is the time to consider getting an insecticide crown drench on.

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, 3/24)

Rain coming back here as well and cooler, but the sounds and smells of spring (I live in a dairy farm area) are definitely in the air...

- **Blueberries** (Monday, 3/24): The floods have receded and we are looking at open clusters, major spraying going on for Mummyberry. So far our cane counts and flower counts show little damage to initiating blooms for 2014 in blueberries. We had a major problem in 2012 with the long, warm fall, seeing the effects in 2013. Looks like we are going into bloom equipped just fine, now up to pollination time. Quite warm right now, so everything just moving fast.
- **Blueberries** (Monday, 3/24): Not a lot to report that would be different than I said last week. Considerable first goes at mummyberry spraying went on quite late last week and weekend. Could have been a bit early in some fields but as I mentioned before I saw a lot of field variability even within the same cultivars. With warm and wet weather in the offing this week it may be better to have something on and shorten the next spray interval when there is a bit more development.
- **Blueberries** (Monday, 3/24): Had anticipated having to have mummyberry sprays on last week but cooler night time temps basically stopped bud development. First app went on Reka today with Duke coming later this week or soon thereafter. Lots of spraying happening in the area yesterday and today. I think some applications went on a bit too early this year as buds just weren't at the development stage for infection. No sign of span worm yet.
Budget at this point looks at least average on Duke, Bluecrop and Reka. Have heard that some fields at least double what was seen last year, keeping in mind industry was down (*in some fields-TP*) at least 25% last year. Have seen very little for damage to buds at this point.
- **Raspberries & blackberries** (Monday, 3/24): Thus far the raspberries and blackberries in the way of the cold winds without snow cover this winter also are looking fine.
- **Strawberries** (Monday, 3/24): Had a late planted field of Albion that didn't make it at all (*due to winter damage-TP*), likely no leaf cover when the worst weather hit. Every plant dead. Replanting right now.

Western Oregon, Willamette Valley

- **Blackberries** (Monday, 3/24): Noticing more cold damage in the Marions. Not that I have looked at every field but every field I have seen shows some signs. The older, weaker, EY (*harvested every year-TP*) fields are showing the most but even the healthy AY (*harvested alternate years-TP*) fields have some. I

think it will show up even more after the warm temps of today. So far the Black Diamonds and the two Columbia Star fields I have seen look OK. Fertilizer and herbicides being applied and some second shots of sulfur on Black Diamond.

Black Diamond blackberry bud development. Top -- 3/21/14. Bottom -- 3/22/13

Same field, different location (Photos by Bill Dinger)



- **Blueberries** (Monday, 3/24): We finished our 3rd mummyberry fungicide application today on our most susceptible varieties. Legacy has a few open blossoms and an occasional open blossom in Duke. Starting to bring the bees in toward the end of this week or early next. Shock virus is starting to show in Bluegold. I haven't found any winter moth damage yet. Next week we will begin applying fish fertilizer.
- **Blueberries** (Friday, 3/21): We're running a little behind last year in bud development. See the photos below from the same fields:

Blueberry floral bud development—Western Willamette Valley

Top -- 3/21/14. Bottom -- 3/22/13

Same field (Photos by Tom Peerbolt)



Patriot

Duke

Draper

Liberty

Blue Jay



Patriot

Duke

Draper

Liberty

Aurora

Comments on cold damage in Marionberry blackberries

- **Bernadine Strik, OSU Berry Horticulturist (3/25):** I've seen some damage in Marion fields. In my opinion, the cold temperatures in early December came before the berry plants were fully dormant; that's why we are seeing some damage at temperatures we might otherwise not expect to see damage. Growers of Marion might see more damage in August trained EY, especially if canes were at all kinked during training. Also, in vigorously growing AY fields (coming from an off year) we are seeing a bit of damage, likely because plants were even later to go dormant (as compared to EY fields). Also, we are noticing some damage on the lower part of canes, particularly in fields where there was snow and on the SW side of the plants (typical SW injury). In these damaged areas, canes might be split and now may have evidence of cane disease. Growers should scout for cane and leaf rust and purple blotch. Cane sprays will be especially important this spring.
- **Joe DeFrancesco, OSU (3/25):** Damage to Marions in Oregon will be site-specific. I have a small planting of Marions on a research farm just outside of Corvallis, and the canes are dead as a doornail. Temperatures were down to 5F (-15C) for a few days early December. This was a healthy, vigorous AY field going into the winter and I'll likely need to cut them down to the ground. However, my Marion planting at the North Willamette Research & Extension Center near Aurora in the northern part of the Valley looks good, with very little damage showing at this time.



Grower Resources

- [Blackberry Production: Tips learned from an ongoing organic research study](#) (3/25, eXtension posted webinar & power point) Presented by Bernadine Strik, Dave Bryla & Louis Valenzuela. This has a lot of valuable information for all growers not just organic.
- [Blueberry weed control updates for 2014](#) (3/18, MSU Extension)

Peerbolt Crop Management

I've got a couple of Peerbolt Crop Management developments to mention.

[Peerbolt Berry Crop You Tube Channel](#)

Videos are now available of presentations from:

- **Oregon Fresh Market Strawberry Workshop** sponsored by the Oregon Strawberry Commission.
- **Oregon Hort Society Caneberry Workshop** at the Ag Show in late January (*coming soon*).
- **The Workshop for Oregon's Commercial Raspberry & Blackberry Growers** sponsored by ORBC along with many industry sponsors.

Thanks to the New and Ongoing Sponsors of the [Berries Northwest website](#)

While the Small Fruit Update Newsletter is paid for entirely by the Northwest berry commissions and councils, the Berries Northwest website's ongoing development and maintenance costs have been picked up by the following sponsors. The SFU and the website are both essential components for maintaining our ability to provide support services for the Northwest Berry Industry. A very big thanks to all of these organizations for stepping up!
Tom P.

New Sponsors in 2014:

- [Applebee Aviation](#)
- [Cascade Analytical, Inc.](#)
- [Crop Protection Services](#) (Rickreall & Hopmere offices)
- [Pacific Agricultural Laboratory](#)

Ongoing Sponsors:

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- [Oregon Blueberry Farms and Nursery](#)
- [OVS](#)
- [Sakuma Brothers](#)
- [Synergistic Pesticide Laboratory](#)
- [Wilbur-Ellis](#) (Jefferson & Woodburn offices)

Industry news/resources

[Newsletters/ Berry reports](#)

- [BC Blueberry IPM Newsletter](#) (3/22) Produce by [E.S. CropConsult](#) for the B.C. blueberry industry.
- [Whatcom Ag Monthly](#) Produced by WSU Whatcom County Extension. Includes excellent berry crop information.
- [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.
- [Weekly Fertilizer Review](#) (3/24) From Farm Futures.
- [General Produce Company's Weekly Market Report](#) (3/24) [The Source](#) (3/14) Different versions of the same report—I haven't figured out if one is better than the other. Any opinions on it? Let me know TP

[Magazine/website 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](#).
- **Fresh Fruit Portal:** [blueberries](#), [blackberries](#), [raspberries](#), [strawberries](#).
Recent stories for the various berries from Fresh Fruit Portal.

Berry research blogs

- [Strawberries and Caneberries](#) by Mark Bolda, UC Davis Berry Extension Agent. **Recent entry: 3/21—**
Chemical phytotoxicity on strawberry *Reports on recent insect and disease research and observations in California.*
- [Team Rubus](#) by Gina Fernandez, North Carolina State Small Fruit Specialist. *Reports on issues in blackberries and raspberries from the Southeast.*

Climate/Water

- [California to ease water restrictions in move to help farmers](#) (3/18, Reuters)
- [Climate change to disrupt food supplies, brake growth: U.N. draft](#) (3/23, Reuters)

West

- Oregon: [Precision farming expo set for April 2-3 in McMinnville, OR](#) (3/21, Western Farmer-Stockman)
- California: [Strawberries plentiful for Easter](#) (3/21, The Packer)
- California: [California strawberry industry contributes \\$3.4 billion to economy](#) (3/18, The Packer)
- California: [Strawberries vital to local, state economy](#) (3/19, Santa Maria Times)

North America

- Michigan: [Blueberry growers concerned about EPA wetland regulation demands](#) (3/19, Fresh Plaza)

International

(FFP=Fresh Fruit Portal)

- Australia: [New blueberries bloom in Queensland](#) (3/20, Fresh Plaza)

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Nutrient Management Guides

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"



Late winter/early 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)".

- o **Tight cluster:** “Individual flowers distinguishable. Can tolerate 20-23 F (-7 to -5 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)
- [Frost & freeze protection: Blueberries \(www.eXtension.org\)](#)

Crop Work/Pest Management Activities

Week 13

All crops

- **Weed management.**
- **Plan fertilizer program.**
- **Scout for and plan for [Voles](#): *Baits cannot be used after bud break.*** Vole activity is apparent in many blueberry, caneberry, and strawberry fields. Management of voles is most effective in the spring before they start multiplying like...voles. Kind of like weeds (and starlings)—get them before their reproduction cycle kicks in! [Click here](#) for some background and biology information on voles (or meadow mice). [Click here](#) for information on how to construct bait stations.

Blueberries

- **Alert: [Mummyberry \(blueberries\)](#)** Treat for mummyberry as needed.
- Scout for bud damage & determine cause.
- Dormant oil can be applied for scale and winter moth egg control before bud break.
- Can apply Bacterial Blight (*Pseudomonas*) management materials.
- **Scout for [Pseudomonas \(Bacterial Blight\)](#)** Water-soaked lesions usually appear in February in some fields that then develop into reddish brown to black cankers.
 - o [Click here](#) for a PCM Research Update on bacterial blight first posted on 1/3/13.
- **Plan for [Bird](#) issues: **Starling management:**** Right now starlings are beginning to fledge. Population control becomes very difficult later into the season because they multiply rapidly. This is a major pest species — plan your control strategy now.
 - o [European starlings and their control](#) (Cornell University)
 - o [Starling population control methods](#). (Wild Wing Company)
- **[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 previous years of problems beginning this early but it’s usually in a couple of weeks. 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](#):** 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.

Raspberries

- Can apply lime sulfur for disease management.
- Scout for [cane blight](#) symptoms as buds break.
- Can apply Ridomil for [Phytophthora root rot](#) management.
- Can drench for [crown borer](#) management.

Strawberries

- As plants start to grow, watch for weak growing areas and check rots for weevil larvae, root rot and/or cold damage.

Food Safety Meetings

OR Blueberry, Strawberry, and Raspberry & Blackberry Commissions

Free Food Safety “Train the Trainers” Workshops—3 hour program

[Click here](#) for all the information and to sign up

- **March 27** — Columbia Gorge CC, The Dalles

- **March 28** — Pine Grove Grange, Hood River
- **April 3** — Fairview Grange, Tillamook
- **April 4** — Lincoln City Cultural Center, Lincoln City
- **April 16** — OSU Seafood Research & Education Center in Astoria
- **April 23** — Unger Farm Store, Cornelius
- **April 25** — Santo Community Center, Medford

Event Calendar

- **Monday, March 31 — Open House, Meet & Greet for Lisa Wasko DeVetter** ~ 10 AM to 1 PM, Washington Red Raspberry Commission office, 1796 Front Street, Lynden.
- **April 2-3 — Oregon Precision Farming Expo** ~ Evergreen Aviation and Space Museum, McMinnville, OR. [Click here](#) for information and tickets. *Unmanned systems, robotics, ag drones, data systems, automation, remote sensing, oh boy!*
- **April 3 — Oregon Strawberry Commission meeting.** Committee meetings start at 4:30. Regular meeting at 6. At Langdon Farms Golf Club. Call 541-758-4043 or [email Phillip Gutt](#) for more information.
- **April 7- 9 — Global Berry Congress** ~ in Amsterdam. [Click here](#) for the conference's information page and registration.
- **April 9 — Washington Red Raspberry Commission** ~ Board meeting in Puyallup. [Contact Henry Bierlink](#) for more information.
- **April 17 — Korea Fresh Shippers Meeting** ~ 10am, Salem, OR, meeting location TBA. Due to changes in record keeping this meeting is considered mandatory for PCAs, please notify those who will be monitoring your production fields. The mandatory nature of this meeting will help with education documentation for the Korean inspector who will be here again this summer. [Email Bryan Ostlund](#) for more information or call 503-364-2944.
- **April 29 — Oregon Blueberry Commission** ~ 12 pm (Budget Hearing), at Chemeketa Events at Winema, Building 48, Room 210. Contact Bryan Ostlund for more information at 503-364-2944 or bryan@ostlund.com.
- **May 11-13 — International Raspberry Organization** ~ Chuzhou, China. [Contact Henry Bierlink](#) for more information.
- **May 29 — National Processed Raspberry Council**, SeaTac Marriott, Seattle, WA. For more information, call Tom Krugman at 360-354-0948. [Click here](#) for the Council's website.
- **June 11 — OSU Strawberry Open House** ~ 1:00-4:30pm North [Willamette Research and Extension Center](#) (NWREC) *A focus on the breeding program & research for commercial growers. Details TBA.*
- **July 9 — OSU Caneberry Field Day** ~ 1:00-5:00pm [North Willamette Research and Extension Center](#) (NWREC) *A focus on the breeding program & research on conventional and organic production systems for commercial growers. Details TBA.*
- **July 16 — OSU Blueberry Field Day** ~ 1:00 – 5:00pm [North Willamette Research and Extension Center](#) (NWREC) *A focus on the breeding program & research on conventional and organic production systems for commercial growers. Details TBA.*

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Archived Small Fruit Updates

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

[12-SFU03-18-14](#) [11-SFU03-11-14](#) [10-SFU03-04-14](#)

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