

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 3, 2015

Week 10

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[Organic industry is skyrocketing, even Target is doubling organic & sustainable product selections](#) (2/23, One Green Planet)

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

A few items of note this week:

- **Degree day Update:** To see updated Degree Day comparisons for representative sites in the Northwest, Go to our [BerriesNW](#) website and click on the Degree Days link in the right hand column. Thanks to Dr. Len Coop at OSU for setting up and maintaining this link.
- **Early Mummyberry Alert:** Given the early season, watch for the vegetative buds to show 1/8 inch of green tip growth as the main sign to begin Mummyberry preventative applications. [Details below.](#)
- **Spotted wing drosophila:** Right now we've got great odds of having a high pressure SWD year. You could be using this weather to modify field border habitats—mainly removing any blackberries and/or cherries.
- **A couple of newsletters:**
 - **B. C. Blueberry IPM Newsletter for 2/24:** A nice photo layout of bud development in the various regions [Go here.](#)
 - **Oregon Strawberry Commission's Fresh Strawberry Grower Newsletter for 2/25:** Put out every other week supporting the fresh strawberry production industry. This one covers irrigation & fertigation. [Go here.](#) If you'd like to subscribe, email or call Lora at our office (lora@peerbolt.com; 503-289-7287)
- I received a request to post the **Oregon Raspberry and Blackberry Commission's latest assessment report (1/9/15)** Here it is: [Go here.](#) It has crop yield totals for last year broken down by variety.

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

[B.C. Strawberry Growers Association](#)
[Raspberry Industry Development Council](#)
[B.C. Blueberry Council](#)

National

[North American Blueberry Council](#)

Tom Peerbolt, SFU Editor



Mummyberry apothecia, Willamette Valley blueberry field (photos by Tom Peerbolt)

Blueberry Disease Alert

Mummyberry (blueberries) In the Willamette Valley we're very close to fields being vulnerable to infections. Be ready with a management program by the time fields at risk reach 'green tip stage'. That's when new infections can begin.

- **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](#)
- **Some critical points:**
 - The optimum temperature for spore release and infection is 50 to 57°F (10 to 14°C). Figure on when temperatures go over 45F in our area you're into the danger zone.
 - At least 12 hours of wetness is required for infection.

Regional reports

British Columbia, Fraser Valley

- **Blueberries:** (Sunday, 3/1) Seen a lot of fields this week and we're definitely moving towards control measures for mummyberry. Some spraying has already gone on in the far west end of Fraser Valley in Ladner area. Also some localized spray on Thursday and Friday on Sumas Prairie near Chilliwack and Abbotsford. Leaf bud development really is variable and (Reka, Bluecrop really advancing) and site specific, but I would expect that more general spray activity will be occurring by the end of next week. We're a bit cooler now than we were a week ago with morning temps approaching freezing (2 frosts this past week) but the daytime temps still get up to 10-15 C. So plants should keep pushing. We are about 2-3 weeks ahead of last year at present! Still a lot of pruning going on which complicates things with need for earlier spraying for weed control and mummyberry.

British Columbia, Fraser Valley

- **Blueberries:** (Sunday, 3/1) Things are definitely moving along at varying stages depending where you are located in the valley. A lot of variability in same variety from field to field. Some fields Blue crop ahead of Duke and in others the other way around. Reka is definitely in the lead in the Abbotsford area usually followed by Duke. Have seen some Elliott that are quite swollen with some buds having cracked. Some growers applying mummyberry sprays in Delta (west) area of the valley and limited applications in Abbotsford/Chilliwack area. Maple Ridge and Pitt Meadows about a week behind Abbotsford area. No signs of Spanworm at this point. Lack of snowpack in mountains a bit of a concern for some growers. It's about 30% off normal and with long dry summers irrigation could be a challenge. Saw a couple bumblebees earlier this week.

Northern Washington, Whatcom County (Sunday, 3/1)

- **Blueberries:** Ditto here in Whatcom. Many trying to finish pruning before bloom! Duke is still partly tight, but some are showing flower clusters. Colder weather a God send. Now, if we can keep it from getting TOO cold. Work on that, will you, Tom? Good news is it's been dry enough for most field work. Quite a bit of diesel being burnt.
- **Raspberries:** Raspberries are pushing hard as well.
- **Strawberries:** The only thing not three weeks ahead are strawberries.

Northern Washington, Skagit County

- **Raspberries & blueberries:** (Friday, 2/27) Growth has stalled somewhat in Skagit with cooler temps and rain returning, a good thing. Found first mummyberry apothecia yesterday in main growing area with more emerging from mummies. Organic growers who attempt to knock down or burn off stipes should have equipment ready to go.

Western Oregon, Willamette Valley

- **Blueberries:** (Monday, 3/2) As with everyone else reporting, we're way ahead in bud development. But with the ground and night temps remaining fairly low I've got the feeling the roots aren't quite listening to what the buds are trying to tell them. Bud development in general is variable on the same plants and among different fields. If this plays out like it is right now I'd say harvest would start very early and be spread out but there's a lot more factors to play out before we get to that point. Bud set is great in some fields. Not so great in others. I suspect our dry fall played a role in some fields getting more stressed.
- **Blackberries:** (Monday, 3/2) Blackberry wise, ditto what everyone else has been saying. Minimum of two weeks ahead but probably more like three. Lime Sulfur being applied or already on. Herbicides going on and plenty of post and wire work. Seems to be more rust than usual, especially in the Black Diamond and Columbia Star. Otherwise all looks good at this point.

Early Season Accelerated Development Information

- [Winter set to be warmest on record for Portland](#) (2/28, Oregonian)
- **Late winter/early spring weather risk information**
 - [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 to 15 F (-12 to -9 C)".
 - **Tight cluster:** "Individual flowers distinguishable. Can tolerate 20 to 23 F (-7 to -5 C)".
 - **Early pink bud:** "Expanding flowers are readily visible & have separated. The pink corolla tubes (petals) are short & closed. Can tolerate 23 to 25 F (-4 to -5 C)".
- **Early spring weather management information links**
 - [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)



Cascade Harvest raspberry bud development, Willamette Valley, 3/2/15

Blueberry Bud Development Comparison for the Western Willamette Valley

I've been taking weekly bud development comparison photos from the same fields the last couple of years but have never started this early --started last week (2-13-15). Last year the first set of photos were taken on March 13th. It's the bottom row below.

Northwestern Willamette Valley Top – 2/27/15 Middle – 2/20/15 Bottom – 3/13/14

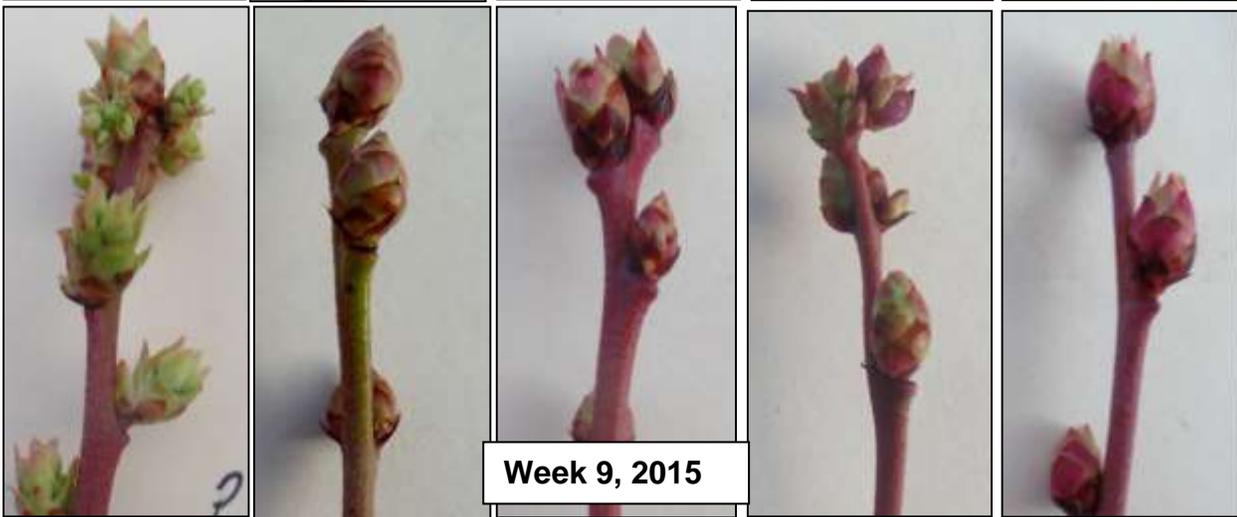
Patriot

Bluejay

Draper

Duke

Liberty



Patriot

Bluejay

Draper

Duke

Liberty

Oregon Blueberry—Korea Export Program

- **March 6** Deadline for Oregon Growers and Packers to register to participate during the 2015 season.
- [Go here](#) for the deadline announcement.
- [Go here](#) for the Korea Export Program's website.

Upcoming Commission Meetings

- **March 10 — Oregon Blueberry Commission** ~ At noon Chemeketa Events at Winema, Building 48, Room 210. Contact Bryan Ostlund for more information at 503-364-2944 or [by email](#)
- **March 11 — Oregon Strawberry Commission** ~ McMenamins Restaurant, 310 NE Evans St., McMinnville. **10:30** Research Committee; **11:15** Promotion Committee; **Noon:** Regular Commission Meeting. Call 541-758-4043 or [email Philip Gutt](#) for more information.
- **March 17 — Oregon Raspberry and Blackberry Commission** ~ Chevy's Restaurant, 14991 Bangy Road, Lake Oswego. **10:00** Legislative/Labor/Education Committee; **10:30** Research Committee; **11:00** Budget Committee; **Noon:** Regular Commission Meeting. Call 541-758-4043 or [email Philip Gutt](#) for more information.
- **April 8 — Washington Red Raspberry Commission** ~ Puyallup, WA, WSU Research Station. Contact Henry Bierlink for more information by [email](#) or phone 360-354-8767.

WA Berry Grower Workshops on Food Safety & Labor Regulations

Sponsored by the Washington Blueberry & Raspberry Commissions

All Sites: 9 - 5, RSVP Required, [Go here](#) for the agenda and to register.

Purpose:

- *What do growers need to know about Food Safety to protect themselves and their customers?*
- *What do growers need to know about Labor regulations to protect themselves and their workers?*

Dates & Locations

- **March 23 — Prosser** ~ WSU-IAREC, 24106 North Bunn Road.
- **March 24 — Battle Ground** ~ Manor Grange # 1101, 17901 NE 72nd Avenue.
- **March 25 — Mt. Vernon** ~ WSU-NWREC, 16650 Highway 536.
- **March 26 — Lynden** ~ NW Washington Fair- Rotary Building, 1775 Front Street.

Upcoming Regional Events

[Go here for Full Event Calendar](#)

- **March 6 — WSU Whatcom Extension Irrigation Workshop “Strategies for Improved Delivery”** ~ [Go here](#) for the agenda and registration information.
- **March 16-17 — OSU Blueberry School** ~ LaSells Stuart Center, Corvallis. [Go here](#) for the event website.
- **New Posting: March 17-18 — Precision Farming Expo** ~ Salem Convention Center. [Go here](#) for the event website.

Upcoming National & International Berry Events

- **March 23-25 — Global Berry Congress** ~ Rotterdam. [Go here](#) for their webpage.
- **New Posting: April 9 — British Columbia Blueberry Council 25th Anniversary** ~ The Royal King Palace, Surrey, BC. 5:30. Call the Council's office at 604-864-2117 for tickets. [Go here](#) for information.
- **May 18-19 — National Processed Raspberry Council** ~ Semiahmoo Resort in Blaine, WA. [Go here](#) to make hotel reservations or call phone 360-318-2000. Be sure to identify yourself as part of the National Processed Raspberry Council. For more information, please contact Tom Krugman, 360-354-0948, TKrugman@redrazz.org
- **June 18-24 — Eleventh International Rubus and Ribes Symposium** ~ Charlotte & Asheville, North Carolina. [Go here](#) for their website with all the details.
- **September 7-9 — 5th Annual International Blueberry Organization Summit**~ Coffs Harbor, Australia. [Go here](#) for meeting information.
- **September 13-16 — International Symposium on Mechanical Harvesting & Handling of Fruits and Nuts** ~ Richland, Washington. [Go here](#) for meeting information.

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)

Classified



Peerbolt Crop Management Field Services for 2015

We're in the process of planning our field season and are about to begin scout hiring. Please contact us soon if you might be interested in contracting for field services for 2015. Once our seasonal scouts are hired & trained our ability to add new field work is limited.

Field services offered:

- **Field scouting/monitoring:** Weekly or every other week field scouting/monitoring for pests & diseases. We're implementing our newly developed GPS based system this year for quicker and more accurate reporting.
- **Scouting/monitoring for Spotted Wing Drosophila:** Field and fruit monitoring specifically for SWD.
- **Certified third party monitoring for blueberry export to Korea:** These pest monitoring protocols require third party pest consultant certification.
- **Custom services:** We can talk with you about adapting our scouting & online reporting resources to meet whatever your specific field management needs might be.

Please call 503-289-7287 or [email](#) for more information or [click here](#) to go to our business website.

Pest Management

- [SWD Research Continues](#) (2/25, Good Fruit Grower)

Bacterial Blight (*Pseudomonas syringae*), blueberries.

- [Click here](#) for a PCM Research Update on bacterial blight first posted on 1/3/13.



Pseudomonas syringae (bacterial canker) symptoms in blueberries

- February is bringing warm spells causing blueberry buds to start swelling.
- These swelling buds are vulnerable to infection by the ever present bacteria, *Pseudomonas syringae*, especially during warm, wet weather.
- Once infected, those buds are vulnerable to subsequent freeze damage at a higher temperature than buds that aren't infected.
- If warm, wet weather is predicted, applications of copper can help prevent *Pseudomonas* infections
- **Caution:** Many strains of this bacteria are resistant to copper compounds. Avoid over applying to help minimize resistance.

Starling management

- Right now starlings are about to fledge. Population control becomes very difficult once that starts because they multiply rapidly. This is a major pest species that needs year round management attention.
 - [Click here](#) for a starling fact sheet.
 - [Click here](#) for a starling nesting fact sheet.

Usual March Pest Management

In most years activities involving the management of the following pests happen during March. They're associated with the warming temperatures and renewed plant growth.

Insects/Mites

- **[Raspberry Crown Borer](#) caneberries:** If you've had borer problems in the past, March is the time to drench for crown borer management in caneberries.
- **[Strawberry Crown Moth](#) southern caneberries:** In Oregon and Southwest Washington, this borer looks to do as much, if not more, damage in caneberries as the Raspberry Crown Borer. The treatment is the same as for RCB- a spring (or fall) insecticide drench.
- **[Clay Colored Weevils](#) southern strawberries:** This early emerging species is usually just considered a pest of raspberries in northern growing areas where it feeds on newly emerging shoots and buds. But in the last few years emerged adult Clay Colored Weevils have been recovered from SW Washington southern strawberry fields and blueberry fields.
- **[Redberry Mite](#) evergreen blackberries:** Dormant sprays of lime/sulfur or elemental sulfur for Blackberry Rust and Redberry Mite are recommended in March.

Diseases

- **[Phytophthora Root Rot](#) raspberries:** March is the time to use a fungicide drench in raspberries. Warm, saturated soils are the conditions that favor this organism, allowing it to spread quickly.
- **[Blackberry Rust \(Phragmidium Rust\)](#) Evergreen blackberries:** Dormant spray of lime/sulfur or elemental sulfur for Blackberry Rust and Redberry Mites is recommended in March to prevent later problems.
- **[Cane Blight](#) raspberries:** A good time to spot symptoms of cane blight is as the buds break. Infected canes will show either no bud break if the cane has been girdled or one-sided bud break if the infection is on one side. Scrape canes to look for rust colored streaks usually coming up from machine harvester scars. There is no treatment for cane blight once it's present, only prevention. The time to prevent next

year's canes from getting infected is to apply an appropriate fungicide immediately after harvest when fresh wounds normally become infected.

- **Purple Blotch blackberries:** Check for cane lesions that are easy to see as the weather warms but the foliage has not yet emerged. It's a good time to assess disease level.

[Click here](#) to go back to the top of this newsletter.



Ouachita Blackberry bud development, Willamette Valley 2/27/15

Industry news/resources

[Washington Small Fruit Conference Proceedings and Recordings](#)

This was held December 3 & 4, 2014 in Lynden, Washington.

Newsletters/ berry reports

- [Whatcom Ag Monthly for February 15, 2015](#). 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.
- [The Source](#) (2/18) Produce marketing news from Pro*Act.

Magazine/website compilations

- **The Packer:** [blueberries](#), [blackberries](#), [raspberries](#), [strawberries](#).
- **Growing Produce:** [recent berry articles](#).
- **Fruitnet-Eurofruit:** [recent berry articles](#).
- **Fresh Fruit Portal:** [blueberries](#), [blackberries](#), [raspberries](#), [strawberries](#).

Berry research blogs

- [Strawberries and Caneberries](#) by Mark Bolda, UC Davis Berry Extension Agent. **Recent entry (2/19): Sodium chloride damage on raspberry** Reports on recent insect and disease research and observations in California.
- [Team Rubus](#) by Gina Fernandez, North Carolina State Small Fruit Specialist. **Recent entry (2/23): It was cold out there but no evidence of damage to the floral buds** Reports on issues in blackberries and raspberries from the Southeast.

Climate/Water

- [California farms to go without federal water again in 2015](#) (2/27, Capital Press)
- [Snow falling in Washington mountains](#) (2/27, Capital Press)

Pollination

- [Hives appear OK after quick, robust almond bloom](#) (2/24, Capital Press)

Extension Services

- Oregon: [Marion County extension ballot measure gains support](#) (2/26, Capital Press)

Business

- [Farm equipment maker Deere foresees sharp sales drop](#) (2/26, Capital Press)
- Washington: [World's largest freezer in final phase of construction](#) (2/23, KVEW)

Labor

- Washington: [Minimum wage hikes hurt more the help, study says](#) (2/24, Capital Press)
- Washington: [State Attorney General backs separate rest pay for piece-rate workers](#) (2/24, Capital Press)

Regulatory Agencies

- [U.S. preparing positions for pesticide residues meeting](#) (2/24, OHS Online)

Technology

- [Salem Precision Ag gathering features top names in research, development](#) (2/26, Farm Progress)

Pesticides/marketing

- [Apples top Dirty Dozen list for fifth year in a row](#) (2/25, Environmental Working Group)
- [Industry responds to new edition Dirty Dozen list](#) (2/26, The Packer)
- [Study finds more balanced coverage of "Dirty Dozen" list](#) (2/25, The Packer)

The West

- British Columbia: [Blueberry farmers worried early blooms could spoil harvest](#) (2/26, CBC News)
- California: [Strawberries plentiful, asparagus scarce for Easter](#) (2/26, The Packer)
- [Port dispute over, but congestion lingers](#) (2/25, The Packer)

North America

- [NAFTA report shows impact of first 20 years on produce](#) (2/26, The Packer)
- Georgia: [Late February freezes damage Georgia blueberries](#) (2/25, The Packer)
- Southeast blueberries: [Georgia, North Carolina Poised for record production](#) (2/25, The Packer)
- Florida: [Strawberry growers sour a bit on trademark fruit](#) (3/2, Fresh Plaza)

International

China

- [China pleased with Mexican berry imports](#) (2/24, Fresh Plaza)
- [China's fresh fruit imports grow 23% in 2014](#) (2/25, Fruitnet)
- [China's long food chain plugs in](#) (3/1, New York Times)

Australia

- [Frozen berries were source of growth for Patties Foods in 2014](#) (2/25, Fresh Fruit Portal)

Other

- [Georgian blueberries to appear on European market](#) (2/27, Fresh Plaza)
- [Peru blueberry shipments grew 60% in 2014](#) (2/24, Fresh Plaza)
- [Dominican Republic increases its strawberry production](#) (2/26, Fresh Plaza)

Archived Small Fruit Updates

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

[09-SFU02-24-15](#)

[08-SFU02-18-15](#)

[06-SFU02-03-15](#)