

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 & industry through their commissions & councils.

March 20, 2012

Table of Contents

- [Disease Alert](#)
- [Regional Reports](#)
- [Ongoing Pest Management](#)
- [March Pest Management](#)
- [Industry News](#)
- [Event Calendar](#)
- [Crop Work](#)

Michigan State Extension information for freeze protection

- [Using sprinklers to protect plants from spring freezes](#) (3/19)
- [Analyzing & improving your farm's air drainage](#) (3/16)
- [Air moving fans for improved air drainage](#) (3/16) *These are tractor powered, ground based fans.*

USDA's annual berry crop report for Oregon & Washington just released (3/16) [Click Here](#)

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

Disease Alert

[Mummyberry](#) (blueberries)- **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 PDF of this 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.
 - Around 12 hours of wetness is required for infection.
 - Frost may increase susceptibility of blueberry shoots to infection.

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

- **Blueberries, Raspberries:** (Friday, 3/16) Still really hard to accomplish much with the mish-mash of weather. We all seem to be sailing in the same boat. We're going ahead with mummyberry sprays (have seen some developing apothecia) where we can get in. Weird temperature regimes lately. Can

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](#)

be cold and rainy and even mixed snow flurries, then afternoon temperature spikes to 14-15C(59F). So plant and fungal development is really unpredictable. Raspberries look good. Not seeing any significant damage and bud development seems to be moving along, even with uncertain weather. But it is tough to get a good day to do lime sulphur. Trying some pre-emergent herbicides instead.

Northern Washington, Whatcom County

- **Blueberries, Raspberries:** (Friday, March 16) It just gets better and better. We had a real mix this week, sometimes all on the same day- wind, rain, hail, snow, and even some sun. And more on the way. Strong winds and hail yesterday may have damaged some of the flower buds in the Bluejay and Reka. We'll check for black flower buds in a couple of days. Tired of waiting, we are going to have to do small projects as the weather allows, lime sulfur in the raspberries, and herbicide in the blueberries, rather than waiting for a stretch of dry weather, that may be a ways off. Tracks really help on the sprayers and Yanmar tractors. No mummyberry sprouts yet, seems like we need a few days around 50 degrees for them to show. There is a bit of winter damage in the baby raspberries, black tissue inside the emerging buds, must have been from that 24 degree morning a couple weeks ago. Secondary buds pushing in many cases.

Northern Washington, Skagit County (Friday, March 9)

- **Blueberries & Blackberries:** (Friday, 3/16) We had snow plows out on I-5 at 5 am Tuesday and it all melted away pretty quickly. It has either been blowing too hard or raining too hard to do much work with equipment. Finishing up pruning and tying on blacks, a few replants in blueberries, moving high tunnels and spraying piecemeal when we can get a small window. Some lime-sulfur going on blacks and 1st round of mummy berry sprays on early varieties in blueberry. We've found some stipes emerging from the mummies but no actual mushrooms yet. Some spanworm in the organic Reka but they don't seem to be doing much damage as the buds are way ahead of them in development. Have seen some neighbors running on top of pruned canes to get sprays on during the very small windows we have had, no fun.....

Willamette Valley, Oregon and SW Washington

- **Blueberries:** (Friday, 3/16) At Salem, frequent and heavy rain has slowed field activities in the blueberries. We are ready to go with a copper and oil spray when the ground firms up. Growth is at bud swell to early green tip with the occasional flower in Legacy and Bluegold. We saw our first bumblebee last week but she has gone into hiding since then. Nightcrawler activity has been extraordinary this winter with casting mounds peppering the blueberry beds. More wild cherry trees are coming down in adjacent fencerows to reduce our SWD threat. Everything looks in line to be an average or better crop.....but, we'll see how Draper and Liberty show for shock as the virus just started moving into our 6 to 8 year old plantings of these varieties.



Rainy weather put a damper on irrigation expansion projects (2006 Draper in the background)

Nightcrawler mounds peppering beds next to the grass middle. Photos by Jeff Flake

- **Blackberries:** (Wednesday, 3/21)



Blackberry snow cones—all natural! A Woodburn, OR, blackberry field on 3/21/12. Photos by T. Peerbolt

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

Equipment Options

Since choice of equipment and knowledge of equipment options have a large impact on the viability of Northwest Small Fruit growers, I'm including direct links to these equipment manufacturers. This information should not be construed as an endorsement, but as disseminating equipment options in the best interests of the growers. If there are particular tools/machinery that you've found useful and are willing to share that information, please pass it along to me at pcm@peerbolt.com—Tom Peerbolt, SFU editor)

- **Yanmar tractors with treads:** [Click here](#) for manufacturer's information. These tractors are used by many Northwest berry growers to be able to work in wet fields as well as limit soil compaction.
- **Mattracks Trail-R- Mate tracks:** [Click here](#) for manufacturer's information. These are track sets for converting regular sprayers, mulch spreaders, and other equipment to tracks and can be used behind Yanmar crawler units.

Blueberry Growers, Handlers & Marketers: Sign up for USHBC Blueberry Alert System

- The US Highbush Blueberry Council encourages growers to sign up for the **crisis alert system** to be able to quickly inform them of rapidly developing situations regarding food safety, pesticides, labor and similar areas.
- This system can help keep you informed on issues as they develop and to provide you with information to help respond to such matters.
- **To Sign up**, provide your contact information by either:
 - **Sending your e-mail address** to JoDee Gowan at the USHBC office: (jgowan@blueberry.org)
 - **Or visiting the alert system website:** <http://www.blueberrycouncil.org/members/amerilert-tools/?type=signup> and following sign-up instructions.

Questions/comments: Call the USHBC office at (916) 983-0111.

Vole Damage Survey for B.C. Berry Growers (2nd week)

How much damage are voles doing to your crop? This is a primary question for many Northwest growers. The B.C. Ministry of Ag and the B.C. Blueberry Council have put together the following survey to gather some real farm data. We should probably do the same for Oregon and Washington.

- [Click here](#) to download a PDF copy of the 3 page survey. It'll take 5-10 minutes to fill out.
- When finished, turn it in by:

- Saving it to your hard drive, attaching it to an email and sending it to research@bcblueberry.com.
- **Or** print it out & mail it to: BC Blueberry Council, #275 32160 South Fraser Way, Abbotsford, BC V2T 1W5.
- **Ignore/Don't use the submit buttons on the top of the survey.**
- Questions/comments can be directed to: Karina Sakalauskas, BC Blueberry Council Research Coordinator cell: 604 613-2133, email: www.bcblueberry.com

Pest Management Materials Update

Fumigants

- [Maker of methyl iodide scraps controversial pesticide](#) (3/21, Mercury News) *So much for that option...*

Ongoing Pest Management & IPM

Vertebrates

- **Voles:** 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—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.
- **Birds, blueberries. 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 that needs year round management attention.
 - [Click here](#) for a starling fact sheet.
 - [Click here](#) for a starling nesting fact sheet.
 - [Click here](#) for the Okanagan (B.C.) grape grower starling trapping 2010 program synopsis. This is a well documented and well run starling management plan.

Diseases

- **[Pseudomonas \(Bacterial Blight\)](#) blueberries:** Water-soaked lesions can appear at this time of year on canes that then develop into reddish brown to black cankers. Cankers may extend from a fraction of an inch to the entire length of 1-year-old wood. Buds in cankers die. If girdled, the cane portion above the canker dies.
- **[Mummyberry](#) blueberries:** [See Alert above.](#)

Insects/Mites

- **[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](#) blueberries:** A dormant oil or Esteem (pyriproxyfen) can be used while blueberries are dormant.

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

March Pest Management

Insects/Mites

- **[Raspberry Crown Borer](#) caneberries:** If you've had borer problems in the past, March is the time to drench for crown borer control 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 couple of 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.

Industry News/Resources

Newsletters

- [Michigan State Fruit News](#) (3/19)
- ['The Source'](#) (3/19) *Market updates from The Produce News.*

Magazine compilations

- The Packer's Market scope: [blueberries](#) [blackberries](#) [raspberries](#) [strawberries](#)
Recent stories & fresh market pricing for the various berries from The Packer.
- Growing Produce: [Recent Berry Articles](#)

Health

- [Blueberries, pipfruit fight diabetes](#) (3/19, The Packer)

West

- [Columbia Fruit finds growth through technology](#) (3/16, Food & Drink)

National

- [U.S grown fruit production, price increased in 2011](#) (3/16/ The Packer)
- [Farm Bill fight ahead](#) (3/16, Growing Produce)
- [Farm bill passage, specialty crop insurance discussed](#) (3/16, The Packer)
- [New York berry crops increase](#) (3/20, FreshPlaza)

International

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

Event Calendar

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

- **April 2-3 — UC Davis GAP training workshop** ~ One day workshop providing entry-level GAPs training, with optional half-day session to create a food safety manual. Also being offered November 5-6. [Click here for details](#).
- **April 16— Oregon Blueberry Commission meeting** ~ 12-noon , Roth's West, Salem, OR (Budget Hearing). Call (503) 364-2944 for more information or [email](#) Brian Ostlund.
- **June 3-7 — International Raspberry Organization Conference** ~ Abbotsford, BC. Plans are being made for the one day 8th IRO conference and for raspberry tours in the Fraser Valley and in NW Washington.
- **April 18 — Oregon Raspberry & Blackberry Commission meeting** ~ 9 am, Langdon Farms Golf Club Restaurant, Aurora, OR. For more information, call 541-758-4043 or [email](#) Philip Gutt.
- **May 3 — Oregon Strawberry Commission meeting** ~ 5:30, Roth's West. 1130 Wallace Rd NW, Salem OR. For more information, call 541-758-4043 or [email](#) Philip Gutt.

Oregon State Open House Schedule

More information on these will be coming as they get closer. They'll be at the North Willamette Research & Extension Center in Aurora.

- **June 13** — **Strawberry Open House**, starting at 1pm
- **July 11** — **Caneberry Open House**, starting at 1pm
- **July 12** — **Blueberry Field Day**, from 1 to 5pm

Nutrient Management

Blueberries

- 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).

Caneberries

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

Crop work

All crops:

- Scout for voles and treat as needed. Baits cannot be used after bud break.
- Weed management.
- Plan fertilizer program.

Blueberries

- Treat for mummyberry as needed. *You can scout for sprouting mummyberries on the ground but they can be very difficult to find. Base treatments on past history of the field and surrounding fields.*
- Scout for winter moth/span worm and treat 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.

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

- Can apply lime sulfur for Redberry Mites and/or disease management.
- Can apply lime sulfur for Redberry Mites and/or disease management.
- Can apply Ridomil for Phytophthora root rot management.
- Can drench for crown borer management.
- Scout for Cane Blight symptoms as buds break.

Strawberries

- Can apply pre-emergent herbicides.
- As plants start to grow, watch for weak growing areas and check roots for weevil larvae, root rot and/or cold damage.

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

Archived Small Fruit Updates

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

[03-13-12](#)

[03-06-12](#)

[02-29-12](#)