

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.

April 19, 2011

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Featured links:

- **Food Safety Song of the Week:** [We are the Microbes](#)
- **Website:** [Food Safety Music](#) (UC Davis)
(Thanks to Beth for finding this site. What a kick!)
- [The Weather Cafe](#) by Rufus La Lone
- [Small Fruit Cold Storage Report](#)

Control Material Update

Canadian Berry Crops—2011 Supplement to the Berry Production Guide—New Registrations

From Mark Sweeney, B.C. Ministry of Ag Berry Specialist:

- “Several key new Canadian berry registrations have come in late this spring such as **Callisto** herbicide on blueberries and **Quintec** fungicide on strawberries.
- Recommendations on these and other new registrations can be found in the 2011 supplement to the B.C. Berry Production Guide at http://www.al.gov.bc.ca/cropprot/berry_guide_sup.pdf
- New registrations listed include:
 - **blueberries:** Callisto (mesotrione), Select (clethodim), Dual Magnum (S-metolachlor), Ignite (glufosinate), Aliette (fosetyl-Al), Concept liquid (imidacloprid), Fulfill (pymetrozine), Rimon (novaluron), Assail (acetamiprid).
 - **strawberries:** Quittec (guinoxifen), Oberon (spiromesifen), Rimon (novaluron), Assail (acetamiprid).
 - **blackberries, raspberries:** Altacor (chlorantraniprole), Acramite (bifenazate).
- Always read the product label for complete user instructions.

All U.S. berry crops—organic herbicide:

From Joe DeFrancesco, OSU Pesticide Specialist

- Pharm Solutions Inc, just issued a label for Weed Pharm (20% non-synthetic acetic acid), the first organic-approved vinegar herbicide product for food crops usage.
- This is a label organic producers have been waiting for.

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](#)

- The label has been accepted and registered by the Oregon Dept of Ag and the Washington State Dept of Ag.
- Weed Pharm does not have OMRI certification but was certified and deemed compliant for organic production by the Washington State Department of Agriculture certification program.
- The Certification Director for Oregon Tilth, Kristy Korb, states that “Oregon Tilth accepts all products that are WSDA and OMRI listed as compliant without any further review necessary.”
- To avoid damage to the crop, Weed Pharm must be used with a hooded or shielded sprayer.
- [Click here](#) for the label.

U.S. blueberries—Chateau WDG (flumioxazin) herbicide label changes

- Valent has re-issued the blueberry supplemental label for Chateau WDG.
- It now allows use *7 days prior to harvest*.
- The original supplemental label did not allow use after budbreak.
- The new label still contains restrictions that need to be followed to avoid damage to the blueberry plant
 - e.g. “Do not apply to bushberries established less than 2 years unless they are protected from spray contact by non-porous wrap, grow tubes or waxed containers.”
 - “Avoid direct or indirect spray contact to foliage and green bark (non-barked trunk with the exception of undesirable suckers”. Etc.
- [Click here](#) for the new supplemental label.

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

- **Raspberries:** (Thursday, 4/14) Thunderstorms last night with hail, heavy snowfall in the Valley this fine morning... wet, wet, wet. Why would the Meeker or, for that matter, anything want to grow now??
- **Blueberries:** (Friday, 4/15) The last two days have started out around 1°C with snow yesterday (14th). The soil is so cold nothing is really moving. I thought by now we would have some good leaf flushing on the blues but that is just not happening with any intensity. Early fertilizer programs started on blues this week. Pretty hard to get excited about anything the last few days.
- **Raspberries:** (Friday 4/15) Shoot burning raspberries this week but not really shooting at much on the Meekers. They look kind of yellow after the snow and cold mornings. Fertilizer going on as a statement of optimism. The 1st year fields look more and more like they took a beating in February (from the cold snap). But I think established Meekers may surprise us if weather patterns start to change soon and gradually.

Northern Washington, Whatcom County

- **Raspberries:** (Thursday, 4/14) Heavy snow for about an hour this morning. Meekers with variable damage pretty evident now. Same as last year, the buds appeared viable but never pushed and obviously aren't going to now. Best hope now is for some heat to get the good laterals to fill in and hide the ugly.
- **Blueberries:** (Thursday, 4/14) Tight pink bloom on Dukes, Reka, and Liberty. First split of fertilizer getting wrapped up. No insect issues yet. Disease at a minimum still. Even it doesn't want to grow in this crap.
- **Raspberries, Blueberries & Strawberries:** (Saturday, 4/16) Ditto. Still seeing bud damage in some older Meekers, delayed bud break may be permanent in some fields. Good opportunity for mouse trapping now in all berries. Blues- approaching pre-bloom insecticide time, most fields have received fertilizer and the second Indar. Time for herbicide in strawberries.

Northern Washington, Skagit County

- **Blackberries:** (Thursday, 4/14) We cut down the organic Black Diamond blackberry block yesterday. That's no crop 3 out of 5 years now. Organic Chesters showing quite a bit of bud mortality from the February freeze; there are buds but nothing in them. Organic blacks actually fared better than the conventionally grown blacks on winter damage. A few leafrollers in the Chesters. Tough to get into the field with all the rain.

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- **Blueberries & Raspberries:** (Thursday 4/14) Here at the station, many of the blueberry varieties have buds just opening so you can see the individual flowers. Can see the occasional frozen Liberty, Duke and Bluecrop flower, but hard to tell just how many there will ultimately be. Our Meekers continue to play out in slow motion compared to all the other varieties. A friend from the UK has seen similar events there; they played out to a somewhat late, long season. Sometimes lower buds take over when many of the upper ones aren't going anywhere. In this case, these lower buds have a lot of fruit, but it comes over a long time.

Willamette Valley, Oregon and SW Washington

- **Blueberries & Raspberries:** (Thursday, 4/14) From Saturday on, there actually might be some dry days. Highs in the mid-50's. Just not a lot of change from last week to talk about but it could be breaking this coming week. We've got a lot of blueberry blossoms ready to open, hungry bees, and depressed, frustrated growers. In caneberries the biggest puzzle for me is still the Meeker raspberry fields that just don't want to break out. Most of the other cultivars are looking uneven (from the late spring weather) but reasonable.
- **Blueberries & Caneberries:** (Thursday, 4/14) At the OSU North Willamette Research & Extension we are at early to late pink stage in blueberries, depending on the cultivar. Legacy and Bluegold have some open blooms. I'm seeing what looks like early shock symptoms on some Draper. Caneberries are slow. No winter damage evident in blueberries or caneberries at the NWREC.

Pest Alerts

Blueberries - [Mummyberry](#)

- From now through the end of bloom, blueberries are susceptible to Mummyberry infections.
- This early period is critical to managing the disease when the vegetative buds are at/beyond green tip stage, there's long periods of wetness, the temperatures are getting into the 50-57°F / 10-14°C range...and it's difficult to get into the fields to treat.
[Click here](#) for a Mummyberry fact sheet from MSU.

Evergreen blackberries - [Blackberry Rust \(Phragmidium Rust\)](#) *This is a critical window in managing this disease.*

- In early-mid April the overwintering spores are germinating whenever there's enough moisture. Lime sulfur should be on.
- Infections won't occur until leaves reach a stage of about ¾'s expansion.
- The first new infection symptoms on the new leaves will be visible by the end of April-beginning of May.
- If lime sulfur was applied and first symptoms are light, a minimal fungicide program should be sufficient (e.g. one Rally (myclobutanil) application).
- Continue scouting through June to be sure another application isn't needed.

British Columbia Blueberries - [Scorch virus](#) - Vector (aphid) management

- From the 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.

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Industry News/Resources

Health News

- [Blueberries may inhibit development of fat cells](#) (4/11, ScienceDaily)
- [Strawberries may help prevent cancer](#) (4/19, The Packer)

Labor/Immigration–E-verify News

*E-verify is the system that is quickly changing the dynamics of U.S. agricultural labor issues. In the absence of federal action on immigration reform, many states are taking their own steps with a number now in various stages of attempts to mandate E-verify use by **all employers**. [What is E-Verify?](#) (U.S. Citizenship & Immigration Services)*

- [E-verify testimony before House Committee on Ways & Means Subcommittee on Social Security](#) (4/14, Dr. Ana Anton) This is an amazing, in-depth critique of the state of the E-verify system and its uses by a well respected authority. A couple of the recommendations:
 - “Careful consideration is critical before mandating use of E-verify because mandatory use would basically also mandate an increase in computer fraud, abuse, and identity theft.”
 - “There should be strong penalties for employers taking action on non-confirmation returns without informing applicants, providing them with an opportunity to appeal and correct mistaken information in the records. Otherwise, the system may be used as an excuse for employment discrimination.”
- [U.S. faces agriculture ‘crisis’ without farm-worker visa reform](#) (4/13, CNN)
- [Study on farm workers: Little has changed](#) (4/12, Recorderonline.com)
- [Let them eat produce picked by robots](#) (4/13, The Packer) This is an opinion piece talking about a recent poll saying that 61% of adults said there’d be less poverty if immigration laws were enforced—supposedly freeing up jobs for unemployed legal citizens.

OSU Extension

- [Environmentalists join farmers to protest cuts to Oregon State University’s research stations](#) (4/8, Oregonian)

Technology

- [The Mobile farmer of today](#) (4/8, The Appconomy) *Smart phone usage on the farm*

Newsletters/Blogs

- ‘[The Source](#)’ (4/18) Market updates from *The Produce News*.
- [Michigan State News for Agriculture](#) (4/19) & (4/12)
- [New Jersey Blueberry Bulletin](#) (4/11)

West

- [California blueberry Commission celebrates one year of operation](#) (4/12, The Produce News)

National

- [Robots on the farm](#) (4/12, Discovery News)
- [Florida blueberry season opens with high volume, quality](#) (4/14, The Packer)
- (N. Carolina) [Sorters reduce rejections for blueberries](#) (4/12, The Packer)

International

- [Global blueberry production to double in five years, says Naturipe](#) (4/15, FreshFruitPortal)

Ongoing Pest Management & IPM Information

- **Prime Time to prevent: [Downey Mildew](#), boysenberries, Kotata blackberries (occasionally other blackberries):** This is a systemic disease that only displays symptoms if environmental conditions are right in the spring. It can cause major losses due to misshapen berries. A distinctive red leaf pattern is also diagnostic of the disease. Phosphite applications in the spring are recommended to prevent outbreaks.

- [March Flies](#), incidental insect: This ‘fly’ clogs up our field insect traps and is everywhere this time of year.

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- **Prime Time to scout for:** [Spur Blight](#), raspberries: As buds break it’s the best time to see the ‘one-side-of-the-cane-dead-bud’ symptoms of this disease before the growth masks them. Actual disease management is right after harvest when machine picker wounds are fresh & the major disease entry point. This is much more prevalent/ serious in machine harvested fields.
- **Prime Time to scout for:** [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.

Diseases

- **Risk is high:** [Pseudomonas \(Bacterial Blight\)](#) blueberries **recommended management:** To prevent future lesions from forming, copper sprays are recommended (Cut rates if there a risk of leaf burning). Once night temperatures are consistently above the mid thirties (F), the risk of new damage is minimal.
- **Risk is high:** [Mummyberry](#) blueberries. See [alert](#).
- **Risk is high:** Evergreen blackberries. [Blackberry Rust](#) (Phragmidium Rust) See [alert](#).
- [Phytophthora Root Rot](#) raspberries:

Viruses

- **Prime Time to scout for:** [Shock virus](#), southern blueberries. Symptoms are just becoming visible in many fields.
- **Prime Time to treat for:** [Aphids/Scorch virus](#), northern blueberries. Pre bloom aphid control is strongly recommended in blueberry fields infected with or in close proximity to fields infected with [Scorch virus](#). **This disease is most prevalent in B.C.**

Insects/Mites

- **Prime Time to scout for:** [Winter Moth/Bruce Span Worm](#) blueberries.
- **Prime Time to scout for:** [Clay Colored Weevils](#) northern raspberries.
- [Raspberry Beetle](#), northern raspberries. This small beetle can cause fruit damage and be a major contaminant in northern raspberry fields.
- [Azalea Bark Scale](#), blueberries. This scale's telltale bright white egg sacs on the lower branches of infested plants are becoming more apparent in some southern blueberry fields.
- [Strawberry Crown Moth](#), southern strawberries. It’s now possible to find the larvae in the crowns of strawberry plants in some SW Washington fields.
- **Root Weevils**, strawberries. Larvae of [Black Vine](#), [Rough Strawberry](#), [Strawberry Root Weevils](#) are now being recovered from some strawberry fields.
- [Leafroller larvae](#) blueberries.
- [Blueberry Gall Midge](#), southern blueberries.
- [Lecanium scale](#) blueberries.

Meeting Information

For more comprehensive meeting schedule, [click here](#).

- **April 19-20 — Soil & Water Conservation Society “Protecting Natural Resources with Conservation Buffers” Workshop** ~ Portland, OR. [Click here](#) for details. Portland, OR. Someone from EPA will be giving the keynote address. This conference will address many of the issues that are at the center of ongoing legal efforts to limit the use of many pesticides.
- **April 21 — SWD Research Update & Season Warm Up Workshop** ~ See *SWD section above*
- **April 22 — Washington Blueberry Commission meeting** ~ 11am. Olsen Bros. Packing Facility 171 West Forsell Rd., Grandview 98930. Contact [Alan Schreiber](#) 509-266-4300 for more information. [Click here](#) for the agenda.
- **April 26 — Oregon Blueberry Commission meeting** ~ Noon. Santiam Room, West Salem Roth's IGA in Salem. Call (503) 364-2944 for more information.
- **April 28 — Oregon Strawberry Commission meeting** ~ 12pm–3pm. Roth's West in Salem 1130 Wallace Rd. Call 541-758-4043 or [email](#) for more information.

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- **April 29 — Whatcom County Spotted Wing Drosophila & Brown Marmorated Stink Bug workshop** ~ See SWD section above.
- **May 5 — Oregon Raspberry & Blackberry Commission meeting** ~ 6pm, Langdon Farms. Call 541-758-4043 or [email](#) Philip Gutt for more information.
- **May 17 — Skagit County Spotted Wing Drosophila & Brown Marmorated Stink Bug workshop** ~ North Whatcom, Fire Station 71, 307 19th Street Lynden, WA, 98264. Commercial Growers (9AM to Noon); Home Gardeners (1 to 3PM). [Click here](#) for more information, including how to RSVP.

Crop work

All crops

- Scout for voles and treat as needed.
 - *Zinc phosphide baits cannot be used after bud break.*
- Weed management.
- Fertilizer program.
- Can put out monitoring traps for Spotted Wing Drosophila.

Blueberries

- Weed management note: [Callisto \(mesotrione\)](#) can only be used before bloom.
 - [Click here](#) for information from OSU on the new herbicide options in blueberries.
 - [Spring herbicide choice for blueberries, MSU](#)
- Scout for Winter Moth/Spanworm and treat as needed.
- Can apply Bacterial Blight (*Pseudomonas*) management materials.
 - [Click here](#) for information on 'Copper products, characteristics and uses' (MSU)
- Scout for sprouting Mummyberries and treat as needed.
- Scout for leafroller larvae feeding.
- Plan for pre-bloom aphid control where Scorch virus transmission is an issue.
- Scout for virus symptoms & send in samples for testing as needed.
- Bring in bees around 10-15% bloom.
- Scout for scale insects.
- Scout for weevil notching.

Blackberries

- Scout for Purple Blotch lesions in Marion berries to assess field disease levels for later treatments.
- Burn back primocanes as needed.
- **Just beginning as leaf emergence allows:** Can apply phosphite material for Downey Mildew prevention in Boysens and Kotatas.
- **Just beginning as leaf emergence allows:** Scout for virus symptoms & send in samples for testing as needed.

Evergreen Blackberries

- **Close to the end of time window:** Can still apply a delayed dormant spray of lime/sulfur or elemental sulfur for Redberry mites and Blackberry Rust.

Raspberries

- Burn back primocanes as needed.
- (northern areas) Scout for Clay Colored Weevil feeding and treat as needed.
- Scout for Cane Blight and Cane Botrytis symptoms.
- **Just beginning as leaf emergence allows:** Scout for virus symptoms & send in samples for testing as needed.
- **Just beginning as leaf emergence allows:** Can apply a phosphite material for stronger root growth and root rot prevention.
- **Just beginning as leaf emergence allows:** Scout for Yellow Rust and assess treatment options.

Strawberries

- As plants start to grow, watch for weak growing areas and check plants for weevil larvae, root rot and/or cold damage.
- (Southern strawberries) Can scout for Strawberry Crown Moth larvae.

- Prepare for bloom in the south. At 10% bloom, can apply a fungicide for fruit/blossom rot.
- Can apply a phosphite material for stronger root growth and root rot prevention.
- Can till row centers and/or narrow down the matted rows.
- Can apply slug bait.

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Archived Small Fruit Updates

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

[04-12-11](#)

[04-06-11](#)

[03-29-11](#)