

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.

June 3, 2015

Week 23

Table of Contents

[Regional Reports](#)

[Berry Day Events](#)

[Blueberry Bud Development](#)

[Industry News](#)

[Grower Resources](#)

- [British Columbia Berry Grower News](#) (Summer 2015 Issue)
- [Naturipe grower adds partner, expands blueberry production](#) (5/27, *The Packer*)
- [Largest organic grocer now Costco](#) (6/1, *Seattle Times*)
- [Spotted Wing Drosophila: Small Fly – Big Problem](#) (5/29, *Growing Produce*)

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

Of note this week:

- [Bird Management](#): A PCM resources list including companies providing falconry services.
- **Field Days this week and next:** 1) BC Blueberries (Thursday, 6/4); WSU Strawberries (Monday, 6/8); OSU Strawberries) Wednesday, 6/10). Go here for details

SWD—

- An [expanded SWD Information/resource](#) segment has been included below.
- Very useful research: [Adding sugar enhances SWD insecticide activity](#) (2/5, *Journal of Economic Entomology*)
- Here's a simplified article on it: [A spoonful of sugar helps the insecticide go down](#) (2/5, *Entomology Today*)

Tom Peerbolt, SFU Editor

For SWD and other crop management information go to the [Grower Resources](#) section.

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](#)

Regional reports

British Columbia, Fraser Valley (Monday, 6/1)

- **Blueberries:** Really warm weather of the past week has ramped things up quickly. Considerably more colour in the early Duke fields every time I go in. These should start to pick before the 15th, especially with

more heat that is expected after the possibility of showers on Tuesday and Wednesday (which I will believe when I see them).

- **Raspberries:** Malahat raspberries starting to pick a bit on the weekend with more to come by mid-week. Rudi raspberries showing considerable red and some in the Meekers. I would expect machining to start by June 20th by the looks of it. Beginning the first SWD sprays this week in raspberries with blues to begin shortly as well.

British Columbia, Fraser Valley (Monday, 6/1)

- **Blueberries:** The beginning of harvest is getting closer with color showing on Duke in the middle and eastern end of the valley. Sizing happening. Fruit is very uniform for the most part. The current and predicted weather pattern has growers continuing with fruit rot fungicides. I have seen very little fruit rot in any of the varieties. Aphids, leafrollers and weevil applications have gone on. SWD levels definitely part of the conversation with trap counts much higher than in previous years. Lack of moisture also part of discussion and we could definitely use the rain. A lot of granular sitting there waiting for it. We are supposed to get some moisture beginning this evening and over the next 2 days. I'm sure some growers will begin harvest around June 15th with volumes increasing through the 20th.



British Columbia, Fraser Valley (Sunday, 5/31)

From [Tom Baumann](#), Director of the Pacific Berry Resource Centre & UFV's Ag Dept. Coordinator:

Hot weather going on, just a three day break coming and then a promise of close to and above 30C for the following weekend, I hope this forecast vanishes... So we will be thankful for the little break and any rain it brings. Very dusty conditions at this time.

- **Strawberries:** Everyone is running 100 km/hour, strawberry season in Langley is officially two weeks earlier than normal, normal being 15th of June in that region. We don't see the usual full fruit load, so the earlier season's ragged look of the plants is still showing through. However this is different from field to field. Puget Reliance is in full swing, first pick as of 1 June, Totem close, Rainier nicely forming berries, not any red yet. Albion in first pick to second pick.
- **Raspberries:** Raspberries setting fruit galore. Looks like great size coming, not red yet, but getting close, just a few weak plants with ripe fruit. Primocane fruiting ones now at around 1.5 meter = 5 ft height.
- **Blueberries:** Duke are ripening fast..., two more weeks to first commercial pick in the Eastern Fraser Valley, size great, fruit set excellent, plants working hard, cannot forget irrigation, alas, not too much either... SWDs picking up in all regions. Looks like Draper and Reka are following Duke in short order, this is going to get very concentrated.

Misc Fruit...: *Grape Kiwis* have finished bloom and set, *Black Mulberry* ripe already and tasting great, grape blooms now open, *Goji* getting first crop large, but still green, *Paw Paw* set beautifully in this weather, looks like a decent crop, First crop of *Figs* reaching ripeness, expect first ripe in two weeks. *Blackberries* finished bloom, sizing nicely, good druplet set.

Misc Tom comments: *“Keep running, have the produce stands open ASAP, have boxes for fruit made up and ample supplies ready, check irrigation for leaks and do not over irrigate. Had muggy weather so watch for mildews and secondary fruit rot. The news outlets are frantic with calls to see why we are so early, what size the crop is etc., be ready to be interviewed, remember to pose a positive message. And yes, there's that question about enough labour. Have the washrooms ready for pickers, including hand washing stations....”*

Northern Washington, Whatcom County

- **Blueberries:** (Monday, 6/1) Like everywhere, the unseasonably warm weather is pushing things along. Beginning to see slight coloration in Duke. Here, also, labor, early fruit, light first picks, and botrytis top discussions. SWD is going to be a real challenge this season. Rain predicted early this week. If it rains, the hope is for enough to help. First picks for fresh probably around the 25th? (More -or- less), with processed waiting (as normal).



Western Oregon, Willamette Valley

From [Bernadine Strik](#), OSU Extension Berry Crops Specialist:

- **Strawberries:** (Monday, 6/1) In strawberry, fruit look good but a lot of botrytis pressure and more powdery mildew than usual thanks to the unusual weather. I'm seeing powdery on some strawberry fruit which is unusual for this time of year. Also in strawberry I'm seeing lots of late inflorescences (trusses) in many fields and in most varieties. These are originating from flower buds that were initiated in late winter/early spring in that very nice warm weather we had. Simple trusses with 3 to 4 berries each. These will bring on expected large fruit at the tail end of the "regular" season. For those few growers who are drip irrigating and fertigating, you might want to think about adding some nitrogen to the program to carry these plants through this extended crop if you can. Still plan on renovating no later than the third week of July to Aug. 1 for June-bearers to avoid getting a fall crop or reduced yield for next year.
- **Blueberries:** (Monday, 6/1) We have plenty of blue color in our Dukes. Things are moving fast.
- **Blueberries:** (Saturday, 5/30) Blues are looking great for the most part. Green berry botrytis, labor and SWD worries seem to dominate most conversations. Start time is finally closing in—around the 12-15th seems the consensus. Southern area (Jefferson/Corvallis) could be as much as a week behind that. Basically not coloring in an Earliblue field in Jefferson last Thursday and just a little in Dukes. Northern fields have definite color. I'm eating some ripe Dukes off my garden bushes here in Portland which is always warmer. Great sizing these last few weeks.

Western Oregon, Willamette Valley

- **Blackberries:** (Tuesday, 6/2) Got about an inch of rain yesterday, will benefit the dryland blackberries the most but everyone else too. On the flip side, not looking forward to the forecasted 90's over the weekend. Black Diamonds have some black fruit, estimating a couple weeks away from harvest, apply an SWD spray. They are still booming, don't know if it will ever end, will be very difficult to figure when there is

enough ripe to make it economical to pick. Bloom is done in Marions, starting to show a light red, could be in there June 22. So far the cold damaged canes are hanging in there, crop looks to be better than initially thought. Columbia Star also starting to turn black, ate a few Sunday; that was a mistake, not ripe. Sizing looks to be good in all the blacks. Evergreens just starting to bloom.



Near Gervais, OR May 29. Left: AY Marions Right: EY Columbia Star Photos by Bill Dinger

Regional Berry Day Events

- **June 4 — WSU Strawberry Field Day.** 1-3 pm. Goss Farm, 15403 Bowman-Hilton Road, Puyallup. *“The field day will consist of an informal wander through the strawberry plots. Additionally we will have a chance to talk about the day-neutral strawberry breeding program and see some day-neutral seedlings and selections. It is also an opportunity to discuss directions for strawberry research.”* For more information contact [Pat Moore](#) 253-445-4525.
- **June 8 — British Columbia Blueberry Council Field Day.** 12:30-3:00 [Go Here](#) for details.
- **June 10 — OSU Strawberry Open House.** 1-4:30 [Go here](#) for details.
- **July 1 — OSU Caneberry Open House** 1-5:00 Details TBA
- **July 8 — OSU Blueberry Open House** 1-5:00 Details TBA
- **August 18 — Oregon Strawberry Commission Fresh Strawberry Plasticulture Workshop and Demonstration** 9:30-5:00 [Go here for the agenda.](#)

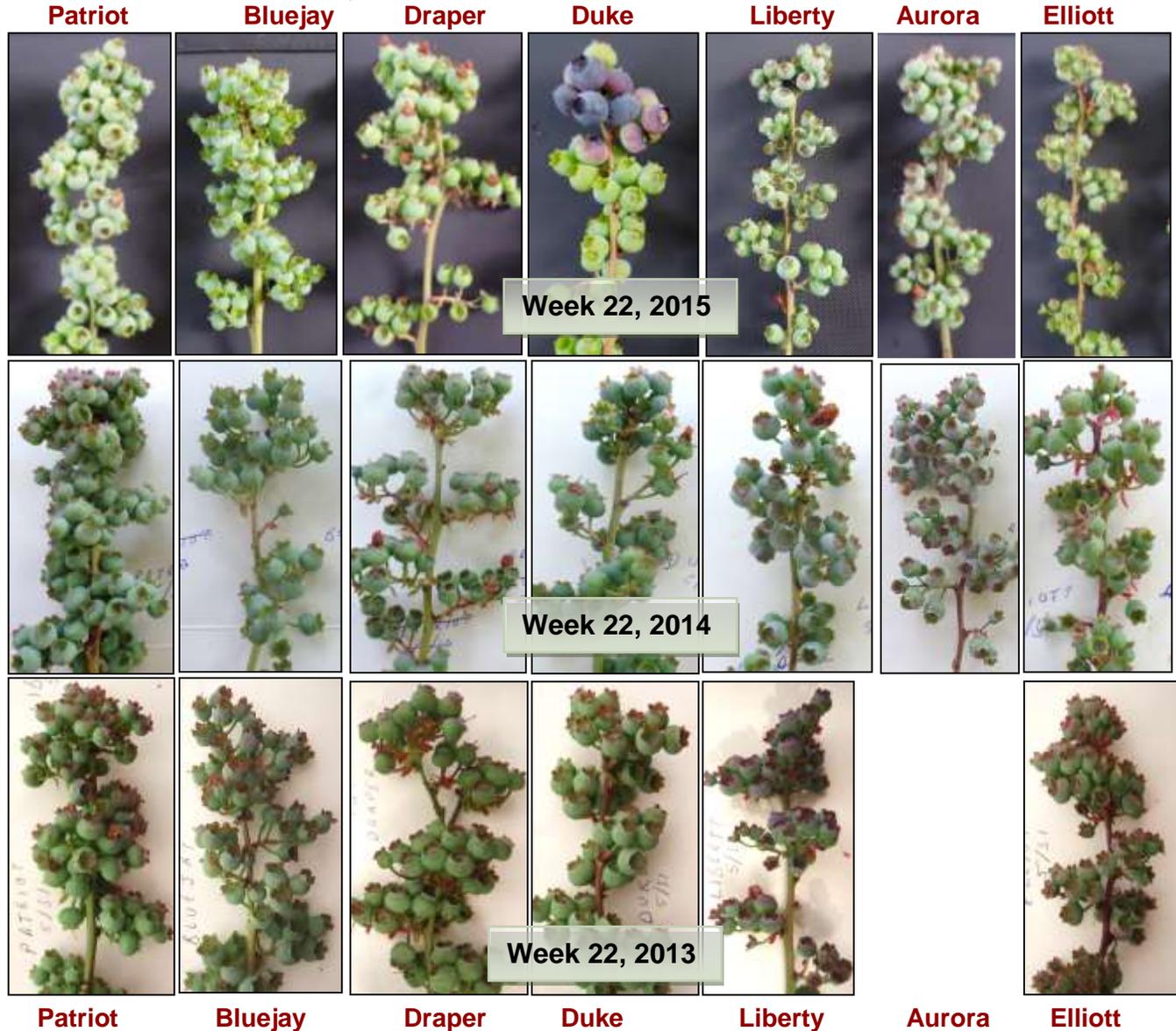


Previous OSU Field Day at the North Willamette Station in Aurora, OR

Blueberry Bud Development Comparison for the Western Willamette Valley

Protocols for these photos: 1) Each Friday I take 5-7 cuttings from the same fields in the NW Willamette Valley. 2) Later in the day I look over the cuttings and choose what seems the most 'representative' (not the most advanced or the least advanced). I'm aiming for the development stage that best represents the fruit that would be the first harvested. **We continue ahead in development over the last two years although that difference has moderated with the cooler weather. Maybe about a week ahead right now but even that depends on the field in question.**

Northwestern Willamette Valley **Top – 5/29/15 Middle – 5/31/14 Bottom – 6/1/13**



Industry news/resources

Newsletters/ berry reports

- [British Columbia Berry Grower](#) (Summer, 2015)
- [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.
- [Market Report from General Produce for Week 22](#) (6/1)
- [The Source](#) from Pro*Act (5/28)

- [USDA Market News \(Fruits & Vegetables\)](#)

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: (5/28) Organic Certification Seminar-June 22** *Reports on recent insect and disease research and observations in California.*
- [Team Rubus](#) by Gina Fernandez, North Carolina State Small Fruit Specialist. . **Recent entry: (5/28) How can I tell the difference between a primocane and florican leaf or cane?** *Reports on issues in blackberries and raspberries from the Southeast.*

Climate/Water

- [Washington farmers, wildlife managers prepare for drought](#) (6/1, Capital Press)

Research/Plant Breeding

- [Three promising new berries from USDA](#) (5/27, Growing Produce)

Health Research

- [Can blueberries lower blood pressure?](#) (6/1, Berkeley Wellness)

Regulatory agencies

- [EPA proposing temporary pesticide-free zones for honey bees](#) (5/28, Reuters)

Business

- [California strawberries star in Wendy's salads](#) (5/26, The Packer)
- [New website for California Giant](#) (5/26, The Packer)
- [Big volumes, good quality on tap for July 4](#) (5/28, The Packer)

North America

- New Jersey: [Blueberries, peaches on track for summer](#) (5/28, The Packer)
- Carolina's: [Carolina's to harvest peaches, watermelon and blueberries](#) (5/27, The Packer)

International

- [Trans-Pacific Partnership to have "primarily positive" impacts on agriculture](#) (5/29, Fresh Fruit Portal)

Serbia

- [Serbia's red gold: Raspberries](#) (5/29, Blooming Twig)



Obsidian blackberries, 5/29/15, Willamette Valley

Week 23 Grower Resources

- [Revitalize blueberries with renovation](#) (5/29, FGN)

Pest Alerts

SWD report for week 23, 2015

From 2010-2014 we did regional SWD monitoring and reporting funded by USDA and ODA grants. We no longer have that funding, but given the severity of the risk SWD poses to northwest berry crops in 2015—it's higher than any previous year—I figured I'd better continue that practice of weekly reports. I just won't have the public monitoring information to include.

Willamette Valley SWD monitoring

This information is based on PCM's client scouting and monitoring services. For proprietary reasons, some regional specifics, trap locations, crop type, etc. are not included.

Comments

- We've been monitoring adult SWD flight activity with various traps and baits since 2010. It originally was recovered in our area in 2009.
- While traps types and baits have varied somewhat over this time, the overall behavior patterns reflected in the monitoring are consistent from year to year and predictive of the risk of SWD larval infestations in berry crops. Each year this has been refined and the predictive value has become better with experience.
- 2010, 2011 and 2014 were what I'd consider low risk years. Trap counts early were low due to very low temperature events the winter before.
- Crop damage in low risk years was mainly confined to late season harvests.
- 2012 and 2013 had a lot more early adult activity than 2010 and 2011. These were higher risk years. However, high temperature events in spring did have a suppressive affect on the SWD populations.
- Major crop damage in these years was seen earlier—around the late Duke picks and later blackberry picks.
- 2015 has followed a different pattern than any of the previous years. We came out of a very mild winter with more SWD adults able to survive than ever before. We've followed that with mild late winter/spring weather that has been ideal for SWD adults to survive until new fruit hosts were available.
- 2015 has a much greater risk potential than previous years. First picks of blackberries, raspberries and blueberries are likely to see infestations. This will vary by region and field risk factors.

Potential SWD host status in the Northwest

- Processed strawberry harvest is in its second week Oregon and SW Washington.
- Raspberries, blackberries are well along in many fields with king berries ripening.
- Duke and other early blueberry cultivars are also coloring.
- Observed ripening fruit that are potential hosts are now expanding greatly and include cherries as well as salmonberry, dewberry, Indian laurel, wild cherries and figs in border areas and landscapes.

SWD damage symptoms in strawberries 5-26-15



Photos by Wendy Hoashi-Erhardt



SWD larvae in strawberry 5-26-15

- Go here for more on this: [Noncrop Host Plants of Spotted Wing Drosophila in North America](#) (Extension Bulletin published April, 2015)

Take home messages

- **SWD Population Status:** The SWD breeding population right now is, for this point in the season, **at highest levels we've ever recorded in the Willamette Valley.**
- **Environmental Factors:** Moderate temperatures (in the 70s F/20-26 C) favor SWD breeding.
- **Damage Risk Assessment: Very high.**
- Immediate risk to ripening strawberries and unripened fruit in other berry crops is relatively low in fields with an insecticide program. However each week the risk increases to ripening crops.
- All precautions should be taken to protect ripening berry crops. In particular early picks of machine harvested blackberries and raspberries. These picks haven't been threatened to this extent in previous years,
- Go here for a [PCM factsheet on SWD risk factors](#). Minimize these risks as much as possible.

Spotted wing drosophila resources

- [SWD I.D. Card](#) (UC Extension)
- [Spottedwing.org](#) Information from the 5 year SCRI regional project that just concluded. Cooperating organizations: OSU, WSU, Agri-Foods Canada, UC Davis, UC Berkeley, Peerbolt Crop Management & the USDA.
- [Spottedwing.org/SWD external links resources](#)

British Columbia

- [Spotted Wing Drosophila \(SWD\) Management in B.C. Berry Crops](#) last updated 6/24/14.
- [Canada—Spotted-wing Drosophila Technical Working Group](#)

Oregon and Washington (last updated 2/24/14)

- [USpest.org SWD Extension Documents](#) Many of Amy Dreves' generated SWD materials on managing and monitoring SWD.
- Blueberries: [SWD pesticide options and information](#)
- Raspberries and blackberries: [SWD pesticide options and information](#)
- Strawberries: [SWD pesticide options and information](#)



Scout taking fruit sample in blueberry field.

Monitoring berries for SWD larvae in the field

[We have created a video of the larvae-checking method.](#) It's from 2010 but still pretty good.

- Put a sample of fruit to be tested in a gallon size sealable plastic bag.
- Pour in enough salt water solution to allow the fruit to float (solution is: 1 cup of salt per gallon of water). Mark bag with field code/date. Gently crush/break open fruit.
- For a quick check in the field after a designated period of time (at least 15 minutes) hold the baggie up to light. This helps to see the larvae in the solution.
- For a more thorough examination, after a designated period of time (at least 15 minutes), pour the fruit and salt solution out into a shallow tray and use a piece of wire mesh screen to hold the fruit down making it easier to separate the larvae from the fruit.

Pest Alerts

Scout for: Silver leaf disease symptoms in **blueberries.**

- *This is a recently identified disease that has so far been confirmed only in a few Draper variety fields in western Oregon. It's unknown how economic this disease will be.*



Silver Leaf disease symptoms—Draper blueberry field, Willamette valley 5/22/15. *Photos by Tom Peerbolt*

Pest Alerts

Time to scout for and treat if needed: Yellow Rust, raspberries



Stages of Yellow Rust (from left) spermagonia, aecia, uredinia: It has not yet reached the uredinia stage.
Middle photo by Carolyn Teasdale, others by Tom Peerbolt

- Yellow rust is moving through its spore stages from yellow/orange colored 'blisters' (spermagonia) on the top surface of leaves to a very visible, almost day-glow orange/yellow spore stage (aecia) and, in southern regional fields, the fourth spore stage (uredinia).
- This fourth spore stage (uredinia) appears later in the season as yellow 'dust' on the bottom of leaves. This last stage is the one that multiplies quickly and can quickly defoliate canes if left untreated.
- Evaluate disease incidence and stage to determine whether (and when) fungicide applications are warranted.

Scout for: Green Berry Botrytis Fruit Rot, blueberries



- The weather warming and drying will help reduce the incidence of green berry botrytis.
- We're seeing and getting reports of green fruit botrytis over the past couple of weeks. Fungicides are of limited efficacy in controlling the infections at the green fruit stage.

A potential pest to be on the lookout for in blueberries

This information is from the 2013 SFU for week 22. We're running into the same situation this year. Recognized symptoms seem to be just a fair amount of leaf notching at this time. Its lifecycle differs greatly from our major pest weevil species. Larval root feeding is the potential economic problem but so far unconfirmed. Work needs to be done on to determine whether it is of economic concern in blueberries. TP

- **Pale Green weevil** (*Polydrusus impressifrons*) and/or **Green Immigrant Weevil** (*Polydrusus formosus*) --- they're very similar.
- [Click here](#) for more photos and information.



Photos by Jason Myer

- The Oregon Department of Ag identified the weevil now showing up in quite a few Oregon blueberry fields as *Polydrusus impressifrons*. Common names: Pale green weevil or leaf weevil.
- It's a very close relative of the green immigrant weevil (*P. sericeus*) identified in B.C. fields last summer.
- From a practical, field perspective the two are pretty identical in behavior and potential economic threat.
- Scouting for this weevil is relatively easy in that it will leave a ragged notching on leaves all over the plant and adults, who can fly, can be observed and caught around the plants during the day.
- While not proven to cause economic damage in blueberries, it's prudent to assume a weevil whose larvae feed on root systems has that potential particularly in new fields with small plants and root systems.

Time now to prevent: Ripe Fruit Rots, Blueberries

Preventative fungicide applications: [Alternaria Fruit Rot](#)

As blueberry bloom starts to finish, it's time to consider whether you need to prevent Alternaria and Anthracnose problems from showing up in the fruit. Alternaria can infect the fruit beginning at the end of bloom and throughout the fruit development stage, up until harvest. Infections remain latent until the fruit ripens. Infected fruits exhibit a shriveling or caving-in of the side of the berry and become watery in storage.



Alternaria fruit rot photo by Caroline Teasdale

Preventative fungicide applications: [Anthracnose Ripe Rot](#)

If you've had problems with Anthracnose, prevention of a reoccurrence begins at petal fall. Symptoms: First, blighting of shoot tips; then, a few flowers turn brown or black. Leaf spots, when they occur, are large or small and roughly circular. As infected berries ripen, the flower end may soften and pucker. Under warm and rainy conditions, salmon-colored spore masses form on infected berries. After harvest, spore masses form rapidly on infected fruit when in cellophane-covered baskets or in plastic clamshell packs.



Anthracnose fruit rot photos by Caroline Teasdale

Time to scout for (and take immediate action if found and verified): [Scorch virus](#), **blueberries**

- Symptoms are visible in infected fields.
- This disease is vectored aphids.
- Infected bushes ***do not*** return to productivity and should be removed ASAP to limit the disease spread.
- [Instructions on how to submit blueberry tissue to the BC Ministry of Agriculture Plant Diagnostic lab for insect or disease testing.](#)

Time to scout for (and not do a darn thing about if verified): [Shock virus](#), **blueberries**

- Symptoms are 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*.

Time to scout for and evaluate if management action is needed: [Powdery Mildew](#), **strawberries**

- Dry, warm, humid conditions favor powdery mildew in strawberries.

Additional, Ongoing Pest Information

Diseases

- **Scout for:** [Phytophthora Root Rot](#) **raspberries** *Look for primocane collapse.*
- **Scout for:** [Purple Blotch](#) **blackberries.**

Insects/Mites

- **Scout for:** [Azalea Bark Scale](#), **blueberries.** This scale's telltale bright white egg sacs on the lower branches of infested plants are now apparent in some southern blueberry fields.
- **Scout for:** [Raspberry Beetle](#), **northern raspberries.** This small beetle can cause fruit damage and be a major contaminant in northern raspberry fields. Leaf feeding pattern is very distinctive.
- **Scout for:** **Root Weevils, strawberries & blueberries.** Larvae & adults of [Black Vine](#), [Rough Strawberry](#), and [Strawberry Root Weevils](#) are now being recovered from some fields.

- **Scout for:** [Blueberry Gall Midge](#), **blueberries**. Tip damage from this midge is showing up in blueberries. Damage is usually deemed to not be economic except in specific situations like new vigorous fields where gall midge can occasionally cause too much stunting of new growth.
- **Scout for:** **Mites in raspberries (northern growing areas):** [Twospotted mites](#) [Yellow mites](#)
- **Scout for:** [Strawberry Crown Moth](#) **southern strawberries:** Infested plants will have a weakened crown and will often break off with a pull on the top growth.

Crop Work

All crops

- **Sample for & treat as needed for SWD fruit infestation as soon as fruit begins to color.**
- Vole management.
- Weed management.
- Fertilizer program.
- Water management.
- Can put out monitoring traps for Spotted Wing Drosophila.

Blueberries

- After petal fall, can treat for [alternaria](#) and [anthracnose](#) prevention if needed.
- Scout for [mummyberry](#) infected fruit.
- Stay on top of aphid management where Scorch virus transmission is an issue.
- Scout for [leafroller larvae](#) & treat as needed.
- Scout for virus symptoms & send in samples for testing as needed ([Shock virus](#); [Scorch virus](#)).
- Scout for [winter moth/Bruce spanworm](#) larvae.
- Scout for scale insects.
- Scout for weevil notching.
- Scout for [azalea Bark Scale](#) in southern blueberries
- Scout for blueberry [gall midge](#) damage.
- Can put out pheromone traps to monitor for leafrollers. ([Orange Tortrix](#) and [Oblique Banded](#))

Blackberries

- Can put out pheromone trap to monitor for leafrollers. ([Orange Tortrix](#) and [Oblique Banded](#))
- Can apply fungicides for [fruit/blossom rot](#) from 10% bloom through the end of bloom.
- Scout for virus symptoms and send in samples for testing as needed.

Evergreen Blackberries

- Scout for [blackberry rust](#) and treat as needed.

Raspberries

- Scout for [raspberry beetle](#) feeding symptoms
- Scout for [yellow rust](#) and assess treatment options.
- Scout for yellow mites and [twospotted mites](#).
- Scout for virus symptoms & send in samples for testing as needed.
- Can apply a phosphite material for stronger root growth and root rot prevention.
- Can apply fungicides for [fruit/blossom rot](#) from 10% bloom through the end of bloom.
- Can put out pheromone traps to monitor for leafrollers. ([Orange Tortrix](#) and [Oblique Banded](#))
- Scout for [cane blight](#) and [cane botrytis](#) symptoms.

Strawberries

- (Southern strawberries) Can scout for [strawberry crown moth](#) larvae.
- Scout for fruit damage symptoms like cat facing, slug damage, anthracnose, etc.
- Monitor ripe and ripening fruit for [SWD larvae](#).

- Scout for weevil adults & notching.
- Can apply fungicides for [fruit/blossom rot](#) from 10% bloom through the end of bloom.
- Can apply slug bait.
- Scout for [powdery mildew](#) and treat as needed.
- Scout for [two spotted spider mites](#) and predatory, beneficial mites.
- Scout for [aphids](#).
- In day neutral varieties scout for [lygus bug](#) and assess need for treatment.

Degree Day Updates

- [WSU Extension—Whatcom County](#)
- [Regional sites—Updated by Len Coop, OSU-IPPC](#) *click on the link, go to right hand column & click on the Degree day icon.*

Events

Upcoming Regional Events & Commission Meetings

[Go here for Full Event Calendar](#)

Upcoming National & International Berry Events

- **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.
- **October 13-15 — 6th Biennial Berry Health Benefits Symposium** ~Madison, Wisconsin. [Go here](#) for all the details.

Archived Small Fruit Updates

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

[22-SFU05-27-15](#)

[21-SFU05-20-15](#)

[20-SFU05-13-15](#)