

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 <u>Peerbolt Crop Management</u> and is funded entirely by the Northwest berry growers & industry through their commissions & councils.

July 19, 2011

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Featured Website: Integrated Pest Management Education

"IPM", a consortium of federal agencies and land-grant institutions dedicated to the efficient and timely delivery of practical integrated pest information to people responsible for developing and implementing Integrated Pest Management (IPM)."

Best Site for Pesticide Label Searches: <u>Agrian.com</u>. Click on the "Label Lookup"

The Weather Cafe by Rufus La Lone/Small Fruit Cold Storage Report

U.S. Highbush Blueberry Council Continuation Referendum

North American Blueberry Council members are encouraged to vote Yes on this Continuation Referendum

- The voting period runs from 7/5/11-7/26/11.
- A member approval vote is required every 5 years.
- Click here for the NABC information flyer.
- <u>Click here</u> for the USHBC information sheet.
- Click here for links/information on all that the USHBC does.
- For questions on the USHBC, the referendum process, or if you haven't received a ballot, call the NABC office at (916) 983 2279

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: (Tuesday, July 19) Dukes started to hand pick today in a few locations in Abbotsford and to the west as far as Richmond and Delta. Rains of the past few

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

- days are troublesome and have caused some minor rot issues along with dropped fruit and some additional fungicide applications. Additional rain this week could cause some bigger problems. The crop looks good but it is at a very vulnerable stage with this unpredictable weather.
- Raspberries: (Tuesday, July 19) What a way to start a raspberry harvest. Latest I can remember and sooo.. difficult. Rain Thursday, Saturday and Sunday, just a mess to pick. Surprisingly little mould so far but a real battle with Black Vine Weevils. Incredible numbers showing up. Unfortunately, our available cleanup insecticides in B.C. are having some difficulty controlling this pest. We're envious of the efficiencies of bifenthrin south of the line. Hopefully this crop comes heavy and fast as the blueberry harvest is almost in lockstep with it and we need to get it over with quickly and efficiently. Possibly rain mid-week is ominous and will really make things tough for maintaining quality. SWD sprays going on at present.

Northern Washington, Whatcom County

- **Blueberries:** (Monday, July 18) You may have heard of the showers forecast for Lynden for last Thursday (July 14). Well, they turned into 1-3 inches of rain in about 5 hours. That isn't fun any day of the year, but July 14? We're still slogging thru the mud and even using tracked Yanmar tractors in some fields. Can you flood harvest blueberries, like cranberries? Dukes and Rekas are still a few weeks off from machine harvesting. Green berry rot looks like botrytis, but we haven't gotten confirmation from the labs yet.
- Raspberries: (Monday, July 18) Surprisingly little mold in the raspberries so far. Keep watching the mites, they are still out there. Root rot showing up more and more. We cleaned up the aphids, but they may be back, there were many winged adults. Found a female SWD in a trap in a raspberry field yesterday so we're starting Mustang Max sprays now. Like the B.C. report, we've also got many reports of Black Vine Weevil in the raspberries. Doesn't seem to matter what the cleanup brew was.
- **Strawberries:** (Monday, July 18) Last gasp for the processed strawberry harvest. It's not fun picking wet fields in the rain. Mowing, cultivating, and spraying Spartan in all the fields that we are keeping for another year.

Northern Washington, Skagit County

Picked up 1-2 SWD females in traps on the wooded perimeter of a Bluejay field that appear to be feeding on snowberry and wild raspberry under the trees, haven't seen any males yet. Expect pressure to increase with strawberry and raspberry fruit on the ground now. Have not started SWD sprays yet in blues.

- Blueberries: (Tuesday, July 19) Will start picking Duke middle of next week depending on labor availability
 and perhaps some picking for the Market Stand end of this week. Some of the organic Reka appear to
 have Mummyberry and some botrytis infection from the retained corolla's rotting.
- Raspberries: (Tuesday, July 19) Raspberries started up harvest yesterday. Appears that all the fruit is coming on at once, looks like a short season. Good fruit size and color.
- **Strawberries:** (Tuesday, July 19) Hope to finish up strawberries first of next week. Lots of good quality fruit, could use more pickers with harvest crew working long days.

Willamette Valley, Oregon and SW Washington

- Blackberries, processed: (Tuesday, July 19) We got started on machine picked Marions Monday (7/18) With all the rain it is either pick or spray. If there is not enough ripe fruit to pick you have to spray and wait, that is an easy decision but there is plenty of fields right on the edge, tough choice. If not for the rain we probably would have started on Wednesday or Thursday. There are still some fields that will wait until Sunday. So far not a lot of mold but the berries are definitely big, soft and juicy, tough to get through a tunnel
- Blackberries, fresh: (Tuesday, July 19) On the fresh market end of things, the rains have made Obsidian too soft so it's all gone to processed. Same with the other fresh market options for now. 'Big, soft and juicy' may taste good but it sure doesn't ship well.
- **Blackcaps:** (Tuesday, July 19) Hand picking late last week and now we're a few days into the machine harvest. So far it looks good. Hopefully this rain won't hang around to cause mold problems.
- Raspberries: (Tuesday, July 19) Quality has been excellent up until this point. We're now seeing some minor mold issues that could get worse if we don't dry up. Cascade Bounty, Cascade Delight, Cascade Dawn—I looked at fields of all three this week and they're holding up to root rot pressure very well—about the only varieties that are.

- **Blueberries:** (Tuesday, July 19) A few Duke fields are starting their second round while others are just getting started. Fruit has held very well on the bushes with this mild weather, Quality has been great although some first picks were lighter than expected, the inch of rain over the weekend has pumped up the berry size. A little worried about shelf life being affected but right now the fruit is getting picked and into the coolers within a couple of hours so it should be fine. The rain has caused problems with scheduling the picks. This coming weekend we'll see our first Bluecrop and Draper coming off.
- **Blueberries:** (Monday, 7/18) At Salem, first pick Duke was completed last week. Fruit was big and blue but not very sweet. The second pick Duke will probably follow next with Bluecrop, Draper and Bluejay right behind. Light aphid pressure this week and SWD counts remain at zero. Recent rains will likely have limited affect on quality as varieties prone to splitting (Aurora, Elliott, and Legacy) are still in the green berry stage. Where Canada Thistle was tight into the blueberry crown, we could not avoid contact with the wood when we sprayed with Stinger on 3/10/11. Four months later, symptoms are clearly evident. (See photos below) Leaves appear cupped, twisted and with a pinched margin. Onion-leafing, leaf-strapping and reddening of fruit and calyx were also apparent. New, "bull" canes from the crown appeared to be most injured. Thistle control was excellent. We will probably continue with lower rates next spring.

Blueberry & Raspberry Fields in Lynden, WA after last Friday's (7/14) "flood"--1 to 3 inches of rain in 5 hours.

Photos by Brian Cieslar





Stinger damage in blueberries
Photos by Jeff Flake (click on photo to see larger image)







Stinger was applied on 3/10 and showed these injury symptoms on 7/15. Symptoms included bright pink calyx coloration (middle photo) and "onion-leafing" on terminal growth (right photo)

Changes in Washington Field Day Schedule

Due to the late ripening season, both Machine Harvesting trials have been moved back one week & not paired with the WSU events as they were previously

Here's the revised schedule of events:

July 20—WSU Berry Grower Field Day ~ 3-5pm. WSU Mt. Vernon Research Station, WA. Call Tom Walters at 360-848-6124 for information.

July 21—WSU Fumigation Field Day ~ 1pm. Maberry farm in Lynden, WA. Call Tom Walters at 360-848-6124 for information.

July 27—Raspberry Machine Harvesting Selection Evaluation ~ 1-3pm. Sakuma Brothers Farm, Mt. Vernon, WA. Call Pat Moore at 253-445-4525 or Tom Walters at 360-848-6124 for information.

July 28—Raspberry Machine Harvesting Selection Evaluation ~ 11am-1pm. Randy Honcoop's farm in Lynden, WA. Call Pat Moore at 253-445-4525 for information.

Pest Alerts

All berries

Blueberries, Strawberries, Caneberries – Spotted Wing Drosophila—<u>See Update Below</u> Blueberries, Strawberries, Caneberries – Root Weevils

These insects remain a chronic, long-term problem in all our berry crops in all regions. Again this year, there are continual reports of major economic injury caused by weevil larvae by root feeding and, as we get into harvest, the adults will be a major crop contaminant. WE NEED NEW APPROACHES TO WEEVIL MANAGEMENT!

General lifecycle: After emergence, it takes about 30 days before an adult (and they're all female) begins laying eggs. So, treatments for these adults should take place before that 30 day window is up, but after sizable amounts have emerged. Monitoring the larvae and pupae development is the best way to know the status of these pests. It's also very time consuming and difficult to quantify. In addition, there are a number of factors that complicate weevil management, A couple of those factors are:

Some weevil adults overwinter and emerge early in the season ready to lay eggs. These overwintering adults would not be controlled before they lay eggs under the usual management regimes.

There many different weevil species affecting our crops. Each one has its own unique lifecycle. Management activities and timing of control applications need to be geared to the particular species.

For more information on our major pest weevil species, click on the following: <u>Black Vine</u>, <u>Rough Strawberry</u>, and <u>Strawberry Root Weevils</u>.

Blueberries

Blueberries - Aphids

All regions are seeing high aphid levels in blueberries. These are leading to honeydew on the fruit as well as high ladybird beetle populations that also can lead to fruit contamination complaints. Sometimes you just can't win—a beneficial insect is still just another insect contaminant once the fruit is picked.

B.C. Blueberries - Aphids/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." You can email the B.C. Blueberry Council's research coordinator, <u>Karina Sakalauskas</u>, for further information on testing and/or disease management.

Blueberries - Alternaria Fruit Rot

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 can become watery in storage.

Blueberries - Anthracnose Ripe Rot

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.

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Raspberries/Blackberries

Northern Raspberries - Aphids

High aphid populations are being reported in many fields and should be evaluated to see if insecticide applications might be needed.

Raspberries - Two-spotted Spider Mites

Mite populations are being reported in many fields and should be evaluated to see if miticide applications are needed.

Raspberries & Blackberries (SW Washington & Oregon) – Orange Tortrix Leafrollers The larval hatch that causes our major crop contaminant problems is ongoing in area caneberry fields with small leafroller larvae being found in large numbers. Fields that have been recording high adult pheromone trap counts are at high risk of having larval contaminant problems. Clean up applications are recommended before starting harvest with ongoing monitoring throughout harvest.

Strawberries

Strawberries (SW Washington & Oregon) – <u>Strawberry Crown Moth</u> We're continuing to get high trap counts in some strawberry fields. Post harvest, growers can mow the field and immediately apply Lorsban with a high amount of water (100 gallons per acre is recommended.

Spotted Wing Drosophila Update for 7-19-11

This Update is a collective effort. It is composed by Peerbolt Crop Management with contributions from OSU, USDA-ARS, WSU, B.C. Ministry of Agriculture and various northwest berry industry people.

SWD Information Websites

Peerbolt Crop Management Oregon State Univ. B.C. Ministry of Ag. WSU Westside WSU Eastside

SWD in the News

(Michigan) <u>First Seasonal Capture of SWD in Michigan</u> (7/15, MSU Extension News)

Comments

- Trap counts are increasing across the region although in fields that have been treated with an appropriate insecticide within the last couple of weeks, counts are very low.
- Last year mid to late July was the window of time in which we saw a dramatic increase in SWD pressure on all west side berry crops from Northern California into The Fraser Valley in B.C.
- With the 2011 crops being 10 to 14 days later than 2010, it is possible that SWD will also be a little later in its development. But we shouldn't take that for granted.
- Be prepared. Be conservative & pro-active. If you or your neighbors had SWD pressure last year, take all reasonable precautions to minimize the risk this insect poses to your crop.
- SWD populations are starting to increase with breeding activity and the spring generations emerging in cherries, strawberries, caneberries and other ripening fruit in California, Oregon, and Southwest Washington.
- The presence of ripening fruit draws SWD into the fields from border areas.
- From this point on, each successively emerging generation will quickly increase SWD numbers and the pressure on susceptible crops.
- Once ripe fruit is present in the field the traps' ability to attract adult flies is much diminished.
- In view of this, growers & fieldmen are advised to rely more on regular sampling of the fruit using the salt solution method to monitor SWD once there is ripe fruit.
- The salt solution sampling method is a valuable additional tool for growers and processors. Allowing them to determine infestation levels well before the fruit enters the processing plant.

Guidelines for checking the fruit for SWD larvae in the field

These suggestions are based on techniques that various public researchers and industry personnel have been developing over the past year and a half. If any of you have ideas for improvements to these protocols, please pass them along. We're all in this together.

- Depending on size of fruit (strawberries take longer than caneberries or blueberries), the larvae will emerge from the fruit into the salt solution in a short period of time.
- The smaller the larvae and the lighter the infestation, the more difficult it is to see the larvae.
- Excellent lighting when looking for the larvae is critical to being able to see the smaller ones.

Present suggested methods:

For scouts/field checking (We have created a video of this larvae-checking method.):

- 1. Collect a sample of fruit to be tested (Strawberries: 25-30 per sample, Caneberries/blueberries: 75 per sample)
- 2. Put fruit in a gallon size sealable plastic bag.
- 3. Pour in enough of the salt water solution to allow the fruit to float (solution is: 1 cup of salt per gallon of water).
- 4. Mark bag with field code/date.
- 5. For a quick check in the field after a designated period of time (at least 15 minutes) holding the baggie up to light. This helps to see the larvae in the solution
- 6. 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.

For processors or fruit handling stations:

- 1. Collect a two pound sample of fruit to be tested.
- 2. Put the sample into a shallow tray and cover with the salt water solution (1 cup of salt per gallon of water).

3. After a designated period of time (at least 15 minutes) use a piece of wire mesh screen to hold the fruit down to make it easier to separate the larvae from the fruit.

Regional Monitoring (South to North)

Oregon Public Scouting Program (Number of traps checked this week in the crop in parentheses).

This scouting program & reporting system are being funded by a USDA SCRI grant, A Northwest Center for Small Fruit Research grant; the Washington Red Raspberry Commission & the Washington Blueberry Commission.

- Jackson, Josephine, Douglas Counties: No report this week.
- Lane County: Strawberries (1): none. Cherries (2): no males/2 female. Raspberries (1): none. Blackberries (2): none.
- Linn County: Strawberries (9): none. Cherries (2): 34 males/11 females. Raspberries (18): 2 males/2 females. Peaches (3):none. Honeysuckle (1): none. Plum (1): 4 males/4 females. Wild Habitat (5): 26 males/22 females.
- Polk County: Strawberries (2): none. Blackberries (5): none.
- Marion County: Strawberries (15): 1 male/no females. Cherries (3): none. Raspberries (2): none. Blackberries (6): none. Blueberries (6): none.
- Clackamas County: Strawberries (1): none. Raspberries (1): none. Blackberries (1): none. Blueberries (6): none. Tayberries (1): none. Honeysuckle (1): 11 males/1 female.
- Yamhill County: Cherries (6): none. Raspberries (6): none. Blackberries (5): no males/1 female. Blueberries (1): none.
- Washington: Strawberries (2): none. Blackberries (1: none Blueberries (2): none.
- Multnomah County: Strawberries (4) no males/1 females. Cherries (1): 4 males/2 females. Raspberries (2): none. Blackberries (1): none. Blueberries (2): 2 males/2 females. Salmonberries (3): none.

Southwest Washington Public Scouting Program

• Clark/Cowlitz/Lewis Counties: Strawberries (12): 3 males/2 females. Cherries (2): no males/1 female. Raspberries (27): none. Blackberries (5): none. Blueberries (21): none.

Eastern Washington--WSU Reporting Site

<u>Click here</u> for the WSU Eastern Washington SWD reporting site. Most recent posts on the WSU site:

- **Friday, 15 July:** "There has been a new regional find today of SWD, in the Brewster area. One male. This find was from a private trap, and many thanks to the folks willing to share their information and alert growers in their area. Five regions now have positive catches."
- **Wednesday, 13 July:** "First catch on Orondo area highest per-trap count to date (2 females, 4 males). It's show time, folks."
- **Friday, 8 July:** "No new catches from eastern Washington traps this week. As cherry harvest is well underway, we may have many regions that "escape" from SWD attack this year."

Western Washington--WSU Public Scouting Program

This scouting program & reporting system are being coordinated by Whatcom County Extension & funded by the Washington Red Raspberry Commission, the Washington Blueberry Commission & the Washington State Commission for Pesticide Registrations.

Click here for the Home site with links to all the counties and site use information.

- <u>Click here</u> for the demonstration video on how to use this resource.
- Here are individual county links (south to north): <u>Clark County</u>, <u>Cowlitz County</u>, <u>Lewis County</u>, <u>Pierce County</u>, <u>King County</u>, <u>Snohomish County</u>, <u>Skagit County</u>, <u>Whatcom County</u>.

Southwestern British Columbia

Click here for the SWD Monitoring Report for Southwestern BC (7/15/11) from the BC Ministry of Ag.

• From the July 17th Blueberry IPM Newsletter: "No SWD flies were caught in the 28 Fraser Valley blueberry fields monitored this week, but a few SWD flies were caught in hedgerow areas and raspberry fields. Growers should plan to spray an insecticide before harvest in early season varieties. The insecticides registered for control of SWD on blueberries are Delegate (3 day PHI), Malathion (1 day PHI), Ripcord (2 day PHI) and Entrust (3 day PHI). Organic growers can spray Entrust. Sprays should be repeated at 10 day intervals through harvest."

<u>Click here</u> for SWD Monitoring Report for the Southern Interior Valleys of BC (July 7-July 13) from the BC Ministry of Ag.

Management Material Resources

Oregon & Washington

- Blueberries: SWD pesticide options & information
- Raspberries & blackberries: SWD pesticide options & information
- Strawberries: SWD pesticide options & information

British Columbia (6/28/11): SWD Management in BC Berry Crops (with insecticide options listed)

Pesticide tank mixes caution

In an effort to manage the risk involved with this new pest, some growers are using combinations of pesticides that they have not used in the past. Before applying an unfamiliar tank mix, be sure to check with your supplier, crop consultant, or other advisor to be sure it won't cause damage. Some mixes have the potential for unexpected, economically damaging effects—just the thing we're trying to avoid by using them.

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Pest Management & IPM Information

Diseases

- Blackberry Rust (Phragmidium Rust): evergreen blackberries.
- <u>Phytophthora Root Rot</u> raspberries.
- Mummyberry blueberries. Click here for a Mummyberry fact sheet from MSU.

Viruses

- Aphids/Scorch Virus British Columbia blueberries see alert above.
- Shock Virus blueberries Reports this season indicate a much higher level of Shock Virus symptoms than usual. If plants are suspected of showing symptoms in successive seasons, send in a test to make sure it isn't Scorch Virus.

Insects/Mites

- Orange Tortrix Leafrollers, southern raspberries & blackberries. see alert above.
- Two-spotted Spider Mites northern raspberries. see alert above.
- Twospotted Spider Mites raspberries, strawberries. see alert above.
- Obliquebanded Leafrollers in Blueberries, Raspberries, Blackberries.
- Leafroller larvae blueberries, caneberries.
- Blueberry Gall Midge blueberries.

Industry News/Resources

Newsletters

- B.C. Blueberry IPM Newsletter for July 17
- New Jersey Blueberry Bulletin for July 5
- Michigan Blueberry Newsletter for Juv19
- Michigan State Fruit News (7/15)
- Market scope: <u>blueberries blackberries raspberries strawberries</u>
 Recent stories & fresh market pricing for the various berries from The Packer.
- 'The Source' (7/13) Market updates from The Produce News.

Immigration/Labor

Undocumented database a growing concern (7/18, Record.net) "California Republicans are pushing a bill that
would require employers to electronically verify the immigration status of potential hires, despite warnings from
farmers that it will devastate their work force. The Legal Workforce Act, which will head to the House Judiciary
Committee this month, is aimed at using a system known as E-Verify to prevent undocumented immigrants from
taking jobs away from legal workers."

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West

- Raspberry producers vote to fund national promotion program (7/13, Bellingham Herald)
- Processed raspberries get new national program (7/12, Western Farm Press)
- (Washington) Whatcom's raspberry crop gets late start, but farmers hopeful for solid season (7/15, Bellingham Herald)
- (BC) <u>U-pick, U have fun</u> (7/13, The Vancouver Sun)
- Weather pushes back British Columbia raspberry season (7/12, FreshPlaza)
- (California) <u>UC examines cost of producing strawberries</u> (7/12, Western Farm Press)

North America

- (Michigan) Temperatures are predicted to keep climbing (7/13, MSU Extension News)
- The "First Pick" helps kick off the Michigan blueberry harvest season (7/19, FreshPlaza/Naturipe)
- (Newfoundland & Labrador) <u>Strawberry crops suffer rain delay</u> (7/18, CBCNews)

International

• Chile developing its own strawberry & raspberry varieties (7/14, FreshFruitPortal)

•

Classifieds

I've tried running classifieds like this in the past without much response. If this is a service you'd like to see in the Update, let me know! If you've got something to list, send it along. Email me by clicking here. T.P.

• 1973 model BEI picker: We have picked with it for 20+ years for cost of less than \$.10 per pound. Basically picked 20 acres at about 1/2 days. Waukesha engine. Hydraulic + electric. Machine will be field ready. Asking \$20,000, FOB our farm at Mossyrock, WA. Call 360-983-3138 or 360-561-6494 or email galdrich@tds.net. Glenn Aldrich, Aldrich Berry Farm & Nursery, Inc. (4th & last week running)

Meeting Information

For more comprehensive meeting schedule, click here.

Change in date.

Due to the late ripening season, this Machine Harvesting trial has been moved back one week from Wednesday, July 20 to Wednesday, July 27 — Raspberry Machine Harvesting Selection Evaluation ~ 1-3pm. Sakuma Brothers Farm, Mt. Vernon, WA. Call Pat Moore at 253-445-4525 or Tom Walters at 360-848-6124 for information.

July 20 —WSU Berry Grower Field Day ~ 3-5pm. WSU Mt. Vernon Research Station, WA. Call Pat Moore at 253-445-4525 or Tom Walters at 360-848-6124 for information.

July 21 WSU Fumigation Field Day ~ 1pm. Maberry farm in Lynden, WA. Call Tom Walters at 360-848-6124 for information.

Change in date.

Due to the late ripening season, this Machine Harvesting trial has been moved back one week from Thursday, July 21 to Thursday, July 28— Raspberry Machine Harvesting Selection Evaluation ~ 11am-1pm. Randy Honcoop's farm in Lynden, WA. Call Pat Moore at 253-445-4525 for information.

July 22 — B.C. Berry Field Day 1-4 pm. Contact Chaim Kempler for more information: 604-853-1551 or 604-819-0175.

July 22 & 23 — "Eat Your Berries! - The Oregon Berry Festival" ~ 11am- 6pm. Portland, OR. Ecotrust Building, 721 NW 9th Ave (NW 10th & Johnson). Taste and buy some of the season's best berries and also sample amazing products made with Oregon's berry bounty. Click here for details.

July 27—Raspberry Machine Harvesting Selection Evaluation ~ 1-3pm. Sakuma Brothers Farm, Mt. Vernon, WA. Call Pat Moore at 253-445-4525 or Tom Walters at 360-848-6124 for information.

July 28—Raspberry Machine Harvesting Selection Evaluation ~ 11am-1pm. Randy Honcoop's farm in Lynden, WA. Call Pat Moore at 253-445-4525 for information.

Summer Field days

Washington State University

Call Pat Moore at 253-445-4525 or Tom Walters at 360-848-6124 for information.

- July 20 Berry Grower Field Day~3-5pm at the WSU Mt. Vernon Research Station.
- July 21 Fumigation Field Day following the mechanical harvest trial at Randy's ~ Lynden location TBA.
- July 27 Raspberry Machine Harvesting Selection Evaluation~ 1-3pm at Sakuma Brothers Farm, Mt. Vernon.
- July 28 Raspberry Machine Harvesting Selection Evaluation ~ 11am-1pm at Randy Honcoop's farm in Lynden.

British Columbia

July 22 — B.C. Berry Field Day ~ 1-4pm. Contact <u>Chaim Kempler</u> for more information or call 604-853-1551 or 604-819-0175.

Crop work

All crops

- Weed management.
- Can put out monitoring traps for Spotted Wing Drosophila.
- As fruit begins to ripen, can sample fruit for SWD.

Blueberries

- Stay on top of aphid management especially where Scorch Virus transmission is an issue.
- Scout for virus symptoms and send in samples for testing as needed.
- Scout for weevils and weevil notching.
- Can treat for Alternaria and Anthracnose prevention if needed.
- Scout for fruit disease symptoms and/or disorders.
- Plan for/Maintain bird damage management.
- Scout for leafroller larvae feeding.
- Scout for Mummyberry.
- Can apply SWD management insecticides.
- Can apply clean up insecticide just before harvest for crop contaminant management.

Blackberries

- Can put out pheromone trap to monitor for leafrollers.
- Scout for leafroller larvae and treat as needed to prevent fruit contaminant problems.
- Scout for Phragmidium Rust in Evergreen blackberries
- Scout for virus symptoms & send in samples for testing as needed.
- Can apply fungicides for fruit/blossom rot through the end of bloom.
- Scout for Cane and Leaf Rust.
- Can apply SWD management insecticides.
- Can apply insecticides as needed for crop contaminant management.
- Scout for aphids and treat as needed.

Raspberries

- Scout for virus symptoms & send in samples for testing as needed.
- Scout for Yellow Rust and assess treatment options.
- Scout for spider mites and treat as needed.
- Can put out pheromone trap to monitor for leafrollers.
- Scout for leafroller larvae.
- Can apply fungicides for fruit/blossom rot through the end of bloom.
- Can apply SWD management insecticides.
- Can apply insecticide as needed for crop contaminant management.
- Scout for aphids and treat as needed.

Strawberries

- Scout for weevil adults and notching.
- (Southern strawberries) Can treat for Strawberry Crown Moth. Adults are now flying.
- Scout for Powdery Mildew and treat as needed.

- Scout for Two-Spotted Spider Mites and predatory, beneficial mites.
- Scout for aphids and treat as needed.
- Scout for fruit formation issues like cat-facing.
- Scout for fruit quality issues such as mold.
- Scout for virus symptoms/send in sample for testing to confirm.
- Post-harvest
 - Treat post harvest for SWD if needed especially if field is in close proximity to other ripening berry/stone fruit crops.
 - o Mow & treat for SCM in south if needed.
 - o Mow & renovate 2-4 weeks after harvest unless pest pressure require mowing & treating sooner.

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Archived Small Fruit Updates