



April 23, 2008

Photo of the Week: Snow on a blueberry field in Lynden, WA. A new record for late season snow. (Taken by Brian Cieslar, 4/18/08).

[Small Fruit Cold Storage Report](#)

[Upcoming Meetings](#) (a calendar of small fruit related events)

[Weather Forecast](#) by Rufus La Lone

Industry Website: [Click here](#) for the **Imperial Frozen Foods** website. They've got their wholesale frozen berry pricing posted on the site, a first that I know of (if there are others out there, let me know, please) plus a newsletter, which last week featured the 'panic' surrounding the raspberry shortage and this week talks about the frozen California strawberry price being set.

Crop Development

Effects of the cold weekend: The northwest berry crops, in general, made it through the cold spell this past week in good shape. I've heard indirectly that some fields on the east side of Washington suffered cold damage but don't know any of the details. It was a close call. Stay alert; we're not out of the woods on potential freeze damage yet this year.

Blueberries:

- **Mt. Vernon, Washington:** Most are still in early pink stage. Only some of the early selections in variety trials like O'Neal and Hannah's Choice seem foolhardy enough to have appreciable blossoms out.
- **Lynden, Washington:** Blossom clusters are separating.
- **Salem area, Oregon:** Duke and Brigitta are just beginning to bloom, around 2%. Some fields have bees in them. With a warm weekend coming up, they could make a jump into the 10-15% range quickly.
- **Hillsboro area, Oregon:** Duke are around 5%. Brigitta are close to that.

Caneberries and Strawberries: Development continues to be around two weeks behind last year. No cold damage reported this past week.

New Northwest Cultivar Publications Available:

Bernadine Strik (OSU horticulturist) and **Chad Finn** (USDA plant breeder) have produced 4 new, very useful, OSU Extension publications for commercial growers:

- Blueberry Cultivars for Oregon, EC 1308;
- Raspberry Cultivars for Oregon, EC 1310;
- Blackberry Cultivars for Oregon, EC 1617
- Strawberry Cultivars for Oregon, EC 1618.

[Click here](#) to download any or all for free.

Industry News (Go to www.nwipm.info for more industry information links.)

- **Late Freeze Hurts Crops Across Eastern Washington:** [Click here](#) for a *Tri-City Herald* article.
- **Serious Crop Damage Reported After Mid-April Freeze:** [Click here](#) for a *Yakima Herald* article.
- **Goose Kill in Oregon linked to Zinc Phosphide use:** [Click here](#) for the article. Remember to use all precautions in using this bait. Too many birds, dogs and other animals are inadvertently killed by it every year and yet it's a very critical vole management tool that we need to keep available. Use it only within the legal rules. In blueberries, zinc phosphide bait cannot be used after leaf emergence has started in the spring.

Freezing & Cold Management information and Resources

- **Michigan State Resource Page:** [Click here](#). This page has a lot of useful links, from recognizing frost damage to management options and critical damage temperatures for various developmental stages.

From Dr. Bernadine Strik, OSU Berry Crops Horticulturist:

- **Strawberry Cold Susceptibility:** “The critical temperature for open flowers is about 30F, closed flower (“popcorn stage”) about 28F, very tight clusters near crown, about 22F. The temperature of all flowers in a field is not the same. Flowers under leaves may not be as cold as others, and those near the soil generally will be warmer than those higher on the plant. On a clear night, the temperature of a strawberry flower can be lower than the surrounding air. Also, cultivars differ in cold tolerance. Some of these differences are genetic, some are physical (flowers under leaf canopy are in warmer location than those held up above leaves).”
- **Using Irrigation for Mitigating Freeze Damage:** “... irrigating on a cold (below freezing), windy (> 10 mph) night might increase damage, because the heat lost to evaporation can be greater than the heat released from freezing. The lower the dew point, the sooner you should start irrigating. If irrigating, remember you can stop when ice starts to melt (monitor to make sure it doesn’t start freezing again). You do not need to wait until all the ice melts.”

New Meeting Information

- **May 17 —Oregon Blueberry Growers Association Annual Meeting** ~ Ryan Brown’s farm (N2K) in Hillsboro. 1 pm. Burgers, socializing and exchanging information, 3 pm Business meeting. Directions to the farm will be coming soon. Call Ryan for information 1-503-739-6002 or [email](#) him.
- **May 28-29—Farm Safety: Farm-to-Table Conference** ~ Washington State University & University of Idaho, University Inn Best Western, Pullman, WA. [Click here](#) for further information and registration.

New Pest Information

BC Blueberry Council’s IPM Newsletter for April 17: [Click Here](#)

Insects

- **[Strawberry Crown Moth](#), southern strawberries:** Larvae are now being found in the crowns of strawberry plants in some SW Washington fields.
- **Root Weevils, southern strawberries:** Larvae of [Black Vine](#), [Rough Strawberry](#), [Strawberry](#) root weevils are now being recovered from some strawberry fields. In one field adults of another species are also being found. Dr Tanigoshi, WSU small fruit entomologist, has tentatively identified them as Raucous root weevil (*Otiorhynchus raucous*).

Diseases

- **[Raspberry Bushy Dwarf virus](#), Marionberries:** The yellow leaf symptom of this virus in Marionberries is just beginning to be seen.
- **[Tomato Ringspot virus](#), southern raspberries:** The typical light green chevron pattern of this virus is also beginning to be picked up on new growth.
- **[Shock virus](#), southern blueberries:** The collapse of newly emerging buds, both vegetative and floral, caused by Shock virus is now being seen in many varieties in the south.
- **[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, deformed berries. A distinctive red leaf pattern is also diagnostic of the disease. Phosphite applications in the spring are recommended to prevent outbreaks.

On-going Pest Information

Insects

- **[Insect Alert: Winter moth/ Bruce span worm](#), blueberries:** Winter moth/ Span worm larvae have been reported in fields in all regions.
- **[Clay colored weevil](#), northern raspberries.**
- **[Aphids](#), blueberries.**
- **[Redberry mites](#), blackberries.**

Diseases

- **[Disease Alert: Pseudomonas \(Bacterial Blight\)](#), blueberries:** Environmental conditions are prime in many areas for bacterial blight damage.
- **[Disease Alert: Mummyberry](#), blueberries:** Protective fungicides and/or other measures to control this disease will be needed over the next several weeks in fields where it is present.
- **[Phragmidium rust](#), Evergreen blackberries.**
- **[Phytophthora Root Rot](#), raspberries:** There’s still time to use a fungicide drench in raspberries.
- **[Purple Blotch](#), blackberries:** Check for cane lesions that are easy to see right now.
- **[Yellow rust](#), raspberries:** The transition from the overwintering, black spore stage (teliospores) to the yellow, slightly raised blister-like spots on new leaves (spermogonia) is now just beginning to be seen in Oregon fields.

Cropwork

All crops

- Weed control.

Blueberries

- Apply fertilizer.
- Can apply mummyberry control materials and/or take other mummyberry management actions.
- Can apply bacterial blight management materials (e.g. copper, **Serenade**).
- Scout for span worms/winter moth and treat as needed.
- Apply pre-bloom aphid control as needed.
- Scout for virus symptoms/send in sample for testing to confirm.
- Make preparations to bring in bees around 10% bloom.
- Plan to apply fungicide for fruit mold control at 10% bloom.

Blackberries

- Apply fertilizer.
- Scout for purple blotch lesions.
- Burn back primocanes as needed.
- Can apply phosphite material for Downey mildew prevention.
- Scout for virus symptoms/send in sample for testing to confirm.

Evergreen Blackberries

- Delayed dormant spray of lime/sulfur or elemental sulfur for blackberry rust and redberry mites.

Raspberries

- Apply fertilizer as needed.
- Can apply phosphite material for root rot control.
- Can burn back primocanes as needed.
- Scout for virus symptoms/send in sample for testing to confirm.

Strawberries

- As plants start growing, check weak areas for root weevil larvae, strawberry crown borers and/or root disease problems.
- Till row centers.
- Scout for virus symptoms/send in sample for testing to confirm.
- Can apply phosphite material for root rot control.