

May 16, 2007

Small Fruit Cold Storage Reports
Weather Forecast by Rufus La Lone

<u>Photo of the Week</u>: Azalea Bark Scale is now very apparent in some southern blueberry fields. Look for soft white spots that contain red egg masses and/or crawlers when scraped open.

Degree Day Information: We're running ahead of last year in degree-day units. **Degree Day information** is available on <u>our nwipm.info site</u>. In cooperation with Dr. Len Coop at Oregon State, we've put together a chart of degree day information that is **updated daily** at 8 AM for a number of sites throughout the Northwest small fruit growing region. This information can be used to **compare crop and insect development stages to previous years**, predict harvest dates and more accurately time pest control applications. Within this chart are links to more in-depth weather and pest information. **Click here** to go to the NWIPM home page and then click on the **degree-day link**.

Crop Reports:

- Oregon blackberries: Marionberries are right around 10%. Irrigation is starting in many fields. Silvans, Kotatas and Black Diamond are all well along in bloom. Black Pearl is just beginning.
- Oregon blueberries: Bluecrop, Duke, Brigitta, Berkeley and Rubel are all between late petal fall and early green fruit stages. Elliotts are at full bloom. So far the crop has good potential yields and quality.
- Oregon/SW Washington strawberries: The first Honeoye variety fruit is ripening. The bloom is moving very fast now
 with the hot weather the last few days. Into the third fungicide application on many fields.
- Oregon/Southwest Washington raspberries: The bees are in most Oregon fields and will be coming into the latest to bloom SW Washington fields this week. Younger and healthier fields are looking very good
- Whatcom County Blueberries: Duke and Bluecrop are in full bloom.
- Whatcom County Raspberries: Raspberry pre-bloom insecticide applications for fruitworm are starting. Getting set to bring in bees.
- Whatcom County Strawberries: Strawberry fungicides starting now at around 10% bloom. Frost the last few nights might have damaged some of the early blooms.
- British Columbia Blueberries: Duke, Bluecrop, Bluejay, Brigitta are all nearing full bloom. Elliotts are around 10%.

B.C. Flood Risk: Growers in the Fraser River Valley and Pemberton area in British Columbia were notified last week that they are under an increased risk of flooding due to a very large snow pack in the mountains. The Ministry of Agriculture and Lands has set up an emergency center in Abbotsford. The center's number is 1-888-221-7141.

<u>Damage in Oregon Marionberry Fields</u>: Yesterday, a group of industry fieldmen along with OSU berry extension agent, Diane Kaufman and OSU small fruit horticulturalist, Bernadine Strik, visited a representative number of Marionberry fields. There was a consensus that, while there is some cold damage, there is also a lot of cane breakage and bud damage caused by training too late (March) and rough cane handling in EY trained fields.

<u>Blueberry Organic Production Manager Opening</u>: A farming operation in Canby, Oregon is looking for a manager for their organic and biofertility programs. <u>Click here</u> for details and contact information.

New Pest Information

<u>Insects</u>

- Weevils, strawberries, raspberries, blueberries. In SW Washington and the Willamette Valley, black vine and strawberry weevil adults are being recovered in various fields of all three crops. In addition rough strawberry adults are also starting to be found in SW Washington strawberry fields. For more weevil information, click on these links: rough strawberry root weevil, black vine root weevils, strawberry root weevils.
- <u>Mites</u>, **strawberries**. Mite levels continue to rise in some southern strawberry fields. With the recent surge in warm weather, they have increased quickly. A few fields have required miticide applications. Predator mite levels are also

increasing in most fields and should be monitored to assess their potential to control mites without the need for a miticide application.

- <u>Aphids/Scorch Virus</u>: **blueberries.** In British Columbia, aphids are now being recovered even in some fields that had a pre bloom application of an insecticide. Aphid populations in southern area fields remains very low.
- Orange Tortrix leafrollers, southern caneberries. While adult pheromone trap counts continue to climb, virtually no leafroller larvae are present in fields at this time. Control applications are most effective when timed to actual or predicted high larval populations and not necessarily high pheromone trap counts.
- <u>Lady Beetles/generalist predators</u>: The last week has seen a big jump in the numbers of lady beetles, minute pirate bugs, spiders and other generalist 'good guys' being found in all crops in the south.
- <u>Azalea Bark Scale</u>, <u>blueberries</u>. This scale's telltale bright white egg sacs on the lower branches of infested plants
 are becoming very apparent in some southern blueberry fields. <u>Click here for information on azalea bark scale</u> and
 other scale species.
- <u>Spittlebugs</u>, **strawberries**. Populations are increasing and getting pretty high in some southern strawberries. They don't cause any direct economic injury but, if present in high numbers during harvest, can deter pickers.
- <u>Strawberry Crown Moth</u>, <u>southern strawberries</u> and <u>caneberries</u>: It's a good idea to get out the pheromone traps for crown moth within the next couple of weeks. Control measures can be very effective but need to be closely timed to adult emergence as determined by trap counts. Emergence usually starts in June.

Diseases

- <u>Scorch Virus</u>, <u>British Columbia blueberries</u>. Now is the time to walk your fields and look for virus symptoms.
 Contact <u>Sonja Ring</u>, Research Coordinator for the B.C. Blueberry Council at 604-613-2133 for details of the Ministry of Ag free testing.
- <u>Mummyberry</u>, **blueberries**. We're now seeing symptoms of the secondary infection phase of this disease--the collapse of infected vegetative laterals throughout the region in infected plants.
- Alternaria Fruit Rot, southern blueberries: As blueberry bloom starts to finish in Oregon and SW Washington, 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 can become watery in storage.
- Anthracnose Ripe Rot, southern blueberries: If you've had problems with anthracnose, prevention of a
 reoccurrence needs to begin 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.

Ongoing Pest Information

(Click on blue, underlined pest name to link to further scouting information, photos, and control options)

Insects

- Raspberry Beetle: northern raspberries.
- Winter Moth: (& span worm), Obliquebanded leafrollers, northern blueberries.
- Clay Colored weevil: northern raspberries & blueberries.
- Blueberry Gall Midge: blueberries.

Diseases

- Cane and Leaf Rust, blackberries.
- Shock virus, blueberries.
- <u>Unidentified virus-like symptoms</u>, **blueberries**: If growers in any growing region observe virus-like symptoms such as blossoms and/or vegetative laterals collapsing and aren't sure what's causing them:
 - In **Washington and Oregon**, contact <u>Bob Martin</u> (USDA small fruit virologist) (541) 738-4041 for free testing. In **British Columbia**, contact <u>Sonja Ring</u> at 604-613-2133 for details of the Ministry of Ag free testing.
- · Pseudomonas (bacterial blight), blueberries.
- Blackberry (Phragmidium) Rust: Evergreen blackberries.
- Yellow Rust, raspberries.
- Tomato Ringspot Virus, southern raspberries.

Cropwork:

All Caneberries: 1) (northern areas) Scout for clay colored weevil. 2) Burn back primocanes. 3) Can apply phosphite materials for disease control. 4) Bring in bees around 10% bloom. 5) Apply fungicides for fruit mold beginning at 10% bloom.6) Can apply fertilizer.

Evergreen/Chester Blackberries: Can apply sulfur for redberry mite control.

Blueberries: 1) Can apply fertilizer. 2) Scout for mummyberry symptoms--control as needed. 3) Scout for virus symptoms/send in sample for testing to confirm. 4) Apply fungicides for fruit molds beginning at 10% bloom. 8) Scout for weevil notching on lower leaves. 4) Scout for scale (see insect section above). 5) After petal fall, can treat for alternaria and/or anthracnose fruit rot.

Strawberries: 1) Fungicide applications to prevent fruit mold starting at 10% bloom. 2) Scout weak areas for root weevil larvae, strawberry crown borers or root disease problems. 3) Scout for virus symptoms/send in sample for testing to confirm. 4) Scout for weevil notching leaves. 5) Scout for aphids. 6) Scout for two-spotted mites and cyclamen mites. 7) (southern growing areas) Plan to put out pheromone traps for strawberry crown moth within the next couple of weeks.

<u>Some Upcoming Small Fruit Events</u> (Click here for a more complete calendar)

June 6 —WSU Strawberry Field Day \sim 3:00-5:00 pm at the WSU Puyallup Farm 5. For more information contact Pat Moore, phone 253-445-4525 or <u>email.</u>

June 11-12 —2007 Berry Health Benefits Symposium ~ Oregon State University, Corvallis, OR. Click here for details.

June 13 —OSU Strawberry Open House ~ starting at 2:00 pm at the North Willamette Research and Extension station, 15210 NE Miley Road, Aurora, OR. Call (503) 678-1264 extension 0 for more information.