Cranberry Watch

This is the time of year when concerns of girdler rear their ugly head. If you suspect that cranberry girdler is causing vine damage, peel back your vines and dig through the duff layer and the top few inches of soil to search for the larvae. If you have previously seen feeding damage in your bed, but you have not been able to find any larvae, it is possible that black vine weevil larvae caused the damage before pupating in the spring, or the damage was caused in the previous year by girdler larvae. Young girdler larvae may also be hard to find due to their small size. Monitoring is best done via pheromone traps.

There are multiple control options for girdler. Cultural controls include:

- Sanding—½” to ¾” of sand reduces girdler numbers by depriving larvae of a food source; namely cranberry roots in the duff layer. Sanding also has the added benefit of helping cranberry vines re-root and rejuvenating the bed.
- Flooding—a 1 to 2 day flood in late August after egg hatch will control small larvae. However, flooding for more than 2 days in summer may cause vine injury. Flooding may also cause fruit losses.
- Weed management—girdlers preferred food sources are grasses. To help control the number of girdler within a bed, control weeds. If beds are especially weedy, consider monitoring for girdler near weeds—especially grasses and grass-like weeds. The concentration of girdler may be greater in these areas.

Chemical and biological control options include:

- Diazinon 14G—application of Diazinon should be made at 2 to 3 weeks after peak flight. One application at 3 lb ai/acre is allowed per season. Diazinon 14G is a restricted use pesticide—which means that it can only be purchased by certified pesticide applicators and used only by certified applicators or persons directly under their supervision. Diazinon 14G has a 5 day REI and a 7 day PHI. It is important that the product is washed into the duff layer for best control. A copy of the Oregon SLN label may be found on the Coos County Extension web-site.
- Parasitic nematodes—application of nematodes should take place when girdler larvae are present in summer. The best time to make the nematode application is 2 to 4 weeks after peak girdler flight. Recommendations state that 2 to 3 billion nematodes per acre should be used. If nematodes are being applied as a spot treatment, apply the nematodes 20 feet out from the infestation area. The most commonly available form of parasitic nematode for girdler control is *Steinernema carpocapsae*. Becker Underwood sells these nematodes under the ‘Nematac C’ label. Other companies may also sell this particular species.

Becker Underwood has researched the compatibility of tank-mixing certain chemicals and nematodes. Nematodes should not be tank mixed with Aliette. While neither chlorothalonil (Bravo, Equus, etc.) nor Diazinon 14G has been tested, the general recommendation is to have at least a 7 day spray interval between these chemicals and nematode application.
Plant Tissue Testing

It’s getting near to that time of year again when plant tissue testing goes on. In order to determine the overall health of your plants, and the effects of a fertilizer regime, leaf analysis needs to happen.

Oregon can make fertilizer recommendations based on years of leaf analysis data on small fruits (cranberries, blueberries, grapes, blackberries, and raspberries), and tree fruits (apples, pears, cherries, peaches, plums, filberts and walnuts). However, in order to make recommendations, leaf samples need to be collected at the correct times. This timing is based on dates when plant nutrients are not changing rapidly—are at a constant level for some period of time. Timing and selection of leaves is listed below for important crops in our area:

Cranberries: Collect samples from mid-August to mid-September. Clip current season’s growth from uprights. Select 20 tips from 9 or 10 locations on the bed for a total of 180-200 tips per bed.

Blueberries: Collect samples from July 21 to August 10. Select the newest, fully expanded leaves, 10 leaves per plant from shoots randomly selected from all sides of the plant. Leaves should be free of diseases or damage and should include the stem portion (petiole). Total sample size should be approximately 50 leaves. Generally, it is best to take samples from a single variety.

Grapes: Collect samples from July 21 to August 10. Grape samples are based on the leaf petiole—not the leaf. Take samples from the middle of the current season’s terminal shoots.

It is best to ship your samples to the analysis lab as soon as it is collected, however, if you need to wait to send samples, allow them to air dry so that they will not mold or spoil.

A list of available laboratories is available from the Coos County Extension office, or on the web at http://extension.oregonstate.edu/catalog/html/em/em8677/

The Central Analytical Laboratory (CAL) at Oregon State University also analyzes plant tissue for $40 per sample. Tissue sample bags and instructions from CAL are available at both the Coos County and Curry County Extension Office.

Cranberry Farm Science Review

August 2, 2007, is the date for this year’s Cranberry Farm Science Review. This year we will be departing from the Bandon High School parking lot at 8:10 am, sharp. The first portion of the day will cover bed renovations, while the second portion of the event will cover pest and disease identification and management. We will return to Bandon High School by 12:15 pm. We will likely be receiving 1 pesticide recertification credit for the event.

We would greatly appreciate it if everyone rides the buses. I know that being on the buses is not the ideal way to travel, but our time on the buses will be short—and riding the buses will give you a chance to talk to the presenters.

The complete agenda is attached to page 4 of this newsletter.

If you have any questions regarding the Field Day, please contact Linda White at the Coos County Extension Office.

Vineyard Ventures Workshop

The Vineyard Ventures Workshop is scheduled for Saturday, August 18, 2007 from 9 am—4 pm in the Douglas County Extension Office, 1134 SE Douglas, Roseburg, OR.

Topics will include:
- Site selection
- Variety selection
- Trellis/training systems
- Understanding vine physiology
- General vineyard maintenance: pruning through harvest.
- Basic winemaking

More information will be available soon.
Blueberry Field Day

The annual Blueberry Field Day will take place on July 6, 2007 from 1 pm—5 pm at the North Willamette Research and Extension Center. Topics include pest and virus testing updates, irrigation scheduling, and breeding work. There will also be a session covering current organic production research. A complete agenda is available on page 5 of this newsletter.

Botrytis Bunch Rot in Grapes

Bunch rot (Botrytis cinerea) is a fungal disease that can infect grapes. The fungus overwinters, and oversummers, on old cluster stems, canes and on mummified fruit. Spores are spread by wind. Wet weather favors the infection and disease development, especially near harvest or when the canopy cover becomes dense. Bunch rot can spread quickly between berries in ripening bunches, moving rapidly in berries that are split or wounded.

Botrytis will infect berries from temperatures ranging from 53 to 86ºF. With as short as 4 hours of fruit wetness. As the hours of berry wetness increases, the berry infection number rises. Tightly bunching or compact clusters have a higher risk of becoming infected by bunch rot.

Symptoms of Botrytis appear in young shoots and leaves as brown, water-soaked areas. These areas will girdle the shoot, causing first wilt, and then dieback. Infected berries appear in late summer and fall on maturing fruit. The fruit develops brown spots and the skin may slip off easily when it is rubbed. Tufts of gray fungal growth then appears on the surface of the berry, often beginning first in the center of the bunch.

There are a number of cultural controls for bunch rot. These include:

- Preventing excess vine vigor through proper rootstock selection and fertilization.
- Use an appropriate trellising system which will allow increased wind flow and sun exposure.
- Thin leaves next to clusters at shatter. If leaves are removed prior to shatter, fruit set and yield may be reduced. If leaves are removed latter than shatter, botrytis may not be effectively controlled. To avoid fruit sunburn, remove leaves on the east or north side of the bunch. This will also help in spray penetration and coverage.

For chemical control, begin fungicide applications at the end of bloom or the beginning of fruit set, just before berry touch, the start of veraison, and 3 weeks before harvest if rain is expected. Thorough coverage is vitally important for good control.

There are multiple chemical control options for bunch rot, but no one fungicide should be used exclusively, in order to prevent developing resistant fungi. Suggested spray programs may be attained in the 2005 Pest Management Guide for Wine Grapes in Oregon. The web-site address is: http://extension.oregonstate.edu/catalog/html/em/em8413-e/

Chemical control measures for Oregon may also be accessed within the 2007 Pacific Northwest Plant Disease Management Handbook, which may be found by contacting your local Extension Horticulture agent or Extension office.

Extension Citizen Advisory Network

OSU Extension is still looking for a new Coos county member to sit on the Extension Citizen Advisory Network. Meetings are held approximately twice a year in Corvallis or Salem. Expenses incurred by the citizen to attend the meeting are paid. This is the perfect opportunity to get a free trip to Corvallis if you have a son or daughter attending the University. If you are interested, or would like more information on the Network, please contact the Coos Co. office.
Agenda

8:00 am  Begin loading buses at Bandon High School – Bandon, Oregon

8:10 am  Depart Bandon High School

8:15 am - Arrive at CranFlora Bogs. General welcome and introductions

8:30 am  Research Updates

9:00 am  Linda White, Coos/Curry County Extension, OSU

9:00 am  Cranberry bed renovations:

10:25 am Renovation methods and the effects on soil properties, pests, and production. A round table discussion

Delmar and Daren Robison, CranFlora Bogs
Bernadine Strik, Department of Horticulture, OSU
John Hart, Department of Crop and Soil Science, OSU
Glenn Fisher, OSU

10:25 am  Break

10:45 am

10:45 am  Travel to Barry Winters’ Farm

10:50 am

11:00 am  Pest and Disease Monitoring and Management:

11:50 am  Sweep net demonstration and timing. Monitoring strategies for insect larval stage. Learn to recognize common pest and disease damage. Common weed identification and control methods.

Glenn Fisher, Department of Crop and Soil Science, OSU
Amy Dreves, Department of Crop and Soil Science OSU
Linda White, Coos/Curry County Extension, OSU

11:50 am  Load buses and depart Winters’ Farm for Bandon High School
Blueberry Field Day  
July 6, 2007

North Willamette Research & Extension Center, Oregon State University

You are invited to attend Blueberry Field Day at the NWREC on July 6. The program has been designed to highlight our research and extended education programs. I encourage you to come out and see our trials, learn more about on-going projects, and taste some cultivars and advanced selections. The day starts at 1:00pm -- see the agenda for more information.

Note: We will ask all those attending from outside of Oregon to contribute $10 to cover costs. Thank you!

Sincerely,

Bernadine C. Strik, Ph.D.
Extension Berry Crops Professor, Horticulture
Berry Crops Research Leader, NWREC

AGENDA (we will start on time!)

1:00 pm  Meet at the new organic blueberry research plot (SW section of farm): welcome/introductions – B. Strik

1:10 pm  Brief overviews of on-going projects:
     The 9th International Vaccinium Symposium, Oregon, July 2008 – B. Strik & C. Finn (5 min)
     Use of grow tubes in the establishment year (grower trial) – B. Strik & G. Buller (10 min)
     Can edible coatings improve shelf-life of blueberry? – Y. Zhao (5 min)
     Research on organic fertilizers in blueberry – W. Yang (10 min)
     Grafting blueberries to improve machine harvest efficiency – W. Yang (5 min)

1:45 pm  Establishment of an organic blueberry field and methods of fertilization and weed management
     Dr. Bernadine Strik, Berry Research Leader, NWREC & Handell Larco, M.S. student, Horticulture

2:05 pm  Walk/drive to cultivar evaluation block

2:15 pm  Pesticide update and pest management
     Joe DeFrancesco, Assistant Extension Professor, OSU

2:30 pm  I. Blueberry viruses. II. A national clonal plant program. III. Update on USDA funding
     Dr. Bob Martin, Virologist and Research Leader, HCRL, USDA-ARS, Corvallis

2:45 pm  Overview of Blueberry Gall Midge – an update of recent research
     Dr. Wei Yang and Dr. Lynell Tanigoshi, WSU /NWREC

3:00 pm  REFRESHMENTS: drinks, ice-cream and berries
     Brian Yorgey, Dept. Food Sci. & Tech.; Connie Pace, Ted Mackey

3:30 pm  Effects of irrigation method and the amount of water application on yield and fruit quality
     Dr. David Bryla, Research Horticulturist, USDA-ARS, Corvallis

3:45 pm  Scheduling blueberry irrigation
     Dr. Thomas Walters, WSU-Mt. Vernon, NWREC

4:00 pm  Blueberry breeding at the University of Arkansas and other southern breeding programs
     Dr. John Clark, Professor, University of Arkansas

4:20 pm  What blueberry cultivars/selections look good? Walk through OSU/ARS cooperative breeding test block
     Dr. Chad Finn, USDA-ARS geneticist, HCRL, Corvallis and Connie Pace, NWREC

ADJOURN
Upcoming Events and Workshops

July 10  
Blueberry Field Day  
1 pm-5 pm  
North Willamette Research and Extension Center, Aurora, OR

August 2  
Cranberry Farm Science Review  
8:30 am-12 pm  
Bandon, OR

August 18  
Vineyard Ventures Workshop  
9 am-4 pm  
Douglas Co. Extension Office  
1134 SE Douglas Ave., Roseburg, OR

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