Fruit ICM News

Volume 6, No. 24
July 25, 2002

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Calendar

July 30: OSU 2002 Berry Tour, Champaign County. Stop #1, 9:00-11:30 a.m. at Rothschild's Farm, 3143 East U.S. Rte. 36, Urbana. Tour fields of raspberries, vegetables, flowers, and herbs; see the manufacturing facility where they produce raspberry preserves and gourmet creations; visit the sales area; and sip cappuccino in their Market Cafe. An optional lunch is available at $10.95 per person (turkey, ham, or chicken salad). Stop #2, 1:00-3:00 p.m. at M & M Berry Farm, 345 North Mutual Union Rd., Cable, OH. Program and tour offer participants ideas for alternatives for improving the sustainability of their farming operations. For a brochure e-mailed to you, please call 1-800-297-2072 or e-mail Melissa Fitzpatrick at fitzpatrick.73@osu.edu. Registration deadline was July 20th. For more information contact Sandy Kuhn, Berry Coordinator, 740-289-2807.

August 7: Pumpkin Field Day, Western Branch Research Station in South Charleston, 4:00-6:00 p.m. OSU researchers Mac Riedel, Bob Precheur, Celeste Welty, Jim Jasinski, and Andy Wyenandt will talk about their work at the station and help answer any questions you might have. The field day will be informal, but will cover many topics, including the use of Sandea and Strategy herbicides in pumpkins, fungicide and variety plot work, giant pumpkin production, the use of Admire, perimeter trap crops, Kairomone traps to reduce cucumber beetles, and cover crops used in pumpkin production. There are nearly 8 acres of pumpkin research at the farm. This is one of the greatest concentrations of pumpkin research in the state; don't miss your chance to see it all!
**Directions:** The Western Branch is located on the south side of S. R. 41, between I-70 and the town of South Charleston. For more details, please contact Jim Jasinski, 937-454-5002 or email: jasinski.4@osu.edu.

**August 15-17: North American Strawberry Growers Association Summer Tour**, southern Michigan and northern Indiana. Participants will tour a variety of sites, including the latest technology in fruit production, a local fair, and Amish produce markets. For more information, contact Erin Griebe at 810-229-9407, or NASGAHQ@aol.com.

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**Raspberry Problems and Answers**


**This Week's Question: What causes white druplet disorder of raspberries?**

Extreme heat and solar radiation can cause druplets on red raspberries to be white, instead of red. Except for the absence of color, the druplets are otherwise normal. They may occur in groups, or individually, over the fruit. An insect or disease does not cause the problem, and although they look unusual, affected berries are safe to eat. Certain varieties are more susceptible than others. Titan, Comet, Heritage, Willamette, and Chilcotin are among those often affected.

Berries are increasingly susceptible to injury as they turn from green to white to pink. Research suggests that reducing UV radiation alone, without reducing temperature, is likely to reduce injury. When the problem occurs in the greenhouse, applying a whitewash to the glass has helped. Perhaps shading raspberry plants to reduce UV radiation as the berries ripen would reduce the problem in the field.

In addition, tarnished plant bug damage will appear as white druplets. Malformed berries or failed druplets result from tarnished plant bugs sucking juices from developing fruits. Whitening of the damaged druplet results from plant bug feeding on mature fruit. Injured fruit tend to crumble easily and are generally unmarketable. Other plant bug species and stink bugs can cause similar damage. *Midwest Small Fruit Pest Management Handbook*, [http://ohioline.osu.edu/b861/b861_34.html](http://ohioline.osu.edu/b861/b861_34.html)

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**Farm Market License Exemption**

*Source: John Wargowsky, Ohio Farm Bureau Director of Labor Services*

Farm markets, farmers' markets, and farm product auctions may be eligible to register with ODA for exemption from Retail Food Establishment License. Sub. S.B. 136 was passed by the Ohio General Assembly and signed by Governor Taft in November 2001. This law will fix numerous negative impacts of previously passed legislation (HB 223) for farmers; beekeepers, maple syrup and sorghum processors; direct agricultural marketers, and those involved in cottage food production activities. As of this date, we are working with the Ohio Department of Agriculture (ODA) to develop rules that will become part of the Ohio Administrative Code.
The exemptions for farm markets, farm product auctions, and farmers' markets are based upon the foods being offered for sale. A synopsis of these specific exemptions are detailed below:

**A person at a farmer's market that offers for sale only one or more of the following:**

Commercially prepackaged food that is not potentially hazardous, on the condition that the food is contained in displays, the total space of which equals less than one hundred cubic feet on the premises where the person conducts business at the farmers market; fresh unprocessed fruits or vegetables; maple syrup, sorghum, or honey; products of a cottage food production operation.

**A farm product auction, on the condition that only one or more of the following are offered for sale:**

Eggs from an exempt farm (500 or less hens); poultry from an exempt farm (1,000 or less chickens/year); non-amenable meats (rabbit, bison, etc.); fresh unprocessed fruits or vegetables; maple syrup, sorghum, or honey; products of a cottage food production operation.

**A farm market that offers for sale only one or more of the following:**

Commercially prepackaged food that is not potentially hazardous, on the condition that the food is contained in displays, the total space of which equals less than one hundred cubic feet on the premises where the person conducts business at the farm market; fresh unprocessed fruits or vegetables; maple syrup, sorghum, or honey; products of a cottage food production operation; cider and other juices manufactured on site at the farm market; eggs on the condition that the person offering to sell them annually maintains five hundred or fewer birds; poultry on the condition that the person offering to sell them annually raises and slaughters one thousand or fewer chickens; non-amenable meats (rabbit, bison, etc.) on the condition that the person offering to sell the meat raises and slaughters the animals.

Please note that the above-mentioned farm markets, farmers' markets, and farm product auctions are exempt only if registered with the Ohio Department of Agriculture. The registered exempt facilities will be inspected by ODA. Farm markets, farmers’ markets, and farm product auctions that do not meet the requirements or exemption are to be licensed as Retail Food Establishments by the local health department. These registration forms are available at [http://www.ohiofruit.org](http://www.ohiofruit.org) or [http://www.ohiovegetables.org](http://www.ohiovegetables.org) by clicking on "Grower News" then "Legislative and Regulatory Issues." The organizer or person in charge of a farmers’ market or farm product auction is responsible to register with ODA. It is not necessary for each participant to register. The owner of a farm market is responsible to register with ODA.

Additional information regarding the new Mobile Retail Food Establishment License, Cottage Food Operations and Exemption Information for small producers of maple syrup, sorghum and honey may also be found at [http://www.ohiofruit.org](http://www.ohiofruit.org) or [http://www.ohiovegetables.org](http://www.ohiovegetables.org) by clicking on "Grower News" then "Legislative and Regulatory Issues" or by going to the Ohio Department of Agriculture website at [http://www.state.oh.us/agr/](http://www.state.oh.us/agr/) and following links for Food Safety. ODA's web site also includes details about juice/cider rules and the clarification that apple cider IS NOT a potentially hazardous food.

**New Small Fruit Fact Sheets from Mike Ellis**

*Source: [http://ohioline.osu.edu/lines/itsnew.html](http://ohioline.osu.edu/lines/itsnew.html), page down to New & Updated Horticulture Fact*
Sheets. Thanks to Nancy Taylor, OSU Dept. of Plant Pathology for the "heads-up".

Mike Ellis, OSU Plant Pathologist, has produced new fact sheets for the following small fruit diseases. Color photos make these a valuable addition to our horticultural resources.

- Phomopsis Cane and Leaf Spot of Grape
- Anthracnose of Grape
- Anthracnose of Strawberry
- Late Leaf Rust of Red Raspberries
- Phomopsis Leaf Blight and Fruit Rot of Strawberry

New Long Lead Weather Outlooks: On the Trail of El Nino

Source: Jeff Andresen, Agricultural Meteorology Geography, Michigan State University Fruit Advisory Team Alert, July 23, 2002

Warmer than normal sea surface temperatures along the equator in the Pacific Ocean are being termed as the initial stages of a "weak to moderate" intensity El Niño event. Even so, the link to weather patterns in the midwestern U.S. is typically very weak at this time of year, but is a possible factor in the off season.

New NOAA Climate Prediction Center (CPC) long lead outlooks continue to be vague for the next few months, followed by a more typical El Nino-influenced forecast for the upcoming winter season. The CPC has backed off of earlier forecasts favoring above normal precipitation during the middle and late summer. (Not surprising, given the distinct lack of rainfall across much of the state and the region since early June.) The new outlooks now call for the even odds "climatology" scenario of equal odds of below, near, and above normal temperatures and precipitation for Michigan for the 30-day August and 3-month seasonal outlooks through the September-November 2002 time frames.

The basic highlights of the outlooks for the remainder of the summer suggest warmer than normal conditions for large sections of the western U.S., wetter than normal conditions for parts of the central Rockies (very important considering the severe drought problems currently plaguing the region), and drier than normal conditions for sections of the mid-Atlantic and New England regions. Further ahead, a more typical El Niño pattern is forecast, with milder than normal winter and early spring (2003) temperatures across the northern U.S. including Michigan, drier than normal late winter conditions across the Ohio Valley and Pacific Northwest regions, and wetter than normal conditions along the Gulf Coast.


Ohio Drought Watch

Source: http://www.cpc.ncep.noaa.gov/products/analysis_monitoring/regional_monitoring/palmer.gif
The National Weather Service of NOAA now lists parts of Ohio as experiencing drought conditions as defined by the Long Term Palmer Index. Some areas of the state received measurable precipitation on July 23, but for the week ending July 20, the Northwest, North-central, and the Northeast Hills regions are experiencing moderate drought. Additional drought information is available at http://www.noaanews.noaa.gov/stories/s944.htm.

Pennsylvania Plum Pox Virus Surveillance Activities July 15 - July 19, 2002

Source: http://sharka.cas.psu.edu/pda_update_july19.htm

Field Activities:

Field survey crews have completed leaf collections in 1,243 commercial Prunus blocks, bringing the statewide survey to 80% of 1,556 commercial blocks orchard blocks surveyed. This represents over 5,000 acres and 90% of Pennsylvania's 476 growers. Counties with one or more blocks remaining to be surveyed include: Adams, Berks, Bradford, Dauphin, Juniata, Lackawanna, Lancaster, Lebanon, Lehigh, Susquehanna, Tioga, Wyoming, and York. Surveys are completed in the 38 other counties where susceptible host material is grown commercially. Crews will be working to complete the statewide survey by the end of this month.

Laboratory Activities:

The lab processed 7,240 field samples during this past week period. Cumulative number of field samples processed for this year is 45,465 including samples from commercial orchards, homeowner properties, retail nurseries, production nurseries, budwood source trees, sentinel trees, and miscellaneous samples. PPV has been detected in 3 new locations; 1 a homeowner property and the other 2 are commercial orchard blocks. The homeowner detection is within the quarantine area in Franklin Township, York county. The commercial orchard detections are 1 block in each of Monaghan and Conewago Townships, York County, outside of the quarantine area. USDA-APHIS has confirmed these latest detections as Strain-D of plum pox virus using both ELISA and PCR tests.

As reported previously, 1 sample tested positive from a commercial orchard block in the quarantine area of Cumberland County.

Regulatory Activities:

The PA quarantine will be amended to include Monaghan and Conewago Townships, York County, effective July 23, 2002. A new quarantine map will be posted to the PA Department of Agriculture web page at http://www.pda.state.pa.us/ or available via email from PDA's survey coordinator, noted below.

Treatment orders for removal and destruction of new 2002 detections are being delivered to the appropriate property owners covering 17 acres of infected trees and approximately 41 acres of commercial trees planted within 500m exposed buffer zones.

Homeowner (HO) Activities:
PDA & USDA homeowner survey personnel are currently working in Adams County: buffer zones of Latimore, Huntington, Menallen, and Tyrone Townships; in Cumberland County: Dickinson, South Middleton, and Southampton Townships; and in York County: Washington Township. Thus far 11,716 properties have been visited. Approximately 35% of the properties visited have Prunus which are being sampled.

**Ohio Plum Pox Virus Footnote:**

Dr. Curtis Young will again be sampling peach orchards to show the absence of plum pox virus (PPV) in Ohio. He appreciated the cooperation you extended to him last year and is looking forward to visiting again this season. As reported in the Ohio Fruit ICM News dated January 31, 2002, leaf samples from 10 stone fruit orchards in 7 Ohio counties were gathered. All 732 leaf samples tested negative (-) for plum pox virus. This year's sampling should yield the same results. Ohio Fruit ICM News July 25, 2002

**Pest Phenology**

<table>
<thead>
<tr>
<th>Coming Events</th>
<th>Degree Day Accum. Base 50F</th>
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</thead>
<tbody>
<tr>
<td>Codling moth 2nd flight peak</td>
<td>931-2212</td>
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<tr>
<td>San Jose scale 2nd flight peak</td>
<td>1271-1874</td>
</tr>
<tr>
<td>Obliquebanded leafroller 2nd flight begins</td>
<td>1412-2076</td>
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<tr>
<td>Oriental fruit moth 3rd flight begins</td>
<td>1448-2013</td>
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<tr>
<td>Spotted tentiform leafminer 3rd flight begins</td>
<td>1537-2123</td>
</tr>
<tr>
<td>Redbanded leafroller 3rd flight begins</td>
<td>1728-2231</td>
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</table>

Thanks to *Scaffolds Fruit Journal* (Art Agnello)

**Degree Day Accumulations for Ohio Sites July 24, 2002**

<table>
<thead>
<tr>
<th>Location</th>
<th>Degree Day Accumulations Base 50F</th>
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<tbody>
<tr>
<td></td>
<td>Actual</td>
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<tr>
<td>Akron-Canton</td>
<td>1557</td>
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<tr>
<td>Cincinnati</td>
<td>1952</td>
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<tr>
<td>Cleveland</td>
<td>1591</td>
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<tr>
<td>Columbus</td>
<td>1924</td>
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SkyBit® Sooty Blotch Prediction for North-Central Ohio

Observed:
July 1-24: active, but no infection

Predictions based on weather forecasts:
July 25: active, but no infection
July 26-Aug 3: possible infection & damage

SkyBit® Fire Blight Prediction for North-Central Ohio

Observed:
July 1-8, 11-12, 15-17, 21, 24: not active
July 9-10, 14, 18-19, 22-23: possible infection & damage
July 13, 20: active, but no infection

Predictions based on weather forecasts:
July 25-Aug 3: possible infection & damage

Fruit Observations & Trap Reports

<table>
<thead>
<tr>
<th>Location</th>
<th>Dayton Grape</th>
<th>Mansfield</th>
<th>Norwalk</th>
<th>Piketon</th>
<th>Toledo</th>
<th>Wooster</th>
<th>Youngstown</th>
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<td>1562</td>
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Site: Waterman Lab, Columbus  
Dr. Celeste Welty, OSU Extension Entomologist

**Apple:** 7/17 to 7/24/02
- RBLR: 18 (up from 5)
- STLM: 89 (down from 189)
- CM (mean of 3 traps): 21.0 (up from 12.3)
- TABM: 0 (down from 1)
- SJS: 29 (down from 36)
- VLR: 1 (up from 0)
- OBLR: 5 (down from 7)
- AM (sum of 3 traps): 11 (up from 5)

**Peach:** 7/17 to 7/24/02
- OFM: 31 (up from 17)
- LPTB: 5 (up from 1)
- PTB: 8 (down from 9)

**Control of 2nd Generation Codling Moth in North Central Ohio** - Using the MSU model as adapted by Art Agnello, Cornell Entomologist, control of the second generation codling moth should be timed 1260 degree days (base 50 F) after the first biofix date. That date was May 23 in northern Ohio. A control application made this last weekend should be effective in controlling egg hatch.

**Site: East District: Erie & Lorain Counties**  
Source: Jim Mutchler, IPM Scout

**Apple:** 7/16 to 7/23/02
- CM (mean of 3 traps): 6.1 (up from 1.5)
- STLM: 388 (up from 365)
- SJS: 245 (up from 33)
- AM (sum of 3 traps): 1.1 (up from 0.2)
- OFM: 1.0 (up from 0.5)
- RBLR: 4.1 (down from 8.4)
- ERM (infested leaves per 25 leaf sample): 2.4 (down from 2.9)
OBLR: 4.0 (up from 0.3)

**Peach:** 7/16 to 7/23/02
- OFM: 4.0 (up from 0.7)
- RBLR: 3.0 (down from 7.0)
- LPTB: 1.3 (down from 2.7)
- PTB: 6.7 (up from 2.7)

Beneficials present - native lady beetles, brown & green lacewings, orange maggots, predatory mites, multi-colored Asian lady beetle

**Site:** West District: Huron, Ottawa, Sandusky Co.
Source: Gene Horner, IPM Scout

**Apple:** 7/16 to 7/23/02
- CM (mean of 3 traps): 4.1 (up from 1.9)
- STLM: 33.0 (up from 17.2)
- SJS: 5.4 (up from 1.0)
- AM (sum of 3 traps): 0.8 (same as last week)
- OFM: 2.2 (down from 7.2)
- RBLR: 3.4 (down from 14.6)
- OBLR: 2.0 (up from 0)
- ERM (infested leaves per 25 leaf sample): 4.6 (up from 2.2)

**Peach:** 7/16 to 7/23/02
- OFM: 4.2 (down from 10.8)
- RBLR: 5.4 (down from 17.8)
- LPTB: 1.6 (down from 3.0)
- PTB: 2.8 (up from 1.5)

Beneficials present - lacewings, banded thrips

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