Fruit ICM News

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Calendar

July 8: Eighth Annual Horticulture Field Night, OSU Piketon Research Centers, 1864 Shyville Road, Piketon, OH. (East from Rte. 23 & 32 intersection, just off Rte. 32.) View more than 500 research & demonstration plots and 18 different fruit and vegetable projects from 5:00 pm to 9 pm. Ask the experts. No admission charge. Open to the public; supper for everyone. For more information contact Brad Bergefurd, Extension Agent, at 1-800-297-2072, or e-mail him at bergefurdl@osu.edu.

July 27-28: Ohio Berry Tour, Central Ohio. Learn more about growing & marketing berries. This drive yourself tour begins on Thursday at 2:30 pm at Rhoads Farm Market on SR 56 east of Circleville. Then head northwest to Circle S Farms located west of Grove City on London-Groveport Road. The tour offers dinner at Circle S Farm on Thursday evening, along with discussions with Dr. Dick Funt and Dr. Mike Ellis of OSU. Friday's tour begins at 9:00 AM at Schacht Farm Market on Shannon Road in Canal Winchester, and also includes stops at Doran's Farm Market on Babbitt Road outside of New Albany and Jacquemine Farms on Hyland-Croy Road near Plain City. Cost of the tour is $15 per person including dinner Thursday evening. For those not participating in the dinner meeting, the cost is $5 per person. Contact Berry Coordinator Sandy Kuhn at (800) 297-2027 or kuhn.37@osu.edu for a registration form (or print it from our website (above). No on-site registrations!

August 3: OVPGA & Ohio Fruit Growers Society Young Grower Tour, in northeast Ohio, 8:30 a.m. to 7:30 p.m. This bus tour provides a broad variety of fruit and vegetable operations that use different marketing strategies. Tour is designed for growers 40 years of age and younger, and others are welcome
if interested. Contact John Wargowsky at (614) 249-2424 or jwargows@ofbf.org for more information.

**Pesticide News**

*Source: Dr. Celeste Welty, OSU Extension Entomologist*

Pyramite registration has been expanded to include grapes and stone fruit (peaches, nectarines, cherries, plums, prunes, apricots, as well as nut trees). It has a re-entry interval of 12 hours and a pre-harvest interval of 7 days on grapes, peach, nectarine, plums, prunes, nuts, pears; 25 days on apples. For now, its use on cherries and apricots is restricted to post-harvest use (the "pre-harvest" interval is 300 days).

Pyramite 60WP has been registered since 1997 for use on apples and pears for mite and psylla control. Pyramite controls European red mite at a rate of 4.4 to 6.6 oz/A, controls grape leafhoppers and pear rust mite at 6.6 to 13.2 oz/A, and controls pear psylla and two-spotted spider mite at 8.8 to 13.2 oz/A.

**Honeyn crisp: the Good, the Bad, and the Ugly**

*Source: Doreen York, Healthy Fruit Volume 8, Number 14, University of Massachusetts*

During the annual International Dwarf Tree Association Summer Tour, a group of Honeyn crisp "experts" were convened in a grower's orchard next to a large planting of young Honeyn crisp. There has been a lot of hype about this new apple, so an attempt was made to be pretty blunt about its potential to make inroads into the market as well as be a profitable gem for growers. Included in the discussion were: David Bedford, University of Minnesota Honeyn crisp breeder; Chris Watkins, Cornell University post-harvest physiologist; Susan Brown, Cornell University fruit breeder; Paul Wooley of E.C. Marketing; and several growers from as far away as Minnesota, Wisconsin, and Michigan who have experience with Honeyn crisp.

After much discussion, it was unanimous that Honeyn crisp has the potential to do "Good" for growers in traditional McIntosh country. But, Susan Brown cautioned, it has some characteristics that are not so desirable -- she says the "Bad" and the "Ugly". In a nutshell, here is how Honeyn crisp stacks up in her eyes. (And the others were pretty much in agreement!)

**The Good:** Clearly, Honeyn crisp has excellent texture and flavor when picked at the right maturity. Both consumers and growers acclaim its "explosively crisp" eating quality, and mention it in the same breath as the highly desirable and good-eating Gala and Fuji. Plus it keeps remarkably well in "plain-Jane" air cold storage.

**The Bad:** Unfortunately, there has been a lot of variability observed in Honeyn crisp's fruit appearance and, in some cases, eating quality. For example, Honeyn crisp are supposed to be a blush-red apple, although they have been reported to be striped too. Sometimes Honeyn crisp fruit is washed-out in appearance, and usually these do not eat as well. This is more likely to happen when the tree is under stress with too heavy a crop load. Speaking of stress, it was advised to make sure Honeyn crisp grow rapidly during the early establishment years. Otherwise, once they slow down, they may not be inclined to grow vigorously again. (Honeyn crisp is inherently a weak grower -- does irrigation sound like a good
idea???)

**And the Ugly:** Here things get even worse, as Honeycrisp storage issues remain a serious bugaboo. In particular, they are susceptible to soft and ribbon scald and bitter pit. (Although at least one grower claims calcium sprays easily rectify the problem.) Also, the best storage environment and temperature regimen remains to be worked out. Fortunately, there is some active research addressing these serious storage problems.

All of the Honeycrisp experts agreed the apple deserves serious grower trial, but before going too gung-ho and planting large acreages, growers may want to wait until some of the "bad" and "ugly" characteristics of Honeycrisp are better understood and can be more easily managed.

**Ohio Weather Station Climatological Data**

*Source:* [http://mcc.sws.uiuc.edu/Summary/Ohio.html](http://mcc.sws.uiuc.edu/Summary/Ohio.html)

**Station Choices in Ohio**
- Akron-Canton Regional Airport
- Ashland
- Ashtabula
- Barnesville
- Bellefontaine
- Bowling Green Wastewater Treatment Plant
- Bucyrus Sewage Plant
- Cadiz
- Canfield
- Celina
- Centerburg
- Chardon
- Chilo Meldahl L&D
- Chippewa Lake
- Cincinnati Lunken Airport
- Circleville
- Cleveland-Hopkins Airport
- Columbus Valley Crossing
- Columbus Airport
- Coshocton Water Pollution Control Plant
- Coshocton Agricultural Research Station
- Danville
- Dayton MCD
- Dayton Airport
- Defiance
- Delaware
- Dorset
- Eaton
- Elyria
- Findlay Airport
- Findlay WPCC
Franklin
Fredericktown
Fremont Water Works
Gallipolis
Greenville Sewage Plant
Hillsboro
Hiram
Howtville
Irwin
Kenton
Lancaster
Lima WWTP
London
Mansfield Airport
Mansfield
Marietta WWTP
Marion
Marysville
McConnelsville
Millport
Mineral Ridge Water Works
Montpelier
Napoleon
Newark Water Works
New Lexington
New Philadelphia
Norwalk WWTP
Oberlin
Painesville
Pandora
Paulding
Philo
Portsmouth Sciotoville
Put-in-Bay
Ripley Experimental Farm
Sandusky
Steubenville
Tiffin
Toledo Express Airport
Toledo Blade
Upper Sandusky
Urbana WWTP
Van Wert
Warren
Washington Court House
Wauseon Water Plant
Waverly
Westerville
Wilmington
Wooster Experiment Station
Xenia
Each of these weather stations’ data banks contain monthly average temperatures and total precipitation. Also are dates of extreme temperature and precipitation events, some going back for more than 100 years. The degree day summaries can be used by fruit growers to establish biofixes when insect populations are monitored with pheromone traps. By choosing a site closest to you, you can more accurately determine expected accumulations of degree days.

For example, at the Norwalk site, we would expect an accumulation of 676 degree days (base 50) in the month of July. Historically, the average daily temperature will only range 1 degree change during July. If you divide the 676 degree days by 31 days, we can expect 21.8 accumulated degree days for any day during the month. How can we apply this knowledge to fruit farming? If we catch second generation codling moth, we know that control measures are best directed toward hatching eggs. Dr. Celeste Welty suggests the first spray at 250 degree days after the second generation’s sustained flight. In this example, it would be about 11 days later.

### Fruit Observations

<table>
<thead>
<tr>
<th>Insect Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM: Apple maggot</td>
</tr>
<tr>
<td>CM: Codling moth</td>
</tr>
<tr>
<td>DWB: Dogwood borer</td>
</tr>
<tr>
<td>LPTB: Lesser peachtree borer</td>
</tr>
<tr>
<td>OBLR: Oblique banded leafroller</td>
</tr>
<tr>
<td>OFM: Oriental fruit moth</td>
</tr>
<tr>
<td>PC: Plum curculio</td>
</tr>
<tr>
<td>PTB: Peachtree borer</td>
</tr>
<tr>
<td>RBLR: Red banded leafroller</td>
</tr>
<tr>
<td>SJS: San Jose scale</td>
</tr>
<tr>
<td>STLM: Spotted tentiform leafminer</td>
</tr>
<tr>
<td>TABM: Tufted apple bud moth</td>
</tr>
<tr>
<td>VLR: Variegated leafroller</td>
</tr>
</tbody>
</table>

### Site: Waterman Lab, Columbus (6/29-7/5)

**Source:** Dr. Celeste Welty, OSU Extension Entomologist  
*Traps used:* STLM=wing traps, SJS=Pherocom-V, Others=Multipler-1® traps

<table>
<thead>
<tr>
<th>Apple</th>
<th>Peach</th>
</tr>
</thead>
<tbody>
<tr>
<td>RBLR: 1 (down from 3)</td>
<td>OFM: 13 (up from 6)</td>
</tr>
<tr>
<td>STLM: 189 (up from 87)</td>
<td>LPTB: 0 (down from 1.5)</td>
</tr>
<tr>
<td>DWB: 1.5 (down from 2.5)</td>
<td>PTB: 7 (up from 4.5)</td>
</tr>
<tr>
<td>SJS: 0 (unchanged)</td>
<td></td>
</tr>
</tbody>
</table>
Site: East District; Erie & Lorain Counties
Source: Jim Mutchler, IPM Scout
Traps Used: STLM=wing traps, SJS=Pherocom-V, Others=Multipher® traps

Other pests: green apple aphid, Japanese beetle, fire blight, scab, white apple leafhopper

Beneficials at work: lacewing eggs, larvae, & adults, orange maggots, lady beetles, Stethorus punctum, banded thrips

Site: West District; Huron, Ottawa, & Sandusky
Source: Gene Horner, IPM Scout
Traps Used: STLM=wing traps, SJS=Pherocon-V, Others=Multipher® traps

Other pests: green apple aphid, lilac borer, potato leafhopper, Japanese beetle, green peach aphid

Beneficials at work: Lacewing eggs & adults, banded thrips, lady beetles

Northern Ohio Apple Scab Activity - SkyBit Product

SkyBit based on observations: July 3, 4; possible infection & damage
Based on Forecasts: July 9, 10; possible infection & damage

North Central Ohio Spectrum Technologies Orchard Monitors for Apple Scab
Northern Ohio Fire Blight Activity - SkyBit Product

SkyBit based observations: July 3, 4; possible infection and damage
Based on Forecasts: July 9-15; possible infection & damage

Northern Ohio Sooty Blotch - SkyBit Product

SkyBit based observations: July 4, 5; possible infection and damage
Based on Forecasts: July 6-15; possible infection & damage

Degree Day Accumulations for Selected Ohio Sites January 1, 2000 to date indicated

<table>
<thead>
<tr>
<th>Location</th>
<th>Actual DD Accumulations July 5, 2000</th>
<th>Forecasted Degree Day Accumulations July 12, 2000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Base 43° F</td>
<td>Base 50° F</td>
</tr>
<tr>
<td>Akron - Canton</td>
<td>1831</td>
<td>1126</td>
</tr>
<tr>
<td>Cincinnati</td>
<td>2262</td>
<td>1472</td>
</tr>
<tr>
<td>Cleveland</td>
<td>1835</td>
<td>1145</td>
</tr>
<tr>
<td>Columbus</td>
<td>2223</td>
<td>1448</td>
</tr>
<tr>
<td>Dayton</td>
<td>2164</td>
<td>1392</td>
</tr>
<tr>
<td>Mansfield</td>
<td>1832</td>
<td>1136</td>
</tr>
<tr>
<td>Norwalk</td>
<td>1911</td>
<td>1212</td>
</tr>
<tr>
<td>Toledo</td>
<td>1889</td>
<td>1172</td>
</tr>
<tr>
<td>Wooster</td>
<td>1932</td>
<td>1207</td>
</tr>
<tr>
<td>Youngstown</td>
<td>1764</td>
<td>1063</td>
</tr>
</tbody>
</table>

Phenology

<table>
<thead>
<tr>
<th>Coming Events</th>
<th>Range of Degree Day Accumulations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Base 43° F</td>
</tr>
<tr>
<td></td>
<td></td>
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</tbody>
</table>
### Apple maggot 1st oviposition

<table>
<thead>
<tr>
<th>Weather Station Location</th>
<th>1566-2200</th>
<th>1001-1575</th>
</tr>
</thead>
<tbody>
<tr>
<td>Codling moth 2nd flight peak</td>
<td>1587-3103</td>
<td>1061-2212</td>
</tr>
<tr>
<td>Oriental fruit moth 2nd flight subsides</td>
<td>1806-2783</td>
<td>1164-1963</td>
</tr>
<tr>
<td>Redbanded leafroller 2nd flight subsides</td>
<td>1927-3045</td>
<td>1291-2160</td>
</tr>
<tr>
<td>San Jose scale 2nd flight peak</td>
<td>1934-2591</td>
<td>1271-1874</td>
</tr>
</tbody>
</table>

Thanks to Scaffolds Fruit Journal (Art Agnello)

## Preliminary Monthly Climatological Data for Selected Ohio Locations June 2000

<table>
<thead>
<tr>
<th>Weather Station Location</th>
<th>Monthly Precip</th>
<th>Normal Monthly Precip</th>
<th>Year-to-Date Precip</th>
<th>Normal Year-to-Date Precip</th>
<th>Average Year High</th>
<th>Normal Year High</th>
<th>Average Low</th>
<th>Normal Low</th>
<th>Mean Temp.</th>
<th>Normal Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Akron-Canton</td>
<td>4.93</td>
<td>3.18</td>
<td>23.67</td>
<td>17.79</td>
<td>77.4</td>
<td>78.5</td>
<td>58.9</td>
<td>57.0</td>
<td>68.2</td>
<td>67.8</td>
</tr>
<tr>
<td>Cincinnati</td>
<td>4.74</td>
<td>3.84</td>
<td>27.72</td>
<td>21.39</td>
<td>81.2</td>
<td>82.0</td>
<td>61.5</td>
<td>60.0</td>
<td>71.3</td>
<td>71.0</td>
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<tr>
<td>Cleveland</td>
<td>5.72</td>
<td>3.70</td>
<td>21.15</td>
<td>17.47</td>
<td>77.6</td>
<td>78.3</td>
<td>59.5</td>
<td>56.8</td>
<td>68.6</td>
<td>67.5</td>
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<tr>
<td>Columbus</td>
<td>3.50</td>
<td>4.04</td>
<td>22.04</td>
<td>18.87</td>
<td>81.2</td>
<td>80.4</td>
<td>62.0</td>
<td>58.0</td>
<td>71.6</td>
<td>69.2</td>
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<tr>
<td>Dayton</td>
<td>2.98</td>
<td>3.82</td>
<td>17.71</td>
<td>18.88</td>
<td>80.2</td>
<td>81.7</td>
<td>61.0</td>
<td>59.2</td>
<td>70.6</td>
<td>70.4</td>
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<tr>
<td>Mansfield</td>
<td>4.66</td>
<td>3.95</td>
<td>22.04</td>
<td>19.24</td>
<td>77.8</td>
<td>78.2</td>
<td>58.8</td>
<td>57.2</td>
<td>68.3</td>
<td>67.7</td>
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<tr>
<td>Norwalk</td>
<td>6.96</td>
<td>3.91</td>
<td>22.65</td>
<td>16.97</td>
<td>76.2</td>
<td>78.8</td>
<td>61.2</td>
<td>56.6</td>
<td>68.7</td>
<td>67.7</td>
</tr>
<tr>
<td>Toledo</td>
<td>5.51</td>
<td>3.75</td>
<td>20.48</td>
<td>15.76</td>
<td>78.5</td>
<td>79.8</td>
<td>59.5</td>
<td>56.0</td>
<td>69.0</td>
<td>67.9</td>
</tr>
<tr>
<td>Wooster</td>
<td>3.48</td>
<td>3.47</td>
<td>18.49</td>
<td>17.38</td>
<td>79.4</td>
<td>79.5</td>
<td>58.7</td>
<td>55.6</td>
<td>69.1</td>
<td>67.5</td>
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<tr>
<td>Youngstown</td>
<td>4.72</td>
<td>3.94</td>
<td>19.34</td>
<td>17.79</td>
<td>77.1</td>
<td>77.4</td>
<td>57.4</td>
<td>54.9</td>
<td>67.3</td>
<td>66.2</td>
</tr>
</tbody>
</table>

Temperatures in degrees F, Precipitation in inches

Record lows equaled: June 22; Mansfield 49° F, Youngstown 44° F

Table Created by Ted W. Gastier, OSU Extension from National Weather Service, OARDC & Local Data

The Ohio Fruit ICM News is edited by:

Ted W. Gastier
Extension Agent, Agriculture
Tree Fruit Team Coordinator
Information presented above and where trade names are used, they are supplied with the understanding that no discrimination is intended and no endorsement by Ohio State University Extension is implied. Although every attempt is made to produce information that is complete, timely, and accurate, the pesticide user bears responsibility of consulting the pesticide label and adhering to those directions.

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