In This Issue:

- **Calendar**
- Drought Conditions Persist as of Aug. 7th
- Apple Notes
- Details on Confirm 2F'
- Pest Focus: Tufted Apple Bud Moth
- Fruit Observations
- Cumulative Trap Report on the Web:
  - Ohio Apple Scab, Fire Blight, and Sooty Blotch Activity- SkyBit Products
  - Degree Day Accumulations/Phenology

**Calendar**

**August 16: Horticulture Field Night**, main campus of Southern State community College, 200 Hobart Drive, U.S. 62 north of Hillsboro. More than 500 fruit and vegetable research and demonstration plots, and 15 different research projects will be on display. Contact Brad Bergefurd at 1-800-860-7232.

**September 21-23: Farm Science Review**, Molly Caren Agricultural Center, London, Ohio, 8 am-5pm Tuesday and Wednesday, 8am-4pm Thursday.

**Drought Conditions Persist as of Aug. 7th**

<table>
<thead>
<tr>
<th>Region</th>
<th>Category of Drought</th>
</tr>
</thead>
<tbody>
<tr>
<td>NW Ohio</td>
<td>Moderate</td>
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<tr>
<td>WCentral Ohio</td>
<td>Moderate</td>
</tr>
<tr>
<td>SW Ohio</td>
<td>Severe</td>
</tr>
<tr>
<td>SCentral Ohio</td>
<td>Severe</td>
</tr>
<tr>
<td>Central Ohio</td>
<td>Severe</td>
</tr>
<tr>
<td>NCentral Ohio</td>
<td>Near Normal</td>
</tr>
<tr>
<td>NE Ohio</td>
<td>Near Normal</td>
</tr>
<tr>
<td>Central Hills</td>
<td>Moderate</td>
</tr>
<tr>
<td>NE Hills</td>
<td>Moderate</td>
</tr>
</tbody>
</table>
Apple Notes

Source: Dr. Dave Ferree, Professor, Horticulture and Crop Science, OARDC, Wooster

1). Many parts of Ohio remain dry, but relief from the excessive heat came this past week. Fruit growth continues below desired rates. Fruit diameter of Delicious is 2.41 in. and Gala, 2.33 in. The season appears a week ahead of normal, which means that applications of Retain on Delicious should go on in southern Ohio the end of this week or beginning of next with a delay of a week to 10 days for central and northern Ohio. Retain applications to all cultivars need to be applied 4 weeks ahead of expected harvest date and these times can be estimated based on normal relationship of the cultivar to Delicious harvest. There are several reports that Retain does not work well on trees under drought stress.

2). Stop Drop sprays of NAA are normally applied when the first sound fruit drops. The effect will begin 2-3 days after application and can last 7-10 days. A second application of NAA should be made within 7-10 days of the first application, if fruits are not harvested. NAA is generally less effective on trees under drought stress or with severely mite injured leaves.

3). As harvest approaches, this is an ideal time to think about how the fruit will be moved. Repair roads and fill holes so unnecessary bruising can be avoided.

4). Summer pruning--Some cultivars such as Macintosh are very sensitive to light and judicious summer pruning opens up the canopy and improves fruit color. The best time for summer pruning is now through the end of August. Less regrowth occurs if the cut is made back to the first fruiting spur on 2-3-year-old wood. Summer pruning can result in reduced soluble solids and reduced fruit size, if carried to excess. Normally on a mature tree, 7-15 years of age, 10-15 cuts/tree will not have adverse effects on fruit quality and can markedly improve color and movement through the orchard.

Details on Confirm 2F'

Source: Dr. Celeste Welty, Ohio State University Extension Entomologist

The new insecticide Confirm, made by Rohm & Haas Company, is now registered for use on bushberries and caneberries, as well as apples. Confirm is an insect growth regulator that interferes with the normal molting process in caterpillars. Caterpillars that feed on treated leaves stop feeding within several hours, but take several hours to die. On bushberries (blueberries, currants, elderberry, gooseberry, huckleberry), it controls cranberry fruitworm, cherry fruitworm, obliquebanded leafroller, redbanded leafroller and variegated leafroller at a rate of 16 fl. oz. per acre, and gypsy moth larvae at 4 to 8 fl. oz. per acre, with a 14 day preharvest interval. On caneberries (raspberries, blackberries, etc.), it controls obliquebanded leafroller, redbanded leafroller and variegated leafroller at the rate of 16 fl. oz. per acre, and gypsy moth larvae at 4 to 8 fl. oz. per acre, also with a 14 day preharvest interval.
Pest Focus: Tufted Apple Bud Moth

Source: Pennsylvania Tree Fruit Production Guide

Although TABM belongs to a family of moths known as leafrollers, the leafrolling activity has little economic impact on the fruit grower and little physiological impact on the tree. It is when this insect webs a leaf onto the apple and feeds directly on the fruit that it becomes a pest. Damage appears as tiny holes (early instar feeding), as irregular scarring or gallerying of the apple surface, or as an area of rot, generally found around the stem. Rot or corking around the stem occurs usually after the larvae have finished feeding and have pupated. Larvae occasionally enter the apple calyx and feed unnoticed within the seed cavity. Most damage to apples is caused by second-brood feeding, although in some years first-brood damage can exceed that caused by the following generation. Damage to fruits destined for fresh markets has a greater economic impact, since their cash value is much higher than that of processing grade apples. Generally, bud moth injury does not reduce the grade of processing apples, but it can affect the storage ability of those apples by promoting decay.

Control measures should be aimed at the eggs and early instar larvae, because later instars are difficult to control once they're webbed in folded leaves. The second brood is usually expected between August 5 and September 5.

Fruit Observations

Site: Waterman Farm, Columbus
Source: Dr. Celeste Welty, OSU Extension Entomologist
Traps Used: AM = red balls SJS = tent trap, others = wing traps

Apple: 8/4 - 8/11

- RBLR: 10 (down from 15)
- STLM: 222 (up from 72)
SJS: 659 (up from 309)
CM (mean of 3 traps): 2.7 (down from 5.7)
AM (mean of 3 traps) 0.3 (up from 0.0)
TABM: 2 (same as last week)
VLR: 9 (down from 17)
OBLR: 0 (same as last week)

**Peaches:**

OFM: 1 (down from 6)
LPTB: 3 (down from 7)
PTB: 8 (down from 10)

**Site: East District; Erie & Lorain Counties**

*Source: Jim Mutchler, IPM Scout*

**Traps Used:** AM = red balls, SJS = tent traps STLM = wing traps Others = Multipher® traps

**Apple: 8/4 - 8/10**

RBLR: 6.3 down from 7.9)
STLM: 425 (down from 500)
SJS: 1.1 (down from 17.7
CM (mean of 3 traps): 2.0 (up from 1.3)
OBLR: 2.5 (up from 1.5)
VLR: 2.0 (down from 4.5)
AM (sum of 3 traps): 1.2 (up from 0.6)
TABM: 42 (down from 43)

**Peach:**

OFM: 13.3 (down from 14.0)
RBLR: 6.0 (down from 7.5)
LPTB: 32.3 (up from 14.8)
PTB: 2.5 (down from 3.0)

**Other pest activity:** green apple aphid, scab

**Beneficials at work:** Lacewings everywhere, Stethorus punctum, and other lady beetles

**Site: West District; Huron, Ottawa, & Sandusky Counties**

*Source: Gene Horner, IPM Scout*

**Traps Used:** AM = red balls, SJS = tent traps STLM = wing trap Others = Multipher® traps

**Apple: 8/4 - 8/10**

RBLR: 19.9 (down from 25.0)
STLM: 427 (down from 665)
SJS: 2.3 (down from 4.3)
CM (mean of 3 traps): 0.8 (down from 1.6)
OBLR: 2.0 (down from 4.0)  
VLR: 12 (down from 29.5)  
AM (sum of 3 traps) 0.4 (Up from 0.1)  
FTLR: 0 (same as last week)

**Peach:**

OFM: 0 (down from 7.5)  
RBLR: 11.5 (down from 25.0)  
LPTB: 14.5 (up from 12.5)  
PTB: 1.0 (down from 3.0)

**Other pest activity:** two-spotted spider mite, apple rust mite

**Beneficials at work:** Lacewing eggs, predator mites, banded thrips

**Site:** Wayne County  
*Source: Ron Becker, Program Assistant, Agriculture and IPM, Ohio State University Extension*

**Apple:** 8/5 - 8/11

STLM: 99 (up from 59)  
CM (mean of 3 traps) 6.1 (down from 7.9)  
RBLR: 2.5 (up from 2.3)  
OBLR: 1 (same as last week)  
AM (mean of 3 traps) 0.6 (down from 1.9)

**Peach:** 8/5 - 8/11

OFM: 25 (down from 27)  
LPTB: 5 (down from 13)  
PTB: 2 (same as last week)

**Cumulative Trap Report on the Web:**

Thanks to Bruce Eisley, Research Associate, Extension Entomology, you can access the cumulative trap reports for these three areas of Ohio for the 1999 growing season..

[http://www.ag.ohio-state.edu/~ipm/fruit/frpest.htm](http://www.ag.ohio-state.edu/~ipm/fruit/frpest.htm)

**Ohio Apple Scab, Fire Blight, and Sooty Blotch Activity - SkyBit Products**

Central District
Apple Scab:
August 1, 8, 11 possible infection & damage
August 2-7, 9, 10 active but no infection
Based on Forecasts; August 12, 16-18 active but no infection
August 13-15 possible infection and damage

Fire Blight:
August 1, 4, 7, 8, 10, 11 possible infection and damage; August 2, 5 not active
August 3, 6, 9 active but no infection
Based on Forecasts; August 12, 18 not active
August 13-17 possible infection and damage

Sooty Blotch:
August 1-11 possible infection and damage
Based on Forecasts; August 12-18 possible infection and damage

Eastern Highlands

Apple Scab:
August 1, 5, 7, 8, 10, 11 possible infection & damage
August 2-4, 6, 9 active but no infection
Based on Forecasts; August 12, 16-18 active but no infection
August 13-15 possible infection and damage

Fire Blight:
August 1, 4, 5, 7, 8, 10, 11 possible infection and damage; August 2, 9 not active
August 3, 6, active but no infection
Based on Forecasts; August 12-15, 17, 18 possible infection and damage
August 16 not active

Sooty Blotch:
August 1-10 active but no infection; August 11 Possible infection and damage
Based on Forecasts; August 12-18 possible infection and damage

Northeast District

Apple Scab:
August 1, 4, 5, 7, 8 possible infection & damage
August 2, 3, 6, 9-11 active but no infection
Based on Forecasts; August 12, 16-18 active but no infection
August 13-15 possible infection and damage

Fire Blight:
August 1, 4, 8, 10, 11 possible infection and damage; August 2, 3, 9 not active
Based on Forecasts; August 12-18 possible infection and damage

Sooty Blotch:
August 1-11 possible infection and damage
Based on Forecasts; August 12-18 possible infection and damage
North Central District

Apple Scab:
August 1, 4 -8, 11 possible infection & damage
August 2, 3, 9, 10 active but no infection
Based on Forecasts; August 12, 16-18 active but no infection
August 13-15 possible infection and damage

Fire Blight:
August 1, 4 -8, 10, 11 possible infection and damage; August 2, 3, 9 not active
Based on Forecasts; August 12 Not active
August 13-18 possible infection and damage

Sooty Blotch:
August 1-10 active but no infection; August 11 possible infection and damage
Based on Forecasts; August 12-18 possible infection and damage

West District

Apple Scab:
August 1, 4 -8, 10, 11 possible infection & damage
August 2, 3, 9 active but no infection
Based on Forecasts; August 12, 15-18 active but no infection
August 13, 14 possible infection and damage

Fire Blight:
August 1, 4-8, 10, 11 possible infection and damage; August 2, 3, 9 not active
Based on Forecasts; August 12-14, 17 possible infection and damage
August 15, 16, 18 not active

Sooty Blotch:

August 1-11 possible infection and damage
Based on Forecasts; August 12-18 possible infection and damage

Degree Day Accumulations for Selected Ohio Sites January 1, 1999 to date indicated

<table>
<thead>
<tr>
<th>Location</th>
<th>Actual DD Accumulations</th>
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<th>Forecasted Degree Day Accumulations</th>
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<td>August 11, 1999</td>
<td>August 18, 1999</td>
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<tr>
<td></td>
<td>Base 43° F</td>
<td>Base 50° F</td>
<td>Base 43° F</td>
<td>Normal</td>
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<td>Akron - Canton</td>
<td>2984</td>
<td>2062</td>
<td>3199</td>
<td>2978</td>
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<td>2228</td>
<td>2033</td>
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<tr>
<td>Phenology</td>
<td>Range of Degree Day Accumulations</td>
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<tr>
<td><strong>Coming Events</strong></td>
<td><strong>Base 43° F</strong></td>
<td><strong>Base 50° F</strong></td>
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<tr>
<td>Codling moth 2nd flight peak</td>
<td>1587-3103</td>
<td>1061-2212</td>
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<tr>
<td>Peachtree borer flight subsiding</td>
<td>2230-3255</td>
<td>1497-2309</td>
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<td>Redbanded leafroller 3rd flight begins</td>
<td>2389-3113</td>
<td>1722-2209</td>
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<td>Spotted tentiform leafminer 3rd flight peak</td>
<td>2415-3142</td>
<td>1728-2231</td>
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<td>San Jose scale 2nd flight subsides</td>
<td>2494-3257</td>
<td>1662-2303</td>
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<td>Redbanded leafroller 3rd flight peak</td>
<td>2514-3225</td>
<td>1818-2625</td>
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<td>Obliquebanded leafroller 2nd flight peak</td>
<td>2634-3267</td>
<td>1789-2231</td>
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<td>Apple maggot flight subsides</td>
<td>2764-3656</td>
<td>1904-2573</td>
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</tbody>
</table>
Thanks to Scaffolds Fruit Journal (Art Agnello)

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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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