http://ipm.osu.edu/fruit/index.html



Newsletter Extension



Volume 3, No. 29 August 12, 1999

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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

Region **Category of Drought**

NW Ohio Moderate WCentral Ohio Moderate

SW Ohio Severe SCentral Ohio Severe Central Ohio Severe

NCentral Ohio Near Normal NE Ohio Near Normal Central Hills Moderate **NE Hills** Moderate

SE Ohio Severe

Source: http://www.cpc.noaa.gov/products/analysis_monitoring/regional_monitoring/palmer.gif

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, and gypsy moth larvae at 4 to 8 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 firstbrood 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

Insect Key

Apple maggot AM: Codling moth CM: DWB: Dogwood borer

LPTB: Lesser peachtree borer OBLR: Oblique banded leafroller

OFM: Oriental fruit moth PC: Plum curculio PTB: Peachtree borer

RBLR: Redbanded leafroller

San Jose scale

STLM: Spotted tentiform leafminer TABM: Tufted apple budmoth

VLR: Variegated leafroller

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

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

	Actual DD Accumulations August 11, 1999		Forecasted Degree Day Accumulations August 18, 1999				
Location	Base 43° F	Base 50° F	Base 43° F	Normal	Base 50° F	Normal	
Akron - Canton	2984	2062	3199	2978	2228	2033	

Cincinnati	3509	2490	3743	3727	2675	2653
Cleveland	2995	2084	3207	2923	2247	1993
Columbus	3594	2605	3829	3283	2791	2286
Dayton	3364	2400	3658	3357	2645	2360
Elyria	3137	2227	3353	3069	2394	2124
Fremont	2886	2011	3116	2977	2192	2059
Mansfield	2864	1948	3081	2952	2115	2013
Norwalk	3019	2117	3234	2907	2283	1990
Toledo	3084	2180	3295	2903	2342	1989
Wooster	3079	2150	3296	2820	2318	1890
Youngstown	2755	1865	2960	2758	2019	1844

Phenology

	Range of Degree Day Accumulations		
Coming Events	Base 43° F	Base 50° F	
Codling moth 2 nd flight peak	1587- 3103	1061-2212	
Peachtree borer flight subsiding	2230- 3255	1497-2309	
Redbanded leafroller 3 rd flight begins	2389- 3113	1722-2209	
Spotted tentiform leafminer 3 rd flight peak	2415- 3142	1728-2231	
San Jose scale 2 nd flight subsides		1662-2303	
Redbanded leafroller 3 rd flight peak		1818-2625	
Obliquebanded leafroller 2 nd flight peak		1789-2231	
Apple maggot flight subsides		1904-2573	

Lesser peachtree borer flight subsiding	2782- 3474	1796-2513
Codling moth 2 nd flight subsides	2782- 3693	1796-2635

Thanks to Scaffolds Fruit Journal (Art Agnello)

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Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Keith L. Smith, Director, Ohio State University Extension.

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