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



Newsletter Extension

## **Fruit ICM News**

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## Calendar

June 24-27: International Dwarf Fruit Tree Assoc. (IDFTA) Annual Summer Tour: Scheduled for the Lake Champlain Valley of New York, Vermont, and Quebec. Various registration options are available for the days you would like to attend. For more information, visit the IDFTA WWW site <a href="http://www.idfta.org/">http://www.idfta.org/</a> or contact IDFTA business manager Charles Ax at (570) 837-1551, <a href="http://www.idfta.org/">attorney@ptdprolog.net</a>.

**June 28: Ohio Fruit Growers Society Summer Tour,** Vogley Enterprises, East Sparta, Ohio, Stark County. Cost is \$6 per person or \$12 for the family. For registration, contact OFGS at (614) 249-2424 or growohio@ofbflorg.

**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 <u>bergefurd.1@osu.edu</u>.

**July 27-28: Ohio Berry Tour**, Central Ohio. Tour stops include Rhoads Farm Market (Circleville), Circle S Farms (Grove City), Schacht Farm Market (Canal Winchester), Jacquemine Farms (Plain City), and Doran's Farm Market (New Albany). We will keep you posted as definite times are set and registration information becomes available. Contact Berry Coordinator Sandy Kuhn at (800) 297-2027 or <u>kuhn.37@osu.edu</u> for information needed before then.

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.

## What Ever Happened to the Drought of 2000?

Adapted from Michigan State University's Fruit Crop Advisory Team Alert, June 20, 2000, Jeff Andresen, Agricultural Meteorology Geography

New National Oceanic and Atmospheric Administration (NOAA) long term outlooks for the coming months have generally backed off of forecasts for drier than normal conditions in Michigan during the summer months, which represents a significant change from earlier forecasts. What happened? Earlier outlooks had called for increased odds of drier than normal conditions this summer, continuing a drier than normal trend that began back in the summer of 1998. During mid-April of this spring, a persistent, mostly zonal west to east upper air pattern set up across the US and Canadian border, bringing a series of low pressure areas and associated precipitation through the region. This pattern has resulted in above normal rainfall from the northern Great Plains eastward into sections of the Great Lakes region, including southern and central sections of Michigan.

During summer months with highest solar radiation rates, there is a correlation between the amount of soil moisture present in a given region and weather patterns that follow weeks afterward. In general, the drier the soils in a region, the less water evaporated into the atmosphere and the greater the odds of subsequent warmer than normal temperatures and below normal precipitation. The reverse (wetter than normal soils tend to be followed by cooler and wetter than normal conditions) is true to some extent as well. With soils across large areas of the Midwest the driest since the drought of 1988 and La Niña conditions fading in the tropical Pacific, dry forecasts for the Midwest and South were the rule.

Despite the efforts of forecasters to bring it to an end, La Niña conditions (albeit weak) continue in the Pacific. Weak La Niña conditions are now expected to linger into the fall of this year, putting the event among the longer-lived cool El Niño/Southern Oscillation (ENSO) events of past century (The most current El Niño began in 1998.). Drought conditions have continued or intensified in areas of the southwestern and southeastern states and in the western Cornbelt region. New outlooks call for this general pattern to continue for the next couple of months in the Midwest, with warmer and drier than normal conditions continuing in the western Cornbelt and mid-Mississippi Valley. For much of Michigan, the outlooks for the next one to three months now call for the "climatology" scenario with near equal odds of above, near, and below normal temperatures and precipitation. Drier than normal conditions are projected for Michigan by later this fall continuing into the early winter.

For the latest information and a 3D animation about the current state of El Niño and La Niña, check out this website: <u>http://www.cdc.noaa.gov/ENSO/</u>.

## **Biological Control Guide**

http://www.nysaes.cornell.edu/ent/biocontrol/predators/galpyri.html

The entomology department at Cornell has developed a website for the study of biological insect and mite control in various fruit crops. Topics include lady beetles, bugs, lacewings, flies, midges, mites, and other predators. Examples familiar to observant Ohio growers are as follows:

- *Stethorus punctum*, the tiny black lady beetle that is strictly a predator of plant-feeding mites, particularly the European red mite and the two-spotted spider mite, and especially the eggs.
- *Hippodamia convergens*, one of the best known and most common American lady beetle, which preys mainly on aphids.
- *Chrysoperla carnea/Chrysoperla rufilabris*, green lacewings, whose alligator-like larvae prey on aphids and spider mites.
- *Aphidoletes aphidimyza*, the orange maggot, which is the larval stage of the gall midge, and thrives on aphids.
- *Galendromus (=Typhlodromus) pyri/Neoseiulus (=Amblyseius) fallacis*, the predatory mites which feed on the slightly larger European red mite adults; also consume two-spotted spider mites and apple rust mites.

## **Fruit Observations**

Insect ]	Key
AM:	Apple maggot
CM:	Codling moth
DWB:	Dogwood borer
LPTB:	Lesser peachtree borer
OBLR:	Oblique banded leafroller
OFM:	Oriental fruit moth
PC:	Plum curculio
PTB:	Peachtree borer
RBLR:	Redbanded leafroller
SJS:	San Jose scale
STLM:	Spotted tentiform leafminer
TABM:	Tufted apple budmoth
VLR:	V ariegated leafroller

#### Site: Waterman Lab, Columbus (6/15-6/21)

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

#### Apple

RBLR: 17 (up from 15) STLM: 345 (down from 757) DWB: 1 (up from 0) SJS: 0 (unchanged)

#### Peach

OFM: 13 (down from 39) LPTB: 1 (down from 4.5) PTB: 5 (up from 3) CM: 6.7 (down from 11) OBLR: 0 (unchanged) TABM: 2 (up from 1) VLR: 1 (down from 2) AM: 0.7 (unchanged)

Site: East District; Erie & Lorain Counties (6/15-6/21)

Source: Jim Mutchler, IPM Scout Traps Used: STLM=wing traps, Others=Multipher® traps

Apple	Peach
RBLR: 21.2 (up from 1.7)	OFM: 13.7 (up from 21.3)
CM: 5 (down from 8.1)	RBLR: 22.3 (up from 2)
SJS: 0 (unchanged)	LPTB: 36 (down from 39)
	PTB: 4.3 (up from 2.3)

Other pests: green apple aphid, fire blight, scab, powdery mildew, white apple leafhopper

**Beneficials at work:** lacewing eggs, larvae, & adults (brown & green), orange maggots, lady beetles, *Stethorus punctum* 

#### Site: West District; Huron, Ottawa, & Sandusky (6/14-6/20)

Source: Gene Horner, IPM Scout Traps Used: STLM=wing traps, Others=Multipher® traps

Apple	Peach
RBLR: 43.8 (up from 11.5)	OFM: 8.5 (down from 22.3)
SJS: 0.0 (unchanged)	RBLR: 64.3 (up from 15.3)
CM: 2.7 (down from 5.1)	LPTB: 53.3 (up from 32)
	PTB: 7.3 (up from 4.8)

**Other pests:** green apple aphid, lilac borer, white apple leafhopper, fire blight, oriental fruit moth strikes, potato leafhopper, plum curculio strike, apple rust mite, two-spotted spider mite

**Beneficials at work:** Lacewing eggs & adults (brown & green), banded thrips, black hunter thrips, lady beetles, predator mites, orange maggot

## Northern Ohio Apple Scab Activity - SkyBit Product

SkyBit based on observations: June 5, 6, 12-19, 22; possible infection & damage **Based on Forecasts: June 24-26; possible infection & damage** 

North Central Ohio Spectrum Technologies Orchard Monitors for Apple Scab Spectrum Technologies Monitors and Software\* Observations: June 12, 15, 18; Medium Infection (Software\* based on Modified Mills Chart)

## Northern Ohio Fire Blight Activity - SkyBit Product

SkyBit based observations: June 1, 11-18, 20, 21; possible infection and damage **Based on Forecasts: June 24-26, 28, 29; possible infection & damage** 

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

	Actual DD Accumulations June 21, 2000		Forecasted Degree Day Accumulations June 28, 2000			
Location	Base 43° F	Base 50° F	Base 43° F	Normal	Base 50° F	Normal
Akron - Canton	1462	855	1663	1497	999	920
Cincinnati	1847	1155	2103	2031	1350	1321
Cleveland	1463	871	1676	1460	1024	896
Columbus	1804	1127	2038	1723	1300	1090
Dayton	1756	1083	1997	1764	1263	1131
Mansfield	1459	862	1674	1489	1016	915
Norwalk	1511	910	1727	1453	1066	900
Toledo	1503	883	1720	1443	1039	893
Wooster	1562	932	1769	1422	1078	857
Youngstown	1412	759	1613	1378	900	828

#### Phenology

	Range of I Accum	Range of Degree Day Accumulations	
Coming Events	Base 43° F	Base 50° F	
Obliquebanded leafroller 1 <sup>st</sup> flight peak	869-1548	506-987	
Oriental fruit moth 2 <sup>nd</sup> flight peak	1000-2908	577-2066	
Apple maggot 1 <sup>st</sup> catch	1045-1671	629-1078	
Redbanded leafroller 2 <sup>nd</sup> flight begins	1096-2029	656-1381	

Codling moth 1 <sup>st</sup> flight subsides	1112-2118	673-1395
Spotted tentiform leafminer 2 <sup>nd</sup> flight peak	1295-2005	824-1355
Spotted tentiform leafminer 2 <sup>nd</sup> generation tissue feeders present		

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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