

Newsletter Extension



Fruit ICM News

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Calendar

June 9: Plasticulture Strawberry, Blueberry, Blackberry, Raspberry Twilight Meeting, Piketon.

June 18-20: Annual Meeting of the American Society for Enology and Viticulture, Reno Hilton, Reno, NV. American Society for Enology and Viticulture; 530-753-3142; E-mail: society@asev.org; Web site: http://www.asev.org.

June 25: Ohio Fruit Growers Society Summer Tour, Glen Hill Orchard, 17156 Glen Road, Mt. Vernon, OH. Registration begins at 8:00 a.m. Member registration fees are \$15 per family and \$10 per individual. (Non-member fees are \$20 and \$15.) Morning refreshments and noontime meal will be available for purchase. Rooms are available at the Mount Vernon AmeriHost at a rate of \$60/single or \$64/double. Call the hotel by June 3 for reservations: 800-480-8221. You may contact the Ohio Fruit Growers Society at 614-246-8292 for additional information.

July 6-8: International Dwarf Fruit Tree Association Summer Tour, Kelowna, BC, Canada; Charles Ax, International Dwarf Fruit Tree Association; 570-837-1551; Web site: http://www.idfta.org.

Ohio Berry Growers Twilight Meeting, June 9 at Piketon

Source: Brad Bergefurd, OSU Hort Agent

The Ohio State University South Centers at Piketon invites anyone interested in growing strawberries, blueberries, blackberries and/or red and black raspberries to attend a Berry Twilight Meeting at their Research and Extension Centers on Monday, June 9 from 5:00 PM to 8:00 PM.

"This is an important educational event for anyone who grows or wants to grow a berry crop for farm profit," says Brad Bergefurd, Horticulture Extension Agent at the OSU South Centers in Piketon. "We have been conducting very extensive research and demonstration berry trials at this location for 11 years and have some fascinating results that we would like to share with growers that may help them become more profitable berry growers, " says Bergefurd.

Currently there are 18 different research and demonstration trials, over 300 different research plots, on berries being conducted by the staff of the OSU South Centers. These include over 600 summer and fall red raspberry plants, over 250 thorny blackberry plants, and over 150 thornless blackberry plants. Some new genetic material was imported from China and was made available to OSU through Dr. Harry Schwartz from the University of Maryland. "We are looking at these new varieties for yield, hardiness, and disease resistance," says Dr. Shawn Wright, Horticulture Specialist at the OSU South Centers. "As the berry industry grows in Ohio, it is critical to have producers growing those varieties that will perform well and stay in production for a high number of years," says Wright.

Other berry trials being conducted by the Ohio State University South Centers include a Black Raspberry Variety Study, a Black Raspberry Alternate Year Production and Pruning Study, a Blueberry Water and Nitrogen Management Study, a Plasticulture Strawberry Winter Protection Study, and a Plasticulture Strawberry Date of Planting Study, to name a few.

In addition to tours and updates of the berry research trials, Dr. Dick Funt, The Ohio State University Small Fruits Specialist and Dr. Mike Ellis, The Ohio State University Small Fruit Disease Specialist will provide updates on new herbicides for strawberries, the use of plastic on strawberries for weed control in eastern cultivars, strawberry renovation procedures, and disease control tactics for small fruit.

Sandy Kuhn, Berry Coordinator at the OSU South Centers, will provide an update on the many exciting opportunities that are occurring in the Ohio Berry Industry. "The OSU South Centers staff is committed to helping the berry industry in Ohio to grow and flourish," says Sandy. "Ohio has the potential to grow over 5 to 10 times the current production; therefore, as farmers consider alternative crops, berries seem to be a very viable option," says Kuhn.

Several companies from the small fruit industry, including irrigation, fertilizer, and plant suppliers have also been invited to provide updates on what new items are available to berry growers.

The Berry Twilight meeting is free and open to everyone. The meeting will be held at the OSU South Centers, 1864 Shyville Road, in Piketon Ohio. Tours of the field research trials will be from 5:00 to 7:00 PM with times for questions of industry specialists and supper being served from 7:00 PM to 8:00 PM. For more information on the Berry Twilight meeting or any of the Berry Research trials being conducted at the OSU South Centers, please contact our office at 740- 289-2071, 1-800-297-2072, or visit our web site at http://www.southcenters.osu.edu.

New Small Fruit Web Resource

The 2003-2004 New England Small Fruit Pest Management Guide is now available online at http://www.umass.edu/fruitadvisor/nesfpmg/index.htm

ABCs of GAPs

Source: Shari Plimpton, Food Safety Educator - Ohio Specialty Crop Food Safety

The other day I paid a visit to a farm to work with a couple of growers on their Food Safety Program. These two gentlemen had attended the OFVGFS workshop and were indeed aware of the latest food safety information offered by the USDA, FSIS, FDA, CFSAN, CDC, National GAPs Program, OSCFS initiative, MAAHS, CIFT/EISC, and OSU's ABE Center. These men had listened carefully as we discussed GAPs, GHPs, SOPs, and SSOPs, as well as GMPs, CFRs, HACCP, pH, ORP, UV, and the ABC's.

In the daily course of running their operation, they also were aware of labor, health, and safety requirements from the FD&C Act, NRCS, CREES, U.S. EPA, and OSHA. Sure, they were informed and making a voluntary effort to bring their operation in line with buyer expectations. They were preparing for a third party audit. They just couldn't understand what the heck I was talking about.

In my role as a Food Safety Educator, I focus on GAPs, GHPs, GMPs, SOPs, SSOPs, CFRs, QA, QC and HAACP daily, so it becomes a habit for me to throw these letters around as if they were words used in everyday conversations. I am consistently aware of the time limits all of us face as we struggle to make a living in this world, so I tend to err on the side of speaking in shorthand to speed things along. Unfortunately, people start to feel confused and overwhelmed, silently wondering why I'm showering them with bowls of alphabet soup.

And yet, no one likes to waste time, least of all growers; so I thought it might be helpful if I made a list of these acronyms along with their definitions. Many of these acronyms (i.e. GMPs and HACCP) apply only if you are processing fruit and/or vegetables. A lot of them you already know, yet there may be a few that slipped by too quickly to remember, so here they are:

ABCs - You know - the alphabet song! For those who haven't heard, this is what you want to teach your workers to sing (silently is ok) while they wash hands to assure that they have scrubbed for twenty seconds and effectively removed microorganisms.

ABE Center - Agriculture Business Enhancement Center. Where you will find Mary Donnell, the Ohio Collaborator for the Good Agricultural Practices Project and Education Coordinator for the Ohio Specialty Crop Food Safety Initiative.

CDC - Center for Disease Control. People who work to track and overcome diseases. If we do our part, maybe we can hear a little less from them.

CFRs - Code of Federal Regulations. These are the regulations that apply to processed foods.

CIFT - Center for Innovative Food Technology. Where I, a Food Safety Educator, work.

CFSAN - Center for Food Safety and Nutrition. A division of the FDA.

CREES - Cooperative State Research, Education, and Extension Services.

FDA - Food and Drug Administration. The agency that is charged with implementing the FD&C Act.

FD&C Act - Food, Drug and Cosmetic Act. The law from which certain food regulations have been developed.

FSIS - Food Safety Inspection Service. As most know, this is part of USDA.

GAPs - Good Agricultural Practices. Recommended (not regulated) agricultural practices developed to help growers maintain a safe operation.

GHPs - Good Handling Practices. Recommended (not regulated) handling practices developed to maintain safety and sanitation of fruit and vegetables during storage and transportation.

GMPs - Good Manufacturing Practices. A set of regulations that define the practices a manufacturer of food products must follow.

HACCP - Hazard Analysis and Critical Control Points. A program used by food processors to detect and control potential hazards in food manufacturing.

MAAHS - Mid American Ag and Hort Services. Where you can leave a message for John Wargowsky to indicate interest in the Ohio Specialty Crop Food Safety Initiative and for assistance on labor issues.

NRCS - Natural Resources Conservation Service (Used to be SCS - Soil Conservation Service).

OFVGFS - Ohio Fruit and Vegetable Growers Food Safety Workshop. A program some of you attended back in March to learn all about this stuff.

ORP - Oxygen Reduction Potential. A measurement that indicates whether a water sanitation method (i.e. copper ionization) is working properly.

OSHA - Occupational Safety and Health Act.

OSCFS - Ohio Specialty Crop Food Safety Initiative. The program that is providing us with the resources to teach about GAPs and GHPs, as well as help growers prepare Food Safety Programs.

OSU - You're breaking my heart! Certainly you know TBDTITL!

pH - pH. It's a measurement of how much free acid is present in food or water.

QA - Quality Assurance. The way you make sure you're selling at a certain quality level.

QI - Quality Improvement. What we all are striving for; some of us simply in life.

SOPs - Standard Operating Procedures. A step-by-step description of how you do things.

SSOPs - Sanitation Standard Operating Procedures. A step-by-step description of how you clean things. **UV** - Ultra Violet. A type of light that can be used for water treatment, amongst other things.

U.S. EPA - United States Environmental Protection Agency. The people who set the standards for water quality.

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Correction to Summer Red Raspberry Spring 2003 Evaluation

(Original article: Ohio Fruit ICM News, May 22, 2003) *Source: Shawn Wright, OSU Centers Horticulture*

The summer reds definitely aren't normally listed as thornless. Sorry for the misprint.

Lesser Appleworm

Part of the puzzle involving internal feeding damage of apple fruit might include the lesser appleworm. Researchers in Ohio are taking a closer look. Here is part of an article originally published in the August 22, 2002 Ohio Fruit ICM News.

The lesser appleworm, *Grapholitha prunivora* (Walsh) is considered a minor pest of apple. The adult is small (3/16 inch) and dark. When at rest, a gold band becomes evident across the moth's back. First generation larvae appear in early June and their shallow feeding habit produces a blotchy mine below the skin that is rarely deeper than 1/4 inch. The mature larvae borer to the outside of the apple fruit and drop to the ground.

Most 1st generation larvae mature by late July, with pupation occurring inside silken cocoons spun in sheltered places on the bark or the fruit. The adults begin emerging the first week in August and 2nd generation larvae are found in fruit from mid-August through early October. An image of apple fruit damage is available at: http://tfpg.cas.psu.edu/part2/part22br.htm (Click on lesser appleworm and then "shallow mines under the skin.")

Grape Insecticide News

Source: Celeste Welty, OSU Extension Entomologist

In our 2003 small fruit spray guide, we included the new insecticide Assail WSP for control of leafhoppers on grapes. Our listing was based on the federal label which was approved in May 2002. The state label for Ohio and several other states was just approved in late May 2003. Assail WSP is for grapes only, and is a different product than the Assail 70WP used on apples and other crops.

Degree Day Accumulations for Ohio Sites June 4, 2003

Degree Day Accumulations							
Base	45° F	Base 50° F					
Actual	Normal	Actual	Normal				
742	773	428	497				
1045	1144	691	779				
710	733	418	470				
	742 1045	Base 45° F Actual Normal 742 773 1045 1144	Base 45° F Base Actual Normal Actual 742 773 428 1045 1144 691				

Columbus	982	921	638	609	
Dayton	918	941	583	629	
Kingsville	548	639	290	405	
Mansfield	690	756	383	485	
Norwalk	685	721	393	465	
Piketon	1107	1158	721	790	
Toledo	660	710	369	458	
Wooster	8251	712	500	448	
Youngstown	645	690	350	435	

Pest Phenology

Coming Event	Degree Day Accum. Base 50° F
Peachtree borer 1 st catch	299 - 988
Codling moth 1 st flight peak	307 - 824
Lesser peachtree borer flight peak	392 - 1526
San Jose scale 1 st flight subsides	434 - 656
Oriental fruit moth 1 st flight subsides	442 - 1026
Lesser appleworm 1 st flight subsides	444 - 999
Spotted tentiform leafminer 2 nd flight begins	449 - 880
San Jose scale 1 st generation crawlers present	569 - 784

Fruit Observations & Trap Reports

Insect Key

AM: apple maggot CM: codling moth

ESBM: eye-spotted budmoth
LAW: lesser apple worm
LPTB: lesser peachtree borer
OBLR: obliquebanded leafroller
OFM: oriental fruit moth
PTB: peachtree borer

RBLR: redbanded leafroller SJS: San Jose scale

STLM: spotted tentiform leafminer TABM: tufted apple budmoth VLR: variegated leafroller

Site: Waterman Lab, Columbus

Dr. Celeste Welty, OSU Extension Entomologist

Apple: 5/21/03 to 5/28/03

CM: 16 (up from 10.0)

ESBM: 0 (same as last week) LAW: 10 (down from 24) OBLR: 6 (down from 8) RBLR: 0 (same as last week) SJS: 0 (same as last week) STLM: 38 (up from 2) TABM: 0 (down from 1) VLR: 0 (same as last week)

Peach: 5/28 to 6/04/03

OFM: 0 (same as last week) LPTB: 2 (same as last week) PTB: 0 (same as last week)

Site: Medina, Wayne, & Holmes Counties

Ron Becker, IPM Program Assistant

Apple: 5/28 to 6/04/03

STLM: Holmes: 0 (same as last

week)

Medina: 0 (same as last

week)

Wayne: 0 (same as last

week)

RBLR: Holmes: 0 (same as last

week)

Medina: 0 (same as last

week)

Wayne: 0 (same as last

week)

CM: Holmes: 1.4 (up from 1.0)

Medina: 0.8 (up from 0.2) Wayne: 33.4 (up from

31.6)

Peach: 5/28 to 6/04/03

LPTB: Holmes: 9 (up from 3)

Medina: 1.5 (down from 5)

Wayne: 6 (same as last

week)

OFM: Holmes: 1 (up from 0)

Medina: 2 (up from 0) Wayne: 1 (down from 4)

PTB: Holmes: 0 (same as last

week)

Medina: 0 (same as last

week)

Wayne: 0 (same as last

week)

Apple: 1st plum curculio damage observed; more scab, hatching ERM, STLM mines, leafhoppers & aphids.

Peach: powdery mildew

Strawberry: harvest started. Pests found: two-spotted spider mite, aphids, spittle bugs, and slugs.

Brambles: two-spotted spider mites.

Site: East District: Erie & Lorain Counties

Jim Mutchler, IPM Scout

Apple: 5/27 to 6/03/03

CM: 5.4 (up from 2.1) LAW: 13.3 (first report) OFM: 2.4 (up from 1.4) RBLR: 0.0 (down from 0.4) STLM: 11.0 (down from 30)

Other pests include green apple aphid, rosy apple aphid, and white apple leafhopper. Beneficials found

include lady beetle and green lacewing

Peach: 5/27 to 6/03/03

LPTB: 19.7 (up from 10.7) OFM: 0.3 (same as last week)

PTB: 0.0 (first report)

RBLR: 0.0 (down from 0.7)

Site: West District: Huron, Ottawa, Richland, & Sandusky Counties - Gene Horner, IPM Scout

Apple: 5/27 to 6/03/03

CM: 0.4 (down from 1.3) LAW: 0.3 (first report) OFM: 0.0 (down from 0.1) RBLR: 0.2 (down from 1.7) STLM: 12.7 (up from 9)

Peach: 5/27 to 6/03/03

LPTB: 3.8 (up from 1.1) OFM: 1.3 (down from 1.9) PTB: 0 (same as last week) RBLR: 0.0 (down from 0.5)

Preliminary Monthly Climatological Data for Selected Ohio Locations, May, 2003

Weather Station Location	Monthly Precip	Normal Monthly Precip	Year- to- Date Precip	Normal Year-to- Date Precip	Avg High	Normal High	Avg Low	Normal Low	Mean Temp.	Normal Mean
Akron- Canton	8.16	3.96	16.91	15.27	66.7	69.8	48.6	47.8	57.7	58.8
Cincinnati	7.29	4.59	16.99	18.12	70.5	74.4	53.2	52.9	61.8	63.6
Cleveland	6.49	3.50	16.01	14.58	66.7	68.5	48.9	48.3	57.8	58.4
Columbus	5.92	3.88	15.29	14.75	69.5	73.3	52.1	51.8	60.8	62.5
Dayton	6.62	4.17	14.06	16.38	68.3	71.2	51.6	51.1	60.0	61.1
Fremont	6.33	3.60	14.09	15.50	67.5	70.4	45.5	48.2	56.5	59.3
Kingsville	6.76	3.32	16.58	12.70	64.5	67.0	45.8	47.1	55.2	57.1
Mansfield	5.24	4.42	13.29	16.75	66.5	69.3	47.2	46.7	56.9	58.0
Norwalk	5.96	3.55	14.86	13.08	66.4	69.3	48.7	48.0	57.5	58.6
Piketon	6.78	4.20	19.05	18.60	71.7	73.8	53.2	49.5	62.5	61.7
Toledo	5.69	3.14	13.54	12.81	66.5	70.6	47.3	48.5	56.9	59.6

Wooster	5.36	4.01	15.28	13.91	69.4	70.6	48.7	46.5	59.0	58.5
Youngstown	6.84	3.45	14.97	14.20	65.7	69.0	46.5	46.2	56.1	57.6

Temperatures in degrees F, Precipitation in inches Table Created by Ted W. Gastier, OSU Extension from National Weather Service, OARDC & Local Data

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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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