

Northern Michigan FruitNet 2016

Northwest Michigan Horticultural Research Center

Weekly Update

FruitNet Report – December 28, 2016

CALENDAR OF EVENTS

01/17 - 01/18/17	2017 Orchard and Vineyard Show Grand Traverse Resort
2/1 – 2/3	Tree Fruit IPM School Registration required (more information below)

What's New?

- **Annual NW Michigan Orchard and Vineyard Show - Agenda**
- **Managing spotted wing Drosophila in organic small fruit**
- **WANTED: Sites with Japanese beetle problems**

Annual NW Michigan Orchard and Vineyard Show

The 2017 Northwest Orchard and Vineyard Show is scheduled for January 17-18 and will be held at the Grand Traverse Resort in Acme, Michigan. Registration opens at 8:00 a.m. on January 17th, and the cost for both days is \$35, which is payable at the door. The line is often long at the registration desk, so meeting attendees are encouraged to arrive *well before* the 9:00 start time. Both days will feature educational programs and vendor exhibits.

The Fruit Industry Luncheon will be held on Tuesday the 17th, which is sponsored by Gillison's Variety Fabrication and GreenStone Farm Credit Services. The Cherry Marketing Institute annual meeting and luncheon will be on Wednesday the 18th. Both lunches are free of cost to attendees.

The exhibit hall will be open during the show to feature vendors of orchard and vineyard equipment and supplies, commodity organizations, and other exhibitors.

Both Tuesday and Wednesday will offer a variety of topics relating to research and information on tart cherries, sweet cherries, apples, wine grapes, berry crops and saskatoons, addressing both production and marketing. Tree fruit topics include spotted wing *Drosophila* monitoring and management strategies, an update on non-bearing Ulster sweet cherries, trends on cherry imports, tart cherry crop insurance and diversion, and pollination. The winegrape session will focus on bees, wasps and SWD in the vineyard, a newly released virus survey, an update on the Michigan Winegrape Collaborative, and insurance for winegrapes. The afternoon will conclude with a social hour featuring local food and wines, sponsored by Crop Production Services.

Wednesday's general sessions will open with the annual meeting of the Cherry Marketing Institute, followed by their luncheon, which is free to growers if they pre-register with Cherry Marketing Institute by phone 800-462-7611 or by email at igordan@usacherries.com. The afternoon tree fruit session will feature topics such as fireblight in apples, cover crops, plant growth regulator use, and will end with a panel of growers discussing the H2A program for labor in orchards.

New to the 2017 will be an afternoon session on the second day that will target small-scale or backyard berry growers and SWD. This pest is new to many of these growers, and this educational program will help them identify SWD, learn how to monitor for it, and how to best control this pest in raspberries, blueberries, and blackberries.

The program is co-sponsored by the Grand Traverse Fruit Growers' Council, Michigan State University Extension and AgBioResearch, Cherry Marketing Institute, Parallel 45, and the Northwest Michigan Horticultural Research Center.

For more information on the Northwest Michigan Orchard and Vineyard Show, please call Jenn Zelinski at 231-946-1510 or email goodr100@msu.edu.

2017 Northwest Michigan Orchard and Vineyard Show Grand Traverse Resort and Spa, January 17-18, 2017

Costs: Registration Fee: \$35/person both days

January 17th: Fruit Industry Luncheon, Free; sponsored by GreenStone Farm Credit Services and Gillison's Variety Fabrication

January 18th: CMI Luncheon, Free to cherry growers

The local beverage tasting and hors d'oeuvre social hour is sponsored by northern Michigan wineries, breweries, cideries and Crop Production Services. This tasting will be held in remembrance of Matt Lyons.

Educational sessions coordinated by:

Dr. Nikki Rothwell, *Northwest Michigan Horticultural Research Center Coordinator and MSU Extension Specialist*

Emily Pochubay, *MSU Extension Fruit IPM Educator*

Dr. Duke Elsner, *MSU Extension Small Fruit Educator*

Tree Fruit Sessions – Tuesday, January 17, 2017

8:00	Registration Desk Opens
8:00 – 10:30	<i>Coffee and Rolls</i>
Moderator:	Stan Moore, MSU Extension
8:30 – 9:00	Northwest Michigan Horticultural Research Foundation Board Meeting <i>The meeting is open to all growers</i>
9:00 – 9:10	Welcome and Overview <i>Paul Hubbell, President, Grand Traverse Fruit Growers' Council</i>
9:10 – 9:20	Non-bearing Ulster Update <i>Dr. Nikki Rothwell, MSU Extension and AgBioResearch</i>
9:20 – 9:45	Turkey Damage in High-Density Apples: DNR Rules <i>Steve Griffith, DNR Specialist</i>
9:45 – 10:10	Making Sense of the Proposed Michigan Pollinator Protection Plan (MP3) <i>Dr. Julianna Wilson, Dept. of Entomology, MSU</i>
10:10 – 10:40	<i>Vendor Break</i>
10:40 – 11:05	Optimizing SWD Monitoring Tools <i>Dr. Larry Gut, Dept. of Entomology, MSU</i>

11:05 – 11:30	Efficacy of SWD Spray Strategies <i>Dr. Nikki Rothwell, MSU Extension and AgBioResearch</i>
11:30 – 12:00	Diversion and Diversion Credits: How Does the System Work? <i>Perry Hedin, Cherry Industry Administrative Board</i>
12:00 – 1:30	<i>Fruit Industry Luncheon</i> Climate Change Data and New Inversion Towers: How this Information Can Help Growers Respond to Cold Events. <i>Dr. Jeff Andresen, Dept. of Geography, MSU</i>
1:30 – 2:00	<i>Vendor Break</i>
Moderator:	Dr. Nikki Rothwell, MSU Extension and AgBioResearch
2:00 – 2:20	2016 Reviewing Growers' SWD Spray Programs <i>Emily Pochubay, MSU Extension</i>
2:20 – 2:45	Trends in Imported Tart Cherry Products <i>Mollie Woods, Dept. of Agricultural Economics and Product Center, MSU</i>
2:45 – 3:15	Freeze Resistance, Fruit Growth and Development Models for Sweet Cherries <i>Dr. Todd Einhorn, Dept. of Horticulture, MSU</i>
3:15 – 3:45	<i>Vendor Break</i>
3:45 – 4:10	Practical Implications of Fungicides in Hives on Orchard Disease Management During Bloom <i>Dr. Julianna Wilson, Dept. of Entomology, MSU</i>
4:10 – 4:55	Helping Growers Understand RMA and the New Tart Cherry Crop Insurance <i>Dr. Roy Black, Dept. of Agricultural Economics, MSU</i> <i>Jim Bardenhagen, Bardenhagen Farms</i>
4:55	Fill Out Pesticide Recertification Credits and Certified Crop Advisor Credits
5:00	LOCAL BEVERAGE TASTING AND HOR D'OUERVE SOCIAL HOUR

Tree Fruit Sessions – Wednesday, January 18, 2017

8:00 – 9:00 ***Coffee and Vendor Time***

Moderator: Phil Korson, Cherry Marketing Institute

9:00 – 9:30 **National Cherry Festival Report to the Industry**
Susan Wilcox-Olsen, National Cherry Festival

9:30 – 9:40 **Evolution of the CMI Marketing Program**
Cathy Calhoun, Weber Shandwick

9:40 – 10:00 **The 2015/16 Montmorency Promotion Program Results**
Carolyn Westcomb, Weber Shandwick

10:00 – 10:30 **Vendor Break**

10:30 – 11:00 **2016/17 Montmorency Promotion Program Overview**
Carolyn Westcomb, Weber Shandwick

11:00 – 11:20 **Export Programs and Opportunities**
Julie Gordon, Cherry Marketing Institute

12:00 – 1:30 **28th Annual Cherry Marketing Institute Luncheon**

1:30 – 2:15 **Vendor Break**

Moderator: Emily Pochubay, MSU Extension

2:15 – 2:45 **Fire Blight: Thoughts on Management for 2017**
Dr. Gerooge Sundin, Dept. of Plant, Soil and Microbial Sciences, MSU

2:45 – 3:15 **Using Difference Cover Crop and Soil Amending Strategies to Improve Growth on New Cherry Plantings**
Dr. George Bird, Dept. of Entomology, MSU

3:15 – 3:45 **Effective Use of PGRs in High-Density Apples**
Phil Schwallier, MSU Extension

3:45 – 4:15 **Challenges and Opportunitites Using H2A (Grower Panel)**
Mark Miezio, Cherry Bay Orchards
Dean Johnson, Johnson Farms
Heatherlyn Johnson Reamer, Johnson Farms
Mike Evans, Evans Fruit Farms

4:15 **Fill Out Pesticide Recertification Credits and Certified Crop Advisor Credits**

Grape and Wine Sessions – Tuesday, January 17, 2017

Room – Peninsula Room

Moderator: Dr. Duke Elsner, MSU Extension

8:00 ***Registration Desk Opens***

8:00 – 10:30 ***Coffee and Rolls***

9:00 – 9:10 **Welcome and Overview**
Brian Hosmer, President, Parallel 45 Vines and Wines, Inc.

9:10 – 9:30 **Experiences in Italian Vineyards and Wineries**
Wes Mateusiak, MSU/VESTA Student

9:30 – 9:50 **Whole Farm Revenue Protection Insurance for Vineyards**
Cory Blumerick, Greenstone Farm Credit Services

9:50 – 10:15 **Update on the Michigan Wine Collaborative**
Lee Lutes, Black Star Farms, Suttons Bay, MI

10:15 – 10:45 ***Vendor Break***

10:45 – 11:10 **The Tip of the Mitt AVA Region and the Bay View Wine Trail**
Jim Peters, President, Straights Area Grape Growers Association
Geoff Frey, Board Member, Straights Area Grape Growers Association
Chuck Lindsey, Board Member, Straights Area Grape Growers Association

11:10 – 11:40 **Changes Ahead at the NW Research Vineyard**
Dr. Paolo Sabbatini, Dept. of Horticulture, MSU

12:10 – 1:30 ***Fruit Industry Luncheon***

1:30 – 2:00 ***Vendor Break***

2:00 – 3:00 **P45 Business Meeting**
Brian Hosmer, President, Parallel 45 Vines and Wines, Inc.

3:00 – 3:25 **Results of the 2016 Vineyard Virus Survey**
Dr. Annemiek Schilder Dept. of Plant, Soil and Microbial Sciences, MSU

- 3:25 – 4:15 **Spotted Wing Drosophila in Virginia Vineyards: Battle in the Berries**
Dr. Doug Pfeiffer, Dept. of Entomology, Virginia Tech, Blacksburg, VA
- 4:15 – 4:45 **Harvest-time Insect Issues in Vineyards - Can Anything be Done?**
Dr. Rufus Isaacs, Dept. of Entomology, MSU
- 4:45 – 5:00 **Fill Out Pesticide Recertification Credits (2 credits requested)**
- 5:00 **LOCAL BEVERAGE TASTING AND HORS D'OUERVE SOCIAL HOUR**

Saskatoon Sessions – Wednesday, January 18, 2017

Room – Peninsula Room

- 8:00 – 9:00 ***Coffee and Vendor Time***
- Moderator:** **Dr. Duke Elsner, MSU Extension**
- 9:00 – 10:00 **Fruit Infesting Insects- ID, Phenology and Impacts**
Dr. Duke Elsner, MSU Extension
- 10:00 – 10:30 ***Vendor Break***
- 10:30 – 10:50 **Results and Observations from the Pruning Demonstration Plot**
Dr. Duke Elsner, MSU Extension
- 10:50 – 11:30 **Saskatoon Berry Institute of North America Report and Discussion**
SBIONA Board Members and Staff
- 11:30 – 1:45 **Novel Berry GREEN Grant**
Dr. Duke Elsner, MSU Extension
- 11:45 – 12:00 **Fill out pesticide recertification credit forms (1 credit requested)**
- 12:00 – 1:30 ***28th Annual Cherry Marketing Institute Luncheon (Free for cherry growers)***

Spotted Wing Drosophila in Northern Michigan Berry Crops – Wednesday, January 18, 2017

Room - Peninsula Room

A FREE SESSION OPEN TO ALL NORTHERN MICHIGAN BERRY CROP GROWERS

1:00 – 1:10	Welcome by SBIONA <i>SBIONA Board Members and Staff</i>
1:10 – 2:30	SWD in Strawberries, Blueberries and Raspberries <i>Dr. Carlos Garcia-Salazar, MSU Extension</i>
2:30 – 3:00	Detecting SWD in Fruit Samples <i>Dr. Duke Elsner, MSU Extension</i>
3:00 – 3:30	SWD adult detection with traps <i>Dr. Carlos Garcia-Salazar, MSU Extension</i>
3:30 – 3:45	Fill out pesticide recertification credit forms (3 credits requested)

WANTED: Sites with Japanese beetle problems

A proposed research project titled "Reducing pesticide use in Japanese beetle management by establishing a biological control in Central and Northern Michigan" will soon be submitted for funding through MSU's Project GREEN program.

The objectives of this proposal are:

- 1) to establish long-term biological control of JB on Central and Northern Lower Michigan farms (chestnut, hop, asparagus, and grape) and nurseries through the introduction of JB infected with *Ovavesicula popilliae*.
- 2) to establish nursery sites in West-central and Northwest Michigan from which infected beetles can be collected and distributed in the future.

We are in need of a vineyard site with a history of Japanese beetle infestation, but sites with other fruit crops would be considered. If you think you have a site which could fit the need for this project, contact Duke Elsner at 231-922-4822 or elsner@msu.edu as soon as possible.

Detection and Control of Spotted Wing Drosophila in Berry Crops

If you grow raspberries, blackberries, blueberries or strawberries for commercial sale or just for your personal use, you may have noticed a new pest insect has arrived on the

scene in northern Michigan. Spotted wing drosophila (SWD) is a non-native invasive insect that has quickly become the top pest issue in the production of many fruits. Our native small fruit flies are a close relative that we are all used to dealing with on over-ripe or injured fruits; SWD can attack fruits before they are fully ripe, destroying berries well before harvest. Accurate detection and well-timed pesticide applications are essential to the control of this insect.

A meeting on SWD detection and control for berry crop growers will be offered as part of the 2017 Northwest Michigan Orchard and Vineyard Show at the Grand Traverse Resort in Acme, MI on Wednesday, January 18. This session is free of charge to both commercial and home fruit growers. Carlos Garcia-Salazar, a Michigan State University Extension Educator with extensive experience with SWD will be the featured speaker. The session runs from 1:00 – 3:30 pm in the Peninsula Room.

The annual Northwest Michigan Orchard and Vineyard Show is a two-day event featuring educational programs and commercial vendors. The show attracts cherry, apple, grape, and saskatoon growers from across the state to learn about key production issues. It is co-hosted by Michigan State University Extension, the Grand Traverse Fruit Growers' Council and the Saskatoon Berry Institute of North America. The 2017 show will be held on January 17th and 18th at the Grand Traverse Resort. Registration for the show is \$35, but berry growers wishing to learn about spotted wing drosophila do not need to register or pay a fee.

For more information on the spotted wing drosophila session, call Duke Elsner at 231-922-4822. For information on the rest of the show, please contact the Northwest Michigan Horticulture Research Center by phone at 231-946-1510

Register for Tree Fruit IPM School by January 11th

***Brochure registration form attached**

Registration is now open for the 2017 Michigan State University Tree Fruit IPM School. This year, the meeting will be held on February 1-3 at Hotel Indigo in Traverse City, MI. The school will feature speakers that will address key challenges in orchard systems and how we can maintain and optimize IPM strategies in the 21st century particularly in relation to invasive insect pests that have changed these strategies. We will also explore orchard diseases and how to balance disease control and resistance management. Participants will learn how to identify and differentiate symptoms of traditional orchard insect pests, newer invasive species, diseases, and physiological disorders. Lastly, we have included important horticultural strategies to grow high quality fruit.

We are pleased to announce that three guest speakers are on our lineup this year – Dr. Tracy Leskey of USDA ARS Appalachian Fruit Research Station will join us to share the experience and status of brown marmorated stink bug management from the perspective of growers in Eastern states; she will also present her latest research on spotted wing drosophila. Dr. Lailiang Cheng of Cornell University will address nutritional issues of apples including nutrient requirements of Gala and mitigating bitter pit in Honeycrisp. Finally, Sara Villani of North Carolina State University Extension will discuss how to resist SDHI fungicide resistance and her latest research on apple scab management.

The cost of registration is \$175 and includes breakfast, lunch, snacks, refreshments, and beverages for the Pub Quiz Social Hour, and a binder with course materials. Dinner and lodging are on your own. Don't forget to mention MSU IPM Fruit School for a discounted room rate at Hotel Indigo until January 22nd. To register, please mail a check made payable to Michigan State University and a completed registration form (attached) to:

Jenn Zelinski
NW MI Horticultural Research Center
6686 S. Center Hwy
Traverse City, MI 49684

Registrations must be post-marked by January 11th. Questions? Please contact Emily Pochubay (pochubay@msu.edu) or Jenn Zelinski (goodr100@msu.edu), 231-946-1510.

*We would like to extend our sincerest thanks our sponsors
for their generous donations to support this year's school!*



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Managing spotted wing Drosophila in organic small fruit

Michigan State University releases new resource on useful information for managing spotted wing Drosophila in organic small fruit production.

Posted on **December 13, 2016** by **Heather Leach**, Rufus Isaacs and Matthew Grieshop, Michigan State University, Department of Entomology

A new fact sheet covering cultural, biological and chemical control of [spotted wing Drosophila](#) in organic crops has been developed by Michigan State University. "[Integrated Strategies for Management of Spotted Wing Drosophila in Organic Small Fruit Production](#)" (**updated December 2016**) highlights multiple ways organic producers of various farm sizes can integrate non-chemical control practices into their farming. It also includes guidance on monitoring for adult flies and for larvae in fruit, and shows the label restrictions for Entrust SC, the primary organic insecticide used to control this pest, for each of the susceptible crops. The fact sheet also describes new approaches to controlling this pest that are currently in development at MSU.

To view the fact sheet, go to [Integrated Strategies for Management of Spotted Wing Drosophila in Organic Small Fruit Production](#).

For more information on spotted wing Drosophila and other crop-specific recommendations, visit [MSU's Spotted Wing Drosophila](#) website.

Grand Traverse Conservation District - MAEAP Technician (2 positions)

The Grand Traverse Conservation District is currently seeking candidates for the Michigan Agriculture Environmental Assurance Program (MAEAP) Technician position. The position is full-time, 40 hours per week. The usual work hours will be scheduled between the hours of 8:00 AM-4:30 PM M-F. Some nights and weekends will be required based on when outreach events and meetings are scheduled. Travel (paid) will be required throughout the multi-county service area. The Technician will be employed by the Grand Traverse Conservation District. This is a grant-funded position and may be renewed annually. The wage (\$17 - \$21/hour) will be commensurate with candidate's experience and education.

The position is housed in Grand Traverse County at Grand Traverse Conservation District located at 1450 Cass Rd., Traverse City, Michigan. The service area covers: Antrim, Benzie, Grand Traverse, and Leelanau counties. The successful candidate will be responsible for delivering on-farm technical assistance in the counties served. This includes conducting farm-specific risk assessments, coordinating local, state and federal agency resources to help growers/farmers reduce environmental risks; and assisting growers/farmers in making progress toward MAEAP verification. The MAEAP Technician is also responsible for collaborating with Conservation District staff to promote MAEAP and educate diverse audiences on the importance of sustainable agriculture in the Grand Traverse region.

Applicants should have a four-year agriculture or natural resource management or related degree from an accredited college or university. Minimum two years of experience in agriculture or natural resource related fieldwork is preferred. Knowledge of and experience working with agricultural producers and practices is preferred. Experience collaborating on, developing, and delivering agriculture education programs to a variety of audiences in diverse settings is preferred. Must maintain a valid driver's license and have access to a working vehicle.

Application Deadline: Friday, January 6, 2017, or until position is filled. Submit a cover letter stating your suitability for the position based on knowledge and skills, along with a resume, and list of 3 professional references to Marsha Clark, Executive Director, Grand Traverse Conservation District. E-mail: mclark@gtcd.org or mail to: 1450 Cass Road, Traverse City, MI 49685. Equal Opportunity Employer

Sustainable Spotted Wing Drosophila Management for United States Fruit Crops

Grower Survey

<https://survey.ncsu.edu/swd/>

Thank you for helping out by taking this survey. The purpose of the survey is to measure the effects of spotted wing drosophila (SWD) on fruit crop production. Results will be used to develop national research and extension projects to minimize future impacts of SWD. These may include:

- *Development of new management tactics and programs*
- *Supporting new or expanded pesticide registrations for SWD*
- *Development of educational material on SWD for growers, extension agents, and others*

Participation in the survey is voluntary. The survey does not collect personally identifying information. Data may be summarized by state, crop, farm size, or farm type, but individual survey responses are confidential and will never be shared. Summaries of aggregated survey data will be publicly available on our project website, and will also be available by request.

Funding for this project, *Sustainable Spotted Wing Drosophila Management for US Fruit Crops*, was provided by the National Institute of Food and Agriculture, U.S. Department of Agriculture Specialty Crops Research Initiative under Agreement No. 2015-51181-24252.

The survey should be completed by the person (age 18 or older) who is responsible for making pest management decisions for this growing operation.

If you have questions about the survey, please contact Hannah Burrack at hjburrac@ncsu.edu or Jean-Jacques Dubois at jjdubois@ncsu.edu

New webinar series for beginning farmers will begin January 2017

The Beginning Farmer Webinar Series generated new farm businesses and employment opportunities. A new series will begin Jan. 30, 2017.

Posted by **Jim Isleib**, Michigan State University Extension, MSUE News

New farm businesses provide jobs, income and increased economic and social stability, and increased food security to rural and other communities. Providing basic, practical information to people interested in or already engaging in new farm enterprises helps these small businesses develop sound production and marketing plans. The Michigan State University Extension Beginning Farmer Webinar Series helps to make this happen, reaching 664 people since 2012.

An evaluation of the series of 24 webinars offered during January-May 2016 showed that the series was perceived as valuable by respondents, with strong indication of knowledge increase. Respondents indicated the series will have impact on the land they manage and on several key farming decisions and activities. Respondents revealed that the series contributed to the creation of 10 new jobs.

A new Beginning Farmer Webinar Series is planned for January-May 2017. Presenters include MSU Extension educators and others. The following evening “Getting started with...” webinars will provide valuable start-up information on nine general and more specific farming topics, including:

- Jan. 30, Small vegetable farm systems
- Feb. 13, Hoophouse management
- Feb. 27, Maple syrup
- March 13, Fencing and watering systems for livestock
- March 27, Blueberries
- April 3, Crop nutrient management
- April 10, Aquaculture (fish farming)
- April 24, Planning and operating a mixed fruit orchard
- May 8, Producing and selling eggs

A fee of \$10 per webinar is required, or you can register for the entire series at half price for \$45. Webinar recordings will be provided to all registered participants. Participate from the comfort and convenience of your own home or office. Registration, a brochure containing details on each individual program and online or mailed payment options can be found at **Beginning Farmer Webinar Series 2017**. You may register for all or some of the courses at any time, even if the session has already taken place. In that case, you will get a link to the recorded program.

Each program begins at 7 p.m. ET and will last up to two hours. A high-speed internet connection is required. You will receive webinar connection information after you register.

An archive of 58 Beginning Farmer Webinar Series programs from 2012-2016 on a wide variety of topics can be accessed free of charge at the [Beginning Farmer Webinar Series](#) webpage.

Contact the Alger County MSU Extension office at 906-387-2530 or isleibj@anr.msu.edu for more information.

Agricultural Survey Responses Needed – Benzie and Antrim County Growers

Benzie County: <https://www.surveymonkey.com/r/5KKDVQB>

Manistee County: <https://www.surveymonkey.com/r/ZNQL8FH>

Last chance to receive pesticide recertification credits from the IPM Academy Online

Up to five commercial or private core pesticide recertification credits are available for Michigan applicators until Dec. 31, 2016. No registration or fees required.

Posted by [Erin Lizotte](#), Michigan State University Extension, MSUE News



Looking to learn more about integrated pest management (IPM) or get some end-of-year recertification credits? Check out Michigan State University's [IPM Academy Online Webinars](#), a series of on-demand webinars created to help Michigan growers identify pest management resources and understand IPM basics.

Registration is not required and they are available for free. Simply visit the [IPM Academy Online Webinars](#) webpage at your convenience and view one or all of the prerecorded webinars. Viewers can earn up to five pesticide recertification credits. A computer with internet connectivity, a web browser and speakers are required.

The following webinars are currently available for viewing:

- MDARD Nursery Program Update
- Summer 2015 Nursery Update
- Becoming an Insect Investigator: Interpreting Vegetable Pest Symptoms and Signs
- Tactics for Vegetable Disease Management
- Hop IPM
- What's Wrong With My Vegetable Plants?
- Chestnut IPM
- Introduction to Integrated Pest Management
- Integrated Pest Management Resources
- Entomology 101
- Plant Pathology 101
- Soil Science 101
- Plant Science 101
- Pesticides 101
- Insect Scouting in Fruit Crops

Accommodations for persons with disabilities may be requested by contacting Erin Lizotte at taylo548@msu.edu to make arrangements. Requests will be fulfilled when possible.

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Be aware of changes to EPA's Worker Protection Standard January 2017

These meetings and resources will help growers who use pesticides comply with changes to the federal Worker Protection Standard.

Posted by **Tom Dudek**, Michigan State University Extension, MSUE News



The Environmental Protection Agency (EPA) has made a significant number of changes to the Worker Protection Standard (WPS) that were put into effect in 1992. The new changes require growers of agricultural crops, including greenhouses and nurseries, to be compliant starting Jan. 2, 2017.

Changes in the new rules include:

- Worker training
- Hazard communication
- Notification of treated areas

- Minimum age for handlers and early entry workers
- Entry restrictions during applications for outdoor production
- Handler suspends application in certain situations
- Exemptions and exceptions
- Basic pesticide safety information
- Personal protective equipment
- Decontamination supplies
- Emergency assistance
- Definitions of “family,” “enclosed space production” and “employ”

Michigan State University Extension is offering EPA WPS Outreach Sessions throughout Michigan in January 2017 to help growers understand the changes. These sessions will take place **Jan. 10 in Clarksville, Jan. 17 in Traverse City, Jan. 24 in Benton Harbor and Jan. 31 in New Era**. Visit EPA WPS Outreach Sessions to register and for more information.

The Pesticide Educational Resources Collaborative has some excellent written materials to help you comply with the changes, including checklists to be sure you have covered all the changes, an employee training video for worker training and the “How to Comply With the 2015 Revised Worker Protection Standard For Agricultural Pesticides” manual. This updated manual supersedes the 2005 version. Changes to the Standard have made the 2005 version obsolete. The revised “How to Comply” manual includes:

- Details to help you determine if the WPS requirements apply to you.
- Information on how to comply with the WPS requirements, including exemptions, exceptions, restrictions, options and examples.
- A “Quick Reference Guide,” which is a list of the basic requirements (excluding exemptions, exceptions, etc.).
- New or revised definitions that may affect your WPS responsibilities.
- Explanations to help you better understand the WPS requirements and how they may apply to you.

The Michigan Department of Agriculture and Rural Development enforces the WPS rules in Michigan. They have completed planned use inspections with many growers over the past few years as a method to see how growers are complying with the Standards.

I encourage you to review the changes and be in a position to implement them when your workers show up Jan. 2, 2017.

MSU Extension programs and material are open to all without regard to race, color, national origin, gender, gender identity, religion, age, height, weight, disability, political beliefs, sexual orientation, marital status, family status, or veteran status.

Michigan State University is committed to providing equal opportunity for participation in all programs, services and activities.

WEB SITES OF INTEREST:

Insect and disease predictive information is available at:

<http://enviroweather.msu.edu/homeMap.php>

This issue and past issues of the weekly FruitNet report are posted on our website:

<http://agbioresearch.msu.edu/nwmihort/faxnet.htm>

60-Hour Forecast:

<http://www.agweather.geo.msu.edu/agwx/forecasts/fcst.asp?fileid=fous46ktvc>

Information on cherries:

<http://www.cherries.msu.edu/>

Information on apples:

<http://apples.msu.edu/>

Information on grapes:

<http://grapes.msu.edu>

Fruit CAT Alert Reports:

<http://news.msue.msu.edu>