

FruitNet Report – June 22, 2016

CALENDAR OF EVENTS

- 6/24** **CIAB Grower Meeting**
SW MI Research and Extension Center, 4:30 – 6:30 PM
- 6/27** **CIAB Grower Meeting**
Oceana Intermediate School District, 8:30 – 10:00 PM
- 6/28** **CIAB Grower Meetings**
Peninsula Township Hall, 9:00 – 11:00 AM
Milton Township Hall, 1:00 – 3:00 PM
NWMHRC, 7:00 – 9:00 PM
- 5/3 – 6/28** **Leelanau County IPM Updates, 12PM – 2PM**
Jim and Jan Bardenhagen’s Farm (details below)
- 5/3 – 6/28** **Grand Traverse County IPM Updates, 3PM – 5PM**
Wunsch Farms (details below)
- 5/4 – 6/29** **Antrim County IPM Updates, 10AM – 12PM**
Jack White Farms (details below)
- 5/4 – 6/29** **Benzie County IPM Updates, 2PM – 4PM**
Blaine Christian Church (details below)
- 7/1** **Natural enemies, new insecticide options, perimeter spray programs-- Rufus Isaacs, MSU**
Hawthorne Vineyards on Old Mission Peninsula, 3-5PM
- 7/13** **Income Taxes for Foreign Agricultural Workers (H-2A)**
NWMHRC, 8AM – 4:30PM
- 8/25** **NWMHRC Open House**
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What's New?

- **The 2016 Michigan Fruit Crop Guesstimate**

- **SWD Trap Update – June 22, 2016**
 - **Monitoring traps for catching spotted wing *Drosophila***
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The 2016 Michigan Fruit Crop Guesstimate

The 2016 Michigan Fruit Crop Guesstimate was held today in Grand Rapids. This session was hosted by the Michigan Frozen Food Packers Association. Growers and consultants representing different areas of Michigan provided the following estimates. In the case of tart cherries, growers represented the different tart cherry growing states as well as the regions of Michigan:

Tart Cherries (million pounds)

<i>Michigan</i>		<u><i>Estimated Start Date</i></u>
• Northwest:	165	7/15 (Manistee) – 8/5 (Northport)
• West Central:	68	7/8 – 7/10
• Southwest:	20	6/29 – 6/30
Total:	253	
<i>New York</i>	7	7/11
<i>Pennsylvania</i>	0.3	
<i>Wisconsin</i>	11	7/31
<i>Utah</i>	50	7/11 – 7/15
<i>Washington</i>	27	6/27
<i>Oregon</i>	3	6/23
U.S. total:	351.3	

Sweet Cherries (million pounds)

<i>Michigan:</i>	
• Fresh:	1,500,555
• Canned:	3,000,000
• Frozen:	16,500,000
• Brine:	33,000,000
Total	54,000,000

Apples (000 bushels)

Michigan (total numbers of bushels)

- Northwest: 3,636,600
- Eastern: 893,000
- West Central: 19,405,000
- Southwest: 2,360,000

Michigan total: 26,294,600

Blueberries (million pounds)

Michigan: 101

SWD Trap Update – June 22, 2016

Catch Date	Location	Crop	No. of SWD
5/31	Centerville Twshp.	Tart Cherry	1
6/16	S. of Suttons Bay	Tart Cherry	1
6/17	Old Mission	Woodlot	2
6/20	M-72 W corridor	Tart Cherry	2
6/21	Old Mission	Sweet and Tarts	3
6/21	Elk Lake Rd.	Wild Raspberry	1
6/22	N. of Suttons Bay	Tart Cherry	1

Total catches per region:

Centerville Twshp. - 2
S. of Suttons Bay - 1
Old Mission - 5
M-72 W corridor - 1
Elk Lake Rd. – 1
N. of Suttons Bay - 1

Monitoring traps for catching spotted wing *Drosophila*

Using the right bait can help improve your spotted wing *Drosophila* trap's sensitivity.

Posted by [Rufus Isaacs](#), and Julianna Wilson, Michigan State University Extension, Department of Entomology; and Nikki Rothwell, MSU Extension, MSUE News



A trap for spotted wing *Drosophila* (SWD) that includes a plastic container with small holes for the flies to enter, a Scentry lure for SWD attraction and small volume of soapy water to trap the flies.

With the first catches of [spotted wing *Drosophila*](#) (SWD) detected in Michigan over the past few weeks, it is important to monitor for this pest to know when it is becoming active in berry fields and cherry orchards. Recent research at [Michigan State University](#) and elsewhere can guide how to best monitor for this pest, and there have been various developments on trap design and lures in recent years that should be incorporated into trapping programs. Additionally, trap checkers need to have good identification skills so that SWD can be separated from all the other small flies as well as detecting females that do not have the black spot on the wings. MSU has developed a guide with photographs, titled "[Spotted Wing *Drosophila* Identification Guide](#)."

Traps and lures can be made at home, or they can be purchased from commercial suppliers, such as [Great Lakes IPM](#) supplies traps and lures. MSU staff are using a simple monitoring trap that consists of a plastic, 32 ounce cup with 10 holes 0.1875-0.375 inch in size around the upper side of the cup, leaving a 3-4 inch section without holes to facilitate pouring out the liquid. The holes can be melted into the plastic with a hot wire or soldering iron. The small holes allow access to vinegar flies, but keep out larger flies, moths, bees, etc.

To help ensure that trapped flies do not escape and to facilitate checking traps, a small, yellow sticky trap can be placed inside hung on a paper clip, but this is **not** necessary. A drop of unscented dish soap in the liquid will ensure flies remain trapped. It is important to have many points for entry by the flies into the trap, and to have holes that are not too big, otherwise lots of other insects will be trapped. Some trap designs include red or black coloration and this will help increase captures, but the bait is the most important component of the trap for getting the flies to be attracted and enter the trap.

For baits, there are some different options. A homemade approach is to use a yeast-sugar mix that ferments and attracts the flies. This trap is made by combining 1 tablespoon of active dry yeast (we use Red Star brand, available online or in stores) with 4 tablespoons of sugar and 12 ounces of water. Although these traps are harder and messier to service, the yeast bait is less expensive.

If you prefer the convenience and cleanliness of a pre-made commercial lure, some of those are now available for SWD. This year, we are using the Scentry pouch lure that is pictured in the photo, and in our 2015 trials in Michigan this lure worked as well as the yeast-sugar mix bait. This Scentry lure is hung in the trap over 1-2 inches of water with unscented dish soap, and the liquid can be checked each week for SWD. The lure should be changed monthly to maintain maximum activity. To prevent the development of molds in the liquid and to help preserve the SWD flies for identification, add 32 grams of borax per gallon of water.

Traps for SWD should be hung in a shaded area in the fruit zone, using a wire attached to the top of the trap. Growers should be sure the trap is clear of vegetation with the holes exposed so that SWD can easily fly in. [MSU Extension](#) recommends a minimum of one baited trap for SWD every 5-10 acres, with an additional trap in a wooded field margin if present to see when SWD is becoming active. Traps should be checked for SWD flies once a week at a minimum; the yellow sticky trap and liquid inside of the trap should be observed for SWD, and the SWD captures should be recorded each week in a log book. With this method, you can track the number of male and female SWD as the season progresses.

Once fruit are ripening and SWD flies are present, fruit protection will be needed to minimize the risk of infestation. We typically get a sharp increase in captures in July, and

when SWD populations reach high levels, it is a very important time for protection of later blueberry varieties, fall raspberry crops and cherries.

For more information about monitoring and management of SWD in Michigan fruit crops, please visit the [MSU Spotted Wing Drosophila website](#).

To Manage or Not Manage SWD in Young Tart Blocks?

N. Rothwell and E. Pochubay

Across Michigan, we have many young tart cherry blocks that have a substantial fruit load. In many cases, this situation is a result of cool weather in 2015 that contributed to a poor response of Pro-Gibb applications last season. In cool conditions, plant growth regulator activity decreases, and many Pro-Gibb applications were made in cooler temperatures in 2015. As a result, there is more fruit in orchards with young trees (3-5 years old) than is typical. With the concerns about spotted wing drosophila (SWD), growers will need to decide if they will manage these young blocks for SWD.

Observations from previous research suggested that keeping the overall SWD population low improves management outcomes. In the case of the efficacy trial at the Northwest Michigan Horticultural Research Center (NWMHRC), we found larvae in all of the treatments, even treatments with efficacious insecticides and tight intervals. For this experiment treatments were applied to single tree replicates, and the trees between the replicates were unsprayed. We hypothesize that SWD reproduced in the unsprayed trees between the treated trees thereby building the overall SWD population in the block. Consequently, larvae were detected in all of the treatments including those with the most efficacious SWD insecticides and spray intervals. This study and other anecdotal evidence suggest that it is necessary to prevent the build up of a high SWD population that can overwhelm even the best spray programs. Hence, growers need to decide whether or not to manage SWD in blocks of young trees with a higher than usual fruit load that will not be harvested. These blocks could serve as a breeding ground for SWD, and female flies will emigrate from these young orchards into adjacent commercial blocks intended for harvest.

Several considerations influence the decision to manage SWD in young blocks. First, what is the proximity of the young block to a block that will be harvested in 2016? If the young block is isolated (3+ miles from commercial block), growers could opt to not manage for SWD in that block. However, growers should consider applying insecticides to young blocks that are adjacent to commercial plantings. Second, what is the cost of the materials used in a block that will not be harvested? This scenario uses the most

economical sprays. Some pyrethroids are inexpensive options, but pyrethroid residuals are typically shorter in the orchard than other insecticides and multiple pyrethroid applications may be needed. Repeated sprays of the same insecticide mode of action and/or those with the potential for cross-resistance exacerbate the likelihood of SWD insecticide resistance. Because SWD reproduce and develop quickly, the potential SWD insecticide resistance is high. Therefore, growers should adequately rotate materials to prevent resistance development. Lastly, SWD presence and fruit susceptibility dictate when to begin management programs. MSU Extension has over 300 SWD traps across Michigan, and we provide traps catch numbers weekly through local newsletters and MSU News for Ag. If growers will manage SWD in young blocks, they should begin spray programs when 5% of the traps in a region (i.e. county) are catching flies or if a single SWD is caught on that particular farm. Additionally, fruit does not become susceptible to SWD until it loses its green color; management should begin when fruit are susceptible and SWD are detected either on farm or at a threshold of 5% of traps in the region.

If growers decide to manage SWD in young blocks, we have developed some guidelines to assist with this management strategy. First, growers should not spray insecticides until the fruit is straw colored; SWD females do not lay eggs in green fruit. Although we have been recommending every row applications for SWD control, in small trees, alternate row spraying will likely be adequate. This strategy will help keep costs down. Growers should make their first applications when SWD are present and fruit are no longer green. Imidan is likely the best insecticide option as it is both efficacious against SWD and has a longer residual time in the orchard compared with pyrethroids. When fruit are susceptible, two half sides of Imidan at a 10-D interval should be applied within one week of SWD detection; this strategy will help to prevent the SWD population from increasing in the young block and moving into the harvestable orchard. If populations do not appear to be increasing rapidly, these two half sides of Imidan may be adequate for the remainder of the season, if spray programs are impeccable in adjacent harvestable blocks. A third half side to full cover of a second material may be warranted if SWD populations in the region explode; we will be sure to alert growers if this sudden rise in population is the case. This additional application could be another Imidan or a pyrethroid, but there is a risk of cross-resistance with these two classes of insecticides. Moreover, the harvestable crop next to the young block should be harvested as soon as possible. Growers do not want to let these fruit hang in the orchard if they have an adjacent young block with little to no residues left on the fruit.

CIAB Grower Meetings

The CIAB meets June 23, 2016 at 8:00 AM, at the Amway Grand Plaza, in Grand Rapids, MI to discuss the Optimum Supply Formula and to set restriction percentages, if any.

The CIAB will hold grower meetings to discuss the outcomes with growers and the prospects for this harvest.

The meetings will be at the following locations and times. Please attend the one that is more convenient for you.

Friday, June 24	4:30 – 6:30 PM	Southwest Michigan Research and Extension Center 1791 Hillandale, Benton Harbor, MI
Monday, June 27	8:30 – 10:00 PM	Oceana Intermediate School District 844 Griswold Street Hart, MI
Tuesday, June 28	9:00 – 11:00 AM	Peninsula Township Hall 13235 Center Rd. Traverse City, MI
Tuesday, June 28	1:00 – 3:00 PM	Milton Township Hall Kewadin, MI
Tuesday, June 28	7:00 – 9:00 PM	NWMHRC 6686 S. Center Highway Traverse City, MI

Income Taxes for Foreign Agricultural Workers (H-2A) – Meeting

Meeting Dates and Times:

Tuesday, July 12, 2016

**Ottawa County Fillmore Complex Main Conference Room 12220 Fillmore Street
Olive, MI 49460**

West

Wednesday, July 13, 2016

**MSU Northwest Michigan Horticultural Research Center 6686 S. Center Highway
Traverse City, MI 49684**

Michigan’s agricultural industry has been seeing a decline in recent years of the traditional labor resources that have been used in the past. The use of the H-2A Guest Worker Program has seen a significant increase in use recently with continued significant growth in coming years. With this increase there is a need for legal and tax

professionals to have an understanding on how to prepare taxes for H-2A guest workers, common pit-falls and challenges.

This Continuing Education Program will provide a four hour presentation with three hours of hands-on workshop to help tax professionals understand how tax law impacts foreign agricultural workers and their employers and give them a better understanding of the challenges faced by tax professionals, employers and the workers themselves as they strive to comply with federal and state tax laws.

The information included also applies to all taxpayers who use ITINs when filing tax returns and/or have spouses and/or dependents living outside the United States.

This program will use IRS Publications 519 and 51 and others as a guide throughout this training. Participants will gain an understanding of tax preparation for H-2A Guest Workers, the appropriate method to fill-out an ITIN documentation/application, how to appropriately calculate the time a guest worker has been “in country” over the past 3-years to determine the correct tax documentation needed to be filed in the present tax year. Participants will also receive an overview of the tax deductions, credits available and not available to H-2A Guest Workers.

This program will also discuss payroll and tax withholding issues and responsibilities of an Employer and H-2A Laborer that all tax and legal professionals should be aware of when working with their clients.

Registration fee is \$125.00 per person which includes lunch, refreshments, handouts and materials. **Register online** by July 8, 2016 at <http://events.anr.msu.edu/H2ATaxPrepWorkshop/> . Online registration offers payment by credit card or check. Or to register by mail, mail completed registration form at right with check payment no later than July 5. Please indicate the location you would like to attend.

More information can be found in the attached PDF flyer.

2016 IPM Update Schedule

Emily Pochubay and Nikki Rothwell
Michigan State University Extension

Tree Fruit IPM Updates beginning the first week of May through mid-July (as needed) will highlight management of the seasons current potential pest challenges dictated by weather and pest biology. Attendees are encouraged to bring examples of pests and damage found on the farm to these workshops for identification and discussion.

Workshops will be held weekly in Leelanau and Grand Traverse counties and bi-weekly in Antrim and Benzie counties in May. Beginning in mid-June, we will hold weekly meetings in all four locations. Tree fruit growers are welcome to attend meetings at any of the locations and times that are most convenient (see below). These workshops are free and do not require registration. For more information, please contact Emily Pochubay (pochubay@msu.edu), 231-946-1510.

Leelanau County

Location: Jim and Jan Bardenhagen, 7881 Pertner Road, Suttons Bay

Dates: May 3, 10, 17, 24, 31; June 7, 14, 21, 28

Time: 12PM – 2PM

Grand Traverse County

Location: Wunsch Farms, Phelps Road Packing Shed, Old Mission

Dates: May 3, 10, 17, 24, 31; June 7, 14, 21, 28

Time: 3PM – 5PM

Antrim County

Location: Jack White Farms, 10877 US-31, Williamsburg (south of Elk Rapids on the southeast side of US-31)

Dates: May 4, 18; June 1, 15, 22, 29

Time: 10AM – 12PM

Benzie County

Location: Blaine Christian Church, 7018 Putney Rd, Arcadia, MI 49613

Dates: May 4, 18; June 1, 15, 22, 29

Time: 2PM – 4PM

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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>