

# **Northern Michigan FruitNet 2018**

## **Northwest Michigan Horticultural Research Center**

### Weekly Update

**FruitNet Report – June 27, 2018**

#### **CALENDAR OF EVENTS**

**5/8 – 6/27**

**IPM Updates**

**8/23**

**NWMHRC Open House**

#### **What's new?**

- **SWD Numbers Update 6-27-18**

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#### **New articles**

##### **SWD Numbers Update 6-27-18**

Spotted wing drosophila (SWD) numbers remained low in traps at the NWMHRC this week. In the past two days, we checked forty traps here at the station, and we detected three SWD adults. We found three female flies. We will check traps in Benzie, Manistee, Antrim, and the remaining Leelanau traps tomorrow. We will be sure to keep everyone

posted on what we are finding. We remind growers that although SWD trap count remains low, both sweet and tart cherry, are at a susceptible stage for female SWD oviposition. There are many materials that would be effective for late plum curculio, emerging San Jose scale crawlers, and SWD. Pyrethroids are a good choice now, especially materials that have a longer PHI in sweet cherry, such as Warrior and Mustang Max. The 3D PHI for Mustang Max is only for processing tart cherries; the PHI for this material in sweet cherry is still 14D.

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## Articles featured in past FruitNet Reports

### Northwest Regional Report – June 26, 2018

*Fruit have developed quickly in the last week, and cherry harvest is fast approaching.*

Emily Pochubay and Nikki Rothwell, MSU Extension

#### GROWING DEGREE DAY ACCUMULATIONS AS OF June 25, 2018 AT THE NWMHRC

Year	2018	2017	2016	2015	2014	2013	28 Yr. Avg.
<b>GDD42</b>	1222	1228	1236	1161	1089	1145	1206.5
<b>GDD50</b>	754	785	721	661	633	694	701.4

#### 2018 Growth Stages – NW Michigan Horticultural Research Center June 25, 2018

**Bartlett Pear** – 24 mm fruit  
**Potomac Pear** – 27 mm fruit  
**Mac** – 32 mm fruit  
**Gala** – 26 mm fruit  
**Red Delicious** – 27 mm fruit  
**HoneyCrisp** – 27 mm fruit  
**Montmorency** – 14 mm fruit  
**Balaton** – 14 mm fruit  
**Hedelfingen** – 17 mm fruit  
**Gold** – 13 mm fruit  
**Napolean** – 14 mm fruit  
**Riesling** – 60% bloom

## Weather Report

The past week's weather has been seasonal with daytime temperatures in the mid to high 70s and overnight temperatures dipping into the 50s. We have accumulated 1222GDD base 42 and 754GDD base 50. Despite starting out the season behind our 20+-year average, we are now 16GDD ahead of average base 42 and over 50GDD base 50. The region also had some rainfall on Saturday and Sunday (23 and 24 June). The Enviroweather station at the NWMHRC received 0.02" and 0.26" of rain on those two days, respectively. The rainfall was much welcomed as the last rainfall was just under a week ago.

## Crop Report

The region has had some good growing conditions over the past week. Temperatures are warm and nights are cool with rainfall coming almost one week apart. Tree growth has been excellent, and fruit is sizing nicely. Cherry fruit have increased in size between 1-5mm since last week. Apples have also increased by ~3mm. With apple size up near 27-32mm, most growers are out of the thinning window. Thinning results have varied across the many orchards: some growers think that they over-thinned while others will be doing some hand thinning to further reduce the crop.

## Pest Report

In apples, most growers have called the end to primary **apple scab** in northwest Michigan. The majority of orchards have remained scab-free up to this point, and we have had few reports of secondary scab infections so far this season. At the NWMHRC, we recorded nine scab infection events out of 17 wetting periods since we set biofix (1 May). Scab lesions should appear this week if an orchard became infected during wet weather around the 15-18 June. We have had a few reports of **powdery mildew** in apples; overall, mildew incidence remains low in apples at this time considering that weather conditions have favored mildew development this season. **Fire blight** management is ongoing and orchards with substantial infections should continue preventing the progress of this disease until trees reach terminal bud set. We observed new ooze production on green shoots late last week in orchards with moderate infections.

Cherry harvest is fast approaching. We have found active **cherry leaf spot** lesions in low levels in tart cherries at the station, and lesions from wet weather in mid-June could show up this week. Additionally, some of our blocks have substantial **powdery mildew** infections. We have received reports that powdery mildew is not difficult to find in commercial tart cherry blocks.

Fruit has developed quickly, and bird activity has picked up over the last few days. Fruit damaged by birds, insects, and cracked fruit are especially susceptible to **American brown rot**. The SDHI fungicides and Indar have been the suggested materials for this disease and while Indar is a good material for brown rot, recent data has shown reduced

efficacy of Indar for American brown rot. Growers planning to use Indar should use this material at the highest allowable rate; the Special Local Need 24(c) label for Indar allows for 12 fl oz/A and a total of 48 fl oz per season. Additionally, growers using Indar should include a material for cherry leaf spot as Indar only provides fair control of the leaf spot fungus. The SDHI fungicides (ex. Merivon, Luna Sensation) are excellent materials for brown rot. Recent data have shown that Merivon provides better activity against leaf spot compared with Luna Sensation. Although we have some time before harvest, we remind growers that an SDHI is typically suggested as the last fungicide spray prior to harvest. Previous data have shown that an SDHI applied to tart cherry trees at pre-harvest timing provides the longest residual cherry leaf spot control compared with other leaf spot materials.

We did not find **codling moth** in our trap line this week, and we are likely at the end of the first flight of codling moth. According to degree day accumulations, we are at peak egg hatch and larvae are active. We will put **apple maggot** traps up at the station this week; this pest has been detected in southern areas of the state within the last week.

We have not observed **San Jose scale** crawler activity at this time, but we received a report of active crawlers in a sweet cherry orchard near the Suttons Bay area. At the station, females under the waxy scale are plump, and we were able to see and extract crawlers from these pregnant females. In apples, crawler activity typically occurs from mid-June into early July and activity has been suggested to align with catalpa bloom. Catalpa trees are still blooming in the area, and the catalpa tree at the station is just starting to bloom. Growers planning to take action against crawlers in sweet cherry are encouraged to select a material that will be effective for multiple pests that could be active at this time (ex. spotted wing drosophila and lingering plum curculio).

**Obliquebanded leafroller** (OBLR) biofix is set for 18 June. These moths took flight two weeks ago, and we had our second consecutive catch this week. Trap numbers were higher this week with one trap that caught 48 moths in a hot spot area. Degree day predictions suggest that egg hatch should begin by this coming weekend when we reach 400-450 GDD base 42 degrees Fahrenheit.

**Spotted wing drosophila** (SWD) numbers remain low, but more traps in our regional trapping network have detected this pest within the last week. Additionally, SWD trap counts have increased around the state. We check traps in NW Michigan on Wednesdays and Fridays most weeks, and we anticipate our numbers will also be on the rise. Many orchards have fruit that are straw-colored or riper and susceptible to SWD egg-laying at this time. As growers are developing their late season pest management programs, pest management costs are a key consideration as well as material and program efficacy for target pests, insecticide label use restrictions and guidelines, resistance development, and concerns for possible mite outbreaks.

Data from our previous efficacy trials have shown that under high SWD population pressure, full cover applications every seven days resulted in the fewest detectable SWD compared with full covers at 10-day intervals and alternate row applications at 7- or 10-

day intervals. Although full covers every 7 days is not feasible for all growers, the data suggest that shorter intervals will minimize the chance of SWD infested fruit, particularly if weaker chemistries are used and/or if wet weather washes away residues. We encourage growers to rotate insecticide modes of action to minimize the possibility of resistance development. Many of the efficacious materials for SWD are in the pyrethroid class, and there is a possibility for cross-resistance among pyrethroid and organophosphate (ex. phosmet/Imidan) insecticides. Additionally, there are several generic and pre-mixes available so growers will need to carefully read labels for the maximum amount of active ingredient applied per season, number of allowable sprays, etc.

Growers should plan when to use different materials to target the mid to late season pest complex can help to maximize spray efficiency. For example, many of the pyrethroids that are efficacious for SWD are also effective against plum curculio and **cherry fruit fly** (CFF), but efficacy data collected in cherries has shown that imidacloprid, the traditional chemistry used against CFF, has weak activity against SWD. Therefore, we do not recommend imidacloprid as a standalone material to target both SWD and CFF. CFF have not yet been detected on traps at the station this season, and OBLR moth activity is ongoing at the station; OBLR egg hatch is predicted for the end of this week and into the days that follow. The spinosad insecticide Delegate is only rated good for SWD, but it provides excellent OBLR control. The newer diamide product, Exirel, is rated excellent for SWD and OBLR. Lastly, growers should be cautious of possible mite outbreaks in orchards where multiple applications of pyrethroids have been made. Hot dry weather early in the season was favorable for a slight uptick of two spotted spider mite populations in tart cherries. The product Danitol is a pyrethroid-miticicide premix insecticide with a short PHI; **two spotted spider mites** are noticeable this season, but thus far their populations have been consistent over the last few weeks. Lastly, we remind growers to discuss pest management options with processors as there may be several restricted materials due to residue concerns.

**Table 1. Avg. number of cherry and apple pests in the NWMHRC trap line by date.**

<b>Cherry - NWMRHC</b>	<b>7- May</b>	<b>14- May</b>	<b>21- May</b>	<b>28- May</b>	<b>4- June</b>	<b>11- June</b>	<b>18- June</b>	<b>25- June</b>
GFW	5	2	1	0	0	0	0	0
APB	0	0	5	6	7	7	6	0
LPTB			Set	4	11	11	3	1
GPTB				Set	1	0	1	0
SJS (sweet cherry)		Set	0	6	73	10	0	0
OBLR					Set	0	8	19
CFF					Set	0	0	0
<b>Apple - NWMHRC</b>	<b>7-</b>	<b>14-</b>	<b>21-</b>	<b>28-</b>	<b>4-</b>	<b>11-</b>	<b>18-</b>	<b>25-</b>

	May	May	May	May	June	June	June	June
OFM	Set	0	0	0	0	0	0	0
STLM	Set	13	18	32	25	1	1	4
CM		Set	0	1	8	1	3	0
SJS (apple)		Set	0	6	24	1	0	0
OBLR					Set	0	2	3
APB = American Plum Borer								
LPTB = Lesser Peachtree Borer								
GPTB = Greater Peachtree Borer								
SJS = San Jose Scale								
CFF = Cherry Fruit Fly								
OFM = Oriental Fruit Moth								
STLM = Spotted Tentiform Leafminer								
CM = Codling Moth								

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## Spotted Wing Drosophila in Saskatoon Berries?

In 2017, I received two reports of spotted wing drosophila (SWD) infesting the fruits of Saskatoon berries in Michigan. Unfortunately, both instances were brought to my attention well after harvest, and there was no way to verify the identification of the infesting insects or the extent of the damage to the crop.

If you are growing saskatoons on a commercial scale or you just have a few bushes, I would like to obtain samples of berries to examine for the presence of SWD. Please contact me at [elsner@msu.edu](mailto:elsner@msu.edu) or 231-922-4822 if you would like to help with this investigation.

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## Frequently Asked Questions: Crop Insurance for Cherry Growers Facing Limited Market Options

Jun 21, 2018

**Q: Is lack of a market for my brining cherries an insured cause for loss?**

A: No. Crop insurance covers physical damage from an insurable cause of loss, such as adverse weather, but does not cover the inability to market cherries for any reason other than actual physical damage.

**Q: I do not have a buyer for my cherries, so I am not going to harvest. Should I let my Agent know?**

A: Yes. If production will not be harvested, whether there is a loss of production or not, growers should timely contact their crop insurance company to have their production appraised.

**Q: Why is it important to get my unharvested production appraised?**

A: Appraisals can be used in conjunction with the annual price to maintain the approved revenue history for your crop insurance policy in succeeding crop years.

For more information, please visit:

<https://www.rma.usda.gov/help/faq/cherrygrowers.html>

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## New 24 © for Mustang Max in Cherries

Label attached to this email or available here for download:

<https://www.dropbox.com/s/073x6bb99f5qewe/2018-06-06%20Mustang%20Maxx%20SLN%20-%20MI%20-%20final%20label.pdf?dl=0>

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## **WEB SITES OF INTEREST:**

Farmer to Farmer – Connecting farmers, cultivating community

<http://www.f2fmi.com>

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://www.canr.msu.edu/nwmihort/nwmihort\\_northern\\_michigan\\_fruit\\_net](http://www.canr.msu.edu/nwmihort/nwmihort_northern_michigan_fruit_net)

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>