

Northern Michigan FruitNet 2015

Northwest Michigan Horticultural Research Center

Weekly Update

FruitNet Report – July 21, 2015

CALENDAR OF EVENTS

2015

5/5 – 8/? **Grand Traverse County IPM Updates**
Wunsch Farm

7/29 **The 26th Annual Viticulture Field Day & Steak Cookout**
Southwest Michigan Research & Extension Center, Benton Harbor, details provided in the grape report.

7/29 **Tart Cherry Harvest Demonstration at the NWMHRC**

GROWING DEGREE DAY ACCUMULATIONS AS OF July 20, 2015 AT THE NWMHRC

Year	2015	2014	2013	2012	2011	2010	25 Yr. Avg.
GDD42	1813	1721	1936	2399	1832	2222	1894.5
GDD50	1113	1065	1576	1576	1159	1405	1187.3

Growth Stages at NWMHRC (July 20, 2015, 11 a.m.)

Apple: Red Delicious – 41 mm fruit
Gala – 39 mm fruit
Yellow Delicious – 39 mm fruit

Pear: Bartlett: 35 mm fruit

Sweet Cherry: Hedelfingen – Harvested
Napoleon – Harvested
Gold – Harvested

Tart Cherry: 22 mm fruit

Balaton: 23 mm fruit
Apricot: 39 mm fruit
Grapes: Buckshot berries

Northwest Michigan Fruit Regional Report – July 21, 2015

Cherry harvest is in full swing in northwest Michigan, and cherry fruit fly and spotted wing drosophila numbers are on the rise; apple maggot adults are also active at this time.

Emily Pochubay and Nikki Rothwell

Weather Report

As we move into full swing of cherry harvest, conditions have mostly been dry. However, a brief storm that dropped a little rain moved quickly through the region on Saturday (18 July). We also had some rainfall the previous Monday and Tuesday of last week, and the total accumulations at the NWMRHC was just under $\frac{1}{4}$ " of rain. Yesterday, 20 July, we had very windy conditions with wind speeds up over 17mph, and growers are concerned with wind whip in tart cherries. Daytime temperatures have typically been in the 80s with nighttime temperatures dipping into the mid-50s to mid-60s. We have accumulated 1813 GDD base 42 and 1113 GDD base 50, and we remain 3-4 days behind our average.

Crop Report

At this time, both sweet and tart cherry harvest is underway across the northwest. Although we have not received substantial rain in the past week, we are seeing some cracking on multiple varieties. We have not seen brown rot in the cracked fruit with the recent dry conditions. We also have observed bird pecks on some varieties at the NWMHRC. Many growers are moving quickly through sweet cherries and blocks with light crops. Tart cherry harvest began over the weekend, and many growers have commented that they are seeing more fruit than they had anticipated as the crop ripens. Monday winds may present challenges for fruit quality, but we have not observed a lot of wind whip as of yet. However, we did see cherries on the ground as a result of the Monday winds, especially in orchard where ethephon was applied 7+ days ago. As harvest continues, growers continue to apply ethephon to manage the harvest of multiple blocks.

Pest Report

Cherry fruit fly (CFF) numbers are higher than last week with reports of 20+ CFF adults on yellow sticky traps in the region. Some blocks have extremely high numbers, and we are catching 80+ CFF per trap. CFF numbers are also up at the station this week with our highest catch of 10 CFF on a trap. Growers are continuing to protect fruit from CFF at this time and some growers who have had consistent catches of spotted wing drosophila are either using a material that is effective for both CFF and SWD or including a material specifically for SWD. Although catches of spotted wing drosophila increased throughout the state in the last week, SWD numbers in the northwest remain relatively low. Last week, we found a total of 23 SWD in 71 traps in northwest Michigan. Please see the table below for more information on the locations and hosts where SWD were found.

Obliquebanded leafroller (OBLR) trap numbers continue to be high this week, with numbers as high as 23 moths per trap at the station. Some growers in the area with OBLR catches over threshold (20+ moths per trap) treated for this pest prior to harvest to prevent shaking larvae into tanks. Larvae in tanks should not be a problem for growers if blocks have not had high OBLR catches yet this season and

cherries will be harvested soon. Growers with high OBLR catches need to be protecting against these insects, as this insect is a contaminant pest (larvae in tanks) in cherries. In blocks that will not be harvested for some time and where OBLR is a concern, the materials that work for CFF are not effective against OBLR. Therefore, growers with high OBLR trap numbers should include a Lepidopteran material for OBLR larvae prior to harvest. OBLR larvae should be active in apples at the station at this time, but we have yet to see them.

Apple maggot (AM) adults (6 AM per trap) were detected at the research station this week. **Codling moth (CM)** activity is ongoing, and we found 3 moths per trap in the station’s apple block. Since the beginning of July, evening and nighttime temperatures have oscillated around the 60 degree Fahrenheit mark when CM adults are typically active. As a result, determining which generation of CM is active in our region has been challenging; determining if we are in first or second generation has not been easy. Overall CM populations have been low throughout the region. Second flight of spotted tentiform leafminer (STLM) adults peaked (200 STLM per trap) this week.

As mentioned previously, conditions have been relatively dry which is good news for fewer recent concerns with new disease infections. Although there is some cracking in cherries, we have not observed **American brown rot** development. Most orchards lost a lot of leaves early in the season from cherry leaf spot infection and/or virus. We have also received a report of leaf loss due to possible phytotoxicity resulting from copper applications for leaf spot. We are currently investigating this issue.

County	Host	No. of traps per county	No. of SWD found 7/13-7/17
Benzie - Manistee	Tart Cherry	12	1
	Other wild hosts	4	1
	Total	16	2
Antrim	Tart Cherry	4	0
	Sweet cherry	6	1
	Other wild hosts	5	1
	Total	15	2
Grand Traverse	Tart Cherry	4	5
	Sweet cherry	6	1
	Other wild hosts	5	0
	Total	15	6
Leelanau	Tart Cherry	13	13
	Sweet cherry	4	0
	Other wild hosts	8	0
	Total	25	13

	Grand Total	71	23
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Tart Cherry Over The Row Harvest

NWMHRC, Traverse City, MI

On Wednesday, July 29 we will be harvesting tart cherries planted in a High Density block research trial at the Northwest Michigan Horticulture Research Center, near Traverse City. The plot was established in 2011 with the support of the GREEN project and the Michigan Cherry Producers. The planting has 6 varieties of sour cherry planted 5 X 13 feet. We are experimenting with treatments to maintain trees in a compact canopy to accommodate an over the row harvester used normally to harvest berry crops. This work began in 2008 with the support of the Michigan Cherry Producers to determine the feasibility of this approach to growing and producing sour cherries. The traditional approach maintains trees at greater distances (15-20 feet apart) using trunk shakers and catch frame machinery. We are inviting members of the northern tart cherry industry and affiliates to view harvesting at the Northwest Michigan Horticulture Research Center (6686 S CENTER HWY) at 5:30 pm on July 29.

With the support of the Michigan Tree Fruit Commission, Michigan State Hort Society and the International Fruit Tree Association, we will be harvesting the research plot on July 29 using a Littau ORXL (2013 model) berry harvester (www.littauhvester.com/products.php). Previous work with the Twin-Tower Rotating-Tine harvester mechanism has been found to be efficient and effective in fruit removal of cherries. We tested the Littau Harvester, sold and rented through Spring Brook Supply, Holland, MI at Oxley Farms near Lawton, MI on July 13 and 14. The machine removed fruit at a very high rate of efficiency with minimal canopy damage. Since 2012, Oxley Farms have cooperated with us in a project to study horticultural approaches to restricting and maintaining a compact canopy, small enough to allow a berry harvester to successfully remove fruit. Oxley Farms allowed us to establish treatments in two rows amounting to over 300 trees. The company purchased a used Korvan 9000, Twin-Tower Rotating-Tine harvester (Oxbo 9000) in 2012 with intent to harvest the planting. We successfully harvested fruit from the planting in 2013. The crop was severely reduced due to spring frosts in 2014. We were successful in developing a protocol for harvesting each group of trees with the machine within treatment parameters while retaining treatment integrity. We were successful in 2015 using the Littau Harvester and will deploy these protocols with the harvesting at the NWMHRC on July 29.



Dr. Ron Perry, Professor of Horticulture, MSU, Project PI

Dr. Nikki Rothwell, NWHRC Director and Extension Educator, MSU, team cooperator

Kewadin and Old Mission Enviroweather Station Scheduled for Maintenance on July 20-21

Enviroweather is scheduled to carry out long term hardware modernization work at the Kewadin station site on Monday the 20th and Old Mission on Tuesday the 21st. As a result, station data updates may be temporarily unavailable (recent and other past data will still be available). We are trying to limit any disruptions to less than 24 hours and apologize for any inconvenience. The modernization efforts are necessary to help us provide dependable, high quality information on a reliable basis. Please contact the NWMHRC should you have any questions regarding this maintenance.

Michigan Pomesters 2015 Membership Renewal

Membership Dues: \$25 per person (can pay at RidgeFest)

Benefits of Membership: Paying your dues today includes:

All tours and educational events held throughout the year are **free of charge** including:

- RidgeFest 2015
- IFTA Scholarship opportunities
- all other educational events that we host
- other events that we are partners in

If there are others at your organization that want to join or have been members in the past, feel free to include their contact info and we can get them on the mailing list.



Company Name (s): _____

Member Name (s): _____

Address _____

Email _____ Phone(s) _____

Checks payable to: Michigan Pomesters

Direct Questions & Comments to: mipomesters@gmail.com | Nick Rasch (616) 813-1064

Strategic Growth Initiative Grant Program Announced to Boost Michigan's Growing Food and Agriculture Industry

LANSING, Mich. – A grant opportunity designed to encourage growth in Michigan's food and agriculture industry was announced today by Michigan Department of Agriculture and Rural Development Director Jamie Clover Adams.

"This is a great chance for our food and agriculture businesses to find innovative ways to expand and grow. Food and agriculture in Michigan is a \$101 billion industry. This is one avenue to help spur job creation, support local communities and drive new economic development," said Clover Adams.

Applicants for grant funds will be asked to describe how the project potentially impacts and produces measurable outcomes for the food and agriculture industry and/or the public rather than a single organization, institution, or individual.

This initiative has been developed to focus on removing existing barriers and leveraging opportunities identified by food processors, agri-business, and those in agricultural production as critical to business development and growth. Priority will be given to projects that identify a scope of work that includes one or more of the following as it relates to the food and agriculture industry:

- Talent/Workforce Development (i.e. training activities)
- Infrastructure/Logistics (i.e. broadband access)
- Feasibility Studies (i.e. enhancing value added capacity)

All application materials including the program overview and fillable application form are

available on MDARD's website www.michigan.gov/mdardgrants. Applications are due to MDARD by 3pm EST on July 22, 2015.

IPM Update Cookout and Schedule Change

Emily Pochubay and Nikki Rothwell, NWMHRC

As many of you are already aware, please note the changes to upcoming IPM Update meeting dates. Due to a scheduling conflict, the IPM Update meetings for July 14th and 15th have been cancelled. We apologize for any inconvenience as a result of this cancellation, and to account for this change, additional IPM Updates have been or will be scheduled. Please see below for details on dates and times of these additional meetings. Thank you all for your continued support of the NWMHRC, MSU Extension, and Michigan's fruit industries!

***NEW IPM Update Schedule**

Grand Traverse County

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

Dates: **August* Final meeting date TBD**

Time: 3PM – 5PM

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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 is available at the new cherry website:

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

Information on apples:

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

Information on grapes:

<http://grapes.msu.edu>

Fruit CAT Alert Reports has moved to MSU News
<http://news.msue.msu.edu>