

Northern Michigan FruitNet 2015

Northwest Michigan Horticultural Research Center

Weekly Update

FruitNet Report – July 28, 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 @ 5:30 PM**

Growth Stages at NWMHRC (July 27, 2015, 11 a.m.)

Apple: Red Delicious – 44 mm fruit
Gala – 42 mm fruit
Yellow Delicious – 42 mm fruit
Pear: Bartlett: 38 mm fruit
Sweet Cherry: Hedelfingen – Harvested
Napoleon – Harvested
Gold – Harvested
Tart Cherry: Harvested
Balaton: 23 mm fruit
Apricot: Harvested
Grapes: Riesling – Buckshot berries

Northwest Michigan Fruit Regional Report – July 28, 2015

Tart cherry harvest is in full swing, and quality remains quite high despite high winds and the recent heat

Nikki Rothwell and Emily Pochubay

Weather Report

The weather continues to be warm and dry across the region. Daytime temperatures reached into the 90s yesterday (27 July), and we will continue to be warm throughout the week. Conditions are extremely dry, and we could use a good rain. There is a 50% chance of rain tomorrow (29 July). The last measurable rain events at the NWMHRC were on 13 and 14 July where we received just under ¼" of rain. Thus far this season, we have accumulated 1618 GDD base 42 degrees F and 974 GDD base 50 degrees F.

Crop Report

Tart cherry harvest is in full swing this week. Fruit quality seems to be holding up even with this heat. Overall fruit size seems to be a bit on the smaller size, especially on trees with a good crop load. Despite the winds we had over a week ago, little wind whip or other mechanical damage is noticeable in tart cherries. Most sweet cherries have been harvested except for a few orchards in the far north. Apples continue to size, and frost rings are evident in some blocks from the 20 May frost event.

Pest Report

Cherry fruit fly (CFF) activity is ongoing throughout the region and we have found CFF larvae in cherries that were left hanging after harvest. CFF numbers continue to be high in some orchards and growers are thinking about targeting CFF post harvest to knock back the population for next season. **Spotted wing drosophila** (SWD) is also active and SWD catches are rising quickly in the northwest. We are running SWD efficacy trials this season and last week, we started to see SWD larvae in untreated cherries. Fortunately, many growers have been protecting from SWD infestation for several weeks, and we encourage growers to continue to protect blocks that have not yet been harvested to prevent SWD larvae in fruit.

Obliquebanded leafroller (OBLR) adult activity is ongoing and catches at the station are the highest we have seen this season (a high of 42 moths per trap). Larvae of OBLR are also active; while these OBLR larvae are small, they are visible and can be found on terminals at this time.

For the second week in a row, **apple maggot** (AM) adults have been observed on ammonium baited sticky traps, and we found a total of nine AM at the station this week. The number of **codling moth** (CM) are lower this week with only one adult found in our traps at the station. Second flight of **spotted tentiform leafminer** (STLM) adults is ongoing with an average of 293 STLM per trap. Apple growers are continuing **aphid** and **mite** management programs, and because many non-crop plants are blooming in orchards at this time, we encourage growers to review the MSU Extension Bulletin, *Minimizing Pesticide Risk to Bees in Fruit Crops*, and consider incorporating practices to protect the pollinators that are currently active in orchards. A table of SWD Adult Catches can be found below.

The northwest has been very fortunate that conditions dried up in time for tart cherry harvest leaving little opportunity for **American brown rot** development as well as inhibiting the spread of **cherry leaf spot**. After cherry shakers move through orchard blocks, there are few leaves left on some trees that were hit harder by disease and virus this season. Trees with significant defoliation now will be more susceptible to decline or death over the winter.

We have received reports of a 'second leaf drop' due to virus and/or phytotoxicity. Viruses tend to impact individual trees rather than entire blocks and typically are not uniform across blocks. Unfortunately, there is no cure for virus and trees that are infected will continue to harbor the virus with which it is infected. In one orchard, we suspect that some trees are infected with **cherry green ring**

mottle virus (GRMV). The GRMV was also found in northwest MI tart cherry orchards in 2010 and 2012, and symptoms of this virus are usually expressed in late June to mid-July. The main symptom of the infection is bright yellow leaves with circular green blotches. These infected leaves can be easily removed from trees during shaking at harvest, or will defoliate naturally. In 2010, defoliation

	County	Crop/Wild Host	No. of traps	No. of SWD	
40-50					approached
the					percent of
each					leaves on
tree.					affected
					We do not
					regularly
					observe
this					disease as
most					of our trees
are					certified
virus-					free. Leaves
					infected
with					GRMV are
					similar to
those					infected
with					the cherry
					yellow
virus,					except that
the					green spots
					within the
					yellow leaf
are in a ring pattern.					

Grapes

Duke Elsner

Warm temperatures have allowed for some very vigorous growth of established or irrigated vines, but young vineyards without a well-established root system are likely to be suffering from drought stress if they are not irrigated. The progress of shoot growth of vinifera varieties is very encouraging—a fine recovery in progress. Berries are enlarging in hybrid blocks, with some early varieties approaching berry touch.

Powdery mildew is the only threat during the dry weather we have been experiencing. Thus far I have seen very little of it in the area. We are still in the critical control period for protecting fruit clusters from this disease. Insect activity has been light, but the timing is about right for the first generation of grape berry moth to be laying eggs. Vineyards with a history of problems with GBM should be scouted carefully for the presence of eggs on berries or cluster stems.

The 26th Annual Viticulture Field Day & Steak Cookout will be held at the Southwest Michigan Research & Extension Center in Benton Harbor on July 29. Informational sessions and the equipment show start at 9 am, and the day finishes with the ever-popular steak cook-out.

SWD Adult Catches

		in each county	found as of 7/24
Benzie - Manistee	Tart Cherry	12	210
	Other wild hosts	4	12
	Total	16	222
Antrim	Tart Cherry	4	5
	Sweet cherry	6	11
	Other wild hosts	5	4
	Total	15	20
Grand Traverse	Tart Cherry	4	64
	Sweet cherry	6	1
	Other wild hosts	5	4
	Total	15	69
Leelanau	Tart Cherry	13	39
	Sweet cherry	4	9
	Other wild hosts	8	11
	Total	25	59
	Grand Total	71	370

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.littauharvester.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

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.



Save the Date:
RidgeFest 2015
July 30th, 2015
12:30 pm
2015 Tour: Mark Youngquist, Ridgeview Orchards,
Joe Rasch Orchards NC140 Trial, Knights of Columbus

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

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

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 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>