

NORTHERN MICHIGAN FRUITNET 2018
NORTHWEST MICHIGAN HORTICULTURAL RESEARCH CENTER

Weekly Update

Grape FruitNet Report – August 10, 2018

8/23 **First Friday Meeting – NWMHRC Open House**
NWMHRC, Time TBA

8/24 **"Forty Years Advancing Fruit Production: Applied Physiology, PGRs, Rootstocks, and Orchard Systems" – Symposium**
Registration link below

8/29 ***International Symposium on New Cultivars for Disease Resistance and Increased Sustainability***
Register here:
<https://events.anr.msu.edu/grapesymposium/>

What's New?

- Request for Powdery Mildew Infected Leaves and Fruit
- International Symposium on New Cultivars for Disease Resistance and Increased Sustainability

International Symposium on New Cultivars for Disease Resistance and Increased Sustainability

August 29th, 2018.

Community Meeting Room, Leelanau County Government Center
8527 E Government Center, Suttons Bay MI 49682

Please register here by August 24, 2018: <https://events.anr.msu.edu/grapesymposium/>

Growing healthy grapes for producing quality requires a lot of spraying in the vineyards, and the use of large quantities of pesticides, fungicides, herbicides, etc. Much effort has been done by the industry developing more environmentally- friendly practices for sustainable viticulture. One of the most recent development in this field, is the use of new disease-resistant grape varieties; vines selected to resist to fungi and to produce quality wines. Across Europe, pioneering wine producers are leading the way and testing these new breeds of super-grape vines and producing wine from them. Some of those varieties and their performance are the focus of this symposium.

Program:

- | | |
|----------|---|
| 9.30 AM | Introduction of the workshop
<i>Thomas Todaro, MSU Extension Viticulture Educator</i> |
| 9.45 AM | Challenges of Sustainable Viticulture in the Great Lake Region
<i>Dr. Paolo Sabbatini, Associate Professor, Michigan State University</i> |
| 10.30 AM | Knocking on cell's door: molecular cascades triggered by powdery mildew-grapevine Interaction.
<i>Dr Clizia Villano, Assistant Professor, University of Naples (Italy)</i> |
| 11.30 AM | Clean Plant Material program at Novavine
Jay Jensen and Jeff Wheeler, Novavine grapevine nursery, California |
| Noon | Lunch break |
| 1.30 PM | Vivai Cooperativi Rauscedo (VCR) Breeding Program and Resistant Cultivars |

Dr. Asia Khafizova breeding project manager, Vivai Cooperativi Rauscedo (VCR)

- 2.30 PM Viticultural performance of new disease resistance cultivars
Dr. Enrico Peterlunger, Professor of Viticulture, University of Udine (Italy)
- 3.30 PM Wine tasting of new disease resistant cultivars
Dr. Asia Khafizova breeding project manager, Vivai Cooperativi Rauscedo (VCR)
- 4.30 PM Roundtable discussion

The symposium is sponsored by Novavine grapevine nursery (California) and there is no registration fee. Lunch will be provided to all the participants. For more information please contact Thomas Todaro (todaroth@anr.msu.edu) or Paolo Sabbatini (sabbatin@msu.edu)

Request for Powdery Mildew Infected Leaves and Fruit

Thomas Todaro is requesting growers to submit Powdery mildew infected leaves and fruit samples to the NWMHRC as soon as possible this week. If you are able, please drop them off at the NWMHRC. If not, please call or email Thomas at 231-256-9888 or todaroth@msu.edu and he will arrange to pick them up from your site. The purpose of this request is to facilitate research on the molecular aspects of PM infection and mechanism of vine response to the attack. Your assistance in this research is very much appreciated!



Image 1: Phomopsis Rachis and Berry



Image 2: Powdery Mildew cluster and close-up.



Image 3: Powdery Mildew leaf

(Source: Midwest Grape Production Guide)

Featured in past Grape FruitNet Reports

NORTHWEST MICHIGAN HORTICULTURAL RESEARCH CENTER ANNUAL OPEN HOUSE

The Northwest Michigan Horticultural Research Center's (NWMHRC) annual open house is scheduled for Thursday, August 23, 2018. This year's event will include educational sessions, equipment demonstrations, a social hour, and dinner.

We have moved to an every-year equipment show, so vendors and equipment will be on hand all day at this year's open house. We have also added annual equipment demonstrations - we have invited equipment companies to bring in new orchard and vineyard equipment and technologies for demonstration purposes. We hope to be able to showcase new advancements in orchard and vineyard assist technologies at the 2018 NWMHRC Open House.

Free educational wagon tours of the NWMHRC will feature MSU specialists and will take place from 1:00 – 2:15 PM. The tour will include wine grape and tree fruit specialists that will speak on a variety of topics. We will discuss fire blight resistance screening results and demonstrate an orchard platform in high-density apples. We will also showcase some work we have conducted using drones as bird deterrents in sweet cherry orchards. We will also present data on the effectiveness of spotted wing drosophila management strategies that were employed in 2018. Cherry leaf spot efficacy will also be discussed. We will demonstrate some weeding strategies in wine grapes, and wine grape specialists will be on hand to review the season and prepare for harvest.

After the educational sessions, growers are encouraged to meet with equipment vendors and participate in the demonstrations from 2:30 – 5:30PM. We will host as many equipment vendors to hold demonstrations as we can in this time frame. We hope that growers and others will be sure to attend this part of the 2018 open house. Demonstrations will be followed with a social hour from 5:30 – 6:15PM and dinner at 6:15PM.

In past years, the Leelanau Horticultural Society has held their annual meeting, but this year they plan to just host the social hour and dinner. We encourage growers from all over the northwest region to join us for this fun and relaxed event.

The 2018 NWMHRC Open House is co-sponsored by the Leelanau Horticultural Society and Michigan State University AgBioResearch, and Extension, with support from Parallel 45 and the NW Michigan Horticultural Research Foundation.

To reserve or purchase a dinner ticket, please call (231) 946-1510 or email Jenn at goodr100@msu.edu by August 20, 2018. The dinner will be catered by *Ethnic Garden Catering* and will feature locally produced food; cost for dinner tickets is \$15 per person.

For more information, contact the NW Michigan Horticultural Research Center at 231-946-1510. We hope to see many of you at this fun and educational event!

"Forty Years Advancing Fruit Production: Applied Physiology, PGRs, Rootstocks, and Orchard Systems" – Symposium

24 August 2018, Hagerty Conference Center, Traverse City, Michigan

This day-long symposium and post-symposium dinner has been organized to **highlight current advances in fruit research** and recognize the statewide, regional, national, and international impacts of the 40+ year careers of Michigan State University professors of fruit science, **Jim Flore** and **Ron Perry**. Many of the anticipated speakers at the symposium studied with Drs. Flore and/or Perry at MSU and have become **leaders around the world in fruit research, teaching, extension, and industry.** **symposium Schedule (subject to change)**

8:15-8:20 Welcome and Introduction

8:20-8:50 **Jim Flore**, *Career Reflections* (30 min)

8:50-9:15 **Riccardo Gucci**, University of Pisa, Italy (25 min) *From Tree Physiology to Fruit Quality: The Role of Carbon and Water in Orchards*

9:15-9:35 **Marlene Ayala**, Pontificia Universidad Catolica, Chile (20 min) *Practical Applications of Source-Sink Relationships in Sweet Cherry*

9:35-9:55 **Paolo Sabbatini**, Michigan State University (20 min) *Changes in Within-Vine Carbon Partitioning Subjected to Early Basal Leaf Removal*

9:55-10:20 **Moreno Toselli**, University of Bologna, Italy (25 min) *Organic Fertilization Affects Carbon and Nutrient Balance in the Orchard Ecosystem*

10:20-10:45 Coffee break

10:45-11:05 **Lailiang Cheng**, Cornell University (20 min) *Photosynthesis and Flower Development in Relation to Sorbitol in Apple*

11:05-11:25 **Dario Stefanelli**, Agriculture Victoria, Australia (20 min) *Apple Biennial Bearing, the Importance and Effects of Crop Load*

11:25-11:50 **Roberto Zoppolo**, INIA, Uruguay (25 min) *Vineyard Water Management in a Temperate Humid Climate*

11:50-12:15 **Alan Lakso**, Cornell University (25 min) *Fruit Crop Physiology to Support Grower Practices*

12:15-1:30 Lunch

1:30-2:00 **Ron Perry** (30 min) *Career Reflections (30 min)*

2:00-2:25 **Tom Beckman**, USDA-ARS, Byron (25 min) *Rootstock Breeding to Improve Disease Resistance and Orchard Productivity*

2:25-2:45 **Greg Lang**, Michigan State University (20 min) *Integrating Rootstocks and Canopy Physiology into New Orchard Systems*

2:45-3:05 **Brent Black** - Utah State University (20 min) *Precision Tart Cherry Orchard Management: High Density System Development, Mapping and Variable Rate Applications*

3:05-3:30 **Terence Robinson**, Cornell University (25 min) *The Evolution/Revolution in Apple Planting Systems and Rootstocks*

3:30-3:50 Coffee break

3:50-4:10 **Win Cowgill**, Rutgers University (20 min) *Six Years of Research with Plant Growth Regulators for Feathering Apple Trees*

4:10-4:30 **Todd Einhorn**, Michigan State University (20 min) *Practical Orchard Strategies to Manage Flower Development and Fruit Set*

4:30-4:55 **Enrico Peterlunger**, University of Udine, Italy (25 min) *New Tools for Physiology Research and Breeding in Grapevine*

4:55-5:15 **Duane Greene**, University of Massachusetts (20 min) *A High Rate of ReTain Influences 'Honeycrisp' Apple Fruit Quality and Storage Potential*

5:15-5:40 **Paul Domoto**, Iowa State University (25 min) *Reflections on Thirty-Eight Years of NC-140 Apple Rootstock Research*

5:40-5:45 Symposium wrap-up

6:00-7:00 Reception/social hour (*partial sponsorship by Michigan Grape & Wine Industry Council*)

7:00-10:00 Dinner and short appreciations (e.g., 2-4 min per speaker) (*partial sponsorship by Michigan Grape & Wine Industry Council*)

Registration and Travel Arrangements for the Flore/Perry Symposium

Please see the program and itinerary above (subject to slight modifications) for the one-day fruit science symposium, "**Forty Years Advancing Fruit Production: Applied Physiology, PGRs, Rootstocks, and Orchard Systems**" to honor the retirements of **Professors Jim Flore and Ron Perry**. As you can see, this is going to be a very stimulating day of state-of-the-art international fruit research presentations, reflections on major advances in fruit production over the years, and ample opportunities to socialize with Jim, Ron, and the many academic and industry colleagues attending the program and/or dinner in beautiful Traverse City, Michigan. Many people are planning to spend extra days and/or bring family members to enjoy the Grand Traverse Bay area - there is much to see and do, from the Sleeping Bear Dunes National Lakeshore to sailing and fishing to dozens of opportunities for tasting of award-winning wines, ciders, and craft beers!

The registration website is now available at:

https://events.anr.msu.edu/Hort_Dept_Fruit_Symposium/

Thanks to Michigan State University and industry sponsorships, we were able to keep the registration costs exceedingly low:

\$75 for the Symposium, lunch, wine reception, and dinner

\$35 for the Wine reception and dinner only

\$50 for the Symposium and lunch only

Please register as soon as possible, and note that **registration closes on August 17** (we need to provide a firm number for the meals one week in advance of the symposium). Also, please note that Traverse City is a highly desirable destination in summer, and so this second-to-last weekend of the traditional tourism season means hotel rooms will be increasingly difficult (and increasingly expensive) to procure, as will air travel into Traverse City airport (alternatives are to fly into Detroit, Lansing, Flint, or Grand Rapids, and rent a car to drive to Traverse City).

The MSU Horticulture Department has been able to reserve a block of hotel rooms at the Country Inn and Suites for \$226/night, which are available **until July 23** or until they are gone. Other alternatives may be found at hotel clearinghouse sites such as www.Hotels.com, www.Expedia.com, www.Tripadvisor.com, or www.Airbnb.com.

Ms. Meghan Hill in the MSU Horticulture main office may be able to help with travel questions, and Ms. Greta McKinney from the Horticulture main office will be our on-site arrangements coordinator for the Symposium and meals, so if you have any registration problems or any dietary restrictions, please advise Greta.

If you have any questions about the Symposium program, please don't hesitate to contact any of us, as between us we'll endeavor to get you the answers you'll need to have a wonderful time! We are looking forward to seeing you in Traverse City!

Sincerely,

Todd Einhorn, einhornt@msu.edu

Greg Lang, langg@mu.edu

Symposium Convenors

Meghan Hill , hehrerme@msu.edu

Greta McKinney, mckin134@anr.msu.edu

Symposium Travel Coordinator and Arrangements Coordinator, respectively

2018 Agriculture Container Recycling Program

A FREE service for agricultural producers in NW Michigan

Where are the collection sites?

- Wilbur-Ellis Co
8075 US-31 Williamsburg, MI 49690
- Ellsworth Farmer's Exchange (Co-op)
11900 Byers Rd. Ellsworth, MI 49729
- CHS Inc
6766 E Traverse Hwy Traverse City, MI 49684
- Crop Production Services (CPS)
13343 Pleasanton Hwy, Bear Lake, MI 49614

When can I drop off my ag containers?

- August 20- August 28 You can drop off your materials during regular business hours at any collection site listed above during these dates. G. Phillips & Sons (the ACRC contractor) will pick up containers on Wednesday, August 29.
- NOTE: CPS in Bear Lake will accept containers anytime throughout the growing season. All other collection sites will ONLY accept containers between August 20-August 28.

One Additional Site: Drop off ONLY on August 29

- Cherry Bay Orchards
2801 N. Jacobson Rd. Suttons Bay, MI 49682

This will be a ONE-DAY collection. You may drop off your containers between **8:00 am and 3:00 pm on August 29.**

What do I do to prepare the containers for recycling?

- Triple rinse, remove caps, remove loose leaf labels (if possible), put in large/clear plastic bags OR string together 20-30 containers with twine – if the containers are not up to these standards, they will not be accepted.
- All non-refillable, high-density polyethylene (HDPE) plastic crop protection and specialty pesticide product containers in sizes up to and including 55 gallons are accepted.

***We will have 1 final recycling collection date in 2018 on October 30. Keep an eye out for future fliers about when you can drop off your containers for this collection date!

Questions? Contact Lauren Silver (lsilver@gtcd.org) or Lizzy Freed (lfreed@gtcd.org) at the Grand Traverse Conservation District. Ph: 231-941-0960

Project GREEN Drone Workshops

Remote Sensing and Geographic Information System (RS&GIS)

This summer and fall, Dr. Bruno Basso (MSU Foundation Professor, Dept. of Earth and Environmental Sciences) and Dr. Erin Bunting (Director of Remote Sensing and Geographic Information System (RS&GIS)) will be hosting two-day Drone Workshops for specific commodity groups this fall. These 2-day intensive workshops are at no cost to growers as result of funding from grants from a Project GREEN, AgBioResearch and funding through RS&GIS. At the three workshops, growers will develop an understanding of drone-based data collection and analysis specific and how it relates to the specific commodities.

The drone workshop for grape growers will be held on September 13-14 at the Northwest Michigan Horticultural Research Center in Leelanau County.

Registration: <https://goo.gl/forms/UQDAnHWxBpRtnopz2>

Agricultural Specialization (Commodity Group)	Location	Date
Tree / Bush Fruit	Southwest MI Extension Center, Benton Harbor	August 9 -10, 2018
Grapes	Northwest MI Horticulture Research Center, Traverse City	September 13 – 14, 2018
Nursery Stock	Michigan State University, East Lansing	September 6-7, 2018
Row Crops	TBD	TBD

Overall Attendees will:

- Learn the essential elements required to safely conduct commercial flight and mapping operations in the National Airspace System including flight planning and

preparation

- Take part in hands-on drone flights both manual and autonomous.
- Develop an understanding of analysis techniques and applications in precision ag
- Gain a brief overview of Remote Sensing and its management applications.
- Leave the course with a clear understanding of the Drone-to-GIS workflow, including planning and completing missions, processing data and analyzing said data in GIS

Space is limited, if you are interested in attending please register and answer the questions at: <https://goo.gl/forms/UQDAnHWxBpRtnopz2>

Interested parties must sign up by July 25, 2018, we will confirm your spot by August 1, 2018.

Please contact Erin Bunting (ebunting@msu.edu) or Bruno Basso (basso@msu.edu) for more information

First Friday Meetings

July 13th Meeting: The July 13th meeting will be titled “Post-bloom Meeting” and will include an in-person presentation from MSU’S new grape pathologist, Tim Miles. This will be a great time to meet Tim as he is planning to visit NW Michigan to discuss 2017 fungicide efficacy trials to manage various diseases in grapes. This will begin at the NWMHREC at 3pm and will be followed by a wine social at Black Star Farms.

Aug 23rd Meeting: The August 23rd meeting will be titled “Pre-harvest considerations” and will run concurrently with the Northwest Michigan Open House. This meeting will include an in-person presentation from Paolo Sabbatini and, depending upon their availability, other members of the MSU faculty to discuss new research projects, and will be followed by a dinner and wine tasting on the grounds of NWMHREC (The NWMHRC Open House and Leelanau Horticultural Society Annual Meeting and Dinner).

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:

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>

60-Hour Forecast:

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

Information on grapes:

<http://grapes.msu.edu>