Northern Michigan FruitNet 2014 Northwest Michigan Horticultural Research Center

Weekly Update August 12, 2014

CALENDAR OF EVENTS

8/14	GT County Household Hazardous Waste & Pesticide Collection recyclesmart.info						
8/15	Hops Field Day						
8/18	Hop Scouting Meeting To Be Held in SW Michigan						
	SW Michigan Research & Extension Center Benton Harbor, MI						
8/21	SW Pre-harvest Grape Meeting Berrien Springs, MI						
8/27	Chestnut Scouting Meeting Clarksville Research & Extension Center						
9/4	NWMHRC Open House – 35 th Anniversary						
9/5	Weathering the Climate: Cultivation & Technology in Grape Production NMC Hagerty Center, Traverse City						
9/7	Harvest Meeting of the Midwest Nut Producers Council Clarksville Research & Extension Center						
<u>2015</u>							
1/13-14	NW Michigan Orchard & Vineyard Show Grand Traverse Resort, Acme, MI						
3/4	Winery Development Pre-Conference MSU – Kellogg Hotel & Conference Center						
3/4-6	Michigan Grape & Wine Conference MSU – Kellogg Hotel & Conference Center						

GROWING DEGREE DAY ACCUMULATIONS AS OF August 11 AT THE NWMHRC

Year	2014	2013	2012	2011	2010	2009	24 Yr. Avg.
GDD42	2304	2441	3059	2527	2896	2188	2516.0
GDD50	1473	1614	2060	1678	1906	1317	1630.6

Growth Stages at NWMHRC (Aug. 11, 2014, 10:00 a.m.)

Apple: Red Delicious – 44 mm fruit Gala – No fruit Yellow Delicious – 56 mm fruit
Pear: Bartlett: 43 mm fruit
Sweet Cherry: Hedelfingen: Harvested Napoleon: Harvested Gold: Harvested
Tart Cherry: Harvested
Balaton: Harvested
Apricot: Harvested
Grapes: Berry touch

NORTHWEST MICHIGAN REGIONAL REPORT

E. Pochubay, and N. Rothwell, MSUE Educators

Pest Report. Cherry fruit fly numbers continue to remain consistently low at the station with a total of two flies captured this week. **Spotted wing** *Drosophila* captures at the station and the average number of SWD captured in the northwest have been slowly increasing since this year's initial detection of SWD at the end of June. We caught a total of 30 SWD (14 females and 16 males) in tart cherry at the station this week. Last week, SWD were detected on Old Mission (one in sweet cherry and one in grape), Leelanau (six in tart cherry, one in sweet cherry, and one in raspberry), and Benzie (six in tart cherry and three in grape). SWD were not detected in Antrim County last week. We will continue to report weekly SWD captures on Fridays to FruitNet subscribers. We have received one report of SWD larvae in ripe fresh market sweet cherry fruit from an orchard in the southwest region.

Feeding damage (ex. stippling and bronzing on leaves) from **two-spotted spider mites** and **European red mites** and webbing is noticeable in orchards and several growers are planning to make postharvest miticide applications. Until today's rain, conditions had been very dry and the recent warm-hot temperatures have been favorable for rapid mite development. 'Firing' is apparent in some orchards and may be a result of dry conditions and high mite populations. **Peachtree borers** and **American plum borer** activity is ongoing at the station with an average of 25.5 greater peachtree borers, 18 lesser peachtree borers, and 23 American plum borers per trap.

In apples, we caught an average of 185 second generation **spotted tentiform leafminer** moths at the station. A total of three **codling moth** and three **obliquebanded leafroller** were caught at the station this week. **Apple maggot** were <u>not</u> detected this week and the first apple maggot fly captured at the station was on 21 July. Some growers have sprayed for apple maggot and are hoping to have some activity against **codling moth** and **obliquebanded leafroller** with this spray. Growers should not be concerned with spotted wing *Drosophila* infesting apples. Since the arrival of SWD in Michigan, we have not observed SWD infesting healthy, undamaged apples.

MICHIGAN BROWN MARMORATED STINK BUG REPORT for August 7, 2014

We caught one brown marmorated stink bug this week in a trap next to a peach orchard near Niles, Michigan and four in sweep netting of vegetation from sites next to field crops in Lenawee County.

Posted on **August 7, 2014, MSUE News,** by <u>Julianna Wilson</u>, and Larry Gut, Michigan State University Extension, Department of Entomology

This is the fifth weekly report of the <u>Michigan State University Extension brown marmorated</u> <u>stink bug</u> (BMSB) statewide monitoring program for 2014. Out of the more than 80 sites being monitored throughout the state, only one BMSB was captured in our traps. The trap was next to a peach orchard in Berrien County near Niles, Michigan. A few adult BMSB were captured at several sites in sweep netting of vegetation next to field crops in Lenawee County just north of the border with Ohio.

The monitoring network uses pyramid-style, pheromone-baited traps set up at farms that grow a variety of fruit and vegetable crops including apples, tart cherries, sweet cherries, peaches, blueberries, raspberries, tomatoes, peppers and sweet corn. Sites have been selected that are known to favor BMSB near riparian areas or along major transportation corridors in the following counties: Monroe, Lenawee, Oakland, Macomb, Livingston, Ingham, Lapeer, Saginaw and Bay on the east side of the state, and Antrim, Grand Traverse, Leelanau, Benzie, Oceana, Newaygo, Kent, Ionia, Ottawa, Allegan, Van Buren and Berrien on the west side of the state.

Although we continue to catch little to no BMSB, we know that BMSB are present in Michigan because of reports that have come mainly from homeowners in various parts of the state, and from sweep netting conducted in the edge of soybean fields. This monitoring network has been set up to provide early warning should BMSB start showing up in greater numbers in fruit and vegetable production areas as it has in mid-Atlantic states over the last decade.

To learn more about how to monitor for the brown marmorated stink bug, distinguish it from other similar-looking stink bugs, what crops it favors, and management strategies should populations reach the threshold where management is necessary, visit <u>MSU's Brown</u> <u>Marmorated Stink Bug website</u>.

The weekly BMSB statewide monitoring report has been funded through <u>Project GREEEN</u> and <u>Michigan State University Extension</u>. This output is generated through a network of MSU

Extension field staff and campus specialists. We would like to acknowledge the following team members and thank them for their weekly scouting efforts and input into this report: Peter McGhee, Michael Haas, Bob Tritten, Mark Longstroth, Brad Baughman, Carlos Garcia, Amy Irish-Brown, Lina Rodriguez Salamanca, Ben Philips, Ben Werling, Mark Whalon, Karen Powers, and Nikki Rothwell.

Dr. Gut's work is funded in part by MSU's AgBioResearch.

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MICHIGAN SPOTTED WING DROSOPHILA REPORT for August 6, 2014

Spotted wing Drosophila numbers are up from last week and are now being detected statewide. Protect susceptible crops where SWD is detected.

Posted on **August 7, 2014, MSUE News,** by **Julianna Wilson**, and Rufus Isaacs, Michigan State University Extension, Department of Entomology

This is the seventh weekly report of the <u>Michigan State University Extension spotted wing</u> <u>Drosophila</u> (SWD) statewide monitoring program for 2014. Our network of traps across more than 100 sites was checked during the week of July 29 and shows increased activity of this pest, particularly in southwest Michigan counties. There was a total of 663 male and 454 female SWD trapped from the following counties in our trapping network: Berrien, Van Buren, Allegan, Ottawa, Kalamazoo, Kent, Montcalm, Oceana, Leelanau, Benzie, Ingham, Macomb, Oakland, and new this week, Muskegon, Mecosta, Antrim, and Grand Traverse counties. No SWD were captured in Ionia, Genesee, Lapeer or Livingston county this week.



Comparison of average trap catches by week between 2013 and 2014.

Comparison of average SWD adults captured per trap by region. This week trapping is reported from 35 sites in the northwest (NW) counties of Antrim, Benzie, Grand Traverse, and Leelanau; 12 sites in the southeast (SE) counties of Ingham, Genesee, Lapeer, Livingston, Macomb and Oakland; 46 sites in the southwest (SW) counties of Allegan, Berrien, Kalamazoo, Ottawa, and Van Buren; and 18 sites in the west central (WC) counties of Ionia, Kent, Montcalm, Muskegon, and Oceana.



Of the traps that were checked, 53 percent of traps captured SWD this week, which is up from 40 percent last week. The average number of SWD per trap is also up from four last week to 10 this week across the network, with more than 21 SWD per trap on average in southwest Michigan. If SWD has not been trapped in your monitoring traps, be on alert for this pest as susceptible fruit crops start or continue to ripen as it seems that the mid-late summer increase in population is underway, at least in the southwest region.

Sampling of fruit over the past week in conventionally managed sites has yielded few larvae in either summer raspberries or blueberries. However, unsprayed sites are showing low to moderate fruit infestation depending on the site and fruit variety. This highlights the need for protection of ripe berries over the coming weeks as the SWD population continues to grow.

SWD can only infest berries when they are ripening or ripe, so the focus of SWD monitoring and management efforts should be in these susceptible fruit. In addition to the use of monitoring traps to detect the adult flies, a simple salt solution of 1 cup of salt per gallon of water can be used to assess fruit for larval infestation. Leave the fruit in the solution for a minimum of 15 minutes then check for small white larvae.

For more information on SWD monitoring and management strategies, and to read past reports, visit <u>MSU's Spotted Wing Drosophila website</u>.

The weekly SWD statewide monitoring report has been funded through <u>Project GREEEN</u> and <u>Michigan State University Extension</u>. This output is generated through a network of MSU Extension field staff and campus specialists. We would like to acknowledge the following team members and thank them for their weekly scouting efforts and input into this report: Rufus Isaacs, Keith Mason, Steve VanTimmeren, Larry Gut, Peter McGhee, Michael Haas, Bob Tritten, Mark Longstroth, Brad Baughman, Carlos Garcia, Karen Powers and Nikki Rothwell.

Dr. Isaacs' work is funded in part by <u>MSU's AgBioResearch</u>.

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2014 FARM BILL PROVIDES ADDITIONAL NAP BUY-UP COVERAGE FOR 2012 FRUIT CROP LOSSES

The 2014 Farm Bill provides retroactive buy-up coverage to Noninsured Crop Disaster Assistance Program producers of eligible non-insurable fruit crops that qualify due to a natural disaster, such as the 2012 freeze.

Posted on August 1, 2014, MSUE News, by <u>Curtis Talley Jr.</u>, Michigan State University Extension

Many commercial fruit producers, particularly tart cherry producers, are familiar with the Noninsured Crop Disaster Assistance Program (NAP) program because in 2012 it was the only insurance-related, risk management tool available. It covers losses more than 50 percent of the farm Actual Production History (APH) at 55 percent of the national average market price. Those enrolled in the 2012 program should have already received an indemnity payment from losses caused by spring freezes that season.

A provision in the 2014 Farm Bill is the availability of additional coverage under the 2012 NAP, if the loss was due to a natural disaster. This is important to producers of crops grown on trees or bushes that were damaged by the severe frosts during the spring of 2012. According to the Farm Service Agency (FSA) 2012 Noninsured Crop Disaster Assistance Program Coverage for Frost, Freeze, or Weather Related Fruit Losses Fact Sheet, July 2014, "Because this assistance is provided retroactively and losses for the 2012 crop year are known, additional assistance will be issued to the applicant at the level that provides the most benefit less the applicable premium fee." The fact sheet states that the premium will be calculated after the completed application is received. It will be deducted from the payment if the payment is sufficient to cover the calculated premium. If not, no payment will be issued and no premium will be due.

The 2012 Noninsured Crop Disaster Assistance Program (NAP) Coverage for Frost, Freeze, or <u>Weather Related Fruit Losses</u> fact sheet provides an overview of the program including premium, approved yields, application information required and the information FSA uses to calculate a potential payment, along with other pertinent information.

A list of eligible disaster counties is available at <u>2012 NAP Frost Freeze County</u>. The same counties that were eligible in 2002 are still eligible.

Commercial producers are encouraged to be on the lookout for additional information or announcements. There are still details for implementing the program to be determined. FSA personnel will be trained for this new program shortly. The law requires the application to be completed by September 22, 2014.

<u>Michigan State University Extension</u> recommends that farmers who want to consider crop insurance for their 2015 tree fruit crops should consider meeting with their area crop insurance agent to review options before the fall deadline arrives.

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BATTLING DOWNY MILDEW AS HOP HARVEST APPROACHES

With cones developing in Michigan hopyards, many growers continue to battle downy mildew and should carefully consider their management programs as harvest approaches.

Posted on **August 8, 2014**, MSUE News, by <u>Erin Lizotte</u>, Michigan State University Extension, and Annemiek Schilder, MSU Extension, Department of Plant, Soil and Microbial Sciences



Downy mildew on centennial leaves, bracts and cones. Photo by Erin Lizotte, MSU Extension

Unusually wet and humid weather during the 2014 season has provided plenty of opportunity for <u>hop</u> downy mildew to become a problem on bines, leaves and cones. The general approach to downy mildew management is to select less susceptible cultivars, apply preventative fungicide sprays, integrate good sanitation practices and properly time harvest. In addition, field scouting for disease plays a key role in an integrated disease management approach.

Downy mildew thrives under moist, rainy conditions, so growers should be applying fungicide treatments on a protectant basis from basal spike emergence in the spring through harvest. For most producers, this means reapplication of fungicides at least every 10-14 days during the season. The time between applications can stretch longer when the weather is dry and if hopyards don't have active infections.

Protectant sprays should be reapplied before forecasted rain events as the label allows regardless of the presence or absence of active downy infection. Covering young, developing bracts before cones close up is critical to protecting against downy mildew when conditions for disease are favorable. Getting adequate coverage on undersides of bracts where infection occurs becomes increasingly difficult as cones mature. These proactive treatments are by far the most efficacious method of controlling downy mildew; post-infection treatments should not be relied on for control.

Unfortunately, even when we follow best management practices, downy mildew can take us by surprise due to high disease pressure, poor fungicide timing, suboptimal spray coverage, fungicide wash-off due to rain, cultivar susceptibility or a combination of factors. In addition, fungicide resistance may play a role in some cases. If needed, growers should be prepared to apply post-infection treatments.

Research from the Pacific Northwest indicates that cymoxanil, such as Curzate, has about two days post-infection activity, but only provides three days of forward protection. This means that cymoxanil would make a great treatment if you failed to get a protectant on ahead of a rain event, but would require the grower to tank-mix it with a protectant fungicide with a longer residual for protection moving into the period following application. The product Tanos is a

combination of cymoxanil – the active ingredient in Curzate – and a protectant mode of action called famoxadone and would be a nice choice for growers looking for some curative action as well as five to seven days protection. Both Curzate and Tanos have a seven-day pre-harvest interval.

Dimethomorph, such as Forum, and mandipropamid, such as Revus, have the same mode of action and offer seven days of protectant activity and one to two days of post-infection activity on actively growing shoots. Forum and Revus both have a seven-day pre-harvest interval. Phosphorous acid fungicides, like Phostrol, have been shown to provide about four to five days protection and post-infection activity of up to five to seven days in field trials in the Pacific Northwest and have a very short pre-harvest interval. The strobilurin fungicides including trifloxystrobin, such as Flint, and pyraclostrobin/boscalid, such as Pristine, have less post-infection activity and are not recommended for downy mildew at this time.

Organic growers have fewer options and will need to focus on keeping tissue protected, selecting downy mildew-tolerant varieties and following cultural practices to limit downy mildew infection. Growers should select clean planting material, remove heavily diseased plants early in the season and eliminate primary basal spikes as late as possible. Early harvest can also minimize cone infection when infection pressure is high.

Copper-based products are the mainstay of downy mildew management in organic hopyards and offer five to seven days of protection, but no post-infection activity. The pre-harvest intervals for copper formulations vary, so refer to the label. Actinovate, Eco-mate, Armicarb-O and Sonata are additional products that list downy mildew on the label and are approved for organic use. The pre-harvest interval for these products is one day or less. At this time we have no data on the efficacy of these products.

Additional considerations

- Growers should rotate through multiple fungicidal modes of action in a season to delay resistance development in the downy mildew pathogen.
- If disease symptoms are showing up on leaves and shoots, you can assume that there is plenty of disease pressure to infect the cones as well.
- Avoid spraying systemic fungicides on heavily sporulating lesions since this is not very effective and can encourage fungicide resistance development. Rather, apply a contact fungicide to kill the spores first and then follow up with systemic fungicide applications.
- Ensure thorough coverage of plant material, particularly for contact fungicides, which means increase spray volume, reduce tractor speed, spray every row and adjust nozzles accordingly.
- Apply fungicides at the highest labeled rate to ensure good post-infection activity.
- Ensure forward protection of healthy plant parts by tank-mixing or following up with materials that have good protective activity.
- Always read the label for the pre-harvest interval, incompatibility with other products and other restrictions.
- Scout to assess if your treatment was effective, keeping in mind that newly developing infections may continue to manifest themselves for a week or more after the spray.
- Some growers may have additional limitations based on their purchaser, so be sure to consult with your customer to ensure you aren't applying materials that are prohibited by the brewer.

For more information on downy mildew of hops, refer to the <u>Michigan State University Extension</u> article, "<u>Downy mildew pressure is high in northern Michigan hopyards</u>."

Dr. Schilder's work is funded in part by <u>MSU's AgBioResearch</u>.

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HOP SCOUTING MEETING TO BE HELD IN SOUTHWEST MICHIGAN ON AUGUST 18

Scouting for hop pests and diseases is critical to environmental and economic sustainability. Come learn about best scouting practices in the field.

Posted on August 6, 2014, MSUE News, by Erin Lizotte, Michigan State University Extension



<u>Michigan State University Extension</u> will be hosting a free hop scouting demonstration Aug. 18 from 5-7 p.m. at the <u>Southwest Michigan Research and Extension Center</u>, located at <u>1791</u>

<u>Hillandale Rd., Benton Harbor, MI 49022</u>. The meeting will start with a classroom style presentation and then move into the field for hands-on scouting at the research station hopyard.

This event is free, but registration is required and space is limited, so sign up today by <u>registering online</u> or by calling Brad Baughman at 269-944-4126. Restricted Use Pesticide Credits will be available.

Accommodations for persons with disabilities may be requested by contacting Erin Lizotte at <u>taylo548@msu.edu</u> to make arrangements. Requests will be fulfilled when possible.

This program was developed with support from the <u>Sustainable Agriculture Research and</u> <u>Education</u> (SARE) program, which is funded by the <u>U.S. Department of Agriculture — National</u> <u>Institute of Food and Agriculture</u> (USDA-NIFA). USDA is an equal opportunity provider and employer.

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CHESTNUT GROWERS: MARK YOUR CALENDARS FOR THESE TWO IMPORTANT MEETINGS

Chestnut growers are encouraged to attend two upcoming meetings on insect and disease scouting on Aug. 27, and cultivar evaluations and chestnut blight research on Sept. 7. Both meetings are free, but require registration.

Posted on August 6, 201, MSUE News, by Erin Lizotte, Michigan State University Extension



CHESTNUT SCOUTING MEETING, AUG. 27

Scouting for chestnut insect pests and diseases is critical to environmental and economic sustainability. Come learn about best scouting practices in the field. <u>Michigan State University</u> <u>Extension</u> will be hosting a free chestnut scouting demonstration Aug. 27 from 5-7 p.m. at the <u>Clarksville Research Center</u>, <u>9302 Portland Rd.</u>, <u>Clarksville</u>, <u>MI 48815</u>. The meeting will start with a classroom style presentation and then move into the field for hands-on scouting at the research station chestnut orchard.

This event is free, but registration is required and space is limited, so sign up today by registering online or calling Erin Lizotte at 231-944-6504.

HARVEST MEETING OF THE MIDWEST NUT PRODUCERS COUNCIL, SEPT. 7

The <u>Midwest Nut Producers Council</u> will hold its Harvest Meeting Sunday, Sept. 7 at noon at the <u>Clarksville Research Center</u>, <u>9302 Portland Rd., Clarksville, MI 48815</u>. After meeting in the parking lot (restrooms available), we will proceed to the chestnut plot to look at the various cultivars and review past production records. We will informally discuss the 2013 Forrest Keeling transplants, the 2013-14 winter and the effects it had on the various cultivars including flowering and pollen production. We will also discuss the Forrest Keeling 2014 transplant shipment arriving this October. There will be no formal presentation in the auditorium at this meeting. Light refreshments including water and granola bars will be available, so bring your own food.

This event is free of charge to all interested parties, but participants should <u>register online</u> or by contacting Dennis Fulbright at <u>fulbrig1@msu.edu</u>. Midwest Nut Producers Council members will receive written packets of information at the meeting.

After the meeting, participants are welcome to continue the Harvest Meeting by driving to the MSU south campus to observe even more cultivars and the chestnut blight treatment research program. MSU has chestnut blight and Clarksville, as of this summer, still does not have chestnut blight, so we will travel from the blight-free plots at Clarksville to the blighted plots at MSU. It is a 45-minute drive to MSU from Clarksville. The meeting will begin again at MSU at 3 p.m. until 5 p.m. Written driving directions will be provided at Clarksville if you wish to go to the MSU chestnut orchard.

Directions to Clarksville Research Center

9302 Portland Road, Clarksville, MI 48815

Exit 59 off of I-96, go south to Portland Road. (about 1/2 mile) and turn right. Proceed to the main entrance on Portland Road. Meet in main parking lot and prepare to move to the orchard.

Directions to MSU research plots

Meet in the parking lot of the Plant Pathology Field Laboratory

Take US-127/I-496 south to Jolly Road exit. Turn left at exit (you are not at Jolly Road yet). Cross freeway and head to signal at end of road. Turn right at this signal; go to signal at end of this road (this is Collins Road, you go by Lansing main post office). Turn left at end of Collins

onto Jolly Road. Drive to the next signal and you are at the corner of Jolly and College Road. Turn left and go to first building on left, the Plant Pathology Research Lab.

Accommodations for persons with disabilities may be requested by contacting Erin Lizotte at <u>taylo548@msu.edu</u> to make arrangements. Requests will be fulfilled when possible.

This program was developed with support from the <u>Sustainable Agriculture Research and</u> <u>Education</u> (SARE) program, which is funded by the <u>U.S. Department of Agriculture — National</u> <u>Institute of Food and Agriculture</u> (USDA-NIFA). USDA is an equal opportunity provider and employer.

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NMC-MSU TO HOST CONFERENCE ON CLIMATE AND TECHNOLOGY IN GRAPE PRODUCTION

Northwestern Michigan College and Michigan State University are hosting a conference, Weathering the Climate: Cultivation and Technology in Grape Production," **Friday, September 5** at the Hagerty Center at NMC's Great Lakes Campus, 710 E. Front Street, Traverse City.

The conference features experts in agricultural technology, geography, horticulture, and other areas related to unmanned aerial systems technology and the science of grape production.

Sessions cover topics like Climate Change and Potential Agronomic Impacts in the Great Lakes Region, Impacts of the 2014 Polar Vortex on Grapes: Lessons Learned, How to Manage Grapes for Our Changing Climate, and Unmanned Systems and Technology Applications in Viticulture. There will be a vineyard demonstration of the application of unmanned systems at Chateau Chantal Vineyard and Winery, and a panel of grape growers who will discuss practical applications of unmanned systems technology in vineyard management.

Experts speaking at the Weathering the Climate conference include Brian Matchett, MSU Institute of Agricultural Technology; Jeff Andresen, MSU Department of Geography, Imed Dami, Ohio State University Department of Horticulture and Crop Science; Paolo Sabbatini, MSU Department of Horticulture; Duke Elsner, MSU Extension; Ed Bailey, NMC Technical Division; and Tony Sauerbrey, NMC Unmanned Aerial Systems.

The panel will include Ben Bramer, Agrivine; Stan Howell, MSU Department of Horticulture; Mark Johnson, Chateau Chantal; Larry Mawby, L. Mawby Vineyards; James Peters, Staits Area Grape Growers Association and Coenraad Stassen, Brys Estate Vineyard. Registration for the event can be done online by visiting nmc.edu/viticulture and following the links. Cost for the conference is \$60, conference and dinner is \$85. Rooms have been made available for conference attendees to reserve at the Bayshore Resort.

FOR MORE INFORMATION Brian Matchett, Regional Program Coordinator, Northwest Michigan Office, MSU Institute of Agricultural Technology (231) 995-1719 <u>bmatchett@nmc.edu</u>

SOUTHWEST GRAPE PRE-HARVEST MEETING

Date: August 21, 2014 Time: 5:00 pm - 8:00 pm Location: Lemon Creek Winery, 533 E. Lemon Creek Rd., Berrien Springs, MI 49013 Contact: Brad Baughman, Berrien County Horticulture Extension Educator. baughm30@anr.msu.edu (269)-944-0157

Southwest Grape Preharvest Meeting Thursday, August 21st 5-8 p.m. Lemon Creek Winery 533 E. Lemon Creek Road, Berrien Springs, MI 49103. This meeting is an opportunity for the grape grower and processor community of Southwest Michigan to discuss the challenges and successes of the growing season thus far, spray decisions leading up to harvest, recovery from 2013-2014 winter injury, and other issues with each other and with experts from Michigan State University (MSU). Dinner is included in registration and will be served at 5 p.m. 2 RUP recertification credits have been requested. Topics and speakers will be: "Rebuilding winter-injured vineyards" (Tom Zabadal, SW Michigan Research and Extension Center), "Pre-harvest insect management decisions" (Rufus Isaacs, MSU Department of Entomology), "Late-season disease management" (Annemiek Shilder, MSU Department of Plant, Soil, & Microbial Sciences), "Canopy management after winter injury" (Paolo Sabbatini, MSU Department of Horticulture) Cost: \$15 per person.

WEBSITES OF INTEREST

This issue and **past issues of the weekly FruitNet** report are posted on our website: http://agbioresearch.msu.edu/centers/nwmihort/nwmihort northern michigan fruit net **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 **cherries** is available at the new cherry website: http://www.cherries.msu.edu/

Information on **apples**: <u>http://apples.msu.edu/</u>

Fruit CAT Alert Reports have moved to MSU News:

http://news.msue.msu.edu