

Northern Michigan FruitNet 2015

Northwest Michigan Horticultural Research Center

March 31, 2015

Greetings FruitNet Subscribers,

It was great to see so many of you at our meetings last week! Jackie's retirement celebration was a success and we would like to send a special thanks to all of the folks who contributed to such a wonderful sendoff. Nikki and Emily are at the West Central Spring Hort Show today (agenda below) and the IPM Kickoff meeting is scheduled for April 22 4-7 PM. The winegrape spring kickoff meeting has also been scheduled and is coming up next week April 10.

It looks like we have a few sunny days in store this week. Enjoy!

In this week's issue, you'll find...

- **WEST CENTRAL SPRING HORTICULTURAL MEETING**
- **2015 TREE FRUIT IPM KICKOFF**
- **NORTHWEST MICHIGAN WINEGRAPE SPRING 2015 KICKOFF MEETING 4/10**
- **2015 FRUIT INSECTICIDE REGISTRATION UPDATE**

CALENDAR OF EVENTS

2015

- | | |
|----------------|---|
| 3/31 | West Central Spring Hort Meeting
Hart United Methodist Church, Hart |
| 4/1 | Michigan Water Use Reporting Due |
| 4/6-12 | Grand Rapids Cider Week
<i>For more information visit https://mca30.wildapricot.org</i>
Grand Rapids |
| 4/10 | Northwest Michigan Winegrape Spring 2015 Kickoff Meeting |
| 4/10-11 | Great Lakes Hop and Barley Conference
Grand Rapids |
| 4/18 | Healthy Forests – Caring for Our Trees |

Grand Traverse Conservation District

4/22 2015 Tree Fruit IPM Kickoff

**Hart Spring Meeting
March 31, 2015**

- | | |
|-------------|---|
| 8:00-8:30 | Introduction to the MAEAP
<i>Dan Busby and Lynda Herremans, MAEAP Program</i> |
| 8:30-9:00 | Short and long-term weather forecasts: What is in store for 2015?
<i>Dr. Jeff Andresen, Dept. of Geography, MSU</i> |
| 9:00-9:30 | Understanding Maximum Residue Limits (MRLs): A Key Ingredient in Michigan
Cherry Growers' Survival
<i>Dr. Mark Whalon, Dept. of Entomology, MSU</i> |
| 9:30-10:00 | Best Management Practices for Pollinators in Michigan Orchards
<i>Dr. Julianna Wilson, Dept. of Entomology, MSU</i> |
| 10:00-10:20 | BREAK |
| 10:20-10:50 | Mating Disruption Using Aerosol Emitters in Michigan Apples
<i>Dr. Larry Gut, Dept. of Entomology, MSU</i> |
| 10:50-11:10 | Using Pyrethroid Sprays to Control SWD and their Impacts on Spider Mite
Populations
<i>Emily Pochubay, NWMHRC, MSUE</i> |
| 11:10-11:30 | Gaining a Better Understanding of Insecticide Efficacy against SWD
<i>Dr. Nikki Rothwell, NWMHRC and MSUE</i> |
| 11:30-12:00 | Investigating mechanical harvesting technologies for high density cherries
<i>Dr. Ron Perry, Dept. of Horticulture, MSU</i> |
| 12:00-1:00 | LUNCH |
| 1:00-1:30 | Using Copper and other Compounds to Control Cherry Leaf Spot
<i>Dr. George Sundin, Dept. of Plant, Soil, and Microbial Sciences</i> |
| 1:30-2:00 | Using Precision Orchard Management Techniques to Grow the Best Apples
<i>Phil Schwallier, MSUE</i> |

2:00-2:30	Understanding Phytotoxicity Risks in Apple <i>Amy Irish-Brown, MSUE</i>
2:30-3:00	Apple Disease Management Update for 2015 <i>Dr. George Sundin, Dept. of Plant, Soil, and Microbial Sciences</i>
3:00-3:30	Thinning Strategies for an Optimal Crop in 2015 <i>Phil Schwallier, MSUE</i>
3:30-3:45	BREAK
3:45-4:30	New Strategies for Successful Record Keeping and FSMA Update <i>Phil Tocco, MSUE</i>

2015 Tree Fruit IPM Kick-off

April 22, 2015 4:00 – 7:00 PM

Northwest Michigan Horticultural Research Center

Please join Michigan State University Extension at the Northwest Michigan Horticultural Research Center on Wednesday, April 22 from 4:00 – 7:00 PM for the annual Tree Fruit IPM Kickoff! This year, we are pleased to host Drs. George Sundin and Larry Gut from the MSU Fruit Team to provide the latest information in cherry and apple disease and insect pest management. Pesticide label changes and updates will also be discussed. This meeting is free of charge and no registration is necessary. There will be three pesticide recertification credits and three certified crop advisor credits available. Please bring your tough insect and disease questions to this meeting as the experts will be here to answer them! We are looking forward to welcoming warmer spring weather and seeing you in a few weeks.

3:45	Welcome and refreshments
4:00 – 4:30	Cherry Disease Management Blast-off for 2015 <i>Dr. George Sundin, Dept. Plant Pathology, MSU</i>
4:30 – 5:00	Scab, Fuzz, and Ooze: Managing apple diseases in 2015 <i>Dr. George Sundin, Dept. Plant Pathology, MSU</i>
5:00 – 5:30	Introducing: Pheromone Aerosol Emitters for Codling Moth <i>Dr. Larry Gut, Dept. Entomology, MSU</i>

5:30 – 6:00 **Preparing for Spotted Wing Drosophila Management in 2015**
Dr. Larry Gut, Dept. Entomology, MSU

6:00 – 7:00 **Pesticide label changes and updates**
Emily Pochubay, MSU Extension

Fill out sheets for Pesticide Recertification, 1C private and commercial core (3 credits available) and Certified Crop Advisor (3 credits available).

Northwest Michigan Winegrape Spring 2015 Kick-off Meeting April 10
Duke Elsner, MSU Extension

This program will feature presentations on the winery sustainability feasibility survey, repetitive motion injuries, proposed Spanish language training sessions and a comparative tasting of wines made from super-cold-hardy grape varieties.

Mark your calendars to attend the [Northwest Michigan Winegrape Spring Kick-off meeting](#) on Friday afternoon, April 10, 2015 at the [Northwest Michigan Horticultural Research Center](#) near Traverse City, Michigan, [6686 S. Center Hwy, Traverse City, MI 49684](#).

The program includes a number of interesting topics, and given that area vineyards have suffered a good deal of winter injury once again, the comparative tasting on super-cold-hardy wines should be of great interest to growers and vintners. Wines made from Marquette, Frontenac, Frontenac gris, La Crescent and other varieties will be included in the tasting.

These are the scheduled topics and speakers:

1 p.m. Parallel 45 update
Brian Hosmer, President, P45 Vines & Wines Inc.

1:20 p.m. Sustainability feasibility study
Liesl Eichler Clark, 5 Lakes Energy

2:10 p.m. Repetitive motion injuries in the vineyard
Rex Holder, Physical Therapist, FAST

2:40 p.m. Spanish language training sessions
Marguerite Cotto, Northwestern Michigan College

3 p.m. Comparative tasting of wines made from selected super-cold-hardy varieties
Ron Perry, MSU Department of Horticulture

This session is jointly sponsored by [Michigan State University Extension](#) and [Parallel 45 Vines & Wines, Inc.](#) The registration fee is \$10 for Parallel 45 members or \$15 for non-members. [Pre-registration](#) is strongly recommended so appropriate accommodations for the wine tasting can be arranged. You may register online at the [Wine Grape Spring Kick-off Meeting registration page](#).

Persons with disabilities may request accommodations by calling the hosting [MSU Extension office](#) by April 3 to ensure sufficient time to make arrangements.

2015 Fruit insecticide registration update

John Wise, Rufus Isaacs and Larry Gut

Michigan State University Extension, Department of Entomology

Summary of insecticide and miticide label additions, clarifications and corrections to the 2015 Michigan Fruit Management Guide (E-154).

The following is a review of insecticide and miticide label changes and restrictions to the [Michigan State University Extension](#) Bulletin E-154, "[2015 Michigan Fruit Management Guide](#)." Agri-chemical labels and regulations can change quickly, so use this information within the context of each compound's legal label.

Insecticide 2015 label additions, clarifications and corrections

Compound	Label changes/ restrictions	Crop	Target pests
Sivanto 200SL	New label	Pome fruit, blueberries and grapes	Aphids, leafhoppers, scale mealybugs and blueberry maggots
Apta 15SC	New label	Stone fruits	Fruit flies, leafrollers and plum curculio
Grandevo	New label	Pome and stone fruits, blueberries, grapes, caneberries and strawberries	Lepidoptera, fruit flies, fruitworms and spotted wing Drosophila
Venerate	New label	Pome and stone fruits, blueberries, grapes, caneberries and strawberries	Lepidoptera, plum curculio, fruitworms and fruit flies
BeetleGONE	New label	Pome and stone fruits, blueberries, grapes, caneberries and strawberries	Japanese beetles
Nealta	New label	Pome fruits and grapes	Mites
Fyfanon ULV	Aerial application	Blueberries	Spotted wing Drosophila

New insecticide label information for compounds listed in [2015 E-154](#)

MSU Fruit Management Guide E-154 product numbers are in parenthesis ().

Sivanto (flupyradifurone) belongs to the butenolide class of insecticides, which are agonists of insect nicotinic acetylcholine receptors (nAChR). Sivanto is registered in pome fruits, grapes and blueberries for control of several sap-feeding insects, including aphids, leafhoppers, psylla, scale insects and blueberry maggots. It is also registered in grapes for control of leafhoppers and mealybugs. Sivanto displays translaminar movement when applied to foliage and is xylem mobile. It has shown to be relatively safe on many beneficials, including honey bees. The maximum yearly amount of Sivanto 200SL that can be applied is 28 fluid ounces in pome fruits, grapes or blueberries per season.

Apta (3) (tolfenpyrad) belongs to the Mitochondrial Complex I Electron Transport Inhibitors (METI 1), which work by inhibiting cellular respiration in the mitochondria. Apta is registered in stone fruits for control of a range of pests including leafrollers, leafhoppers, plum curculio, *Rhagoletis* and *Drosophila* fruit flies (suppression of spotted wing *Drosophila*). The maximum yearly amount of Apta 15 SC that can be applied is 54 fluid ounces per acre in stone fruits.

Nealta (4) (cyflumetofen) is a beta-ketonitrile class miticide with a METI 2 (Group 25 acaracide) mode of action, labeled for use on pome fruits and grapes. Nealta provides knock-down and residual control of tetranychid mites such as European red mites and two-spotted spider mites. Nealta will control all life stages of these mites, including eggs, nymphs and adults. Because Nealta is not systemic, thorough coverage of plant surface is necessary for effective control. Nealta is relatively safe to beneficial arthropods. The maximum yearly amount of Nealta 200SC that can be applied is 27.4 fluid ounces (two applications).

Grandevo (6) (*Chromobacterium subtsugae*) is a mixture of metabolites produced by the bacterium during fermentation and the formulated product contains no viable cells. Grandevo is labelled for pome and stone fruits, blueberries, caneberries, strawberries and grapes, and is listed by the [Organic Materials Review Institute](#) (OMRI) for use in organic production. Grandevo is labelled for control of a range of leafrollers, aphids, fruitworms, codling moth, and has shown activity on spotted wing *Drosophila* in field trials. The proposed modes of action include repellency, reduced oviposition, reproduction of certain sucking insects and mites and a stomach poison for chewing insects. The use of a non-ionic adjuvant is recommended and the spray solution should be near neutral pH. Water with high mineral content should be avoided.

Venerate (7) (*Burkholderia rinojensis*) is a mixture of metabolites produced by the bacterium during fermentation and the formulated product contains no viable cells. Venerate is labelled for pome and stone fruits, blueberries, caneberries, strawberries and grapes, and is listed by the [OMRI](#) for use in organic production. Venerate is labelled for control of a range of leafrollers, fruitworms and plum curculio, and suppression of aphids, mites, thrips and stink bugs. The proposed mode of action is exposure to spray deposits and as a stomach poison. The use of a non-ionic adjuvant is recommended.

BeetleGONE (12) (*Bacillus thuringiensis* subsp. *galleriae*) are aerobic, spore-forming, rod-shaped bacteria that form crystals of protein called delta-exotoxins that when digested by Scarab beetle adults damage the stomach wall, causing feeding cessation which leads to death. BeetleGONE is labelled for control of Japanese beetles in pome and stone fruits, blueberries, caneberries, strawberries and grapes, and is listed by the [OMRI](#) for use in organic production.

Fyfanon ULV (13) (dimethyl dithiophosphate) is a malathion insecticide formulated for aerial application against spotted wing Drosophila in blueberries. It has a 24c label for use in Michigan through April 2019 with a maximum of five applications per season. There is also a 10-day minimum application interval and a one-day pre-harvest interval. The restricted entry interval is 12 hours. It is not expected to provide more than one week of residual control and it will lose significant activity if residues are subject to rainfall or overhead irrigation.

Drs. Wise, Isaacs and Gut's work is funded in part by [MSU AgBioResearch](#).

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/centers/nwmihort/nwmihort_northern_michigan_fruit_net

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/>

Fruit CAT Alert Reports has moved to MSU News

<http://news.msue.msu.edu>