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  
For more information visit https://mca30.wildapricot.org  
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

2015 Tree Fruit IPM Kickoff

Hart Spring Meeting
March 31, 2015

8:00-8:30 Introduction to the MAEAP
   
   Dan Busby and Lynda Herremans, MAEAP Program

8:30-9:00 Short and long-term weather forecasts: What is in store for 2015?
   
   Dr. Jeff Andresen, Dept. of Geography, MSU

9:00-9:30 Understanding Maximum Residue Limits (MRLs): A Key Ingredient in Michigan Cherry Growers’ Survival
   
   Dr. Mark Whalon, Dept. of Entomology, MSU

9:30-10:00 Best Management Practices for Pollinators in Michigan Orchards
   
   Dr. Julianna Wilson, Dept. of Entomology, MSU

10:00-10:20 BREAK

10:20-10:50 Mating Disruption Using Aerosol Emitters in Michigan Apples
   
   Dr. Larry Gut, Dept. of Entomology, MSU

10:50-11:10 Using Pyrethroid Sprays to Control SWD and their Impacts on Spider Mite Populations
   
   Emily Pochubay, NWMHRC, MSUE

11:10-11:30 Gaining a Better Understanding of Insecticide Efficacy against SWD
   
   Dr. Nikki Rothwell, NWMHRC and MSUE

11:30-12:00 Investigating mechanical harvesting technologies for high density cherries
   
   Dr. Ron Perry, Dept. of Horticulture, MSU

12:00-1:00 LUNCH

1:00-1:30 Using Copper and other Compounds to Control Cherry Leaf Spot
   
   Dr. George Sundin, Dept. of Plant, Soil, and Microbial Sciences

1:30-2:00 Using Precision Orchard Management Techniques to Grow the Best Apples
   
   Phil Schwallier, MSUE
2:00-2:30 Understanding Phytotoxicity Risks in Apple
Amy Irish-Brown, MSUE

2:30-3:00 Apple Disease Management Update for 2015
Dr. George Sundin, Dept. of Plant, Soil, and Microbial Sciences

3:00-3:30 Thinning Strategies for an Optimal Crop in 2015
Phil Schwallier, MSUE

3:30-3:45 BREAK

3:45-4:30 New Strategies for Successful Record Keeping and FSMA Update
Phil Tocco, MSUE

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
Dr. George Sundin, Dept. Plant Pathology, MSU

4:30 – 5:00 Scab, Fuzz, and Ooze: Managing apple diseases in 2015
Dr. George Sundin, Dept. Plant Pathology, MSU

5:00 – 5:30 Introducing: Pheromone Aerosol Emitters for Codling Moth
Dr. Larry Gut, Dept. Entomology, MSU
Preparing for Spotted Wing Drosophila Management in 2015
Dr. Larry Gut, Dept. Entomology, MSU

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


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

<table>
<thead>
<tr>
<th>Compound</th>
<th>Label changes/restrictions</th>
<th>Crop</th>
<th>Target pests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sivanto 200SL</td>
<td>New label</td>
<td>Pome fruit, blueberries and grapes</td>
<td>Aphids, leafhoppers, scale mealybugs and blueberry maggots</td>
</tr>
<tr>
<td>Apta 15SC</td>
<td>New label</td>
<td>Stone fruits</td>
<td>Fruit flies, leafrollers and plum curculio</td>
</tr>
<tr>
<td>Grandevo</td>
<td>New label</td>
<td>Pome and stone fruits, blueberries, grapes, caneberries and strawberries</td>
<td>Lepidoptera, fruit flies, fruitworms and spotted wing Drosophila</td>
</tr>
<tr>
<td>Venerate</td>
<td>New label</td>
<td>Pome and stone fruits, blueberries, grapes, caneberries and strawberries</td>
<td>Lepidoptera, plum curculio, fruitworms and fruit flies</td>
</tr>
<tr>
<td>BeetleGONE</td>
<td>New label</td>
<td>Pome and stone fruits, blueberries, grapes, caneberries and strawberries</td>
<td>Japanese beetles</td>
</tr>
<tr>
<td>Nealta</td>
<td>New label</td>
<td>Pome fruits and grapes</td>
<td>Mites</td>
</tr>
<tr>
<td>Fyfanon ULV</td>
<td>Aerial application</td>
<td>Blueberries</td>
<td>Spotted wing Drosophila</td>
</tr>
</tbody>
</table>
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 subtsgae) 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](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](http://agbioresearch.msu.edu/centers/nwmihort/nwmihort_northern_michigan_fruit_net)

60 Hour Forecast

Information on cherries is available at the new cherry website: [http://www.cherries.msu.edu/](http://www.cherries.msu.edu/)

Information on apples: [http://apples.msu.edu/](http://apples.msu.edu/)

**Fruit CAT Alert Reports has moved to MSU News**
[http://news.msue.msu.edu](http://news.msue.msu.edu)