

NW Michigan Regional Fruit Grower Newsletter

April 2005

CALENDAR OF EVENTS

- | | |
|-----------------------------|---|
| 4/21 | Spring IPM Kick-Off
NWMHRS |
| 4/30 | Household Hazardous Waste Collection
Grand Traverse Co. |
| 4/30-5/23 | MSUE Citizen Planner Course
Connie Binsfeld Resource Center |
| 5/2 | Food Marketing Institute Show
Chicago |
| 5/18-7/6 | Leelanau Co. Weekly IPM Updates
Every Wednesday, Larry Esch Farm |
| 5/18-7/27 | Grand Traverse Co. IPM Updates
Every other Wednesday
Josh Wunsch Farm, Old Mission Peninsula |
| 5/24, 6/14,
6/28 | Benzie Co. IPM Updates
Evans Brothers Orchards |
| 5/24, 6/14 | Antrim Co. IPM Updates
Dave White Farm |
| 6/1-6/22 | 2nd Tractor Safety Training Program
Wednesdays, Classic Farm Equipment |
| 6/16 | Organic Apple Field Day
Clarksville Hort Expt Station |
| 6/18-19 | Barn Restoration Workshop
Martin Basch Farmstead
Port Oneida Rural Historic District |
| 7/4-7/8 | Cherry Connection
NWMHRS |
| 7/27 | Viticulture Day
SW MI Research & Extension Center |

EMAIL ADDRESS CHANGES

MSU Extension changed its email system. New addresses are:

Jim Bardenhagen – bardenh3@msu.edu
Duke Elsner – elsner@msu.edu
Steve Fouch – fouch@msu.edu
Stan Moore – moorest@msu.edu
Jim Nugent – nugent@msu.edu
Nikki Rothwell – rothwel3@msu.edu
NWMHRS – nwmihort@msu.edu

SPRING IPM KICK-OFF!

Nikki Rothwell, District Fruit IPM Educator

To start our growing season off on the right foot, the Northwest Horticultural Station is hosting a spring IPM meeting on **April 21st** from 6:30-9pm.

We are lucky to have Dr. John Wise, Trevor Nichols Research Station, come up to speak about the new pesticide chemistries available this year. He will discuss modes of action, application timing, and the best way to manage resistance with these new chemicals.

Codling moth, which has become more problematic in our northern Michigan orchards, will also be a topic on the agenda. Pete McGhee will present the latest information on codling moth control as there are new pesticides and biopesticides currently available for use against this pest. These chemicals have different timings than the traditional codling moth insecticides, and Pete will offer the optimal application timings as well as alternative control methods that have been effective against codling moth.

Jim Laubach will be presenting a hands-on session to better understand how to use the PestNet agricultural weather system. PestNet provides growers with critical information on precise timing of pesticides, and Jim will show the group how to maneuver through the system to get the most out of the program.

6:30-6:35	<i>Welcome</i>	Nikki Rothwell
6:35-7:30	<i>New pesticide chemistries:</i> modes of action, application timing, resistance management	John Wise
7:30-8:15	<i>Update on control tactics for codling moth:</i> new chemistries, application timings, alternative control tactics	Pete McGhee
8:15-8:30	<i>Fungicide resistance management</i>	Nikki Rothwell
8:30-9:00	<i>PestNet ag weather review:</i> use of weather information for precise pesticide timing	Jim Laubach

Pesticide recertification and CCA credits have been applied for. If you are planning to attend, please call 946-1510 to register.

SUMMER IPM UPDATE SERIES

Nikki Rothwell, District IPM Educator

A summer series of IPM workshops will be held throughout northwest Michigan for the 2005 growing season. Growers are encouraged to bring samples of pests found on the farm. Relevant problems will also be discussed. *One credit* per one-hour meeting for private, commercial 1C pesticide applicator recertification has been requested from MDA. These are the best opportunities to discuss orchard management options with MSU staff and numerous other growers in a timely manner. Don't miss these meetings!

Leelanau County

Larry Esch Farm, 1 mile west of Eagle Highway on Horn Road

Dates: Every Wednesday, May 18-July 6

Time: 1-2pm

Grand Traverse County

Josh Wunsch Farm, Old Mission Peninsula, Phelps Road

Dates: Every other Wednesday, May 18- July 27

Time: 4-5pm

Benzie County

Evans Brothers Orchards, Joyfield Road

Dates: May 24, June 14, June 28

Time: 3-4pm

Antrim County

Dave White Farm

Dates: May 24, June 14 (with Dr. George Bird, see below), June 28

Time: 11:30-12:30pm

Dr. George Bird from the MSU Department of Entomology and Nematology Laboratory will be a featured speaker at the June 14 meeting. He will be discussing alternatives to fumigants for nematode control, and an experiment on this topic to be conducted at the Dave White farm. Growers from all counties are encouraged to attend this session.

PESTNET AGRICULTURAL WEATHER UPDATE

Nikki Rothwell, District Fruit IPM Educator

We are requesting your help in sponsoring MSU's statewide PestNet program in 2005.

PestNet provides critical information to assist growers with precise timing of pesticides. The information system is based on weather data from the Michigan Agricultural Weather Network (MAWN) with stations throughout the state's fruit belt. Models and forecast tools are generated for apple scab, cherry leaf spot, fire blight, black rot (grape), codling moth, and plum curculio. The site also provides a 21-day weather summary and a phenology model for Red Delicious. A spring frost event report is also available on the web.

Growers and consultants have shown tremendous interest in seeing this program continue to serve the fruit industry needs. In order to serve this clientele better, a proposal to upgrade the MAWN system was submitted to the Project GREEN agricultural initiative. The proposed funds would further automate the data acquisition process and include more pest models. Unfortunately, this proposal was not funded, which has resulted in the need to solicit growers and agri-businesses for money to continue the current weather system. The 2005 program will be comparable to 2004 with wetting event reports being posted twice per day during rain events from green tip on apples till mid-June.

If you are interested in helping endorse the PestNet Program, please clip out the sponsorship form and send it along with a check payable to "Michigan State University" to the Northwest Michigan Horticultural Research Station, 6686 S. Center Hwy, Traverse City, MI 49684. Your support with this program is greatly appreciated!

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PestNet Agricultural Weather Sponsorship Form

Yes, I would like to support MSU's AgWeather program at

\$25 \$50 \$100 \$200 Other _____

Name/Business _____

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SOURCES OF SEASONAL FRUIT INFORMATION FOR 2005

1. **FruitNet** – Weekly email/fax newsletter for NW Michigan fruit growers written by area extension agents and sent out of NWMHRS. Funded by area horticultural organizations so subscription is free. Past subscribers will remain on the list. Contact the NWMHRS (231/946-1510) to be added to, or removed from, the subscription list.

2. **NW Michigan Code-A-Phone Message** – Information will be updated regularly (generally weekly, but more frequently if necessary). It requires a touch tone phone to access. Call 947-3063 or 1-877-722-3388 (toll free), then press **1** for **stone fruit** information and/or **2** for **pome fruit**. **New for 2005**, beginning in early May, **grape information** can be accessed by pressing **3**. Funded by area horticultural organizations.
3. **MSU Fruit Crop Advisory Team (CAT) Alert** – The MSU Fruit CAT Alert newsletter has valuable feature articles that we do not include in the FruitNet report. Sign up for the 2005 CAT Alert is underway with Fruit, Vegetable, Field and Landscape editions again available for \$35 by mail each edition or can be read for free on the internet at <http://www.ipm.msu.edu/ipm/aboutcat.htm>. For questions or to subscribe, contact Assistant Editor Rebecca Lamb at: 517/353-4703.
4. **PestNet** – Disease, insect and crop development prediction system based on the Michigan Agricultural Weather Network (MAWN). Updated twice/day during early season wetting events, once/day during late season wetting events, less frequently during non-wet periods. Information can be accessed via the internet at <http://www.mifruit.com> or received via email by calling the NWMHRS at 946-1510. This statewide net is run out of NW Michigan. **Funding depends on contributions from agribusinesses and growers.** See accompanying article.
5. **60 Hour Weather Forecast** – Weather forecast for the Grand Traverse region predicted in 3 hour increments and updated twice per day. Available via internet at <http://www.agweather.geo.msu.edu/agwx/forecasts/fcst.asp?fileid=fous14ktvc> or <http://www.MIFruit.com> or subscribe to receive via email by contacting the NWMHRS at 946-1510. This has also been available via fax in the past, but our computer dedicated to the fax system is no longer functional, so as of this time, we do not expect to have a fax option available.

POLLINATION

Jim Nugent, District Horticulturist, MSUE

Good fruit crops cannot occur without good pollen transfer during bloom. We all recognize the importance of bees to transfer the pollen in crops requiring cross pollination, but I often hear growers talk about the importance of wind to pollinate tart cherries. **Wind is not a significant pollinator of tart cherries.**

In 1928, Carl Hemstreet (then the agricultural agent in Oceana County and later the first District Horticultural Agent in NW Michigan) conducted experiments where he screened Montmorency cherry trees during bloom to exclude bees from reaching the flowers. The trees inside the screens produced 4 lbs/tree while the unscreen controls produced 40 lbs/tree. The production of 10% of a tart crop inside the screens is better than the crop inside screened apple trees where cross pollination is required, but 10% of a crop doesn't pay the bills.

The fact is that if honey bees are not provided by the grower, then the grower is relying on a combination of native bees and other insects plus the neighbor's honey bees. A second fact is that today, unlike twenty years ago, there are virtually no wild honeybees left in Michigan due to the introduction of two non-native mite species. Still, pollinating a self-fertile crop such as tart cherries can be successfully accomplished with fewer bees than is required for self-incompatible crops such as sweets (most varieties) and apples.

Warm, dry conditions during bloom favor both pollen transfer (insect activity) and the process of fertilization (pollen dehiscence, germination, growth and fertilization). Under these conditions, nature may provide enough pollinators for a self-fruitful crop, but when conditions are less than ideal, it is very important to have an abundance of bees to get adequate levels of pollen transferred in a timely manner.

Recommended rate for honeybees (based on strong hives):

Apple – **1-3 hives/acre** (use higher rates in high density plantings)

Sweet cherry, and Balaton tart cherry – at least **2 hives/acre**

Tart cherry (except Balaton), peach, plum – **1 hive/acre**

Pear – **1-2 hives/acre**

Blueberry, cranberry – **3 hives/acre**

Strawberry, raspberry – **1 hive/acre**

Grape – 0 (wind pollinated)

Placement of honeybee hives:

- Place pallets with hives in locations that receive early morning sun.
- It is preferable to distribute pallets throughout the orchard area rather than placing all in one.
- Have bees in place prior to first bloom for all tree fruits. First bloom of cherry most readily set fruit and king bloom in apple produce the biggest fruit.
- Remove bees from area prior to applying pesticides toxic to bees

2005 FRUIT INSECTICIDE REGISTRATION UPDATE

John Wise, Rufus Isaacs and Larry Gut
Entomology

This is a summary of insecticide/miticide label additions and corrections to the "2005 MSU Fruit Management Guide". Agri-chemical labels and regulations change quickly so use this information within the context of each compound's actual label.

Insecticide additions, label changes, restrictions

Compound	Label changes/restrictions	Crop	Target pest
Rimon 0.83EC	New use	Apple	Codling moth
Actara 25WG	New use	Blueberry	Aphids, leafhoppers
		Strawberry	Aphids
		Cranberry	Cranberry weevil, flea beetle
Platinum 2SC	New use	Blueberry	Aphids, leafhoppers
		Strawberry	Aphids
Agri-Mek 0.15 EC	New use	Plum, prune	Mites
Dimilin 25W	Existing use	Pear	Codling moth, psylla, rust mite
Clutch 50WDG	Federal label (State pending)	Apple, pear	Codling moth, aphids, hoppers
Carpovirusine	New use	Apple, pear	Codling moth

New labeled insecticide descriptions

Actara (thiamethoxam) belongs to a new class of insecticides called neonicotinoids (thianicotinyl subclass). Actara is registered for use in apples, pears and blueberries as well as stone fruits targeting aphids, leafhoppers, plant bugs, leafminers, psylla and plum curculio. This translaminar (locally systemic) material has long residual inside the plant and is particularly effective on piercing/sucking insect pests as well as the sap-feeding stage of leafminers. Because most of Actara's surface residue is quickly absorbed into the plant, negative impact on natural enemies is minimized.

Platinum (thiamethoxam) is a soil-applied neonicotinoid insecticide. Contact the NWMHRS for more information.

Rimon (novaluron) is an insect growth regulator (IGR) insecticide that acts by disrupting the generation of chitin in the insect exoskeleton. This prevents normal development of the insect larval instars and, when in contact with eggs, suppresses embryo-genesis. Rimon has no direct activity on adult insects, but

hatching of eggs laid by treated adults will be suppressed. Rimon is registered for use in apples for the control of codling moth. Rimon is safe on most beneficial insects and has a unique mode of action for resistance management purposes.

Codling moth (CM) granulosis virus is the common name for a naturally occurring and highly specific option for codling moth control. Each virus particle is contained within a protein occlusion body (OB). Viral OB's are very small. Indeed, over a trillion OB's are present in an ounce of formulated product. These tiny particles must be ingested by the CM larva to be effective, but it only takes a few to cause death. Upon ingestion, OB's are dissolved by the insect's alkaline gut lining, releasing the viral particles. The virus replicates itself within the gut cells and spreads to other organs, causing the larvae to melt into a mass of billions of viral OB's. With the new addition of **Carpovirusine**, there are currently three CM granulosis virus-based biological insecticides available for use by Michigan apple growers, including **Cyd-X[®]** and **Virosoft^{CP4}**. Stored material should be kept refrigerated to ensure stability and potency. There are many options for incorporating virus into a CM management program. Codling moth granulosis virus products are compatible with most fungicides and insecticides sprayed in apple orchards. However, they should not be mixed with lime sulfur, Bt products or copper fungicides. Use of a buffer to neutralize the spray mix is recommended if the pH is above 9 or below 5.

Agri-Mek (avermectin) is newly registered on plums and prunes for the control of European red mite and two-spotted spider mite. The active ingredient is a by-product of a soil fungus that has insecticidal activity. Agri-Mek is a translaminar (locally systemic) insecticide, and when applied before leaf tissue is mature and it has long residual inside the foliage. The performance of this product is enhanced with the addition of 0.25% or 1 gal per acre of paraffinic spray oil (may increase risk of phytotoxicity) to effectively penetrate the leaf tissue. For best mite control, apply when mites first appear and before populations build beyond threshold.

BECOME A CITIZEN PLANNER THROUGH MSU EXTENSION SHORT COURSE

By Jim Bardenhagen, Leelanau MSU Extension

Since many growers and producers are on planning commissions, I thought you might be interested in the Citizen Planner Program.

Planning commissioners, zoning board members and others interested in learning about facing the challenges posed by community growth and development can discover new tools and information for use in their communities by participating in Michigan State University (MSU) Extension's Citizen Planner Program course **April 30 through May 23, 2005**.

The seven-part program focuses on the basics of planning and zoning, site plan reviews, boards of appeals, legalities, best practices, and running effective meetings. Sessions will take place April 30, May 5, 9, 12, 16 and 19 at the Connie Binsfeld Resource Center in Lake Leelanau.

The program also will be localized for Leelanau County residents and include a session related to preserving rural character without infringing on property rights.

Citizen Planner graduates will receive a certificate upon completing the course. Following course completion, they are expected to perform at least 30 hours of community service using the information they learned.

The cost to attend the Citizen Planner Program is \$315 for the seven core sessions and \$35 for the local topic session. Individual sessions can be enrolled in for \$65 per session. The cost includes educational materials, an expandable notebook, and refreshments.

Registration information is available from the Leelanau County MSU Extension by calling 231-256-9888 or online at <http://www.msue.msu.edu/leelanau>.

For more information about the Leelanau County Citizen planner Program, contact Jim Bardenhagen at 231-256-9888 or online at <http://www.msue.msu.edu/leelanau> or <http://www.msue.msu.edu/cplanner>.

THE NEW FARM*A*Syst – AN ASSESSMENT TOOL FOR THE FARMSTEAD SYSTEM

The Michigan Groundwater Stewardship Program (MGSP) has a new partnership with the **Michigan Agriculture Environmental Assurance Program (MAEAP)**. The new Farm*A*Syst is the assessment tool used to verify environmental assurance on your agricultural operation.

Have you already completed a Farm*A*Syst in the past? What's in the new Farm*A*Syst for you? The new Farm*A*Syst is your complete guide to environmental regulations dealing with pesticides, fertilizers, and livestock in agricultural operations. There are new sections such as Worker Protection Standards and General Manure Management. The new Farm*A*Syst is a compilation of the Right-to-Farm, Generally Accepted Agricultural Management Practices (GAAMP's) for Pesticides, Nutrients and Manure, updated Federal and State legal requirements, and MAEAP verification levels.

It takes approximately two hours to complete a Farm*A*Syst with a qualified groundwater technician and up to four hours for operations with livestock. The MGSP offers **4 RUP recertification credits** for completing a new Farm*A*Syst and you will be **eligible for cost share** on groundwater stewardship practices. The assessments offered through the MGSP are free and confidential. Call now to schedule an appointment for a Farm*A*Syst on your farm. To learn more about the new Farm*A*Syst and the Michigan Agriculture Environmental Assurance Program and how these programs can improve your operation, call Dan Busby at (231) 941-4191

Cost Share and Technical Assistance Available through the MGSP

The Northwest Michigan Groundwater Stewardship Program has funds available for groundwater stewardship practices, which reduce risk of ground or surface water contamination on your farm. FREE Technical Assistance is available for MGSP evaluations, including the preparation of an Emergency Plan for the farm, the closing of an Abandoned Well, Pesticide Container Recycling, Clean Sweep (the proper disposal of unwanted pesticides), and other types of agricultural assistance. For more information, call Dan Busby at 941-4191.

Cost Share on Groundwater Stewardship Practices available for 2005:

Abandoned Well Closure	90% up to \$500
Pesticide Storage Shed	50% up to \$500
Pesticide Storage Shed Containment Liner	50% up to \$200
Offset Hydrant (moving fill site from well)	75% up to \$750
Spill Kits (for pesticide storage/mix/fill sites)	75% up to \$35
Pre-Sidedress Nitrate Testing (Row Crop)	100% up to \$8/sample
Clean Sweep (disposal of unwanted pesticides)	Free Assistance
Emergency Planning for the Farm	Free Assistance

HOUSEHOLD HAZARDOUS WASTE COLLECTION

Saturday, April 30 (other collections for 2005 – **July 30** and **September 24**)

This collection is by appointment only - Must call for an appointment. Call the GT County Resource Recovery Hotline at 941-5555 today!

In 2004, over 41,432 pounds of toxic substances were collected for safe disposal and recycling! Some of the accepted materials include: toxic cleaners, oil based paints and supplies, automotive fluids, pesticides – including herbicides, algicides, fungicides, etc. batteries, fluorescent light bulbs and mercury. If you have any questions on acceptable materials, please go to <http://www.grandtraverse.org> or call the GT County Resource Recovery Hotline at 941-5555.

TRACTOR SAFETY TRAINING – 2ND PROGRAM

Jim Bardenhagen

Included in this newsletter is a registration form for the 2nd Tractor Safety Training Program for 2005, which will be held at Classic Farm Equipment in Williamsburg on Wednesdays June 1, 8, 15, 22. The written and driving tests will be held on June 25 at the Horticultural Research Station, 6686 Center Hwy, Traverse City. Tony Bugai and Dave Surowitz of Classic Farm Equipment will be the instructors.

If you plan to hire 14 or 15 year olds to work on your farm this summer, please contact them to register for the Tractor Safety Program. It's very important for our 14 & 15 year olds to sign up for this program if they want the opportunity to work on farms this summer. Please make copies of the form as needed.

A reminder that farm family youth working on farms that are organized as partnerships or corporations must also have work permits from the local school if the youth are under 18.

Even though this training is not required for sons or daughters of farm families (sole proprietor only) working on your farm, I would still encourage you to use this training program to do comprehensive training for your own 14 & 15 year olds. If there is room in the program, they will try to accommodate training for farm family youth that are under age 14 since many start driving before age 14.

Please note that to be certified, youth must be 14 years of age by June 1, 2005. **Registration deadline is Friday, May 27, 2005. Encourage the youth to register early! The form is available at:**
<http://www.maes.msu.edu/nwmihort/tractorsafetyreg05.pdf>

This training program is jointly sponsored by MSU Extension and Classic Farm Equipment. If there are any questions, please feel free to call our office at 231-256-9888 or Tony Bugai at Classic Farm Equipment at 231-267-9400. We thank you for your help in promoting this program.

2005 FOOD MARKETING INSTITUTE SHOW IN CHICAGO

Jim Bardenhagen, Leelanau MSU Extension

Michigan Department of Agriculture and Michigan Farm Bureau are sponsoring a one-day trip on **Monday, May 2**, to the 2005 Food Marketing Institute Show in Chicago for \$35. The fee covers a bus ride from Lansing to Chicago and return and a free pass to the show (a \$200 value). The pass also covers entrance to the Fancy Fruit Show, the National Organic Show and the United Fruit & Vegetable all going on at the same time in the McCormick Place in Chicago.

The bus leaves the Farm Bureau building (7373 W. Saginaw Hwy) in Lansing at 7:15 am and returns there around 8:00 pm.

These shows are great places to observe and hear about the trends in the food industry which are important to the agricultural economy. It's a great place to pick up some entrepreneurial ideas.

If you have any questions, please call Farm Bureau at 800-292-2680 ext. 2023 or 2024.

Please use the form below to register. **If after April 15**, call first to see if there's room.

If you would like to take advantage of this exciting tour, please return this form along with a check made payable to Michigan Farm Bureau for \$35.

Mail to: Michigan Farm Bureau
Commodity & Marketing Department
PO Box 30960
Lansing, MI 48909

Name: _____

Address: _____ Phone: _____

Emergency contact & #: _____ Phone: _____

Please choose pick-up location: ☐ Stevensville ☐ Lansing

Registration deadline is Friday, April 15, 2005.