August 1999 Regional Fruit Newsletter

CALENDAR OF EVENTS

9/2  NWMHRS Open House & Machinery Show

10/20 & 21  Sprayer Demonstration & EQUIP (see article)

12/7-9  Mich. State Hort Soc.
Annual Meeting
Grand Center, Grand Rapids

12/14  Pesticide Recertification
Review & Test
Ellsworth Community Hall
9-12 Review; 1 p.m. Test (MDA)

12/16  Pesticide Recertification
Review & Test
Twin Lakes, Traverse City
9-12 Review; 1 p.m. Test (MDA)

2000

1/11-12  MSU Strawberry School
Kellogg Biological Station

1/13  MSU Greenhouse
Raspberry Production School
Kellogg Biological Station

1/25-26  NW Mich Orchard Show
Grand Traverse Resort

NORTHWEST MICHIGAN HORTICULTURAL RESEARCH STATION ANNUAL FALL OPEN HOUSE AND EQUIPMENT SHOW

The NW MI Horticultural Research Station Open House and Equipment Show will be held on Thursday, Sept. 2nd. This program is being held in conjunction with the Leelanau Horticultural Society's annual meeting. This year's program will include an equipment show and demonstration, sponsored every other year by the Leelanau Horticultural Society.

This year the program will feature a special program entitled "Celebrating 20 Years of Service" to commemorate the 20th Anniversary of the NWMHRS. This program will take a look at where the station has been, where it is now and where it's headed. We will review some of the work and recognize some of the people that have made things happen.

The Leelanau County Horticultural Society will hold an evening cookout followed by a short annual meeting and award presentations. Ticket price is $15.00 and tickets will be available at the door. The cookout will be a pig roast this year from a pig purchased at the 4-H livestock auction and donated by fruit grower Frances Johnson.

Everyone is invited and encouraged to attend!

The program schedule is as follows:

1:00-2:15 p.m. Exhibit/Equipment Area Opens
2:15-3:00 "Celebrating 20 Years of Service"
3:00-3:45 Visit Exhibit Area
3:45-5:15 Equipment Demonstrations
5:30-6:30 Wine & Juice Tasting/Social Hour
6:30 Pig Roast & Leelanau Hort. Soc. Annual Meeting

TISSUE SAMPLE ORCHARDS ASAP

By James Nugent
District Horticulturist, MSUE

The nutritional health of tree fruits is best assessed by measuring the concentration of nutrients in plant parts. These nutrient concentrations are a direct measure of the nutritional status of the crop. In contrast, soil tests only estimate the ability of the top four inches of soil to supply nutrients and may not predict actual nutrient levels in the crop. Still, it is highly recommended to also
Leaf samples are best collected during July through mid August. Collect 100 leaves that from the middle of the current season's growth. Do not sample spur leaves or leaves significantly damaged by insects, disease, wind or abrasion. Collect leaves from several different plants (at least 10 trees) throughout the variety or sampling area. Use leaves that can be reached from the ground from all sides of the tree. Once collected, wash if recently sprayed with a nutrient by using a light detergent solution followed by good water rinsing. Whether washing leaves or not, lay the leaves out on a sheet of paper and allow them to dry. Once dry, they can be placed in a paper bag with some holes punched along the edges so the leaves will continue to dry and not mold.

Leaf samples can then be sent directly to the lab at MSU. The address for the lab is: MSU Soil Testing Laboratory, Plant and Soil Science Building, Michigan State University, East Lansing, MI 48824. Please pre-pay with a check for $20.00 for each sample, payable to Michigan State University. Please also include the variety of the sample and the age of the tree.

Please call your local Extension Office or the NW MI Horticultural Research Station to request the appropriate form to enclose with your sample.

**PENNCAP-M & GUTHION UPDATE**

**Penncap-M:** As a result of the Food Quality Protection Act (FQPA), EPA and Elf Atochem announced that virtually all fruit and vegetable uses of Penncap-M will be cancelled beginning in 2000. The Penncap-M tolerance will be maintained for 1999, so use remains legal for the '99 season.

**Guthion:** EPA and Bayer announced that the following changes are being made to the Guthion label beginning in 2000.

**Apples**
- Reduce maximum yearly use from 6 to 4.5 lbs a.i. (12 to 9 lbs Guthion 50W).
- Increases pre-harvest interval (phi) to 21 days if last application is greater than 1 lb a.i. (2 lbs of 50W).
- Prohibits chemigation or application by fixed-winged aircraft.

**Pears**
- Reduce maximum yearly use from 6 to 4.5 lbs a.i.
- Prohibits chemigation or application by fixed-wing aircraft.

**Peaches & Nectarines**
- Reduces maximum yearly use from 4.5 to 3.375 lbs a.i. (9 to 6.75 lbs Guthion 50W).
- Prohibits application by chemigation or fixed-wing aircraft.

**Cherries**
- No crop specific change

**Christmas Trees:**
- Deletes all use.

**Other**
- All non-tree crop re-entry intervals except for mowing, irrigating and scouting are extended from 48 hrs to 4 days in our climate (5 days in drier climates).
- Prohibits application by backpack or hand-wand sprayers.

**WORKER TRAINING VIDEO**

By Jim Bardenhagen
Leelanau County Extension Director

The Leelanau MSU Extension has an updated EPA approved Worker Protection Standard Video for training agricultural workers. The video is available in English and Spanish.

Showing this video to workers and documenting their viewing it meets the training requirements for the Worker Protection Standard Regulations. You may want to use the video to train apple harvest workers on worker protection standards prior to the start of harvest.

The video, titled "Pesticide Safety – Help Workers Protect Themselves", can be checked out from the Leelanau MSU Extension office at any time, but you may want to call first to see if it’s checked out or not.

**SPRAYER DEMONSTRATION & EQUIP**

By Ginger Bardenhagen
NW MI Groundwater Stewardship Program
Grand Traverse Conservation District

The Natural Resource Conservation District Service, MSU Extension and area conservation districts are bringing to you two demonstrations for our local specialty crop area. The goal of these demonstrations is to provide growers with information on the technologies available to improve the efficiencies of their operations and to protect the resources of their farms. These workshops will also provide the growers with available information on cost share programs, both the Environmental Quality Incentives Program and the Michigan Groundwater Stewardship Program. Local Integrated Pest Management Scouts will be on hand to answer questions and discuss their programs.

The demonstrations will take place October 20 at the Fred Vermeersch farm in Antrim County and on October 21 with the location to be announced in Manistee/Benzie area. Both will be held from 9 a.m. to 1 p.m. Lunch will be served on site. Recertification credits have been applied for.

Once again there is additional cost share funding available through the Groundwater Stewardship Program for Leelanau County Growers!

We still have $2000+ available until September for the following cost share practices. In order to be eligible you must...
have done a farmstead assessment or Farm*A*Syst. If you haven't done one yet, no problem! Give Ginger Bardenhagen a call at 231-941-4191 and she will work with you in completing one. A Farm*A*Syst is an assessment of your farming practices and how they potentially affect the groundwater quality. The assessment is done by you, is confidential and all information and material covered stays on the farm. If the cost share money is not spent, it will be returned. The funding for the cost share comes from the fee placed on pesticide and nitrate fertilizer purchases, i.e., your pockets, so let's put it back into your pockets in the form of safer groundwater practices.

Practices available for 1999:

Abandoned Well Closure - 90% cost-share up to $500. Must be an abandoned well located on an active farm.

Nurse Tank - 75% cost-share up to $1500. The grower must be currently filling within 150 feet of well head and be willing to commit to doing all pesticide loading and mixing at the site of application, or more than 150 feet from the well head, for duration of practice.

Offset Hydrant - (moving fill pipe away from well head) 90% cost-share up to $630. The grower must be currently filling within 150 feet of well head. Cost-share funds can cover all pipe, fittings and electrical materials needed to move the fill pipe 150' from the well head.

Pesticide Application Controller - 50% up to $1500. Help reduce the amount of pesticides used. Controller’s monitor ground speed and control application rate, display application rate, area covered, volume of liquid used and speed. Automatic or manual operation. Can be used toward Laser Jets or Smart Sprayers.

Spill Kits - 75% up to $56. It is a good idea to have one of these around in the event of a chemical spill. Everything you need to clean up a spill, all in one container. Get a portable spill kit for your tractor or sprayer or a stationary one for your chemical storage area.

Anti-backflow Device - 50% up to $500. Only available for fertigation and chemigation systems.

Pesticide Storage Impervious Surface (retro fit) - 50% up to $500. Cost-share funds for this practice are limited to improvements in existing pesticide storage through the use of a new concrete slab or impervious membrane to reduce storage risks.

Intensive Rotational Grazing - 50% of retail purchase price of high-tensile electric perimeter fence materials and portable water system materials (no labor), up to $15/acre.

Persons receiving cost-share must be taking high to moderately high-risk soils out of row-crop or confinement livestock production; water systems must be moved on a daily basis to avoid soil nitrate buildup. Limited to persons that have not previously adopted this practice and will work closely with the NRCS.

Pesticide Container Rinse Nozzle - Only $6.23. Aids in container recycling and helps you obtain the most pesticide for your money. Ask us about upcoming Clean Sweep Pesticide Disposal and demonstrations.

Pesticide Applicator Foam Marker - 50% of cost, up to $500. Keep track of the spray rows easily with these. No over or under application problems any longer.

Emergency Planning Tube $5 FREE $5

Store your farm's and family's emergency plan and SARA Title III info in this tube on a pole near the farm entrance so that emergency crews know where to go and where the chemicals are located. The Tube helps ensure the crew's and your family's safety. Much of the necessary info is found in F*A*S fact and work sheet #11.

Every farm owner should be prepared for an emergency. The Michigan Emergency Tube will help you be prepared and will protect your local emergency crews. Don't keep emergency crews guessing!

Call Ginger Bardenhagen at 231-941-4191 for more information or an application today!!

PREDICTED APPLE HARVEST DATES FOR NW MICHIGAN
(Based on weather data from the NWMHRS)

<table>
<thead>
<tr>
<th>Variety</th>
<th>Full Bloom Date</th>
<th>1999</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>McIntosh</td>
<td>May 9</td>
<td>Sept. 5</td>
<td>Sept. 18</td>
</tr>
<tr>
<td>Jonathon</td>
<td>May 10</td>
<td>Sept. 26</td>
<td>Oct. 4</td>
</tr>
<tr>
<td>Red Del.</td>
<td>May 11</td>
<td>Oct. 3</td>
<td>Oct. 10</td>
</tr>
</tbody>
</table>

These dates are slightly different than previously published dates due to errors in the weather data. The McIntosh date, in particular, is much earlier. The previously published date was September 14th. Sorry for any inconvenience this may have caused.

GUIDELINES FOR ACCEPTABLE RANGES FOR START INDEX AND FIRMNESS FOR LONG-TERM CA STORAGE OF MAJOR APPLE FRUIT VARIETIES IN MICHIGAN

<table>
<thead>
<tr>
<th>Variety</th>
<th>Starch-iodine Index</th>
<th>Firmness (lb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>McIntosh</td>
<td>4 - 6</td>
<td>14.5 - 15</td>
</tr>
<tr>
<td>Jonathan</td>
<td>3 - 5.5</td>
<td>15.5 - 16</td>
</tr>
<tr>
<td>Jonagold</td>
<td>3 - 5.5</td>
<td>15 - 16</td>
</tr>
<tr>
<td>Empire</td>
<td>5 - 5.5</td>
<td>16 - 17, 18-19 for export</td>
</tr>
<tr>
<td>Red Delicious</td>
<td>2.5 - 4</td>
<td>17 - 18</td>
</tr>
<tr>
<td>Golden Delicious</td>
<td>3 - 5</td>
<td>15 - 17</td>
</tr>
<tr>
<td>IdaRed</td>
<td>3 - 4</td>
<td>14.5 - 16</td>
</tr>
<tr>
<td>Variety</td>
<td>Height (3-5)</td>
<td>Diameter (16-19)</td>
</tr>
<tr>
<td>------------</td>
<td>-------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>Mutsu</td>
<td>3 - 4.5</td>
<td>16 - 17.5</td>
</tr>
<tr>
<td>Law Rome</td>
<td>3 - 5</td>
<td>18 - 19</td>
</tr>
</tbody>
</table>

Please send any comments or suggestions regarding this site to:
Bill Klein, kleinw@pilot.msu.edu
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