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April 1999 Regional Fruit Newsletter CALENDAR OF EVENTS

April 26 - [Agriculture Task Force Mtg](#)
NW MI Hort. Res. Sta.

April 26 - [Tree Fruit IPM and Thinning Update](#)

NW MI Hort. Res. Sta.

May 10 - [Sprayer Calibration Clinic](#)

E. Leland - Larry Esch Farm

May 19 - [IPM Updates Begin](#)

Leland - Ed Merica's Farm

CODE-A-PHONES

By Gary Thornton, District Fruit IPM Agent

The Code-A-Phones are now scheduled to start up on April 26th. Until approximately mid-May, the phone numbers and the operation of them will remain the same as in years past. Sometime in mid-May we will hook up to our new menu driven "code-a-phone." At that point, the number to call will only be 947-3063. This number will access both stone and pome fruit information at that time. This will ring into the computer and if someone is on the line, it will roll over to another line. In the event two callers are using the system at the same time, then the line will be busy. Once on the system, you will then be asked to press 1 for the cherry message, 2 for the apple message, 3 for the grape message, 4 for additional information on controlling plum curculio in tart cherries and so on. The system will eventually have a fax-back system, so additional bulletins or information can be requested at any time of the day.

We also will have a toll free number at that time for those of you outside the Traverse City area; that number is 1-877-763-PEST (7378).

The major improvements will be fewer busy signals, toll free access, expanded topics and less waiting for the information that is needed.

Until then, use these numbers as in the past.

Stone Fruit (cherries, peaches, plums) 616/947-3064

Pome Fruit (apples, pears, grapes, strawberries) 616/947-3063

The recordings will be updated at least twice weekly, on Tuesday and Friday. I will also update the code-a-phones after rains to post the wetting period length and severity.

Other Important Numbers/Addresses at NWMHRS:

NW Station Phone: 616/946-1510

NW Station Toll Free Number: 888/749-3019

NW Station Fax: 616/946-1404

NW Station E-mail Address: nwmihort@msue.msu.edu

Gary Thornton E-mail Address: thornton@msue.msu.edu

Jim Nugent E-mail Address: nugent@msue.msu.edu

NW Station Web Page: <http://www.maes.msu.edu/nwmihort>

AG TASK FORCE ON AGRICULTURE PRESERVATION -- TIME CHANGE

Jim Bardenhagen, County Extension Director Leelanau County

Michigan Senate Task Force on Agriculture hearings were announced in the last newsletter. The time of the NW Michigan hearing has been changed. The hearing will take place on April 26th at 10 a.m. (not 9:00 a.m.) at the NW MI Horticultural Research Station.

The bipartisan task force, chaired by Sen. George McManus, is soliciting testimony in person and in writing, which will provide the basis of their recommendations and report. Farmland preservation will be a key topic. Please come with your suggestions on what may be done at the local, state and federal level to preserve both farming and farmland! Your ideas are important to the future of agriculture; you can make a difference!

Pre-Season Fruit Pest Management and Thinning Update

By Gary Thornton, District Fruit IPM Agent

Where	Date	Time
NWMHRS	April 26 th	7-9:00 p.m.

With the trouble in the apple markets this past year, there does not look like there is a lot of room for undersized fruit. Phil

Schwallier, District Horticultural and Marketing Agent, will be joining us for half of the evening to share with us the latest in thinning strategies and materials.

Doug Sandmann, Bayer Crop Protection Products, will be joining me for the IPM update. There are quite a few label changes this year and the significance of those will be discussed, as well as control strategies for the upcoming season. The annual "pesticide cost comparison" guide will be available at this meeting.

Pesticide recertification credits have been applied for. In the past, 2 credits have been granted for this session.

WEEKLY FRUIT IPM UPDATES

Ed Merica's Farm (Leelanau)

Weekly Update Starting May 19th 5:00 p.m.

232 Popp Rd., 1/4 mile south of M-204

Josh Wunsch Farm (Grand Traverse)

May 18th and June 1st, 15th, 29th, and July 13th.

Updates at 5 p.m.,

1/4 mile west of Peninsula Dr. on Phelps Rd.

Feel free to bring in samples of pests or other horticultural problems for identification. One pesticide applicator recertification credit has been granted in the past for those who want to recertify by credit. All sessions will end approximately at 6 p.m.

IPM/Horticulture Updates will also be held in other counties. Growers should receive a card on those updates just prior to those dates.

SPRAYER CALIBRATION CLINIC

Larry Esch Farm

May 10th 3-6:00 p.m.

6764 Horn Rd., East Leland,

1/2 mile west of Eagle Hwy on south side of Horn Rd.

At this year's clinic we will demonstrate the calibration of an airblast sprayer and a weed sprayer. We will also look at the latest nozzles that are available to growers and their pluses and minuses. We have applied for pesticide recertification credits. In the past, MDA has granted 3 credits for this session.

PESTICIDE UPDATE

By Gary Thornton

Apollo miticide/ovicide – The pre-harvest interval has been reduced to 45 days on apples.

Spintor 2SC – Registered for use in apples against Spotted Tentiform Leafminer and Leafrollers.

Vangard 75WG – A new fungicide registered for use on apple, tart cherry, pear, grape, plum and peach.

Sevin – Pre-harvest interval changed to 3 days for apple, cherry, peach, plum and pear. Changed to 7 days for strawberries and blueberries.

PennCap M 2F – Pre-harvest intervals changed:

Grapes – 40 days

Apples – above 4 pt/acre – 21 days

Peach and Plum – above 3 pt/acre – 28 days

Peach and Plum – 3 pt/acre or less – 21 days

HISPANIC PESTICIDE CERTIFICATION WORKSHOP

Jim Bardenhagen

Leelanau County Extension Director

A Hispanic Pesticide Certification Workshop will meet on May 10th, 12th, 17th and 24th from 6:30 pm – 9:30 pm at the NW Michigan Horticulture Research Station.

The workshop will enhance participants' knowledge of pesticide application and will prepare participants to take the Pesticide Recertification Private or Commercial exam. Participants will receive a Spanish pesticide certification manual as well as video tapes of material to study from.

The Workshop will cost \$15.00 per person to cover materials and refreshments. To register, please call the Leelanau MSU Extension office at (616) 256-9888.

DO YOU HAVE FARMWORKERS?

Then you should have a copy of Circular A. Agricultural Employer's Tax Guide and be able to answer these five questions about taxes. The answers follow these questions:

Are you withholding from your workers' pay the proper amounts for federal income taxes, social security and Medicare?

When are the deposits due?

Are your employees eligible for Advance Earned Income Credit (EIC) Payments?

Is your farm subject to paying Federal Unemployment (FUTA) Tax?

Are you aware of the newly required W-4 and New Hire Forms?

How can I get Circular A?

1) Cash wages you pay to employees for farmwork are subject to social security and Medicare taxes if either of two tests is met.
• You pay cash wages to an employee of \$150 or more in a year for farmwork, or

• The total you pay for farmwork (cash and noncash) to all your employees is \$2,500 or more for the year.

For 1999, the social security withholding rate is 6.2% for the first \$72,600 paid to each employee and 1.45% Medicare tax on all wages. This amount must be withheld from the employee's paycheck AND the employer must contribute a matching amount. If the wages are subject to social security and Medicare, then they are also subject to income tax withholding.

2) The deposits for social security, Medicare and income tax withholding (Form 943 taxes) are paid to an authorized financial institution or Federal Reserve bank and are due depending on whether you are classified as a 'monthly schedule depositor' or a 'semiweekly depositor'. Please note that these terms do not refer to how often your business pays its employees, or even how often you are required to make deposits, but identify which set of rules you must follow.

In general, if you reported \$50,000 or less as your deposits in the lookback period (the year 1997 is the lookback period for 1999), then you are probably a monthly schedule depositor. Your Form 943 taxes on payments in a calendar month are due by the 15th day of the following month. For many farms that fall in this category, a recommended method is to write the check for these taxes right after the last labor check is written for the month. That way you can avoid penalties from late payments. These are the general rules.

There are exceptions and the 'semiweekly depositor' rules are a little more complicated. Refer to IRS publications for more details. They tell how to get Federal tax deposit (FTD) coupons. If you accumulate less than \$1,000 of net Form 943 taxes after paying any advance EIC payments, no deposits are required.

3) An employee who is eligible for the earned income credit (EIC) and who has a qualifying child is entitled to receive EIC payments with his or her pay during the year.

Generally, the employer makes the advance EIC payment from withheld income tax and employee and employer social security and Medicare taxes. Employers are required to notify employees who have no income tax withheld that they may be able to claim a tax refund because of EIC. During 1999, if you pay an employee total wages of at least \$26,928, you must stop making advance EIC payments to that employee for the rest of the year.

4) FUTA provides for payments of unemployment compensation to workers who have lost their jobs. Employers who meet either one of the following two tests probably have to pay FUTA.

Paid cash wages of \$20,000 or more to farmworkers in any calendar quarter in 1998 or 1999

Employed 10 or more farmworkers during at least some part of a day (whether or not at the same time) during any 20 or more different weeks in 1998 or 20 or more different weeks in 1999

There are exceptions for some family members and certain payments for agricultural workers. The FUTA tax rate is 6.2% on the first \$7,000 of cash wages you pay each employee and is generally deposited quarterly. You may receive a credit of 5.4% of FUTA wages for the state unemployment tax you pay. Generally, services or wages subject to the federal FUTA laws are also subject to the Michigan laws with a few exceptions.

5) Ag employers are required to furnish new W-4 or New Hire Forms within 20 days of hiring all new or rehired employees (basically everyone except current employees). Call the Michigan New Hire Operations Center at 1-800-524-9846 to obtain these forms.

6) These answers come from IRS publications. To remain in compliance and avoid problems and penalties, every farm operation that employs workers should have a copy of IRS Publication 51, Circular A, Agricultural Employer's Tax Guide. You can order it anytime through the IRS Web Site www.irs.ustreas.gov or over the telephone on weekdays between the hours of 7:30 a.m. and 5:30 p.m. (1-800-829-3676).

DEBUDDING AIDS SWEET CHERRY TREE TRAINING

By Jim Nugent, District Horticulturist, MSU-E

Debudding is a technique that can be used successfully to help with sweet cherry tree training. It causes lateral limbs to form on the central leader over a greater distance and generally with wider crotch angles than normal. This is particularly useful for sweet cherries to overcome the tendency to produce relatively few laterals, all generally within about 8" of the terminal and the uppermost generally with narrow crotch angles.

I tried a couple of debudding techniques last season on sweets. The most successful was to remove all but the terminal bud from the top 3-5", then remove approximately 50% (every other one) of the remaining buds on last year's terminal growth. The result was that many buds produced laterals and nearly all had spread the limbs over a much larger area of the leader.

Debudding is a technique that will work particularly well in the spring of year two on trees that do not have adequate limbs (at the proper height with wide crotch angles) to select as potential scaffolds, so the tree is to be taken back to a "nub whip". However, even when 1-3 scaffolds are saved at this time, so that 1-3 more scaffolds are desired, this technique can again be used to produce limbs that are better spread along the leader to improve the likelihood of getting the desired limbs in good locations.

Debudding could also be used on newly planted trees following whipping to produce limbs over a greater distance on the leader. However, this is generally not advantageous if trees are to be mechanically harvested, as low limbs must be removed anyway.

KEEP SWEET CHERRY TREE HEIGHT DOWN

By Jim Nugent

It's interesting to discuss early tree training, as we did at a demonstration in East Leland last month. But the single biggest problem I see with sweet cherry tree training doesn't involve young trees; it is that growers often are letting trees grow too tall! As trees get too tall, excessive shading occurs that leads to weak and dead wood in the lower canopy. Left unchecked, tree height continues up, and so does the distance to the lowest fruit. This makes disease control much more difficult, resulting in higher spray costs and/or poorer fruit quality. It also increases fruit crop height during harvesting, which increases bruising.

Keep in mind that shading occurs both within the row and between rows. During the past 25 years, trees have generally been planted closer in both directions than in former times. This results in higher early yields, but it accentuates shading problems in later

years. The solution to excessive canopy shading is not to remove lower canopy dead wood continually. Instead, lower the tree height. The preferred method is to cut all upright scaffolds to an outward growing limb.

So, what's too tall? First, you'll know trees are getting too tall when lower limbs begin getting weak and dying. Dr. Jim Flore looked at this issue on tart cherries, and the results would probably be the similar with sweets. His work found that shading was excessive when:

1) With rectangular shaped trees planted north-south, height from the bottom of the canopy to the top should not exceed two times the alleyway width. Example: Rows are 22 ft. apart, but the clear distance in the drive rows (alleyway) is 8 ft. If height to the lowest limbs is 5 ft., then top height should not exceed $2 \times 8 \text{ ft.} = 16 \text{ ft.} + 5 \text{ ft.} = 21 \text{ ft.}$

2) If trees are shaped more like a barn roof, then top height could be slightly higher.

3) East-west planted rows should be kept lower.

Don't wait until the lower canopy is gone before lowering tree height. You may find that being more aggressive with pruning the trees will help your sweet cherry orchards produce high quality fruit for the life of the block.

GETTING THE MOST FROM ROUNDUP

by Gary Thornton, District Fruit IPM Agent

Roundup (Glyphosate) is a systemic herbicide that is widely used in fruit production in Michigan. In order for Glyphosate to be effective, it needs to be absorbed into the plant. In soft water Glyphosate has no problems in being absorbed, however; in hard water Glyphosate will be "tied up" and not be absorbed as readily. This is known as "hard water antagonism". Hard water contains high concentrations of the soluble salts, calcium (Ca++) and magnesium (Mg++). When these are present in your spray water, the Glyphosate, which is negatively charged, will combine with them to form Glyphosate-Magnesium and Glyphosate-Calcium compounds. These compounds are not as easily absorbed by the plant and the result is poor uptake and poor weed control.

So how can growers increase the efficacy of their Glyphosate treatments? A common practice has been to add a surfactant to the spray tank. This allows the Glyphosate spray solution to spread across the leaf surface better and the result is greater absorption into the leaf. Some Glyphosate products now have the surfactant in them such as "Roundup Ultra". Roundup Ultra does not solve the hard water antagonism problem by the addition of a surfactant though, as the surfactant alone does not address this problem.

The hard water problem is best solved by adding to the spray water, before the Glyphosate is added, 17 pounds of ammonium sulfate. The addition of this compound to the spray water does two things. First, the sulfate ions tie up the calcium and magnesium ions by forming conjugate salts and secondly, some of the Glyphosate ends up as a Glyphosate-Ammonium compound which some species of weeds preferentially absorb into their leaf tissue over Glyphosate alone. Urea - Ammonium Nitrate (28% liquid nitrogen) will also improve the efficacy of Glyphosate, but not as well as the ammonium sulfate.

Reduced gallons of spray solution per acre will also have the effect of increasing the efficacy of the Glyphosate. Fewer gallons of water equals fewer calcium and magnesium ions to tie up the Glyphosate.

WELCOME TO FRUITNET '99

In 1999, the staff at the NW Michigan Horticultural Research Station will again be providing a weekly newsletter throughout the growing season. The name of "FruitNet" has replaced Faxnet as we now deliver the newsletter both via fax and internet. The intent is to deliver real-time information in a timely fashion. FruitNet will be published on Tuesday afternoons with special alerts sent as needed.

Funding for this service is provided by area horticultural groups.

To Receive FruitNet in 1999:

1. FruitNet subscribers within Northwest Michigan (Manistee County north) will automatically remain on the list. Please contact the Research Station if you wish to be removed from the subscription list.
2. Outside of Northwest Michigan. Because this service is being paid by the local horticultural groups, we are requiring a \$15 subscription fee to receive FruitNet outside of Northwest Michigan. This fee was chosen to represent the estimated long distance phone charges for the season per subscriber. We will be sending the next couple of FruitNets to the entire list but we will need to receive the \$15 payment or a call saying the payment will be forthcoming. If we do not hear from you by May 5, your name will be removed from the subscription list.

NORTHWEST MICHIGAN WEATHERNET FOR 1999

By Jim Nugent

A few years ago we initiated a program to deliver weather forecasts daily for the Grand Traverse area during the growing season. The forecast is given in 3 hr. increments for a 60 hr. period. It is now available either in fax or email format. There is a \$30 subscription for the fax version and a \$20 subscription fee for the e-mail version, per season. The predictions are based on the Traverse City airport, so you will need to mentally adjust temperature forecasts as appropriate to your site.

This program is meant to assist growers with spray planning and other needs for accurate weather forecasts. The reliability of this forecast has really been quite good.

Dr. Jeff Andresen, Agricultural Meteorologist, MSU, has worked very hard to take this program offered by NOAA and convert it into a readable program for non-meteorologists and focus only on the information most critical to agricultural needs.

The computer program that generates these reports is run twice per day - once based on 8:00 a.m. data that is available to us at about 2:45 p.m., and again based on 8:00 p.m. data and available to us about 2:45 a.m. We will be making available the afternoon report via fax. E-mail subscribers will receive both reports, i.e. updated reports every 12 hours. We will begin the fax cycle by about 3:00 p.m., but we can't always access the MSU computer system on the first try.

To Summarize:

Reports will be sent daily from *mid April* through *September 30*.

Cost is \$30 via fax or \$20 via e-mail for the 1999 season.

This predictive information should complement the real-time (current) weather and pest scouting information that you are collecting or are having someone else collect for you to further improve your IPM implementation decisions!

Contact Jackie Baase or Alison Heins at the NWMHRS via phone at 946-1510 or 888/749-3019, via fax at 946-1404, or via e-mail at nwmihort@msue.msu.edu if you wish to subscribe.

We will offer a 2-week free trial period if you want to try it before deciding whether to subscribe for the season.

Make checks payable to *Michigan State University* and mail to: NWMHRS, 6686 S. Center Highway, Traverse City, MI 49684.

Please send any comments or suggestions regarding this site to:

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