June 2001 Regional Fruit Newsletter

FMO GROWER MEETINGS

A series of meetings will be held to update growers on the FMO. These are as follows:

Monday, June 25, 9-11 a.m. Peninsula Twp. Hall, Traverse City
Monday, June 25, 1-3 p.m. Milton Twp. Hall, Kewadin
Monday, June 25, 7-9 p.m. NW MI Horticultural Research Station
Tuesday, June 26, 9-11 a.m. Sail Inn, Benzonia

NASS TART AND SWEET CHERRY PRODUCTION ESTIMATES
Click here to get the pdf version of this release

PREHARVEST CHERRY SHAKER UPDATE/IPM REVIEW
By Gary Thornton

For the final IPM Update, Richard Ledebuhr, Dept of Ag. Engineering, MSU, will review the best management practices for shakers. He will discuss clamp pressures, padding and tips to insure a good shake while minimizing trunk injury. Preventing trunk injury is part of the IPM approach to American plum borer control.

Where: Larry Esch farm, 6764 Horn Rd, ½ mile west of Eagle Highway on Horn Road
When: June 27th
Time: 5:00-6:30 p.m.

Refreshments will be available. B.Y.O.C. – bring your own chair!

CHERRY FRUIT FLY EMERGENCE
By Gary Thornton, District Fruit IPM Agent

The first Eastern cherry fruit fly adults were trapped in northwest Michigan on **June 19th.** Egg laying begins 7-10 days after adult emergence. If you are not monitoring for this insect with yellow sticky boards in your orchards, plan to apply your first fruit fly insecticide on approximately **June 26th.** Generally in commercial orchards with low fruit fly pressure, first trap catch is delayed significantly and may not occur until adult flies migrate in from breeding sites in abandoned orchards and wild sites. Without monitoring, it is dangerous to assume low populations or delayed activity.

To monitor for fruit fly activity, use the yellow "A.M." (Apple Maggot) traps, and get them out immediately if they aren't already. Place traps on the exterior of orchards, especially near any abandoned blocks. However, if the crop was abandoned last year and the fruit left on the trees, the traps should also be placed on the interior of the orchard. The traps should be replaced every two weeks, as the ammonium attractant wears off. The threshold is one fly in any trap in a given block.

Since cherry fruit flies are very mobile, alternate middle row sprays of either Guthion or Imidan do an excellent job in controlling this pest.

PRE-HARVEST HERBICIDE SPRAY INTERVALS
By Gary Thornton

Growers applying mid-season herbicides should be aware of the pre-harvest intervals (PHI) of the herbicides they are using.

Below is a list of PHI's for the common herbicides used:

Gramoxone Extra 28 days PHI
Roundup 17 days PHI
2,4-D 40 days PHI
Touch Down 13 days PHI
Poast 25 days PHI
Fusilade 14 days PHI

Leelanau Farmers' Markets
Jim Bardenhagen, County Extension Director

Interested in marketing some of your farm produce or products locally? Leelanau County now has three Farmers' Markets available for selling farm products this summer - one in Empire (downtown near the Post Office), one in Leland (parking lot across from The Bluebird), and one in Suttons Bay (Suttons Bay Township Park/ice skating rink at Broadway & Lincoln). The dates and hours of operation are as follows:

Empire Saturdays 8 am - 1 pm June 2 - October 27
Leland Tuesdays 8 am - 11:30 am June 19 - September 4
Suttons Bay Saturdays 8 am - 1 pm June 16 - October 27

The vendor rates will be:
$10 for the daily fee
$100 for a seasonal reservation at one location
$150 for a seasonal reservation at all locations

Each market has a Market Master that vendors can communicate and work with on a weekly basis.

A list of Market Masters, market rules and an application form is available at the Leelanau MSU Extension office (256-9888 or e-mail: leelanau@msue.msu.edu). We can send, fax or email them to you. You can also download them from our website at www.msue.msu.edu/leelanau/agriculture.html and click on *Leelanau Farmers' Markets.*

The Leelanau Farmers' Markets will include products from Leelanau or adjacent counties (Benzie & Grand Traverse).

Each of the markets has already been open one or more times and the consumer turnout and enthusiasm have been great! They are anxiously awaiting fresh fruits, vegetables and products to come in season.

This is a great opportunity for you to retail your products directly to the consumer and for the community to get local products. It also provides an opportunity for you and the public to interact on the importance of agriculture to the community.

The Leelanau Farmers' Markets Committee looks forward to your participation in the Leelanau Farmers' Markets.

ETHEPHON USE ON CHERRIES
By James Nugent, District Horticulturist
Michigan State University Extension

Ethephon used properly will facilitate mechanical harvesting, but it is important to avoid tree injury.

Research and grower experience have shown that lower rates can be used than was first thought. This is caused in part

because ethephon's activity increases as it is applied in higher concentrations, while the original research was conducted on a dilute basis. Lower rates will reduce the likelihood for tree injury.

The activity of the ethephon is greatly influenced by the temperatures that occur during the first 72 hours after application. This creates a challenge to achieve the desired results without experiencing injury. Consider the following:

1) Avoid application if temperatures are expected to exceed 85 degrees F during the 72-hour period after application, as activity is excessive.

2) Do not apply when temperatures are below 60 degrees F as activity is greatly reduced.

3) Do not treat trees low in vigor or under significant stress.

4) Applying ethephon with concentrate sprayers (i.e., 20-80 gallons of water/acre) achieves the same level of loosening at lower rates than does dilute applications.

5) With light sweet cherries, do not apply until fruit on the interior of tree is developing yellow ground color. Ethephon applied prior to this stage of development may cause fruit to drop prematurely with stems attached.

6) Consider the size of the trees when determining the appropriate rate per acre for concentrate spraying. Rates are based on typical full size trees. When treating younger blocks with smaller tree size, adjust the rate per acre downward.

7) Ethephon is applied 8-14 days prior to anticipated harvest. The time required to achieve adequate loosening is a function of ethephon rate and temperature.

8) Do not harvest cherries within 7 days of application of ethephon (7 day PHI on label).

9) If temperatures during the next 72 hours are expected to be above average (but not excessively hot), use lower than normal ethephon rates. Conversely, if temperatures are expected to be below normal, rates slightly higher than normal may be used.

10) Questions always arise about tank mixing ethephon. While there is no research data regarding tank-mixing ethephon, according to experience there appears to be no problem tank mixing ethephon with the fungicides and insecticides commonly used at this time. However, it is possible that materials in the tank may act as a buffer to the ethephon thereby causing some loss in activity. This could be overcome by acidifying the tank mixture prior to the ethephon being added. Do not tank mix with foliar nutrients or compounds such as crack inhibitors, bird repellents, etc. Avoid the use of surfactants unless prior experience has indicated their effect on the ethephon.

11) Ethephon has a 48-hour worker protection re-entry interval (REI).

Sweet Cherries

1. Light Varieties

A. When applied concentrate (80 gal water/acre or less), 1 to 2 pts/acre applied about 14 days before anticipated harvest should provide adequate loosening. Vary the rates depending on temperatures, days before harvest, tree

stress and past experience. The full rate of 3 pts/acre will result in tree damage some years.

B. When applied dilute, use no more than the full rate of 1 pt/100 gallons.

2. Dark Canners

A. When applied concentrate, suggest using 1 1/2 to 2 1/2 pts/acre applied 12-14 days prior to anticipated harvest. Rates as low as 1 pt/acre have been used successfully by growers, but results have been less consistent. The full rate of 4 pts/acre is generally not necessary and will result in tree damage some years.

B. When applied dilute, use no more than the full rate of 1 1/3 pts/100 gallons.

Tart Cherries

A. When applied concentrate, use 1/2 to 1 pt/acre applied 8 to 14 days prior to anticipated harvest. When applied dilute, apply no more than 1/3 pint/100 gal.

Under certain conditions, ethephon may promote softening of tart cherries. This seems to be most apt to occur when a period of extended cool weather follows the application of ethephon. It may be possible to minimize this effect by delaying application during exceptionally cool weather until closer to anticipated harvest, then using a relatively higher ethephon rate, thereby shortening the time cherries are exposed to ethephon, but this technique has not been researched.

ESTIMATED COST SAVINGS BY LEAVING TARTS IN THE ORCHARD

By Glenn Kole, Jim Nugent, and Jim Bardenhagen
MSU Extension

Heavy tart cherry crop yields will result in a large U.S. crop and surplus industry supplies. Therefore, the FMO will be used to balance supply with demand with some surplus restricted percent for the 2001 crop. Options for the restricted tonnage under the Federal Marketing Order are: 1) export for diversion credit; 2) approved new products for diversion credit; 3) reserve pool; 4) in-orchard diversion; and 5) at-plant diversion. The mix of these options available to growers will vary by processor.

The primary reserve is expected to be full or nearly full prior to the 2001 harvest. Therefore, for this and other reasons, the non-harvest option is apt to be more relevant this year than in previous years. To best determine the most profitable diversion strategy for your situation, compare your expected returns (after marketing assessments) from delivered restricted tonnage with the expected cost savings from in-orchard diversion. *Table 1 and Figure 1* represents the authors' best estimate of cost savings from leaving tarts in the orchard, itemized by type of harvester.

This estimate of cost savings could also be useful in analyzing situations when quality in a block or area is particularly poor and as a result expected return from open market cherries is expected to be very low. In this situation, a combination of non-harvest savings and value from the sale of excess diversion certificates can be compared to anticipated returns from open market tonnage.

Assumptions for this analysis:

- All labor needed, whether "family" or not, is charged to each system at the stated per hour levels plus 25% is added to cover additional payroll costs such as Social Security, workers' compensation, unemployment, etc.
- "Overhead" costs, including depreciation, interest, insurances, and property taxes, are considered to be there whether you market your tarts or not. Therefore, these costs are not included in this analysis.
- Use this analysis as a general guide only. Because costs vary from farm to farm, efforts should be made to fill in

"Your Farm" cost data.

Explanation of footnotes for the following worksheet:

Click here to go to the Cash Cost Savings worksheet

Click here to go to the Diversion Cost Saving Table and Figure

Note A: Per acre variable costs were considered not significantly different between double and single rollout systems; added acreage harvested (on double vs. single) was offset with added labor expenses, leaving per acre charges virtually identical.

Note B: It is possible to have a savings in chemicals (insecticides, fungicides and/or ethephon) if the decision to divert a block is made early enough in the season. However, a present savings may be offset by added chemical costs and/or lower yields the following season. For this analysis, we assumed no cost savings.

Note C: Block non-harvest diversion under the FMO requires a sampling procedure to estimate the block's yield. We estimated it would take one hour of shaker time per block resulting in a cost of about $130 per block. Sampling costs per block will be fairly similar for any size block, so sampling costs per pound will be higher for small blocks than large blocks. Assuming a 10 acre block, sampling costs are estimated at about $13/acre. This shows as a negative figure in the worksheet because it increases the cost of diversion.

Note D: Shaking on the ground in the event of non-harvest is assumed here. Since this is a cost incurred only if orchard diversion is chosen, it shows as a negative figure. Fifty percent of shaker repairs, fuel, and one operator were used in determining this adjustment. Net effect of shaking on the ground is to reduce the short run economic benefits from in-orchard diversion.

Note E: Trucking from pad to processor is expected to average 0.5¢ to 1.5¢ per lb. at current fuel prices. 1¢ per lb. was used for this analysis.

Note F: The industry's market expansion assessment through the Michigan Cherry Committee (MCC) is 0.5¢/lb. (0.25¢/lb. for juice). The CIAB assessment for administrative costs is 0.17¢/lb. (.085¢/lb for juice), but because CIAB is a handler expense rather than a grower expense, it is generally not deducted from grower payments and is therefore not included in this analysis. Add the CIAB assessment as a cost savings if your processor deducts it from your payments.

Note G: Harvesting costs per acre vary somewhat by yields; to recognize this, costs (other than trucking and assessments) have been adjusted from our calculations as follows:

Under 5,000 lbs/a : Reduced 10%; 5,000 - 10,000 lbs/a : No adjustment; 11,000 - 15,000 lbs/a : Increased 10%; 16,000 lbs plus/a : Increased 20%.

Please send any comments or suggestions regarding this site to:

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