WEATHER

The drought continues to worsen. At the NWMHRS precipitation for the past 7 weeks is a record low of 0.23", while evaporation during the same period has averaged over 0.25" per day! That means that rainfall met the fruit crop water needs for just over one out of the past 49 days.

Growing Degree Day Accumulations as of August 7, 2001 at the NWMHRS

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GDD42</td>
<td>2497</td>
<td>2373</td>
<td>2622</td>
<td>2636</td>
<td>2104</td>
</tr>
<tr>
<td>GDD50</td>
<td>1635</td>
<td>1460</td>
<td>1720</td>
<td>1712</td>
<td>1340</td>
</tr>
</tbody>
</table>

PESTS and DISEASES

By Jim Nugent

Many tart cherry growers have completed their harvest, though harvest will continue on a limited basis into next week. This week is the peak for in orchard diversion activity. Drought stress is causing heavy yellowing and drop of older leaves, firing of individual limbs and collapse of trees in the very driest soils. Mite populations are building in many blocks. Mite thresholds are lower than normal due to increased firing potential during this drought. Weather conditions are also good for powdery mildew, but it is too late in the season to treat. I suggest that post harvest sprays target cherry leaf spot only (Bravo is the preferred material). Cherry fruit fly and apple maggot are commonly found in traps. If fruit is being left on trees, I strongly suggest an organophosphate insecticide in post harvest sprays (alternate rows are adequate).

In plums, apple maggot is common in traps at this time and will infest the fruit. Be sure to monitor for mites.

The peach harvest has begun in early varieties, with reports of many split pits. Watch for mites.

In apples, apple maggot is commonly found throughout NW Michigan, though generally not at exceptionally high numbers. Codling moth trap catches remain low in many locations but have increased significantly in certain locations, mostly in areas with higher codling moth pressure. Mites, including European red mite, two-spotted and rust mites, are building in some locations. Pear psylla
populations are building.

MISCELLANEOUS

Leaf Analysis Sampling: Tissue analysis is the best method to assess tree and vine nutrient needs. The window for collecting nutrient samples is from mid-July to mid-August. I strongly encourage nutrient analysis be done at least every two to three years. It is best to combine this with soil samples taken from the same blocks. This combination allows a good analysis of nutrient and lime needs.

Plant tissue analysis can be effective in monitoring the nutrient status or trouble-shooting poor growth of a crop. The following points and sampling guides will help insure collection of a good diagnostic plant tissue sample:

- Sample plants representative of the field, orchard or crop.
- Collect the correct plant part from at least the number of plants indicated in the guide (Plant Tissue Sampling for Determining Fertilizer Needs of Fruit Crops, Extension Bulletin E2482).
- Do not collect leaves damaged by disease or insects.
- Collect separate samples from poor and good areas. This will aid in diagnosis of the problem.
- Rinse the sampled tissue in clean water to remove dust, soil or spray residue.
- Dry samples before sending to the lab by laying samples out in the air (do not oven dry).
- Send samples in paper bags (not plastic) to the MSU Soil and Plant Nutrient Laboratory. Be sure to include the proper, completed information sheet.

If you have any questions on how to collect tissue samples, call your local county Extension office or District Horticultural Agent. The cost per sample is $20 again this year. Include a check payable to MSU with sample(s) to avoid an MSU billing fee.

NW MI Research Station Open House

The date for the NW Station Annual Open House is Thursday, August 30th, beginning at 1 p.m.

Program:
1:00 - 2:00 p.m. Visit Equipment/Vendor Displays
2:00 - 3:00 Educational Programs on Cherries and Wine Grape Production and Pest Management
3:00 - 3:45 Visit Display Area
3:45 - 5:15 Equipment Demonstrations
5:15 - 6:00 Wine and Juice Tasting
6:00 - Close Cookout followed by Leelanau Horticultural Society's Annual Meeting in the pole building and Parallel 45 Vines and Wines meeting in the conference room.

Cookout tickets are $15.00. Advance purchase of tickets is preferred or can be reserved by calling the
Leelanau Co. Extension office (231/256-9888). Tickets are also available at the door day of the event.

CIAB Weekly Raw Product Report

If you are interested in the CIAB weekly raw product report, it can be accessed at the following address:

[http://www.cherryboard.org/prodrept.html](http://www.cherryboard.org/prodrept.html)

**ACTUAL AND PREDICTED DEGREE-DAY ACCUMULATIONS SINCE March 1, 2001 (*)**

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

Last Revised: 8-7-01
WEATHER

NW Michigan has received some limited rainfall the past two weeks, but amounts have varied. At the NWMHRS rainfall the past two weeks has totaled 1.0". This brings the total precipitation since the dry spell began on June 20th to 1.23". Evaporation rates for the past two weeks were 2.00" and 0.98" respectively. Since June 20th, evaporation has totaled 15.57", averaging 1.73" per week.

Growing Degree Day Accumulations as of August 20, 2001 at the NWMHRS

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GDD42</td>
<td>2898</td>
<td>2713</td>
<td>2960</td>
<td>3031</td>
<td>2420</td>
</tr>
<tr>
<td>GDD50</td>
<td>1924</td>
<td>1688</td>
<td>1946</td>
<td>1995</td>
<td>1543</td>
</tr>
</tbody>
</table>

PESTS and DISEASES
By Jim Nugent and Gary Thornton

In apples the biggest pest concerns are codling moth and apple maggot. Codling moth averaged 3 per trap at an abandoned block, and 2.5 per trap at the NWMHRS. Most blocks have already reached threshold on either codling moth or apple maggot, and many blocks are already sprayed. Apple maggot is common in commercial orchards, although numbers have been on the low side. Growers should watch the traps closely for the next three weeks. Weekend rain could allow a new flush of adult apple maggot to emerge.

Tart cherry harvest is nearly complete at this time in NW Michigan. Last week we had a heavy infection period for cherry leafspot, and this past weekend we had a light infection. Any post harvest fungicide sprays should already have been applied or should be applied as soon as possible. Two spotted spider mites are very high in some blocks. Mite pressure, combined with drought, has stressed the trees a great deal, particularly in the southern portions of Leelanau, Grand Traverse and Benzie Counties. Miticides applied now would be most useful on stressed trees or young trees. The two-spotted spider mites will be turning orange and starting to migrate off the trees in about two weeks.

Red Haven peach harvest is just beginning in NW Michigan. Size is a concern where irrigation was not available. Brown rot sprays remain important on peaches, where shelf life is a factor.
MISCELLANEOUS

Apple Maturity
By Gary Thornton, District Fruit IPM Agent

Once again the NWMHRS will be providing growers information on the optimum time to harvest their fruit. Optimum maturity will be for long term CA storage and will be based on starch/iodine and pressure tests. If interested in having your fruit tested, drop off 10 apples picked randomly from the outside portion of the trees. The fruit for testing should be large in size.

Information will be compiled and put on the PestNet (code-a-phone) as well as faxed to apple growers. If you are interested in picking up the information via the PestNet, call 947-3063 and go to the pome fruit message.

The predicted harvest dates for long-term CA storage from northwest Michigan, based on temperatures and bloom dates at the NWMHRS, are as follows:

McIntosh September 15
Jonathan September 29
Red Delicious October 5

NW MI Research Station Open House

The date for the NW Station Annual Open House is Thursday, August 30th, beginning at 1:00 p.m.

The program schedule is as follows:

1:00 - 2:00 p.m. Visit Equipment/Vendor Displays
2:00 - 3:00 Educational Programs on Soft Tart Cherries, Wine Grapes and Insect Pest Management
3:00 - 3:45 Visit Display Area
3:45 - 5:15 Equipment Demonstrations
5:15 - 6:00 Wine and Juice Tasting
6:00 – Close Cookout followed by Leelanau Horticultural Society and 45th Parallel Vines & Wines Meetings

Cookout tickets are $15.00. Advance purchase of tickets is preferred or tickets can be reserved by calling the Leelanau Co. Extension office (231/256-9888). Tickets are also available at the door the day of the event.

CIAB Weekly Raw Product Report

If you are interested in the internet version of the CIAB weekly raw product report, it can be accessed at the following address: http://www.cherryboard.org/prodrept.html

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

ACTUAL AND PREDICTED DEGREE-DAY ACCUMULATIONS SINCE March 1, 2001 (*)