**Weekly Vineyard IPM Scouting Summary**

**Report for the week of June 6, 2008**

**Southwest Michigan**

**Grape Berry Moth:**

<table>
<thead>
<tr>
<th>Site</th>
<th>Variety</th>
<th>Average Number of GBM in Traps (Average of 4 Traps Per Site)</th>
<th>Percent Clusters Infested With GBM (25 Clusters Scouted at 4 Locations at Each Site)</th>
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</thead>
<tbody>
<tr>
<td>Allegan</td>
<td>Chardonnay</td>
<td>0 0 0 0</td>
<td>0 0 0 0</td>
</tr>
<tr>
<td>Berrien 1</td>
<td>Vignoles</td>
<td>0.3 0.8 1 1</td>
<td>0 0 0 0</td>
</tr>
<tr>
<td>Berrien 2</td>
<td>Concord</td>
<td>0.3 3.8 3.3 13</td>
<td>0 0 0 0</td>
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<tr>
<td>Van Buren</td>
<td>Concord</td>
<td>0.8 0.5 6 3</td>
<td>0 0 0 0</td>
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<tr>
<td><strong>2008 Average</strong></td>
<td></td>
<td>0.3 1.3 2.6 4</td>
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<td><strong>2007 Average</strong></td>
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<td><strong>2006 Average</strong></td>
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<td>2 0.2 6 11 18 25</td>
<td>0 0 0 2 0</td>
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<td><strong>2005 Average</strong></td>
<td></td>
<td>3 3 13 33 22 13</td>
<td>0 0 0 1.3 0.8</td>
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<tr>
<td><strong>2004 Average</strong></td>
<td></td>
<td>8 4 7 32 17 5</td>
<td>0 0 0 0.6 0 0</td>
</tr>
</tbody>
</table>

**Early GBM infestation on Concord cluster in 2007.**

**Potato and Grape Leafhoppers:**

** Potato leafhoppers were found in scouting at both of the wine grape sites for the first time this week. These adults came in to the vineyards on the storms that came through the region during the middle of last week. One grape leafhopper was also found at the Berrien 2 Concord site. Now is the time to begin scouting for leafhoppers, especially in vineyards where you’ve had problems in previous years. Look for them by gently turning over leaves and looking for the adults before they hop away.

**Banded Grape Bug and Lygocoris inconspicuous:**

** Last week at the Van Buren site we found quite a few *Lygocoris inconspicuous* nymphs along the vineyard border. This week we found fewer *Lygocoris* nymphs and more banded grape bug nymphs. Both species can cause damage to the clusters. While they don’t often become a problem, when they do they can cause economic damage to the clusters. Keep an eye out for them while you’re scouting for other insects and diseases and if you see any do a more detailed count. If you find more than 1 nymph per 10 shoots you may want to apply an insecticide. Make sure to scout in multiple locations as you may be able to get by with just a border spray if the population is isolated to your borders.

**Rose Chafer:**

** We found the first rose chafer of the season this week at the Van Buren Concord site. Keep a close eye on your clusters as rose chafer can do quite a bit of damage in a short amount of time. Scout both your vineyard borders and interiors as you may be able to get by with just a border spray if populations are mainly concentrated along the vineyard edges. If you have alfalfa fields adjacent to your vineyard watch for an influx of chafer after the alfalfa is cut.
**Grape Blossom Midge:**

**We are seeing some grape blossom midge, *Contarinia johnsoni*, showing up on some clusters at the Van Buren site. This small fly lays its eggs in the developing flower bud. The fly larva feeds on the bud from the inside, causing the bud to swell and turn red. If you see some of these red buds on your clusters, chances are there are midge larvae inside. Since they only attack individual flower buds these insects only rarely become a problem and are really more of a curiosity than anything else.

**Diseases:**

**All the rain that’s been falling this past week has been prime Phomopsis infection weather. If you have a chance to spray in between rain showers, your best bet will be to apply something that has a bit of systemic activity so it won't all wash off in subsequent rains. Something such as one of the phosphorous acid products (Agri-Fos, Fosphite, Fungi-Phite, ProPhyt, or Phostrol) tank-mixed with Dithane will provide at least some systemic protection and possibly some back action as well. An Elite/Ziram spray, on the other hand, may not be your best option since Elite provides only fair Phomopsis control and Ziram is a protectant only that will be washed off in the rain.**

**Something to remember for National Grape growers is that EBDC fungicides (Penncozeb, Dithane, etc.) are restricted to pre-bloom applications only. So, growers in the southwest probably only have a few more days before bloom hits, depending on what stage clusters are present in the vineyard. All other grape growers have a 66-day PHI for the EBDC fungicides.**

**Powdery and Downy Mildew Infection Events:**

**Phomopsis spots on a Concord leaf at the Van Buren site.**
This report is a summary of weekly scouting from winegrape and juicegrape vineyards in southwest Michigan. It should be used only as a general guide, because pests vary greatly in their abundance from site to site. Scouting your own vineyards is the best way to know whether pest problems are developing in your farm.

For more information on this project, contact Steve at (517) 242 1282.

More information on Vineyard IPM is available online at: www.grapes.msu.edu

All photos: Steven Van Timmeren

Current Growth Stages:

**Concord-Van Buren**

**Vignoles-Berrien 1**

**Wild Grape Adjacent to Berrien 1 Site**

**Chardonnay-Allegan**

**As of June 5**

**As of June 5**

**As of June 5**

**As of June 6**

**Concord-Berrien 2**

**Niagara-Allegan (TNRC)**

**Aurore-Allegan (TNRC)**

As of June 5

As of June 9

As of June 9

As of June 6

As of June 9

As of June 9

Next Year GDDs

<table>
<thead>
<tr>
<th>SITE</th>
<th>5/19</th>
<th>5/26</th>
<th>6/1</th>
<th>6/8</th>
<th>6/1</th>
<th>6/8</th>
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<td>273</td>
<td>317</td>
<td>458</td>
<td>314</td>
<td>455</td>
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<tr>
<td>Lawton</td>
<td>288</td>
<td>348</td>
<td>414</td>
<td>568</td>
<td>408</td>
<td>568</td>
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<tr>
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<td>263</td>
<td>334</td>
<td>394</td>
<td>562</td>
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<tr>
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<td>269</td>
<td>318</td>
<td>373</td>
<td>534</td>
<td>367</td>
<td>527</td>
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Previous Year GDDs on June 8 (March 1 Start):

<table>
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<th></th>
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<tbody>
<tr>
<td>Concord-Van Buren</td>
<td>648</td>
<td>508</td>
<td>537</td>
<td>568</td>
<td>362</td>
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<tr>
<td>Lawton</td>
<td>791</td>
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<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
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<tr>
<td>Scottdale</td>
<td>782</td>
<td>615</td>
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<td>N/A</td>
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<tr>
<td>SWMREC</td>
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<td>579</td>
<td>610</td>
<td>667</td>
<td>454</td>
<td>612</td>
</tr>
</tbody>
</table>

All photos: Steven Van Timmeren

Upcoming Twilight Grape IPM Meetings:

- **June 19:** Tim Seppala farm, Lawton
- **July 24:** Bob Dongvillo farm, Scottdale
- **August 28:** Lemon Creek Winery, Berrien Springs

**All meetings are free and take place from 6-8pm. A free dinner is provided.**

**RUP credits are available.**
**Crop Report**

We have observed substantial damage in some wine grape vineyards in both Leelanau County and on Old Mission Peninsula. This damage appears somewhat spotty, and some vineyards sustained more damage than other adjacent vineyards. These damage variations in close proximity have also been the case in cherry orchards where one block has significantly more damage than other blocks in the same locale. Damage has also been found in some vineyard sites that are considered ‘good’ winegrape sites. Unfortunately, this damage is attributed to the downright cold nighttime temperatures on Wednesday, May 28th. On a positive note, grape vines have the ability to push secondary buds and produce a crop.

**Grape Berry Moth**

**Life Cycle:**

Grape berry moth spends the winter as pupae in leaf litter in and around vineyards. When temperatures increase in the spring, adults emerge from the pupae in the weeks before bloom. Male and female moths mate and the mated females lay eggs on developing grape clusters around the time of bloom. Eggs hatch a few days later and larvae feed on the young cluster until they have developed to full size. Larvae then roll themselves inside the edge of a leaf and pupate there. This cycle is repeated 2-4 times during the season, depending on the length of the growing season. Adult flight ends at first frost.

As vines senesce at the end of the year, the grape berry moth pupae fall to the ground in the leaves and berries, and spend the winter in the leaf litter. They may be blown out of the vineyard during the fall, to accumulate at the edge of woods or against physical barriers. These sites will be where adults emerge in the spring.

**Chemical control:**

If populations exceed thresholds, or if the vineyard has a history of damage from grape berry moth, insecticidal control may be required. An immediate post-bloom application usually coincides with egg-laying and hatching of first generation larvae. Later generations are difficult to time accurately, but the generation before harvest typically becomes active just prior to veraison. Scouting can help detect timing and distribution of infestations before they become a problem.

The most sensitive stages are eggs and young larvae. Because most of the insect’s development is on the grape cluster, applications must produce good coverage of the grapes. Adjust spray volume as the canopy size increases, and check that clusters are being well covered.

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**GRAPE IPM UPDATES FOR 2008**

We hope that you are all attending and enjoying the IPM updates. There are two more scheduled so be sure to put these dates on your calendar. Both sessions will take place from 3:00-5:00pm. Hope to see you there!

**July 11:** Larry Mawby’s vineyard, S. Elm Valley Rd. - Dr. Annemiek Schilder will talk about pathology issues.

**August 8:** NW MI Horticultural Research Station - Discussion of a new workbook for evaluating agricultural sustainability followed by and end of the season POTLUCK!!!
Powdery and Downy Mildew Infection Events:

* = powdery mildew primary spore release event
** = downy mildew primary spore release event

Current Growth Stages:

Differences in the amount of spring growth between varieties are apparent this season. As in every year, there are tangible differences in bud break and speed of growth in different wine grape cultivars, but with the recent cool weather, the differences seem much more extreme than in a more typical spring. Please note the figures below that demonstrate the obvious differentiation of varietal growth. However, growers should not be concerned with this somewhat unusual and varied growth.

For more information on this project, contact Steve at (517) 242 1282

More information on Vineyard IPM is available online at www.grapes.msu.edu

All photos: Steven Van Timmeren and Karen Powers