Principal Periods of Major Grape Insect and Disease Risks

If you attended one of the grape IPM workshops last fall, you were given a small guide entitled “A pocket guide for grape IPM scouting in the North Central and Eastern United States” that was developed by Rufus Isaacs, Annemiek Schilder, Tom Zabadal, and Tim Weigle and published by Michigan State University. Below you will find a chart that I modified from the last two pages of the guide. I added grape flea beetle and also added the approximate growth stages based on the modified Eichhorn-Lorenz system of staging grape development. The chart provides a timeline based on grape developmental stages when insect and disease pests are usually active in the vineyard. If you are unfamiliar with the developmental stages of grapes and you have the pocket guide, turn to page 4 and 5 and you can view color photographs of the different stages.

<table>
<thead>
<tr>
<th>Growth stage Visual</th>
<th>Bud swell</th>
<th>Shoot 1-5”</th>
<th>Shoot 8-12”</th>
<th>Pre-bloom</th>
<th>Bloom</th>
<th>Pea-sized</th>
<th>Berry touch</th>
<th>Bunch closing</th>
<th>Veraison</th>
<th>Pre-harvest</th>
<th>Harvest</th>
<th>Post-Harvest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growth stage</td>
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<tr>
<td>Modified Eichhorn-Lorenz</td>
<td>2-3</td>
<td>7-13</td>
<td>14-18</td>
<td>19-22</td>
<td>23</td>
<td>31</td>
<td>32</td>
<td>33-34</td>
<td>35</td>
<td>36-37</td>
<td>38</td>
<td>39-47</td>
</tr>
</tbody>
</table>

**Insects**

- Cutworm
- Grape Flea beetle
- Rose Chafer
- Grape Berry Moth
- Grape Leafhopper
- Potato Leafhopper
- Japanese beetle

**Diseases**

- Phomopsis
- Black rot
- Downy mildew
- Powdery mildew
- Botrytis bunch rot

**Legend**

- Usual time for monitoring and management.
- Reduced risk from pests, but monitoring and control may be required.
- Potential period of insect activity or disease infection risk.
How are well established mature grapevines developing in Sturgeon, Bay Wisconsin?

How are well established mature grapevines developing in Vernon County Wisconsin?

Growing Degree Days\textsuperscript{1} from April 1 to May 17

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2008</th>
<th>5 Yr. average</th>
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<tbody>
<tr>
<td>Peninsular ARS</td>
<td>165</td>
<td>156</td>
<td>183</td>
</tr>
<tr>
<td>W. Madison ARS</td>
<td>243</td>
<td>240</td>
<td>278\textsuperscript{2}</td>
</tr>
</tbody>
</table>

\textsuperscript{1}Modified method
\textsuperscript{2}3 year average for West Madison ARS.

Progression of bud development on mature Foch grapevines in Door and Vernon Counties in May 2009.
What stage are the second year grapevines at West Madison Agricultural Research Station?

What stage are the second year grapevines at Peninsular Agricultural Research Station?

ANSWERS

The inflorescences (flower buds) of La Crescent are clearly visible compared to the Foch at West Madison. The La Crescent would be at stage E-L 12 to 13 while the Foch would be at stage E-L 9 to 10.

At the Peninsular ARS the Foch and La Crescent have not changed greatly from a week ago with both varieties approaching budburst, E-L 4.

Please scout your vineyards on a regularly scheduled basis in an effort to manage problem pests. This report contains information on scouting reports from specific locations and may not reflect pest problems in your vineyard. If you would like more information on IPM in grapes, please contact Dean Volenberg at (920)746-2260 or dean.volenberg@ces.uwex.edu

Pesticide Safety

A number of pesticides used for pest management in grapes are not classified as restricted use pesticides. Restricted use pesticides (RUP) are only available for purchase and use by applicators that are certified applicators. A pesticide is designated as a RUP if it has a relatively high potential to cause human or environmental hazards when used according to the label. Pesticides that are not classified as RUP still have the potential to cause human and environmental hazards, especially if not used according to the label and personal protective equipment (PPE) is not used properly. You can find what PPE is required by reading the information under “precautionary statements” on the label. A pesticide label is a legal document and you should read and follow the label. If you are unfamiliar with a pesticide, all pesticides labels and material safety data sheets can be found at CDMS Agrochemical database

www.cdms.net/LabelsMds/LMDefault.aspx

Remember that just because a pesticides is available, it may not be legal to use the pesticide in Wisconsin. All pesticides that are legal to use in Wisconsin must be registered with the U.S. Environmental Protection Agency and the state of Wisconsin. A list of pesticides that are legal to use in Wisconsin can be found at http://www.kellysolutions.com/wi/pesticideindex.asp

If you would like to learn more about the safe use and handling of pesticides or how to become a certified applicator, visit your County Extension office or visit http://ipcm.wisc.edu/Default.aspx?alias=ipcm.wisc.edu/PAT