



Grape IPM Update

Lorraine P. Berkett

July 22, 2009

Grape Berry Moth (GBM) -- The third week of July is an important time to scout for this insect to determine if intervention is warranted. The following figure is from [Risk Assessment of Grape Berry Moth and Guidelines for Management of the Eastern Grape Leafhopper](#) by Martinson, Hoffman, Dennehy, Kamas and Weigle. It shows not only how to scout for GBM and Leafhoppers but also thresholds. Note that the threshold of 6% clusters damaged by GBM was developed for grapes going for juice. For winegrapes, you do not want to reach 6%. Scouting forms can be found at:

<http://www.nysipm.cornell.edu/publications/grapeman/files/mothform.pdf>

<http://nysipm.cornell.edu/publications/grapeman/files/hpprform.pdf>

<p>Grape Berry Moth—Select four areas in the vineyard to be sampled: two in the center of the vineyard (1 and 2) and two on the edge of the vineyard (3 and 4). Visually inspect, at random, 10 clusters on each of five vines (a total of 50) in each of the four areas. Record the number of GBM-damaged clusters in each area. Compute separate totals for areas 1 and 2 (center) and 3 and 4 (edge) to determine the percent damaged clusters. For the July sampling date (low-risk and intermediate risk sites), treatment should be applied if the percentage of the clusters with damage exceeds six percent. For the August sampling date (high-risk vineyards), treatment should be applied if the percentage of damaged clusters exceeds 15 percent. See the IPM fact sheet #1 on Grape Berry Moth for photographs of damage.</p>	<p>Eastern Grape Leafhopper—First observe whether or not leaves have stippling damage. If stippling is present, the block should be sampled to estimate the number of leafhopper nymphs per leaf present. Counts should be made at the same 4 locations used for GBM counts. At each area, examine the undersides of the third through seventh leaves of one shoot (leaf one is the first leaf at the base of the shoot) on each of five vines. Divide the total number of leafhopper nymphs by 100 to compute the number of leaf hoppers per leaf. If more than five nymphs per leaf in the third week in July or 10 nymphs per leaf in the fourth week in August are found, an insecticide treatment should be applied. See the IPM fact sheet #4 for photographs of leafhopper nymphs and damage.</p>

1. Sampling procedures for Grape Berry Moth and Eastern grape leafhopper.

For GBM scouting, look for whitish webbing between the berries in the cluster -- this indicates GBM activity (see photo). For Leafhopper scouting, look for whitish dots (stippling) on the upper surface of the leaf and the insect itself (see picture)



GBM webbing



Stippling caused by leafhoppers.

Please see the [2009 New York and Pennsylvania Pest Management Guidelines](#) for management options.

Black Rot -- If more than trace levels of fruit rot are present, continued fungicide protection is advised until the end of July to limit spread within clusters.

Downy Mildew -- The pictures below were taken today. They illustrate three things: (1) what the symptoms of the disease look like; (2) that we have favorable weather for sporulation (spores are available early in morning when conditions are humid); and (3) why wild grapes should be removed from around the vineyard. These are infected wild grape leaves that are providing potential inoculum to a managed vineyard.



Top and bottom of leaf that has multiple Downy Mildew lesions



Petiole and vein infected.



Close-up of Downy Mildew sporulation

Please see the [2009 New York and Pennsylvania Pest Management Guidelines](#) for management options.

+++++

Many Thanks to **Kevin Iungerman, Justine Vanden Heuvel, and Wayne Wilcox** of **Cornell University** for sharing their expertise and insights with us at the UVM Hort. Res. Center on Saturday morning, and in the afternoon at Cornell's Baker Farm Vineyard in Willsboro, NY. There was good grower participation at both sites. And -- it was sunny !!

Pictures from the Jointly Sponsored Workshop and Vineyard Tour:



Upcoming Opportunity to Tour a SARE Grape Project ... There will be a **Vineyard Research Tour** on Saturday **August 15** at **1:00 PM**. **Richard Lamoy** has announced the first of two vineyard tours at **Hid-In Pines Farm** at 456 Soper Street in Morrisonville, NY. The tour is to familiarize grape growers and interested parties on the **Grape Training Trial** at the vineyard. This is part of a **Northeast SARE Grant Project** awarded this year to Richard entitled: **Better Wine Grape Quality using Combined Vine Training and Canopy Management**. The trial is a comparison of differing training styles of grapes and uses a variety of canopy management. The study is to see if by varying these combinations improved grape quality may be achieved leading to a better tasting wine. The meeting will include a walking tour of the training systems trial located at 456 Soper Street in Morrisonville, NY. Richard will describe the project in detail and how results will be obtained and measured. If you are interested in attending, please **contact Richard Lamoy at 518-643-0006 or e-mail richl@charter.net**.

Where trade names or commercial products are used for identification, no discrimination is intended and no endorsement is implied. Always read the label before using any pesticide. **The label is the legal document for the product use. Disregard any information in this newsletter if it is in conflict with the label.**

The Vermont Agricultural Experiment Station, University of Vermont Extension, and U.S. Department of Agriculture, cooperating, offer education and employment to everyone without regard to race, color, national origin, sex, religion, age, disability, political beliefs, and marital or familial status. Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the United States Department of Agriculture. University of Vermont Extension, Burlington, Vermont.