Vineyard IPM Scouting Report for week of 23 July 2012
UW-Extension Door County and Peninsular Agricultural Research Station
Sturgeon Bay, WI

Native Stink bugs

Dean Volenberg

Briefly. Although the green, *Acrosternum hilare* and brown, *Euschistus servus* stink bugs seldom are a serious pest of grapes, during drought years these native stink bugs can become a greater concern.

Over the past 12 months, UW-Extension has made efforts to inform fruit growers of the exotic Brown Marmorated Stink Bug (BMSB). Although the BMSB has been reported in Wisconsin, at this time we are do not have a breeding population. Besides the BMSB there are native stink bugs that can become a problem in grapes. The most common stink bugs observed are the green and brown stink bug. These native stink bugs can negatively impact a number of crops including corn and soybeans. The native stink bugs have started to become an increasing problem in crop production. A couple theories exist why native stink bugs are increasing in numbers. Stink bugs overwinter and with warmer winter weather the percentage of overwintering adults is increasing. Second, the adoption of *Bt* corn and soybeans has resulted in reducing the use of broad spectrum insecticides that kept stink bug populations below economic injury levels. Increasing numbers of native stink bugs should tell you to keep your eyes open for these pests.

Stink bugs have piercing sucking mouthparts and inject digestive enzymes into grapes and then remove the digested fluid. Since stink bugs can be direct fruit feeders, they reduce berry weight and potentially expose the cluster to secondary infections such as sour rot, botrytis, etc. Also harvested grape clusters contaminated with stink bugs can result in wine taint.

Stink bugs unlike many insects go through only three stages of development: (incomplete metamorphosis) egg, nymph, and adult. The nymphs resemble the adults, but will molt a number of times before becoming an adult. Typically, from the first instar to the adult stage takes 1 month. Although nymphs resemble adults in shape they often are of a different color compared to the adult.

This is the time of year to be scouting for native green and brown stink bugs. The green stink bug nymphs are often difficult to see on green grape berries and will often be hidden within the cluster. Often the native stink bugs are not considered a pest of grapes, but it is well known that native stink bugs become a greater concern during drought conditions.
What’s lurking in or near the vineyard this week?

Many growers have been reporting that they have observed berries shriveling and what could be described as mummies. The picture (left labeled A) shows a grape cluster with one shriveled berry and the rest of the berries appearing healthy. Shriveled berries bring to mind black rot or grape berry moth. Typically black rot on berries begins with the berries turning a light chocolate brown and shriveling (see picture B). Whereas berries infected with GBM starts to first turn color, webbing is present, and often “stings” can be seen where the larvae entered the berry (see picture C).
BMSB Updated Observations and Research Results

The Scaffolds Fruit Journal, Volume 2, No. 12 dated July 2, 2012 had an excellent article that updated observations on the Brown Marmorated Stink Bug (see the link below). The article listed five plant species that BMSB has been observed to be congregating on. This suggests that these plant species may be used as early indicator species for the movement of BMSB into Wisconsin. The plant species are the Asian invasive Tree of Heaven, *Ailanthus altissima*, invasive *Paulownia tomentosa* imported from China, northern catalpa, *Catalpa speciosa* native to east Asia, and Ash and Maple. The article also describes what insecticide products are effective in managing BMSB. [http://www.scaffolds.entomology.cornell.edu/2012/7.02MD.pdf](http://www.scaffolds.entomology.cornell.edu/2012/7.02MD.pdf)

eViticulture Science-Based Online Resource

Are you looking for more information on viticulture but find yourself spending your time searching endlessly on the internet. A new one-stop resource is available created by the Grape Community of Practice (GCoP). The information on eViticulture is put forth by a nationwide group of professionals that work within the grape industry. In Wisconsin, Patty McManus, Tim Rehbein, and Dean Volenberg have represented Wisconsin in the GCoP. If you are looking for expert information on IPM, grape diseases, variety selection, canopy management, pruning and many other topics, then check out eViticulture. The site also has a section entitled “Ask an Expert”. No longer do you have to search endlessly on the internet for an answer. Let the experts answer your question via email. The site also contains great video clips that can help you learn quickly about a problem. Take a minute and check out the video on Grape berry moth. In about 7 minutes, you will learn how to scout for GBM, what are the thresholds, and when management practices should be applied.


Epilogue of Vineyard Walks at Spirit Creek and Himmelgarten

The vineyard walks at Spirit Creek and Himmelgarten were attended by a total of 73 individuals. I would like to thank Spirit Creek and Himmelgarten vineyards for being hosts and opening up their vineyards to attendees. Thanks also to Kevin Schoessow and Rebecca Harbut for conducting the walk at Spirit Creek vineyard. At both walks there was a great mix of individuals—there were those looking for information on starting a vineyard and those with several years of experience. These events have been a great way for growers to network and learn from other growers in their area. Next month there are two more vineyard walks and so look to page 8 for more information. Thanks again to our fine hosts, Spirit Creek and Himmelgarten vineyards.
Development of wine grapes in the grape variety trials at the Peninsular Agricultural Research Station (PARS) Sturgeon Bay, WI and West Madison Agricultural Research Station (WMARS), Madison, WI
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La Crescent at WMARS 7.23.2012

La Crosse at PARS 7.23.2012

La Crosse at WMARS 7.23.2012

Marquette at PARS 7.23.2012

Marquette at WMARS 7.23.2012
Development of wine grapes in the grape variety trials at the Peninsular Agricultural Research Station (PARS) Sturgeon Bay, WI.
Degree Day\textsuperscript{1} (base 50) Accumulation from April 1 to July 22, 2012 at Peninsular Agricultural Research Station in Sturgeon Bay, WI

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\textsuperscript{1}Modified method.  
\textsuperscript{2}Average from 2007 to 2011.

Degree Day\textsuperscript{1} (base 50) Accumulation from April 1 to July 22, 2012 at West Madison

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\textsuperscript{1}Modified method.  
\textsuperscript{2}Average from 2007 to 2011.

Accumulated degree days\textsuperscript{1} (base 50) for the month of March in Sturgeon Bay and Madison, WI.

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\textsuperscript{1}Modified method.  
\textsuperscript{2}Data from http://www.doa.state.wi.us/degreedays/

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
Regional Vineyard Walks
The UW-Extension Fruit Team will be hosting 4 regional summer vineyard walks for 2012, according to Rebecca Harbut, the UW-Extension Fruit Specialist. With the continued growing interest in commercial wine and table grape production in Wisconsin, the Fruit Team decided to host the vineyard walks regionally to reach more growers and those interested in becoming a commercial grower.

Each regional vineyard walk will be hosted by a grape grower with vines in production. The vineyard walk leader will evaluate the vines and answer questions that participants may have about commercial production practices. With the vineyard walks scheduled for 4 different dates, growers can attend the closest walk or attend any of the four if desired. The vineyard walks are held rain or shine so come prepared. Participants are also asked to bring lawn chairs for the grower socializing following the walk.

Northwest Wisconsin-Completed
Sunday, July 15, Spirit Creek Vineyard, 3555 Blom Lake Dr., Frederick, WI 1:00-3:00 p.m.
Mike and Sue Jahnke and their family started planting Frontenac and Marquette grapes in 2007. They have added La Crescent, Petite Pearl, Brianne and Summerset. Vineyard walk leader is UW-Extension Fruit Specialist Rebecca Harbut. Registration fee is $5 payable at the vineyard walk. Please email the number attending to kevin.schoessow@ces.uwex.edu or call the Spooner Area UW-Extension Office at 715-635-3506. Attendees may bring a wine to share.

Northeast Wisconsin-Completed
Saturday, July 21 Himmelgarten Vineyard, 10131 Newton Road, Newton, WI 4:00 – 8:00 p.m.
Randy and Faye Riester planted their first Baco Noir grapes three years ago so this fall will be their first harvest. Vines are trained on a VSP system with unique in-line posts. Vineyard walk leader is UW-Extension Ag Agent Dean Volenberg. Registration is $20 which will include a catered meal. Attendees may bring a wine to share. Please send payment one week in advance to the Door County UW-Extension Office, Attn. Vineyard Walk, 421 Nebraska St., Sturgeon Bay, WI 54235. If you have questions, email dean.volenberg@ces.uwex.edu 920-746-2260

Southwest Wisconsin
Saturday, August 4 Viriditas Vineyard, E8101 Green Acres Rd., Viroqua, WI 4:00 – 8:00 p.m.
Jeff and Mary Aderman planted their first Frontenac and Frontenac Gris vines in 2005. Since then they have added La Crescent, Marquette and Brianna. One of the biggest challenges that the vineyard had to experience a couple of years ago was the grape ripe rot infestation. Vineyard walk leader is Mark Hart, a private grape vine breeder from Bayfield, Wisconsin. Registration is $20 which will include a catered meal. Attendees may bring a wine to share. Please send payment one week in advance to the Vernon County UW-Extension Office, Attn. Vineyard Walk, Suite 392, 318Fairlane Dr., Viroqua, WI 54665. If you have questions, email timothy.rehbein@ces.uwex.edu 608-637-5276

Southeast Wisconsin
Sunday, August 12, Staller Estate Vineyard and Winery, W8896 County Rd. A, Delavan, WI 10:30 a.m. – 2:00 p.m. Joe and Wendy Staller planted their first Frontenac, Foch and La Crescent vines in 2008. They planted with the plans to open a winery of which they did also in 2008. Vineyard walk leader is UW-Extension Fruit Specialist Rebecca Harbut. Registration fee is $30 which will include a catered wine – food pairing meal. The winery is a state licensed facility so attendees are asked not to bring any wine to share. Wine from the Staller Winery will be supplied. Registration is limited to 40 people. Please send payment one week in advance to the Walworth County UW-Extension Office, Attn. Vineyard Walk, PO Box 1001, 100 W. Walworth St., Elkhorn, WI 53121 If you have questions, email peg.reedy@ces.uwex.edu 262-741-4951