News you can use

Save the date: Upcoming Winegrape workshop on recent achievements in viticulture research and vineyard management practices; November 12th at NWMHRS in Traverse City. See event calendar for full details.

Stay tuned for more information on upcoming grape & wine workshops and educational programs.

GROWING DEGREE DAYS

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*5-yr Avg = 2005 to 2009
See enviroweather.msu.edu for more information.
NORTHWEST

Erin Lizotte, IPM/IFP District Educator
NW Michigan Horticultural Research Station

Things have been quiet in the pest and disease department up north, with the harvest of many early ripening varieties starting last week and really picking up over the past few days. The cool weather has really slowed things down, with daytime highs typically in the 60’s and overnight lows dipping into the 40’s. The NW MI Horticultural Research Station recorded 0.88” rain over the past week. Degree day accumulation for 2010 is still well ahead compared to our 20-year averages. Growers in the region are reporting really nice fruit quality and few snafus with harvest so far.

The symptoms of downy and powdery mildew are still present, but vineyards that maintained good early season control have minimal issues. Remember powdery mildew prefers temperatures around 68-71 °F, downy mildew will grow at lower temperatures but requires significant humidity to do so. Growers who cultivate late harvest varieties or plan to let fruit hang should keep an eye on the weather as the season proceeds, especially if the forecast calls for some additional wet/warm conditions. If management is needed keep the preharvest interval and fungicidal mode of action in mind, during wet weather systemic materials are often more effective. Botrytis and fruit rots remain a sporadic issue particularly in vineyards affected by grape berry moth. Bird feeding damage is prevalent in unprotected vineyards.

-E.L.
SOUTHWEST
Steve Van Timmeren, Research Technician
Trevor Nichols Research Complex

Grape Berry Moth. *Grape berry moth* infestations vary quite a bit from site to site. The Van Buren Concord site, a high pressure site, has a lot of infestations, including quite a few earlier instar larvae, while the Allegan Chardonnay site, a lower pressure site, has seen a decrease in the number of infestations over the last couple of weeks.

For sites in southwest Michigan, the grape berry moth growing degree day model is predicting the fourth generation of GBM to complete its development in another 150-200 growing degree days. This means that a decent number of these larvae will actually be able to reach pupation and will overwinter as pupae. So, in vineyards that won’t be harvested or will be harvested late there are going to be significantly more overwintering GBM this year than in previous years. You should keep this in mind once you begin planning your management plans for next season.

Grape Leafhoppers. At the Van Buren Concord site, where no insecticide sprays have been applied for a while, there are a lot of grape leafhopper nymphs and adults at the vineyard border but none on the interior of the vineyard.

Ants. *Ants* are present in large numbers at all of the sites scouted this week. They are concentrating on previously damaged berries, including GBM-infested, Botrytis, Phomopsis, and sun scald damaged berries.

Powdery Mildew. *Powdery mildew* leaf infections remain at low levels, mostly on leaves tucked up under the canopy. Infections on the rachises remain scattered yet extensive on the few clusters that are infected.

Downy Mildew. *Downy mildew* leaf infections at the two Concord sites have remained the same over the last couple of weeks. The few leaves that had more extensive infections are now beginning to die off and the rest of the leaves only have small colonies here and there on the leaves. Unsprayed Niagara vineyards are showing much more defoliation on leaves with most older leaves beginning to die off.

Botrytis. *Botrytis* infections are beginning to show up on cracked and GBM-infested berries at the Van Buren Concord site, mostly at the vineyard border where there are more infestations. Older Botrytis infections at the Allegan Chardonnay site have now mostly shriveled up, however, new infections have begun to show up on berries. While these new infections are mostly on isolated berries they could potentially spread before the clusters are harvested. Some infections are mixed in amongst berries already infected with Phomopsis.

Growth Stages. Harvest at the Berrien Vignoles site started last week and scouting at that site was finished two weeks ago. With the start of Concord harvest, scouting at the Berrien and Van Buren Concord sites has wrapped up for the year as well. The Allegan Chardonnay site will be harvested sometime in the next couple of weeks.

-S.V.
Grape harvest in SW Michigan

Diane Brown-Rytlewski, Extension Educator
Michigan State University Extension-Southwest

Harvest began early in Southwest Michigan, with harvest of Niagara grapes beginning on September 8th. Early season freeze damage resulted in a crop that was light—about 12,500 tons, but sugar levels were good, in the 13 Brix range. There were a few loads of Niagaras lost to mold and decay caused by diseases such as phomopsis. Concord harvest started this week and should be finished by the end of September. So far, the quality of Concord grapes is good with Brix averaging in the high 16’s and a few loads that were higher than 18 Brix. The estimated crop for Concords is about 25,000 tons, or about half a normal crop. Spring freezes in April caused substantial damage to Niagara and Concord grapes in southern Berrien County and most of Van Buren County. There have been a few loads rejected for grape berry moth and rot and decay, but overall quality seems to be good. The warm growing season this year resulted in high grape berry moth populations and problems for some growers with late season infestations in their vineyards. Weather conditions this year were favorable for both downy mildew and phomopsis, which presented disease management challenges for growers.

Recap of 2010 growing season in SW Michigan

Mark Longstroth, Extension Educator
Michigan State University Extension-Southwest

The 2010 growing season will be remembered as coming early. The winter of 2009-2010 was a mild Michigan winter. January seemed milder than normal because of a warm spell when temperatures were generally above freezing and most winter snow melted. The coldest days of the winter were at the beginning and end of January when low temperatures briefly fell close to zero. The snow and cold returned in February. Snow storms deposited several feet of snow and the highs seldom rose above freezing, for the entire month.

Spring and the month of March began on the same day in Southwest Michigan, with highs in the 50s and lows above freezing. March’s warm weather continued into early April, with highs near 80. Intense hail and wind storms on April 6 caused significant damage in northern Cass, southern Kalamazoo and southwestern Van Buren counties. Warm temperatures in April caused rapid development. Sweet cherry bloom was almost 3 weeks ahead of normal.

The first significant freeze occurred on April 19, during tart cherry and apple bloom. Grapes, apples and tart cherries in low sites suffered significant injury. The April 19 freeze was followed by cool weather and another freeze on April 28. The final serious freezes took place on May 9 and May 10. These freezes caused some damage in blueberries and strawberries.

April and May were fairly wet and flooding was a problem in poorly drained fields early in the season. June, July and August were relatively dry and hot, with highs generally in the 80s and lows near 60. The last weekend of August was hot with highs in the 90s. By the end of August drought stress symptoms were common in tree fruit and blueberries. The variability in rainfall between the different sites was very pronounced. Some sites received more than an inch and others only about a quarter inch of rain. The fruit harvests were early, due to hot weather in early April, high degree day accumulation and light crops in many locations. The 2010 season was 10 to 14 days ahead of normal. 2007 was a comparable year in heat accumulation.

Grapes were hard hit by spring freezes. Grape buds were opening and flower clusters were visible in the shoot tips on April 19 when a freeze severely damaged many areas with lows to 26 F. Damage from the April 28 freeze affected the same areas as the April 19 freeze concentrating in low areas where cold air collected. Shoots that escaped damage were killed by the second freeze. In southern Berrien and most of Van Buren counties freeze lines were visible where shoots growing above areas of freeze damage were clearly visible. Southern Berrien and most of Van Buren counties had extensive damage to Concord and Niagara vineyards. Grapes growing in higher sites were not severely affected. Many growers stopped spraying their vineyards early in the season due to lack of crop. Because of the wet weather early in the season phomopsis was a significant problem in many vineyards. The warm season allowed grape berry moth to build to very high levels late in the year. High populations of grape berry moth caused problems in 2004 as well when the crop was reduced by a freeze early in the season. Downy mildew was a common problem. Harvest of juice grapes should be finished by the end of the month due to the small crop and warm season.
Late-season pressure from grape berry moth

Grape growers are experiencing unusually high grape berry moth pressure across the state as we head through harvest. Wine and juice grape vineyards have lost yield from this pest, with higher contamination risk than normal. With the exceptionally warm weather of 2010, this pest has been able to fit in another generation late in the season, and moths are still being trapped in monitoring traps. If vineyards are being harvested this week or early next they are unlikely to benefit from attempts to control berry moth, because larvae are either already inside berries or newly-hatching larvae will still be very small and undetectable. For vineyard hot spots with additional activity that are being harvested in late September or into October, growers will need to decide whether additional expense is worthwhile at this point in the season. This decision will obviously need to take into account the level of infestation, expenses to date in the vineyard, and the level of crop present. There are a number of highly effective insecticides with short pre-harvest intervals that can protect clusters for a week. Being this close to harvest, growers should consult with their winery or processor before making such a decision.

Why are we seeing this late season berry moth activity? With the very warm 2010 season, we are now at almost 3000 degree days, well past the degree days needed for a fourth generation of this pest (2430). This is much more than usual, and the insects are responding to this heat. For comparison with last season, we had only accumulated 2300 GBM degree days in Berrien Springs by this point in September last year. In a typical season, as the days get shorter in August grape berry moth enters a resting state or ‘diapause’ so that larvae develop to pupae and then stop at the pupal stage to make it through the winter. With this season’s very hot summer, they apparently could detect the signal from the environment that it might be worth ‘trying another generation’, and so the heat counterbalanced the usual effect of the shorter days. This resulted in a significant portion of the larvae developing through to adult moths that are now flying, mating and looking for egglaying sites on clusters. As a result, we are seeing higher late-season activity from berry moth. Another potential reason for the high pressure is that this spring’s frost damage led to low management inputs on many acres. Unless there was complete crop loss, the clusters in these blocks are still sufficient to support this pest and provide a haven for it to develop and build populations within farms.

The high pest pressure will also result in greater-than-normal levels of berry moth pupae going into the winter. However, this will not necessarily translate into higher pressure in 2011 because there are many factors during the winter that can reduce survival including death from exposure to cold. However, this pest will surely require management in 2011 and growers should take the experience of this year to map out the regions of farms where damage from berry moth was greatest. Also, think about your spray program and whether you are getting excellent cluster coverage, using scouting and degree day models to get the right timing, and using insecticides that provide the activity and residual control required to successfully control this pest. MSU Extension will be delivering programs to help review these topics during the winter. Attendance by growers and crop consultants at one or more of these meetings should be time well spent so that grape pest management programs can keep this pest controlled next year.
2010 TNRC Field Day  
September 28  
1-4PM  
TNRC - Fennville, MI

Winegrape Workshop:  
Recent achievements in viticulture research & vineyard management practices  
More information: Paolo Sabbatini, 517-355-5191 X1302 or Paul Jenkins, 517-648-5099.  
November 12  
8AM-5PM  
NWMHRS - Traverse City, MI  
Lunch provided  
Cost: $75 for the first person from each winery/company, $25 for each additional person from the same winery/company.  
Registation for this event will open soon.

Program (subject to change):  
Recent advances in canopy management, Nick Dokoozlian, E&J Gallo  
Mechanization of vineyard operations with emphasis on crop, R. Keith Striegler, University of Missouri  
Rootstocks for grapevine root health, Peter Cousins, USDA/Cornell University  
Vineyard cultural practices: Where is the biggest bang for your buck?, Nick Dokoozlian, E&J Gallo  
The role of rootstocks in achieving vine balance, Jim Wolpert, UC-Davis  
Winegrape cultivars: A key to reconciling viticulture practices and production efficiency, Diego Barison, Novavine  
Dealing with freezing stress in grapevines, Imed Dami, The Ohio State University

2010 Great Lakes Fruit, Vegetable, & Farm Market Expo  
December 7-9  
DeVos Place Convention Center- Grand Rapids, MI  
Please note there will not be an enology session at the GL Expo this year.

2011 Orchard & Vineyard Show  
January 18-19  
Grand Traverse Resort - Acme, MI

2011 Unified Grape & Wine Symposium  
More information: http://www.unifiedsymposium.org/  
January 25-27  
Sacramento, CA

2011 SW Hort Days  
More information: Diane Brown-Rytlewski, 269-944-4126  
February 2-3  
Lake Michigan College - Benton Harbor, MI

2011 Midwest Grape & Wine Conference  
More information: http://www.midwestgrapeandwineconference.com/  
February 4-7  
St. Charles Conv. Center - St. Charles, MO

2011 Finger Lakes Grape Growers Conference & Trade Show  
More information:  
March 4-5  
Holiday Inn - Waterloo, NY

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