The Lake Erie Regional Grape Program

Electronic Crop Update for August 8, 2013

IN THIS UPDATE:

- ***Weather Data***
- ***From North East, PA***
- ***Grape Cultural Practices***
- ***Grape IPM***
- ***In the Vineyard: Andy Muza***
- ***Upcoming Events:***

Please visit our LERGP Website at: http://lergp.cce.cornell.edu/ for a detailed calendar. Please remember to RSVP for those events that require one! UPCOMING EVENTS are also listed toward the bottom of this Update.

Please remember to let us know if you have changed or are in the process of changing your email address so we can keep the Electronic Crop Update coming to your inbox!
Please email Edith at: emb35@cornell.edu.

ATTENTION: For those planning on attending the Thompson Ag Pig Roast on August 21, 2013.

There will be *No NYS DEC Pesticide Recertification Credits available* this year.
My application for a repeated course was denied as it appears I went to the well once too often with that type of application. I apologize for any inconvenience that this causes but hope that everyone still attends for the educational programming and Pig Roast. Please see the full announcement for this meeting at the end of the Crop Update *below*.

FROM NORTH EAST, PA.: Bryan Hed

From North East PA

Weather: Here at the North East PA lab, we accumulated 123 growing degree days during the first week of August. Our gdd total since April 1 equals 1671.5. We have recorded just 0.2 inches of rain during the first week of the month, definitely on the dry side.

Phenology: We are observing some coloring of berries in our Chancellor block. However, no sign of color or softening in our Concord or Niagara, though I am hearing reports of ripening occurring in early varieties like Fredonia.

Diseases: Some growers are continuing to discover areas of their vineyard affected by black rot, and weather conditions for the 3-4 weeks after bloom (when fruit susceptibility is high) were very favorable for this disease. Most vineyards are actually in good shape with respect to this disease, but areas that did not receive timely sprays during June were not granted forgiveness in 2013 and have suffered the worst. Black rot does not spread on the wind during dry periods as powdery mildew can do. It needs rainfall to initiate spore release and rain splash and wind driven rain (which we had plenty of during June) can spread the disease from infected vineyards to healthy, well maintained vineyards under high inoculum pressure (as in 2013). As I mentioned last week, I am seeing more black rot leaf and fruit infections than I have seen in a long time, and in places where I wasn't aware it existed. The fungus that causes this disease can survive and over-winter not only in infected fruit mummies (the most potent form of inoculum from the previous season) but also in wood

in the trellis, waiting for wet summers like 2013, to reappear. Growers who are seeing the powerful effects of black rot on their fruit this year will need to remove infected fruit mummies from the trellis before next season and begin fungicide applications earlier to prevent pre-bloom leaf and shoot infections, especially if conditions are wet in May and June of 2014. For now, fruit are resistant to black rot (although fruit rot symptoms may continue to appear over the next week or so) and focus remains on controlling leaf infections of powdery and downy mildew.

I am also observing downy mildew infections on fruit and leaves of Concord and Niagara grape. Although fruit have been resistant since early to mid-July, berry stems can remain susceptible for a few weeks (?) longer and infections of stem tissue can result in a pre-veraison 'reddening' of full size Concord berries which remain hard and do not ripen. Often (but not always), downy sporulation can be observed on infected berry stems and stems will darken or blacken in color. However, at this time you will not generally see downy mildew sporulation from berries themselves. Berries with infected stems often shell before harvest. There is really nothing that can be done to alleviate this condition on clusters at this time; spray penetration into these dense canopies will be minimal, and sporulation from them will not contribute much to the inoculum pressure in the vineyard. It's best to focus your attention on keeping canopy function at maximum efficiency to ripen the large crop we expect to bring in. Scout canopies of varieties that are susceptible to downy mildew, as this disease can strip canopies of their leaves quickly under these 'frequently wet' and cloudy conditions.

Wine grape growers of varieties with compact clusters will want to gear up for an application of a Botrytis specific fungicide around veraison. Fortunately, we have several effective chemistries that are also relatively rain fast. We are observing a small amount of Botrytis developing in our Chardonnay block, where Botrytis specific fungicides were withheld earlier at pre-closure and bloom. Don't wait for wet weather to make this application; this should be standard procedure for growers of Riesling, Pinot Noir, Pinot Gris, Vignoles, Chardonnay, and other varieties with compact clusters.

GRAPE CULTURAL PRACTICES: Luke Haggerty

After making area farm visits I have noticed there are a lot of growers who are conducting crop estimations and thinning. Crop estimation can help gauge season crop load so there are no surprises at harvest. With the heavy crop load this year, thinning can be important in reaching target sugar concentrations and balance the vines to assure that the vines will be fruitful next year as well.

If you are still considering thinning your crop, there is still time. In order to see a positive effect from crop thinning it should be done prior to veraison. Here at the CLEREL (Portland site) we are at approximately 60 days after bloom meaning that there is still time to thin. We are predicting veraison to happen at or around August 19th. This means you still have a week to thin your crop.

To learn more on crop estimation and thinning go to the July newsletter by logging into our website with your password and viewing the Latest Vineyard Notes Newsletter.
The *Crop Estimation and Thinning Table* created by Terry Bates is available online at http://lergp.cce.cornell.edu/submission.php?id=65&crumb=research|research.

I have enjoyed meeting area growers and I encourage others to call me at (716) 792-2800 Ext. 204 or email me at llh85@cornell.edu to set up a site visit.

IN THE VINEYARD with Andy Muza

TIME TO SPRAY (or close to it) for Grape Berry Moth in the Lake Erie Region

The GBM Degree Day Model on NEWA (http://newa.cornell.edu/index.php?page=berry-moth) suggests that an insecticide application should be timed to coincide with **1620 degree days (DD)** in high risk vineyards (and areas above 15% injury threshold) **if using materials such as Altacor, Belt or Intrepid**. (Note that Intrepid is not registered for use in NY).

Depending on Location and Wild Grape Bloom date this means that an insecticide application should be applied anywhere from August 6 (Sheridan area) – August 13 in the majority of vineyards in our area with the exception of Niagara County, NY. In Niagara County, NY based on a Wild Grape Bloom date of 6/1 an insecticide application should be applied around August 19/20.

However, **if using an insecticide with a contact mode of action** (e.g., generic pyrethroids, Baythroid, Brigade/Capture, Danitol,) then timing should coincide with **1720 DD**. This would be about 5 days later (depending on daily temperatures) than the 1620 DD timing.

The GBM DD Model provides the optimum timing for an insecticide application. However, the decision to apply an insecticide should depend on scouting data and history of GBM injury at the site.

NOTE: Also refer to Tim Weigle's article on the Grape Berry Moth Model in this Crop Update *below*.
NOTE: Table for Insecticides for use in NY and PA from last weeks Crop Update is available on our website at http://lergp.cce.cornell.edu/submission.php?id=69&crumb=ipm|ipm

GRAPE INTEGRATED PEST MANAGEMENT: Tim Weigle

Grape IPM

Table 1. Results of Grape Berry Moth Model displayed on NEWA for August 7 and forecasted out to August 12.

	DD Total on August 7		Forecast for August 12		Date 1620 DD reached	
	*May 22**	*May 26**	*May 22**	*May 26**	*May 22**	*May 26*
Versailles	1554	1506	1650	1602	August 10	August 13
Sheridan	1640	1590	1747	1697	August 6	August 8
Silver Creek	1603	1556	1707	1660	August 7/8	August 10
Portland Escrp	1578	1532	1683	1638	August 9	August 11
Portland	1577	1532	1682	1637	August 9	August 11
Ripley	1642	1594	1743	1695	August 6	August 8
North East Escrp	1588	1542	1697	1652	August 8/9	August 10/11
Harborcreek	1626	1579	1738	1691	August 7	August 9
North East Lab	1610	1562	1721	1674	August 7/8	August 9/10
Ransomville	1503	1462	1601	1560	August 13	August 15
North Appleton	1498	1462	1604	1569	August 13	August 15
South Appleton	1553	1510	1660	1617	August 10	August 12
**** Date of Wild Grape Bloom used to start Grape Berry Moth model***						

According to the Grape Berry Moth Model found on NEWA, we are at, or rapidly approaching, the 1620 DD

timeframe where an insecticide should be applied for GBM in high risk vineyards and in low- and intermediate-risk vineyards where scouting showed damaged clusters above the 15% threshold.

In Table 1, I provided results of the GBM model using two different wild grape bloom dates to get results for today, and forecasted out for August 12 just to show the differences that we are finding between bloom dates and station location. Again, the best way to use the model would be to plug in the wild grape bloom date that you know for your region.

Looking at the model results, it appears that areas where wild grape bloom was May 22 should be applying insecticides that need to be ingested to be effective, during the August 6 – 10 time frame. This includes the majority of stations with the exception of Ransomville and North Appleton where the best timing would be on August 13. Areas with a bloom date on or closer to May 26 are looking at an August 8 – 13 timeframe. If using a contact insecticide you should wait an additional 100 degree days (1720 DD) using the model to ensure the best efficacy. (Check out last week's Crop Update *OR ONLINE* at (http://lergp.cce.cornell.edu/submission.php?id=69&crumb=ipm|ipm) for a table listing the modes of actions of insecticides used in New York and Pennsylvania vineyards).

To get the latest in model information for both grape berry moth and the grape diseases downy mildew, black rot and Phomopsis, get on the NEWA website at http://newa.cornell.edu and access the station, or stations, nearest you.

NYS IPM FACT SHEETS FOR GRAPES:

- Powdery Mildew: http://nysipm.cornell.edu/factsheets/grapes/diseases/grape_pm.pdf
- Downy Mildew: http://nysipm.cornell.edu/factsheets/grapes/diseases/downy_mildew.pdf
- Black Rot: http://nysipm.cornell.edu/factsheets/grapes/diseases/grape_br.pdf
- Grape Berry Moth: http://nysipm.cornell.edu/factsheets/grapes/pests/gbm/gbm.pdf

WEATHER DATA: Edith Byrne

Weather Data

DATE/YEAR	HIGH	LOW	DAILY PRECIP.	GDDs	*TOTAL* APRIL GDDs	*TOTAL* JAN GDDs
Week 7/24/13	68	58	0.00	13	1442	1467.5
Week 7/31/13	77	58	0.00	17.5	1547	1572.5
Week 8/7/13	***81***	***65***	***0.00***	***23***	***1664.5***	***1690***
Week 8/7/12	***77***	***55***	***0.00***	***16***	***1867.5***	***1998***
AVERAGE	***79.5***	***61.7***	***0.17***	***20.63***	***1675.49***	***1700.41***
GDDs accumulated Aug 1-7, 2013 = 117.5				*GDDs accumulated Aug 1-7, 2012 = 159.5*		
GDDs accumulated July 2013 = 653.5				*GDDs accumulated July 2012 = 725.50*		
GDDs accumulated June 2013 = 455.0				*GDDs accumulated June 2012 = 532.50*		
GDDs accumulated May 2013 = 260.5				*GDDs accumulated May 2012 = 393*		
Average *GDDs accumulated through July 31 = 661.80*						
Average *GDDs accumulated whole month July = 662.69*						
This year compared to AVERAGE: JAN. GDD: AHEAD 0.50 / APR. GDD: AHEAD 0.53						

This year compared to 2012: JAN. GDD: *BEHIND* 14.99 / APR. GDD: *BEHIND* 9.8		
	2013	*2012*
***Average* High July**	77.58 (*last week 77.58*)	80.57 (*last week 81.35*)
***Average* Low July**	64.58 (*last week 64.58*)	65.00 (*last week 65.45*)
August Rainfall amount = 0.11"	*JULY Rainfall amount = 3.27"*	*JUNE Rainfall amount = 7.69"*
Rainfall accumulation 1/1/13 through 8/7/13 = 24.36"		

LERGP WEBSITE LINKS OF INTEREST –

- **PHENOLOGY INFORMATION:**
  http://lergp.cce.cornell.edu/submission.php?id=66&crumb=cultural%20practices|cultural_practices

- **Table for: Insecticides for use in NY and PA:**
  http://lergp.cce.cornell.edu/submission.php?id=69&crumb=ipm|ipm

- **Crop Estimation and Thinning Table:**
  http://nygpadmin.cce.cornell.edu/pdf/submission/pdf65_pdf.pdf

Go to http://lergp.cce.cornell.edu/ for a detailed calendar of events. ***Please remember to RSVP for those events that require one!***

Upcoming Events

LAST WINEMAKER'S ROUNDTABLE MEETING of 2013

Topic: Vinifera Reds

DATE: Monday August 19, 2013

TIME: 4:00 – 6:00

LOCATION: CLEREL Meeting Room, 6592 West Main Road, Portland, NY 14769

Please bring wines that you wish to discuss, whether problem wines or wines with merit. All provide an opportunity for learning! This meeting is open to all commercial winemakers in the region and beyond, so encourage your colleagues to attend. No RSVP is required, and there is no charge.

LERGP TWILIGHT MEETING & THOMPSON AG ANNUAL PIG ROAST

ATTENTION: For those planning on attending the Thompson Ag Pig Roast on August 21, 2013. ***There will be* NO NYS DEC PESTICIDE RECERTIFICATION CREDITS AVAILABLE THIS YEAR*. My application for a repeated course was denied as it appears I went to the well once too often with that type of application. I apologize for any inconvenience that this causes but hope that everyone still attends for the educational programming and Pig Roast. (THW)***

DATE: Wednesday August 21, 2013 **REGISTER BY FRIDAY, AUGUST 16, 2013 (*SEE BELOW*)!**

TIME: Meeting begins at 3 pm

LOCATION: Thompson Ag, Corner of Angell and Hanover Rds., Hanover, NY

Bring your lawn chair as seating is limited

3:00 – 3:30 PM Cost/Benefit Analysis of Pest Management Strategies, Kevin Martin, Extension Educator, Lake Erie Regional Grape Program.

3:30 – 4:00 PM Insect Management Updates and Roundtable Discussion

4:00 – 4:30 PM Disease Management Updates and Roundtable Discussion

4:30 – 5:00 PM Update on Viticulture Projects at CLEREL and in the Lake Erie Region

Pig Roast sponsored by Thompson Ag to follow.

To register please contact: Kate at 716.792-2800 x 201 OR Donna at 716-934-3808.

REGISTER BY FRIDAY, AUGUST 16, 2013!

THIS MEETING IS FREE BUT REGISTRATION IS REQUIRED - IF YOU DO NOT REGISTER A MEAL CANNOT BE GUARANTEED

PLEASE NOTE: ***Next Electronic Crop Update will be Thursday August 15, 2013***

Lake Erie Regional Grape Program Crop Update is an e-mail newsletter produced by the Lake Erie Regional Grape Program and sent out by subscription only. For subscription information, please call us at 716.792.2800 ext. 201. For any questions or comments on the format of this update please contact Tim Weigle at: thw4@cornell.edu.

Lake Erie Regional Grape Program Team Members:

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Veraison to Harvest newsletters: http://grapesandwine.cals.cornell.edu/cals/grapesandwine/veraison-to-harvest/index.cfm

THE LAKE ERIE REGIONAL GRAPE PROGRAM at CLEREL

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