



The Lake Erie Regional Grape Program



Electronic Crop Update for August 15, 2013

IN THIS UPDATE:

[From North East, PA](#)

[Grape Cultural Practices](#)

[In the Vineyard: Andy Muza](#)

[Grape IPM](#)

[Business Management](#)

[Grape Phenology](#)

[Weather Data](#)

[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.](mailto: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.

See more in the message below under *Upcoming Events*.

Please do not forget to REGISTER!

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

REGISTER BY TOMORROW, FRIDAY, AUGUST 16, 2013!

THIS MEETING IS FREE BUT REGISTRATION IS REQUIRED - IF YOU DO NOT REGISTER A MEAL CANNOT BE GUARANTEED. The meeting begins at 3 pm.

FROM NORTH EAST, PA.: Bryan Hed

From North East PA

Weather: Here at the North East PA lab, we accumulated 239 growing degree days during the first half of August, which is below average. Our gdd total since April 1 equals 1787. We have recorded just 1.06 inches of rain so far during August (on the dry side).

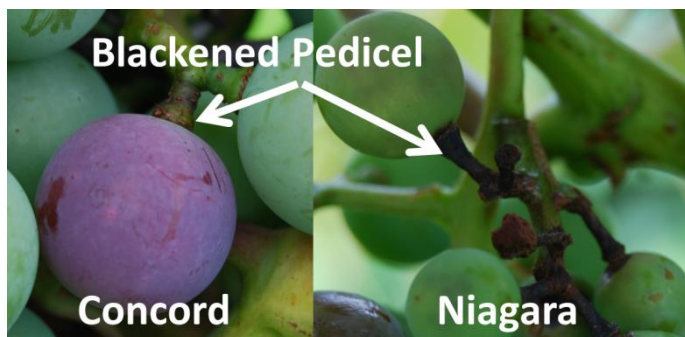
Phenology: We are not yet observing any softening or color in Concord or Niagara here at the North East lab. However, many of our wine varieties (Vignoles, Chancellor, our Minnesota varieties) are changing rapidly.

Diseases: Rain on Tuesday, August 13, generated another [downy mildew](#) infection period. Continue to scout your vineyards to maintain a handle on this disease, as letting it get out of control can strip leaves from vines and leave you with less ripening power to mature the crop.

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. This application 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

This time next week there will be a lot more color around. We are predicting veraison to happen at or around Monday August 19th. During site visits this past week I noticed color in the 'Concord', but after closer



examination the cause was mostly [downy mildew](#) and not veraison. There was also downy mildew in most of the 'Niagara' I visited. An easy way to check if you have downy mildew on your berries is to see if the pedicel is blackened (*see image left*). If infected with [downy mildew](#), the berry will most often turn color and should stay fairly hard. When the berries are in true veraison they will soften up, so give these berries a squeeze if you have a hard time seeing the pedicel. Best case scenario, [downy](#)

[mildew](#) will stay isolated to infected berries and pedicel and not travel up the cluster rachis.

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 for [Grape Berry Moth](#) in the Lake Erie Region if using an insecticide with a contact mode of action.

Weather Station	Wild Grape Bloom	Current GBM DD	1720 DD Timing
N. E. Escarp., PA	28-May	1674	17-Aug
Harborcreek, PA	26-May	1734	14-Aug
N.E. Lab, PA	29-May	1691	16-Aug
Ripley, NY	26-May	1749	13-Aug
Port. Escarp., NY	28-May	1666	18-Aug
Portland Lab, NY	29-May	1654	18-Aug
Portland- Rt 5, NY	28-May	1672	17-Aug
Sheridan, NY	22-May	1796	10-Aug
Silver Creek, NY	30-May	1664	18-Aug
Versailles, NY	27-May	1648	19-Aug
Ransomville, NY	1-Jun	1504	20-Aug

Table – The above table was compiled today (8/15/13) from the GBM DD Model from 11 stations in the LERGP region.

Spray timing for a GBM application **using an insecticide with a contact mode of action** (e.g., generic pyrethroids, Baythroid, Brigade/Capture, Danitol,) should coincide with **1720 DD**.

According to the model (*see above table*) the majority of vineyards should be applying an insecticide application if (**using an insecticide with a contact mode of action**) from 8/16 - 19. The Harborcreek, PA

and Ripley, NY areas, although past the 1720 DD, are still within 2 days of this timing while Sheridan, NY is about 6 days past this timing.

The Niagara County, NY area will be reaching the 1620 DD by 8/20 - 21 (**Note:** use Altacor or Belt) or 1720 DD (**use an insecticide with a contact mode of action**) by about 8/25.

GRAPE INTEGRATED PEST MANAGEMENT: Tim Weigle

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<i>Table 1. Results of Grape Berry Moth Model displayed on NEWA for August 15 and forecasted out to August 20.</i>						
	DD Total on August 15		Forecast for August 20		Date 1720 DD reached	
	May 22*	May 26*	May 22*	May 26*	May 22*	May 26
Versailles	1700	1652	1803	1756	August 16	August 18/19
Sheridan	1796	1746	1914	1864	past	past
Silver Creek	1763	1716	1873	1827	past	August 15
Portland Escrp	1725	1679	1839	1793	August 15	August 17
Portland	1726	1681	1840	1795	past	August 17
Ripley	1797	1749	1743	1905	past	past
North East Escrp	1735	1690	1843	1797	past	August 17
Harborcreek	1782	1734	1895	1848	past	past
North East Lab	1768	1721	1882	1834	August 15	past
Ransomville	1649	1607	1758	1717	August 18/19	August 20
North Appleton	1654	1619	1773	1738	August 18	August 19
South Appleton	1706	1662	1825	1781	August 15	August 17
<i>* Date of Wild Grape Bloom used to start Grape Berry Moth model</i>						

According to the [Grape Berry Moth](#) Model found on NEWA, we are past, at, or rapidly approaching, the 1720 DD timeframe where contact insecticides 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 20 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.

What a difference location and wild grape bloom date can make. Looking at the model results, it appears that the areas with a wild grape bloom date of May 22 in the lower Lake Erie grape belt are at (spray today or tomorrow) or past the point of having insecticide applications be effective (the majority of larvae are now within the berry). If the bloom date in this area was closer to May 26 then the cutoff dates are August 15-19, depending on location. Even up in Niagara County where degree day accumulation is lagging a bit behind, the

model recommends an insecticide application within the next five days.

NOTE: Check out the revised table listing the modes of actions of insecticides used in New York and Pennsylvania vineyards. It has been updated to better reflect IRAC numbers for materials with multiple modes of action. If you have printed off a copy of the old table, please discard it and use the new table. The table is also available on our website at:

<http://lergp.cce.cornell.edu/submission.php?id=69&crumb=ipm|ipm>

To get the latest in model information for [grape berry moth](#), 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>

BUSINESS MANAGEMENT: Kevin Martin

Monetary Value in Knowing Your Brix

As the juice grape harvest scheduled to kick off in a six weeks, now can be a great time to make sure harvest is as efficient as possible. Low soluble sugar solids will likely be a problem this year.

Use this time to check the progress of your individual blocks. I know a lot of growers will be mowing many of their blocks this time of year. Bring a power inverter, blender and refractometer with you. If you do a lot of custom harvest, offer this service to your customers or request samples. Everyone is painfully aware of harvesting in low brix grapes, driving around for hours looking for sugar. Drive around before harvest and for the next few weeks looking for sugar. Avoid doing it in three weeks with three or four employees following you around.

On the other side of things, perhaps you will find some blocks ripening relatively early. If that's the case, you can still benefit from finding the sugar. Universally ripe grapes will allow you to minimize moving around for high brix grapes. To the extent you can minimize moving time, you will still want sugar accumulation to influence your harvest. Try to harvest low tonnage (if you have any), high brix grapes allowing lower brix grapes to accumulate more sugar. That will also allow you to hang crop that might "only" be 15.5 brix another week. Increasing your average delivered brix by .05 will increase revenue for the average farmer by \$2,400.

Just in case you needed another reason to check on your blocks, berry size varies slightly from year to year and site to site. I applaud those using Dr. Bates berry curve for managing crop load. To fully maximize the effectiveness of this crop estimation tool, you'll need to determine what your final berry weights are and how much variance there is between different blocks. While this tool is primarily used to see if vines are substantially over-cropped, an accurate estimate creates peace of mind. It may not speed you up during harvest. Having an idea of what your personal berry curve looks like helps with the accuracy of his estimation tool.

Over the next eight weeks many of you will burn a lot of midnight oil, along with two to three full time laborers, perhaps operating a half a million dollars' worth of equipment. Spending two days scouting, testing and calling grower customers is worthwhile assuming it saves you two hours during harvest or increases your average soluble sugar by .006 brix. Fortunately, Luke (our new Viticulturist) has some great tips you'll read about before harvest, to create a reliable dataset for understanding brix in your vineyard.

GRAPE PHENOLOGY: Kelly Link



Image A

A co-worker told me he saw color in the concords this week. I thought this was strange, since the grapes have not reached the “honey dew melon” phase of development (the berries turn a yellowish-green just before Veraison). Walking through the phenology blocks on the Portland and Fredonia farms, I did see purple berries. My first thought was grape berry moth, which I did find one or two infected berries. But the coloration of the other purple berries was not right. It was more of a mosaic, leaving many spots of the berries still green. It had an almost veiny look to the berry surface (see image A, left). In addition, the berries were still hard. There was a great disturbance in the force.



Image B

I scouted other Concord blocks on both farms. I did see the first signs of Veraison behind the pole barn at



Image C

Portland and behind the bowling alley at Fredonia. These berries were soft to the touch and had a more even distribution of a purplish blush throughout the berries (see image B, above right). So what was going on with these other purple berries? I turned to the experts here at CLEREL: Tim Weigle and Luke Haggerty. They informed me that what I was seeing was a downy mildew infection at the berry pedicel. The berry pedicel had turned brown, shutting down the connection between the berry and the cluster rachis (see image C with arrow, left). These berries will eventually fall off the cluster.

As of Wednesday afternoon, I have not seen any signs of Veraison in the phenology blocks at Portland and Fredonia. The 48 year average for Veraison in the Fredonia Historical vines is August 24th. The earliest Veraison date on record is August 5, 1991. The latest is September 3, 1997. The four year average for Veraison in Portland is August 13th.

WEATHER DATA: Edith Byrne

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DATE/YEAR	HIGH	LOW	DAILY PRECIP.	GDDs	TOTAL APRIL GDDs	TOTAL JAN GDDs
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 8/14/13	66	56	0.00	11	1779	1804.5
Week 8/14/12	77	64	0.35	20.5	2002	2132.5
AVERAGE	79.0	61.0	0.13	19.97	1816.32	1841.24
GDDs accumulated Aug 1-14, 2013 = 232				GDDs accumulated Aug 1-14, 2012 = 294		
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 August 14 = 288.66						
Average GDDs accumulated whole month August = 614.94						
This year compared to AVERAGE: JAN. GDD: BEHIND 1.84 / APR. GDD: BEHIND 1.87						
This year compared to 2012: JAN. GDD: BEHIND 16.42 / APR. GDD: BEHIND 11.17						
2013			2012			
Average High July		73.21 (last week 77.58)		77.86 (last week 80.57)		
Average Low July		59.93 (last week 64.58)		64.14 (last week 65.00)		
August Rainfall amount = 2.43" JULY Rainfall amount = 3.27" JUNE Rainfall amount = 7.69"						
Rainfall accumulation 1/1/13 through 8/7/13 = 26.68"						

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!*

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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 22, 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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[Luke Haggerty](#), Grape Cultural Practices, 716.792.2800 ext. 204

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