



The Lake Erie Regional Grape Program



Electronic Crop Update for August 1, 2013

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Weather Data

In the Vineyard: Andy Muza

From North East, PA

Grape IPM

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)

WEATHER DATA: Edith Byrne

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DATE/YEAR	HIGH	LOW	DAILY PRECIP.	GDDs	TOTAL APRIL GDDs	TOTAL JAN GDDs
Week 7/17/13	84	73	0.00	28.5	1281	1306.5
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
<i>Week 7/31/12</i>	<i>85</i>	<i>69</i>	<i>0.00</i>	<i>27</i>	<i>1708</i>	<i>1838.5</i>
AVERAGE	80.5	62.1	0.13	21.34	1527.71	1552.63
GDDs accumulated thru July 31, 2013 = 548.50				GDDs accumulated thru July 31, 2012 = 725.5		
GDDs accumulated June 2013 = 455.00				GDDs accumulated June 2012 = 532.50		
GDDs accumulated May 2013 = 260.5				GDDs accumulated May 2012 = 393		
<u>Average GDDs accumulated through July 31 = 661.80</u>						
This year compared to AVERAGE: JAN. GDD: AHEAD 0.93 / APR. GDD: AHEAD 0.90						
This year compared to 2012: JAN. GDD: <i>BEHIND</i> 12.5 / APR. GDD: <i>BEHIND</i> 7.5						
	<u>2013</u>		<u>2012</u>			
<u>Average High July</u>	77.58 (last week 79.04)		81.35 (last week 81.75)			
<u>Average Low July</u>	64.58 (last week 66.67)		65.45 (last week 65.83)			
JULY Rainfall amount = 3.27"		JUNE Rainfall amount = 7.69"		MAY Rainfall amount = 4.14"		
Rainfall accumulation 1/1/13 through 7/31/13 = 24.25"						

IN THE VINEYARD with Andy Muza

INSECTS

Grape Berry Moth (GBM) – Severe Risk Concord sites examined this week in Erie County, PA. had GBM cluster injury ranging from 20% - 67%. A cluster was recorded as injured if any berries showed signs of GBM larval feeding.

As of today (8/1), GBM Degree Days in the Lake Erie Region range from 1408-1458 at weather stations in PA and from 1245 (Ransomville, NY) to 1518 (Sheridan, NY) in NY. Scouting for GBM injury should already be taking place in the Sheridan area and should start by this weekend for most of the other areas in the region except Ransomville.

The GBM Degree Day Model suggests that the next insecticide application should be timed to coincide with 1620 degree days (DD) in high risk vineyards if using materials such as Intrepid, Altacor or Belt. If using insecticides with a contact mode of action (e.g., Baythroid, Brigade/Capture, Danitol,) then timing should coincide with 1720 DD.

ESTIMATED timings for the next GBM spray application is around August 6-7 for vineyards in the Sheridan area and between August 9-13 for all other sites in the region except Niagara County, NY. The **estimated** timing in the Ransomville, NY area is around August 19-20.

Keep checking the GBM Degree Day Model on NEWA at <http://newa.cornell.edu/index.php?page=berry-moth> **daily** to determine specific GBM spray timings for your vineyard sites.

(NOTE: 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).

FROM NORTH EAST, PA.: Bryan Hed

Weather: Here at the North East PA lab, we accumulated 651 growing degree days during the month of July, which is right around average. Our gdd total since April 1 equals 1548, which is still a couple of days ahead of our 14 year average. Our rainfall total for July is 2.69 inches, which is over an inch below our 18 year average. Still, we recorded rainfall on 15 of the 31 days of the month; conditions that continue to fuel the threat of downy mildew outbreaks on grapevine canopies of susceptible varieties.

Phenology: In our NE1020 variety trial, some of our Minnesota hybrids are beginning to soften and blush with color already. These varieties ripen very early in our climate and appear to be capable of reaching very high sugar levels.

Diseases: 2013 will go down in the books as a bad year for [black rot](#). Fortunately, most vineyards were starting this year with very little inoculum, and with the prospect of a larger than average crop, most growers have been diligent with their fungicide programs and were able to prevent economic damage from this disease. In unsprayed Concord vines at the North East lab 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. This reminds us that the fungus that causes this disease can survive in wood in the trellis, waiting for wet summers like 2013 to reappear.

Unfortunately, growers who have missed important fungicide applications (primarily around and shortly after bloom) are seeing the powerful effects of black rot and 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. For now, at more than 6 weeks past bloom, Concord and Niagara fruit are resistant to black rot and focus remains on controlling leaf infections of [powdery](#) and [downy mildew](#). 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. With larger than average crops this year, maintaining canopies at optimum efficiency will continue to be important for reaching minimum sugar standards.

GRAPE INTEGRATED PEST MANAGEMENT: Tim Weigle

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Table 1. Results of Grape Berry Moth Model displayed on NEWA for August 1 and forecasted out to August 6.

	DD Total on August 1		Forecast for August 6	
	May 22*	May 26*	May 22*	May 26*
Versailles	1440	1393	1522	1475
Sheridan	1519	1469	1606	1556
Silver Creek	1480	1433	1578	1531
Portland Escarp.	1462	1416	1546	1500
Portland	1458	1412	1542	1496
Ripley	1516	1468	1600	1552
North East Escarp	1469	1423	1553	1508
Harborcreek	1504	1457	1599	1552
North East Lab	1484	1436	1577	1530
Ransomville	1391	1349	1479	1438
North Appleton	1379	1343	1470	1435
South Appleton	1436	1392	1527	1483

** Date of Wild Grape Bloom used to start Grape Berry Moth model*

According to the [Grape Berry Moth](#) Model found on NEWA, second generation larvae are protected within berries and completing their development for the next generation. The model also tells us that we are at, or rapidly approaching, the 1470-1620 DD timeframe where scouting should be done to determine the need for further insecticide applications against GBM.

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 6 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 some stations (Sheridan, Ripley, Harborcreek) will be hitting 1620 DD sometime towards the middle or end of next week if the wild bloom date was May 22 with the remainder of the stations following close behind.

Coming up with the best timing of the various types of insecticides has always been a good topic of discussion. Andy Muza and I put together *Table 2. Insecticides for use in New York and Pennsylvania Vineyards* (based on one developed by Rufus Isaacs at Michigan State University) **below** that we hope will be of help in

determining the different modes of action to assist you in selecting the best insecticide and timings as well as to assist you in developing a resistance management program. Time materials that need to be ingested close to 1620 DD as determined by the GBM model on NEWA and for contact materials wait an additional 100 DD and apply them at 1720 for the best efficacy.

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

Table 2. Insecticides for use in New York and Pennsylvania Vineyards

Insecticide	IRAC Number	Control method	Longevity	GBM	Leafhopper	Japanese Beetle	Toxic to Natural Enemies
Delegate	5	C, I	**	***	*	*	Moderate
Spintor/Entrust	5	C, I	**	**	*	-	Moderate
Biobit, Dipel	11	I	*	**	-	-	Safe
Movento	23	S, C, I	***	Phyloxera control only			Moderate
Altacor	28	C, I	***	***	*	***	Moderate
Belt	28	C, I	***	***	-	-	Moderate
Voliam Flexi	28	S, C, I	****	***	***	***	Moderate
Intrepid^	18	I	****	***	-	-	Safe
Sevin	1A	C	**	**	***	***	Toxic
Imidan	1B	C	***	***	**	***	Moderate
Avaunt	22A	C, I	**	**	*	**	Moderate
Tourismo	28 + 16	C, I	****	***	-	-	Moderate
Evergreen	27A + 3A	C	*	*	*	***	Moderate
Baythroid	3A	C	***	***	****	***	Toxic
Brigade/Capture	3A	C	***	***	****	***	Toxic
Danitol	3A	C	***	***	****	***	Toxic
Leverage 360	3A	S, C, I	****	***	***	***	Moderate
Mustang Max	3A	C	***	***	****	***	Toxic
Provado	3A	S, C, I	****	-	****	***	Moderate
Pyganic	3A	C	*	*	*	**	Moderate
Actara	4A	S, C, I	****	**	***	***	Moderate
Admire Pro	4A	S, I	****	-	***	**	Safe
Assail	4A	S, C, I	***	-	***	***	Moderate
Venom, Scorpion	4A	S, C, I	****	**	****	***	Moderate
Brigadier	4A + 3A	S, C, I	****	***	***	***	Toxic
^ = not registered for use in New York		Longevity Rating		IRAC Number indicates Mode of Action and Chemical sub-group for the insecticide. Rotating mode of actions will decrease the chance of resistance development.			
Control Method		* = 3-5 days					
S = systemic locally or through vine		** = 7 days					
C = Contact activity		*** = 7-10 days					
I = ingestion required		**** = 10 - 14 days					

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



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

FRUIT FIELD DAY

DATE: Thursday August 1, 2013

TIME: 8:00 am to 5:00 pm

LOCATION: New York State Agricultural Experiment Station, Geneva, NY

COST: \$30.00 per person (\$40.00 per person for walk-ins) | Lunch will be provided.

PREREGISTRATION IS REQUIRED

Register now to learn about Cornell's latest research and extension efforts in tree fruits, grapes, hops, and small fruits at the Fruit Field Day, August 1st, from 8:00 a.m. to 5:00 p.m. at the New York State Agricultural Experiment Station in Geneva, NY. Attendees will travel by bus to the research plots to hear presentations by researchers; for a complete list of talks:

<http://blogs.cornell.edu/stationnews/cicada-fest-at-the-hudson-valley-lab-grabbing-a-bite-on-the-fly/presentations-fruit-field-day-2013/>.

Pre-registration is required for the \$30 rate; register on-line at: <http://is.gd/ffd2013>.

The event will be held at the Fruit and Vegetable Research Farm South, 1097 County Road No. 4, one mile west of Pre-emption Road in Geneva, NY. Signs will be posted.

GRAPE TWILIGHT MEETING & ERIE COUNTY HORTICULTURAL SOCIETY'S ANNUAL CHICKEN BBQ

DEC Credits available.

DATE: Thursday August 8, 2013

FARM EQUIPMENT DISPLAY (various vendors): 3:30 pm – 7:00 pm

GRAPE PROGRAM: 5 pm – 6 pm; Chicken BBQ to follow

LOCATION: Gravel Pit Park, 10300 West Main Road (Rt. 20), North East, PA 16428

COST: The BBQ is *free* but **REGISTRATION is mandatory**. If you do not register, a meal will not be reserved for you. Register by Monday, July 29, by calling Penn State Extension Erie County at (814) 825-0900.

This meeting will be assigned 2 Category pesticide re-certification credits pending approval by the Pennsylvania Department of Agriculture.

Pesticide re-certification credits have also been applied to NY DEC for New York growers.

- Insect and Disease Management Updates: Bryan Hed and Jody Timer, Lake Erie Regional Grape Research & Extension Center, North East, PA; Andy Muza, Tim Weigle and Kevin Martin, LERGP Extension Team.

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

U learning! This meeting is open to all commercial winemakers in the region and beyond, so encourage your colleagues to
p attend. No RSVP is required, and there is no charge.

c **LERGP TWILIGHT MEETING & THOMPSON AG ANNUAL PIG ROAST**

m **DATE:** Wednesday August 21, 2013 **REGISTER BY FRIDAY, AUGUST 16, 2013!**

i **TIME:** Meeting begins at 3 pm

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

g Bring your lawn chair - PA Credits have been applied for / 1 NYS Credit available

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

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

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

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

t Pig Roast sponsored by Thompson Ag to follow.

s To register please contact: Kate at 716.792-2800 x 201 or Donna at 716.934-3808

PLEASE NOTE: Next Electronic Crop Update will be Thursday August 8, 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.

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