

Cornell University



# LERGP Crop Update

## \*\* September 3, 2015 \*\*

*Crop Updates will be delivered on a weekly basis through the growing season.*

**\*\*Check the web-site for more upcoming events and meetings.**



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Here's your weekly reminder to check out the GBM model on the NEWA website to see where your vineyards are, and where they are going to be, as we finish up the third generation and work into a potential fourth generation of GBM this year. As shown in the table below, the model tells us we are well past the point where insecticide applications will be helpful for the third generation, and we are still well short of the 2430 DD needed for a fourth generation to require treatment. However, after discussion with Andy Muza (see his article in this week's Crop Update) and visits to vineyards classified as being at severe risk of GBM damage, there is still some egg laying going on from the last of the third generation/being of the fourth due to the overlapping of generations. Keep in mind that the GBM model on NEWA <http://newa.cornell.edu> is only a predictor of how long it takes for the grape berry moth to complete its life cycle (from the egg being laid to the female laying another egg). It cannot provide information on how long a single generation lasts (from the first moth emerging to the last) or how long an overlap of generations will occur. By combining scouting with the model information, you will be able to make much better decisions on whether further insecticide applications are necessary.

And here is another reminder to check the pre harvest interval on the label. The pre harvest interval is the time that must elapse from when the material was applied to when the grapes are harvested. **NOTE: THE LABEL IS THE LAW.** Always check the label of the product you are using to get any pertinent information. Information found from other sources should be viewed as guidelines only. The pre harvest interval applies to any pesticide so be sure to check any fungicide labels if you are looking at late season applications.

NEWA Location	Wild grape bloom date*	DD Total on Sept 3, 2015	Wild grape bloom date**	DD Total on Sept 3, 2015
Versailles	May 30	1959	May 26	2049
Dunkirk Airport	May 31	1992	May 27	2086
Sheridan	May 27	2148	May 23	2230
Silver Creek	June 3	1963	May 30	2008
Portland Escarp.	May 29	2053	May 25	2147
Portland	May 30	2023	May 26	2116
Portland Route 5	May 30	2066	May 26	2160
Ripley	May 28	2129	May 24	2227
North East Escarp	May 29	1990	May 25	2083
Harborcreek	May 28	2114	May 24	2211
North East Lab	May 29	2068	May 25	2163
Erie Airport	May 27	2211	May 23	2352
Somerset	May 30	1994	May 26	2088
North Appleton	June 6	1792	June 3	1831
* Estimated date provided by NEWA website				
** Data projected 4 days earlier than NEWA prediction from observations around the belt.				

## Crop Insurance

The harvest season is upon us. Before you get too into the mad rush, keep in mind that crop insurance decisions will need to be made before November 20<sup>th</sup>. As usual, it does not give growers much time to revisit policies once harvest is complete. Quite a few growers I've spoken with, given the recently cold winters, are reevaluating their need for risk management strategies related to weather.

As part of that reevaluation growers should be aware that crop insurance for grapes has changed. Revenue protection is a new crop insurance policy. It is similar to its predecessors, ARG and ARG lite. The program has actually been available for nearly a year but the first round of regulations were not finalized until after the November 2014 deadline. As a result, signups were minimal.

As most of you are aware, I am fairly hesitant to recommend revenue insurance for grapes. The paperwork was so complicated growers lost out on claims they were entitled to. The transfer of underwriting the risk of insurance to the private sector made matters worse. With most grapes marketed through Cooperatives, marking up current year crops to forecasted prices just turned revenue insurance into a mess.

I've still got a lot to learn about this new form of insurance. Until that information becomes available, I'm comfortable changing my status to neutral. The goal of this new program is to address many concerns that grape growers had. I do remain skeptical that it will be an effective tool for growers that deliver primarily to cooperatives. However, it may be something to consider from year to year, even for cooperative members. While it is difficult to forecast prices on the 2015 and 2016 harvest, the processors and regulators that dictate the forecasting are not optimistic about near term grape prices. When the forecasted price is accurate and it is low, this could be a beneficial risk management strategy.

On the other hand, we've seen many growers have a great deal of success with yield protection. Using long term prices for yield protection does offer a bit of revenue insurance when disasters actually happen. It has worked for many growers for many years. Given the current reality of higher risk grape production, many growers would do well to adopt higher levels of yield protection over the next few years.

We will continue this discussion into 2016. Unfortunately we will not have a lot of time to really figure out the nuts and bolts of this newer product prior to the November deadline. The best thing you can do is to talk to your agent and try to determine if there is a clear-cut benefit to additional insurance. As regulations are finalized we will have a meeting at CLEREL to discuss crop insurance as well as the nuances of these changes before the November deadline.

# Cultural Practices

Luke Haggerty  
Viticulture Extension Associate  
Lake Erie Regional Grape Program

## Great Ripening Weather

In the past 45 days the region has been dry. In this time most of the area has only had between 2-3 inches of precipitation. I have heard some concerns from growers whether it is too dry or not. My response has been “this is great ripening weather”. This past week has been hot, but the humidity has been high. Sure, it’s not the best weather to work in, but evaporation is low and the vines can get away with using less water when the humidity is high. Also, vines have a large root system and can reach deep to find the moisture they need. The only concerns I have are with new plantings, as they will need water soon.



It is time to start sampling sugars. As of September 2<sup>nd</sup> Concord samplings showed brix readings between 11 and 12 and Niagara samples showed above 12°brix readings. In this Crop Update, Dr. Bates has the current berry curve, and things are looking good. Berry size is up and sugar accumulation is right on track. The only down fall is our crop estimations are ~25% lower than last year.

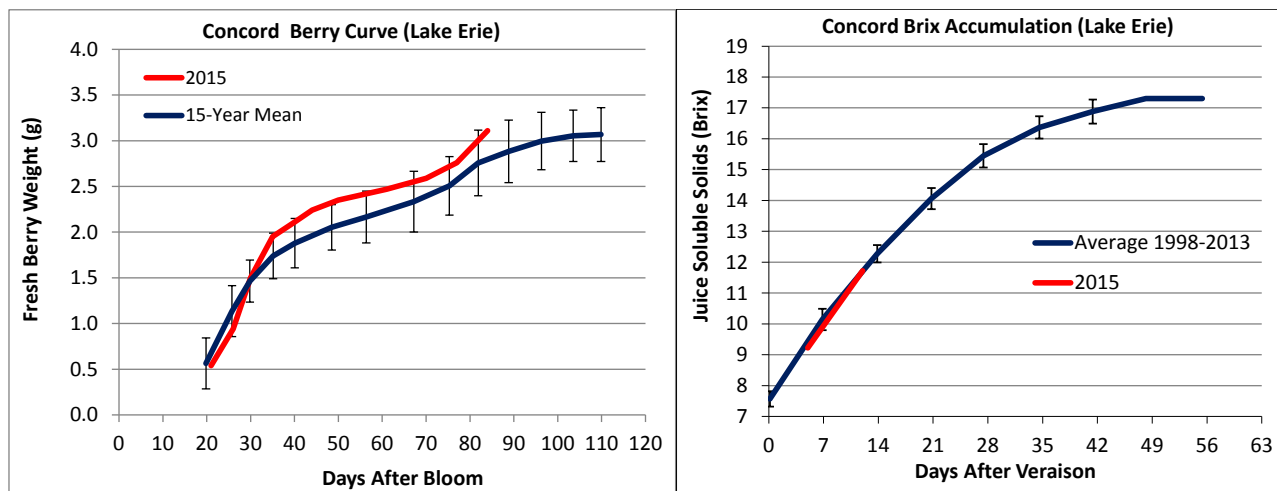
I'm still finding a large amount of variation out there along with active downy mildew infections, powdery mildew, and grape berry moth. This 'calm before the storm' time before harvest is a great time to sample blocks for sugar and gauge severity if pests and disease and make decisions on where to start harvesting.

DATE/YEAR	HIGH	LOW	DAILY PRECIP	GDDs	TOTAL GDDs	APRIL	TOTAL JAN
Week of 8/12/2015	76.1	58.90	0.17	122.5		1850	1850
Week of 8/19/2015	80.71	64.60	0.07	158.5		2008.5	2008.5
Week of 8/26/2015	75.9	59.10	0.08	122.5		2131	2131
Week of 9/2/2015	76	62.00	0.00	133.5		2264.5	2264.5
Average(from 1964)	77.5	59.60	0.20	131.9		2180.5	2204.4
September Precip-Week 1=.02"    Week 2    Week 3=    Week 4-							
Total Precip: August = 2.53"							

## 2015 Lake Erie Concord Update: T. Bates

9/3/2015

Concord fresh berry weight is slightly larger than the long term mean as we head into the fruit ripening phase. Early season berry weight was a little low but high precipitation in June, including 6 inches of rain in one event, increased berry weight around 30 days after bloom. Berry weight has remained above average the rest of the season, even though much drier conditions. Good post-veraison berry weight and Brix accumulation rates indicates that the vines still have adequate vine water status.





# In the Vineyard

Andy Muza

Extension Educator, Erie County, PA Extension

**In the Vineyard** (9-3-15) – Andy Muza, Extension Educator, Penn State University

**Grape Berry Moth** – The good news this week (for me) was that examining clusters for eggs was much easier due to the clear, sunny weather. The bad news (for growers with high – severe risk sites) is that I was still finding unhatched eggs at 5 of the 6 sites checked. At these sites, the percentage of clusters with unhatched eggs was 0, 8, 8, 12, 16 and 44%.

In addition, at 3 other high to severe risk sites examined, unhatched eggs were easy to find. However, the percentage of clusters with unhatched eggs was not recorded.

Although it was not unexpected to find some unhatched eggs at high risk sites, the numbers that I observed at a few sites reinforces the need for late season scouting, especially in high and severe risk areas.

Scout problem areas **NOW** for eggs and injury levels to determine if an additional insecticide application is needed. Also, take into account the history of GBM injury at these sites. If areas have had consistent problems and only 1 insecticide application was applied for this generation then an additional spray may be needed.

**If you decide to spray then be aware of the preharvest interval for the insecticide that is used.**



*Concord Berry with 2 unhatched GBM eggs*



*Concord Berry with GBM larva entry hole*

# From the North East Lab

Bryan Hed-Research Assistant  
Lake Erie Regional Grape Research and Extension Center

Our August rainfall total was 2.21", more than an inch below average. Our growing degree day accumulation during August was a little behind average, but nothing to get into a twist over. Growing degree day accumulation since April 1 totals 2155, right about at average for the season at our site. We may get some rain later this afternoon (Sep 3), but beyond that, the forecast looks dry over the next several days.

Examinations of infected Concord and Niagara leaves reveals active sporulation of downy mildew, despite the relatively dry weather. As I mentioned earlier, this disease is very well established in some vineyards in the belt and is here to stay until leaf fall. Measuring 'photosynthetically active radiation' under what appeared to be a clear sky yesterday, made me realize that there is so much moisture in the air, that sunlight levels were reduced by about 30% by the hazy conditions. Relative humidity levels at our site have exceeded 95% (and sometimes 98%) every day since August 25th. This is not unusual for this time of year, but in 2015 the little bit of moisture and the extreme levels of humidity are keeping the threat of downy mildew alive in area vineyards, despite the drier conditions. However, remember that without wet leaf surfaces, downy mildew is not going to spread. In Concord vineyards I've looked at, I don't see problems to the extent that another spray is needed, especially since the short term forecast looks relatively dry. In Niagara and wine grape vineyards with active sporulation and where the disease can spread more easily given the chance, monitor conditions closely and take action if conditions turn wet. To spray or not to spray has to be determined according to circumstances in each individual vineyard. Other things to consider: ragged Niagara vineyards with a crop, that are still struggling with trunk damage need all the leaves they have; suckers painstakingly trained up as new trunks, and cold tender wine varieties, need all their leaves to properly harden off against another potentially brutal winter. It would be a shame to spend all that time in trunk renewal, only to have downy mildew leave suckers green going into winter. Scouting a commercial Niagara vineyard recently, revealed a disturbing level of fresh downy sporulation on leaves. Many large mature leaves that appeared to have 'old, burned out' infections were literally covered with fresh sporulation underneath, despite dry weather over the past several days. For vineyards with that situation, stay closely tuned to the weather; an evening shower could keep leaves wet for an extended period overnight and lead to more leaf loss in susceptible vineyards where there is active sporulation. On the other hand, I've scouted Niagara and wine grape vineyards that were relatively clean (and I'm hoping this represents the situation in most vineyards), and for those vineyards, scouting is all that needs to be done for now. Again, to spray or not to spray has to be determined according to circumstances in each individual vineyard.



### **LERGP Website Links of Interest:**

Check out our new Facebook page!!

Cornell Lake Erie Research & Extension Laboratory Facebook page

<https://www.facebook.com/pages/Cornell-Lake-Erie-Research-Extension-Laboratory/146971918664867>

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](http://nygpadmin.cce.cornell.edu/pdf/submission/pdf65_pdf.pdf)

Appellation Cornell Newsletter Index:

<http://grapesandwine.cals.cornell.edu/cals/grapesandwine/appellation-cornell/>

Veraison to Harvest newsletters:

<http://grapesandwine.cals.cornell.edu/cals/grapesandwine/veraison-to-harvest/index.cfm>

Go to <http://lergp.cce.cornell.edu/> for a detailed calendar of events, registration, membership, and to view past and current Crop Updates and Newsletters.







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Contact the Lake Erie Regional Grape Program if you have any special needs such as visual, hearing or mobility impairments.

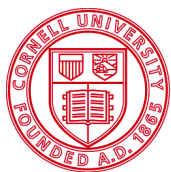
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