



Cornell University Cooperative Extension





CROP UPDATE AUGUST 23, 2019



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The Lake Erie Regional Grape Program is a Cornell Cooperative Extension partnership between Cornell University and the Cornell Cooperative Extensions in Chautauqua, Erie and Niagara county NY and in Erie County PA.

Business Management

Kevin Martin, Penn State University, LERGP, Business Management Educator

Grape Price Announcements

Plans for grape prices and structure were discussed at summer meetings and picnics. Actual prices were announced to contracted growers last week. Almost universally the cash market saw slightly higher prices than last year. Recent acreage removal and changes in processor supply chain have removed most or all of the Concord surplus from the market. The price for bulk juice has significantly improved, though not breaking any records.

I have not heard about all cash market prices but so far the range of Concord prices has been \$225 - \$290. This spread is mostly based on Refresco's return to paying a premium for high brix Concord. This year has a potential for Brix to be low. I would expect average payments to growers to be very close to \$250 per ton including trucking. This will be about \$20 higher than last year's prices.

Cash market prices for Niagara have mostly been brought into parity with Concord. After a few years of lower prices, we are seeing an increase in demand for Niagara. The soft demand and low prices for Niagara hit our region right after two major winter events. It is going to be difficult for markets that need Niagara to find it for the next few years. The highest cash juice price I've heard for Niagara this year is \$290 per ton.

All of this news will help the price paid by Cooperatives as well. What that price will be would really be speculation on my part. By December we'll start to get an idea as pricing of 2019 juice becomes established.

For the most part this is good, not great, news for the industry. Crop size and a late season provide ample reason to be concerned that some growers may not be able to take advantage of these somewhat better prices.

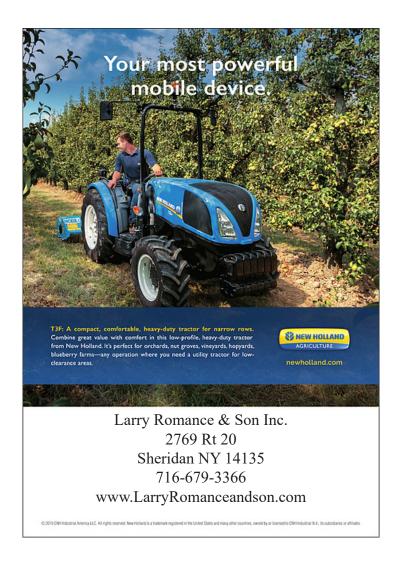




Tim Weigle, NYSIPM, Cornell University, LERGP Team Leader

Grape Berry Moth Update

As seen in Table 1 below, with the exception of Harborcreek Escarpment, Burt and Corwin, we are past the most effective timing for applications of insecticide for grape berry moth to be effective. Egg-laying should be greatly reduced at this time and since we are not experiencing an extremely warm growing season most pupae will be entering diapause (overwintering stage) after 1700 DD. This means a reduced number of moths emerging which leads to the reduction in egg laying. For vineyards that have been classified as being at extremely high risk for grape berry moth damage, continued scouting is recommended.



	Wild grape bloom	DD Total on August 23,	Forecasted DD for August 28, 2019
NEWA Location	date*	2019	,
Versailles	June 7	1736	1836
Hanover	June 8	1765	1869
Sheridan	June 6	1844	1951
Silver Creek	June 8	1806	1913
Dunkirk Airport	June 9	1810	1916
Forestville	June 8	1780	1883
East Fredonia	June 9	1741	1848
Fredonia	June 9	1707	1813
Brocton Escarp.	June 9	1729	1836
Portland Escarp.	June 7	1793	1897
Portland	June 8	1787	1892
East Westfield	June 9	1734	1842
Westfield	June 9	1757	1865
Ripley	June 8	1831	1923
Ripley Escarp	June 8	1755	1862
Ripley State Line	June 8	1802	1909
North East State Line	June 9	1723	1818
North East Escarp	June 7	1788	1889
North East Sidehill	June 8	1760	1861
North East Lab	June 8	1847	1962
Harborcreek	June 8	1796	1909
Harborcreek Escarp	June 9	1693	1800
Lake City	June 7	1843	1951
Ransomville	June 11	1755	1865
Burt	June 19	1555	1665
Corwin	June 13	1680	1787
* Estimated date provided by NEWA website		_	

Table 1. Phenology-based Degree Day model results for Grape Berry Moth by NEWA station location in the Lake Erie Region on August 23, 2019.

Viticulture

Jennifer Russo, Viticulture Extension Specialist, LERGP

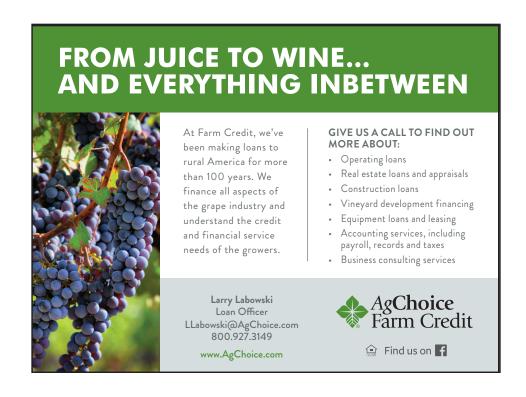
Research on the Farm

Cornell Lake Erie Extension and Research Laboratory has different research trials going on ranging from willow plantings for biofuels, hops, vegetables, and different grape research trials. One of the points of interest is a collaboration between Dr. Terry Bates and Hans Walter-Peterson to monitor plantings of Concord Clone 30, which has been identified as an early ripening clone of Concord. The Clone 30 was found during a trip that Hans took to Brazil in 2008.

The Brazilian Agricultural Research Corporation, or Embrapa, is a state-owned research corporation affiliated with the Brazilian Ministry of Agriculture. Embrapa mission is to "develop research, development and innovation solutions for the sustainability of agriculture, for the benefit of Brazilian society". Clone 30 was identified by Embrapa as part of their clonal and varietal selection program for juice grape varieties and imported to the United States.

Clone 30 was then sent to Foundation Plant Services for virus detection and cleaning. A 'virus-free' version of Clone 30 and a 'virus-free' standard Concord selection were both planted at CLEREL to research. They are in the second year of growth.

The vines are showing promise and we expect to have a half crop during next year's growing season to compare and contrast with our standard Concord vine production. The images below show the difference in the fruit maturation. Just one of the exciting projects that our team at CLEREL is working on to bring sound research-based information into the hands of our industry stakeholders.





Clusters of Concord (left) and Concord Clone 30 (right) at the Cornell Lake Erie Research & Extension Laboratory in Portland NY. Concord Clone 30 was imported to the United States from Brazil, where it was identified as an early ripening clone of Concord. A planting of Clone 30 has been established at CLEREL and evaluations of it in comparison to 'standard' Concord vines will begin next year. Photo: Terry Bates, Cornell University



PA Update

Andy Muza, LERGP Extension Educator, Penn State University

In the Vineyard (8 - 23 -19) – Andy Muza, LERGP Extension Team & Penn State Extension – Erie County

Fredonia berries are coloring (Figure 1). In a Delaware block, a scattering of berries were also showing color. I did not observe any signs of veraison in Concords but a few growers reported some coloration on weak and young vines.

<u>Grape Berry Moth</u> – By now, all high/severe risk sites should have received an insecticide application for the third generation of GBM.

While scouting vineyards in the Lake City, PA area this Monday (GBM DD at 1747) I was still picking up eggs in high/severe risk sites (Figure 2). This is 5 days after this area had reached 1620 DD which the GBM Model indicates is peak egg laying for the third generation. This shows that egg laying can continue over an extended period of time. The higher the population levels (i.e., high/severe risk sites) the greater number of eggs that will be laid.



Figure 1. Fredonia berries on August 19, 2019 in the Lake City, PA area. Photo – Andy Muza, Penn State.



Figure 2. Two grape berry moth eggs and spray residue on Concord berry. Photo – Andy Muza, Penn State

PA Update

Bryan Hed, Research Technologist, Lake Erie Grape Research and Extension Center

<u>Weather:</u> At our location by the lake, our August rainfall total is now 3.54», which is already above our 20-year average (3.27") for the entire month. We have accumulated 464 growing degree days so far during August, which puts us on track for above average heat accumulation for the month AND pushes us ever so slightly ahead of our 20 year average in gdd accumulation as of April 1 (we now have 1959 gdds since April 1).

Keep scouting your vineyards for downy mildew on leaves. Though we saw little of this disease earlier this season, our wetter conditions (1.65" of precip over the past 5 days) will contribute to the development and maintenance of this disease in area vineyards. The presence of active white sporulation on the undersides of leaves means the downy mildew pathogen is capable of spreading quickly under wet conditions and can spiral out of control, strip vines of their leaves and effectively end the season (and the ripening of canes for next year's crop). If you find yourself trying to control this disease well into the ripening period (especially on wine grapes) be aware that your list of chemical control options will become shorter as we get within 30 (Ranman, Reason), then 21 (Ziram), then 14 (Revus, Revus Top, Zampro) days of harvest, until in the end you'll be left with some formulations of Captan, copper, and phosphorous acid products (0 day pre-harvest interval). It's also important to remember that materials like Ranman, Reason, Revus/Revus Top, and Zampro contain chemistries that are prone to the development of resistance. These materials should not be used to put down an epidemic - which will speed up the resistance development process - but rather to maintain a clean vineyard. And, although phosphorous acid products are less prone to resistance development, you will enhance the chances of losing this technology to resistance as well, by using these materials on a heavily diseased vineyard; limit your use of phosphorous acid products to three applications per season. Copper formulations would be least risky in terms of the development of resistance and can be an effective means of controlling downy and powdery mildew on juice grapes late into the growing season. Just be mindful of varieties that may be injured by copper applications, and that copper injury will be exacerbated by application under slow drying conditions and application to wet canopies (for example, don't make applications to dew covered canopies in the early morning). For wine grapes, be aware that excessive copper residues on fruit at harvest can cause problems with fermentation (copper kills yeast). If you are protecting a non-bearing, young vineyard from downy mildew (you're not selling/ harvesting a crop), you probably can continue to use mancozeb products, which are very effective against downy mildew, carry a low (no?) risk of resistance development, and will not burn the leaves.

As for powdery mildew, I don't need to tell you how important it is to keep your juice grape canopies as functional as possible in order to maximize your chances of getting a huge crop ripe in an 'average' season for ripening. This will be even more critical if the weather in September is cool and wet. Our most recent data seem to indicate that mid/late summer copper sprays do a pretty good job of keeping Concord leaves clean of powdery mildew. And, there are no issues with pathogen resistance to copper. Also, a tank mix of the synthetics with a foliar fertilizer like harvestmore, *can in some years*, slow the development of powdery mildew on leaves more than just the synthetic program alone, and help to manage the development of resistance. A material like Nutrol (with a surfactant) will likely do the same thing. But none of these inputs will guarantee that you'll ripen that huge or bigger-than-average crop this year; they're only insurance policies designed to improve the odds in your favor, in spite of the weather.



INSURING GRAPES

NY, 2019

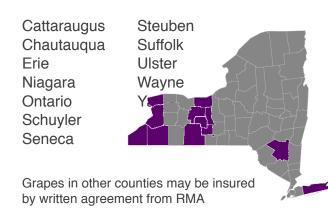
Crop insurance is a safety net for farmers that helps you **manage risk**. If you have a crop failure, crop insurance can help you farm again next year.

Important Insurance Deadlines

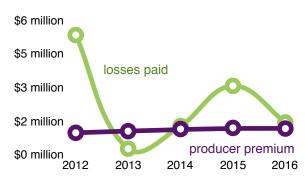
- Aug. 15, 2018: Premium Billing Date
- Nov. 20, 2018: Sales Closing, Policy Change, Cancellation, Termination Date
- Nov. 20, 2019: End of Insurance Period
- Jan. 15, 2019: Acreage / Production Report Date



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NYS Grape Crop Insurance



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To sign up, contact a crop insurance agent. Find an agent using the Agent Locator tool at rma.usda.gov/en/Information-Tools/Agent-Locator-Page

Cornell University delivers crop insurance education in New York State in partnership with the USDA Risk Management Agency. Diversity and Inclusion are a part of Cornell University's heritage. We are an employer and educator recognized for valuing AA/EEO, Protected Veterans, and Individuals with Disabilities.







