



Cornell Cooperative Extension
Lake Erie Regional Grape Program



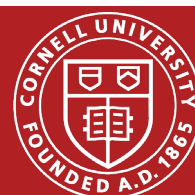
PennState Extension



Crop Update - September 17, 2020

Niagara harvest at CLEREL,
September 17, 2020- photo T. Bates

Building Strong and Vibrant New York Communities
Diversity and Inclusion are a part of Cornell University's heritage. We are a recognized employer and educator valuing AA/EEO, Protected Veterans, and Individuals with Disabilities.



In this Crop Update:

- **Harvest Labor- Kevin Martin**
- **Keeping Records in Your Vineyards- Jennifer Phillips Russo**
- **In the Vineyard - Andy Muza**



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.

Contact Information:

Jennifer Phillips Russo - LERGP Viticulture Specialist:

jjr268@cornell.edu

(716) 640-5350

Kevin Martin – LERGP Business Management Specialist:

Kmm52@psu.edu

(716) 397-9674

Andy Muza – LERGP Disease and Pest Management Specialist:

Ajm4@psu.edu

(814) 825-0900

Kim Knappenberger – LERGP NEWA and Vineyard Improvement Program Contact

Ksk76@cornell.edu

Kate Robinson – Administrative Assistant

Kjr45@cornell.edu

How to join a Zoom meeting video (1 minute):

https://www.youtube.com/embed/vFhAEoCF7jg?rel=0&autoplay=1&cc_load_policy=1

Joining and Configuring Audio & Video (1 minute):

https://www.youtube.com/embed/HqncX7RE0wM?rel=0&autoplay=1&cc_load_policy=1

[Click here to watch LERGP Podcasts](#)



DRYSHOD
WATERPROOF FOOTWEAR
The world's most wearable rubber boot.

dryshodusa.com



ORIGINAL
LOWE



CORONA

SEASON AFTER SEASON

NORTH EAST FRUIT GROWERS
2297 KLOMP ROAD, NORTH EAST, PA 16428
814.725.3705

NEFRUITGROWERS@VERIZON.NET
OPEN YEAR-ROUND MONDAY - FRIDAY 8AM - 5PM
OPEN SATURDAYS APRIL- NOVEMBER 8AM - NOON

BULK FERTILIZER
BAGGED FERTILIZER
CHEMICALS
VINEYARD SUPPLIES
ORCHARD SUPPLIES
PRUNING SUPPLIES
GLOVES & BOOTS
POND PRODUCTS
PRODUCE PACKAGING
HOME OWNER SUPPLIES
& SO MUCH MORE!

Clover Hill Sales LLC

10401 Sidehill Road, North East, PA 16428

814-725-3102

sales@cloverhillsales.com

www.cloverhillsales.com



WOODS
Woods Equipment Company



Harvester Parts and Belting
Southern Yellow Pine Posts
Tractor Tires & Tubes • And So Much More!



Your most powerful
mobile device.

T3F: A compact, comfortable, heavy-duty tractor for narrow rows. Combine great value with comfort in this low-profile, heavy-duty tractor from New Holland. It's perfect for orchards, nut groves, vineyards, hoppyards, blueberry farms—any operation where you need a utility tractor for low-clearance areas.



Larry Romance & Son Inc.
2769 Rt 20
Sheridan NY 14135
716-679-3366

www.LarryRomanceandson.com

© 2019 CNH Industrial America LLC. All rights reserved. New Holland is a trademark registered in the United States and many other countries, owned by or licensed to CNH Industrial N.V., its subsidiaries or affiliates.

Business Management

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

Harvest Labor

With Concord season in full swing make sure NYS payroll is compliant with overtime rules. While these rules are not new anymore, this will be the first harvest season they are in effect. The rules require that all employees are given a day of rest. Employees should provide written consent that they wish not to have a day of rest if they do not get one during harvest. Also, employees will need to be paid time and a half for working on the day of rest. This overtime pay is mandatory regardless of total hours worked in the week. Overtime is also mandatory when workers exceed 60 hours. Again, just like standard federal rules that rate is also time and a half.

PA laborers are exempt from overtime rules in agriculture. Harvest is a difficult time for everyone. While managing long days is just part of being involved in agriculture; even without a government mandate best management practices should include multi-faceted worker appreciation. While some growers might not see it as affordable, the quality and reliability of front-line harvest workers are critical to maintaining business operations. Whether growers chose to pay higher rates, overtime or bonuses; some form of increased compensation should be part of harvest.

Flexibility in developing a multi-pronged approach will need to be fiscally lean in NY. It is not practical to comply with NY labor rules and offer generous bonuses. Growers will need to be more imaginative and inventive. With higher salaries and hourly rates, hopefully compensation is less associated with value and positive feedback, employee gifts, and professional development provide adequate and inexpensive solutions.

Research also indicates that workers valuable flexible scheduling, trust and responsibility. In addition to compensation, these three tools will help keep harvest safe, happy and healthy. Good luck!

LaPorte
Farm Equipment
"Large and small, we sell them all!"
Sales - Parts - Service
Westfield NY (716) 326-4671

CASE IH
AGRICULTURE
laportefarmequipment.com

Custom Built 2 Tank Weed Sprayer



We sell and service CaseIH Tractors, Oxbo Harvesters, and Turbomist Sprayers. We also custom manufacture single and dual tank sprayers, spray booms, pre-pruners, brush sweepers, & wire winders.



Viticulture

Jennifer Russo, Viticulture Extension Specialist, LERGP

Keeping Records in Your Vineyards and Updates

At the Cornell Lake Erie Research and Extension Laboratory we have been tracking Concord grape phenology over the past 21 years. Phenology is defined as the study of cyclic and seasonal natural phenomena, especially in relation to climate and plant and animal life. Basically, for our purposes, it is the timing of grape development.

The work at CLEREL and previously at the Fredonia Lab, has developed a historical average that is very useful when comparing berry weight and sugar accumulations from year to year to strengthen your management practices. Sustainable production of grapes is increasingly tied to a clear and accurate knowledge of vineyard conditions, the variation in your vineyard, and recording your own history of berry development. Getting a handle on all of that will greatly improve your management practices and allow you to farm more efficiently, and hopefully leading to more profitability.

The point of all of this, is that I am trying to encourage you to keep records of your berry growth. Most of you are already doing this in your heads but writing it down in a dedicated space from year to year will allow you to see trends over the years and strengthen your decisions. Collecting final cluster weights at harvest is an important step that easily gets forgotten in the organized chaos of harvest, however it is crucial to better understand your own vineyard.

With a little extra effort, you can have your own personal berry curve for each of your vineyards. The CLEREL Concord Berry Curve is a great reference point but knowing what your personal berry curve is will allow you track vineyard performance, see trends, and possibly diagnose shortcomings and address them in a timely manner.

At this point in the season, the yield component to record is cluster weights. Maintaining records of cluster weights from year to year will help improve crop estimation. It is the component of yield that varies the most from year to year. Wet weather during bloom could cause poor set and may lead to low cluster weight. A dry summer tends to reduce berry size and thus may decrease average cluster weight. A raining end of Stage III could increase berry size and dilute sugars. So, having this data recorded is a key part of any yield prediction program. The ideal way to collect cluster weights is to take them from the vine that you used for cluster counts at the beginning of the season, but any data is better than no data. If time only allows you to grab from bins, then by all means collect away. Average cluster weight is obtained by sampling at least 100 clusters throughout the vineyard; weigh the total and divide by the number of clusters sampled.

Do not get discouraged if first attempts at crop estimation are inaccurate, because the more experience and data acquired, the more accurate the estimates will become. The Grower/vineyard manager knows that the vineyard is not uniform. Variation within the blocks can be categorized as “high-,” “moderate-,” or “low-” producing. If you have data-driven maps through our Free Loaner Sensor program, or from your own sensors, use them to select a few vines that are characteristic of these zones for your data collection. The data recorded from these management zones can serve as the basis for long-term understanding of that zone/vine relationship and the usefulness of this vineyard data grows as the information collected grows over years. Remember that no person

can have better knowledge about the vineyard or greater incentive to achieve maximal sustainable production than you.

Here's to a beginning, or continuation, of your vineyard records and understanding the berry curve and best wishes for a great harvest!

Cornell Lake Erie Research and Extension Laboratory, Portland, NY

Here at the Cornell Lake Erie Research and Extension Laboratory (CLEREL) in Portland, NY we monitor our Concord vines in our phenology block that are minimally pruned through vines where we leave up 120 nodes. Data collected throughout the growing season includes berry weight and °Brix. Dr. Terry Bates updates the Concord Berry Curve graph and this week all berry samples in this phenology block averaged 2.8 grams, which is lower than the 21-year average and dropped from the last week (Figure 1). The samples taken on September 8, 2020 averaged 2.94 grams with a weekly average decrease of .14 grams of berry weight, presumably from less precipitation.

The °Brix accumulation is well above the 21-year average with the phenology samples averaging at 16.60 °Brix (Figure 1). On September, 2020, the average °Brix for these vines was 15.47. A weekly average accumulation of 1.13 °Brix.

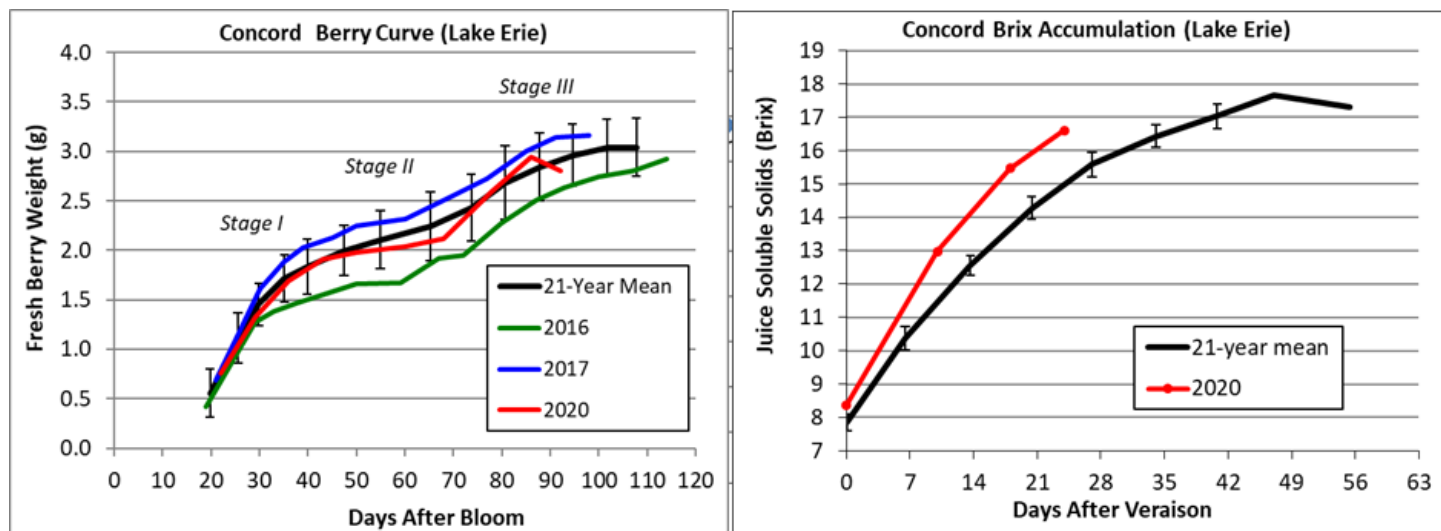


Figure 1. Cornell Lake Erie Research and Extension Laboratory's Historical Concord Berry Curve and Concord Brix Accumulation

In speaking with grape industry representatives around the region, harvest is well underway and progressing fast and furiously. One producer started Concords on Saturday, September 12th, and reported higher average °Brix than the end of the harvest season last year and the °Brix ranged from 11.5-18.2. That same producer finished their white variety harvest and noted that the °Brix were "off the charts".

Another producer reported that they started Niagara harvest this past week and the growers are finding good yields. He stated that it is a clean crop with very few defects and it looked like above average berry size as a result of the rain last week.

CLEREL Weather

Per the Network for Environmental and Weather Applications (NEWA) for the station located at CLEREL in Portland, NY, the average air temp for the past week was 61.7°F a difference of 6.2° from last week. The air maximum temp of 79.0°, a 10.6° difference from last week, and minimum temp of 47.1° that differed 5.7°. The AgriTech lab received 0.1 inches of precipitation and 3 hours of leaf wetness (Table 1).

Table 1. Network for Environmental and Weather Applications September 11-17, 2020 data Cornell Lake Erie Research and Extension Laboratory

Date	Avg Air Temp (°F)	Max Air Temp (°F)	Min Air Temp (°F)	Total Precip (inches)	Leaf Wetness Hours	Avg Wind Speed (mph)
9/11/20	58.6	63.7	52.8	0.06	10	4.6
9/12/20	65.1	79	49.2	0	0	6.8
9/13/20	68	72	63.8	0.55	8	8.2
9/14/20	59.8	65.3	50.9	0	0	4.5
9/15/20	55.9	64.4	47.1	0	0	2.4
9/16/20	62.6	71.7	55.2	0	0	5.0
9/17/20	62.7i	63.6i	61.8i	0.00i	0i	3.5i
Monthly summary	61.7	69.4	53.2	0.1	3.0	5.3

Do you have your sanitizer and masks for harvest? *Kim Knappenberger*

As I am sure you are all aware, Chautauqua County has had a recent uptick in confirmed Covid-19 cases, especially in the Fredonia area. Although most have been associated with the college and they have been working hard to keep that contained, it is not time to relax our efforts to prevent the spread of the virus. As harvest begins we need to stay vigilant in protecting ourselves and others by wearing face masks and using hand sanitizer. It is a good idea to have masks in trucks and tractors to be available when drivers come in contact with other people. The small spray bottles are convenient to have there as well to quickly spray hands, steering wheels, whatever you feel needs a quick sanitizing, and those can easily be refilled with the gallon jugs of sanitizer. The NYS Department of Agriculture has provided both sanitizer and masks to be distributed in the counties of New York by their local Cornell Cooperative Extension agencies. CCE Chautauqua County has made sure that we have an ample supply available in the county. You can request supplies at <http://chautauqua.cce.cornell.edu/resources/hand-sanitizer-and-face-mask-request> and then we will arrange a pick-up time at the Cornell Lake Erie Research and Extension Lab in Portland, NY. If you have any questions please contact Kim at ksk76@cornell.edu. These supplies are available to all agricultural producers in the county, so if you know of a producer that is in need, please share this resource with them!



PA Update

Andy Muza, LERGP Extension Team & Penn State Extension- Erie County

In the Vineyard

Grape Berry Moth (GBM) – Last week I checked High – Severe Risk sites on the west side of Erie (Lake City area) for 4th generation GBM egg laying. This week I checked a few High – Severe Risk sites in the North East, PA area. I found at least some eggs at these sites but mostly observed remnants of hatched eggs (most likely from 3rd generation egg laying) and GBM injured clusters (Figure 1).



Figure 1. Remnant of hatched grape berry moth egg on Concord berry. Photo – Andy Muza, Penn State.

Now, before harvest begins, is a good time to check vineyard blocks (particularly High/Severe Risk sites) for GBM injury levels.

- Keep records of which areas have problems.
- Determine if injury/rot levels are too severe in sections of blocks to potentially result in load rejections.
- Instead of dumping berries from these areas on the vineyard floor during harvest, as often occurs, consider harvesting infested areas now and dumping berries in a location away from vineyards. (Ideally, berries should be buried or at least covered with soil to prevent GBM from emerging next season).

NOTE: Dropping infested berries in the vineyard only ensures that GBM population levels will remain high in the same areas again next season.

After harvest, examine your spray records in the blocks where GBM infestations were high. Develop a management strategy for next season by determining what changes need to be made (e.g., choice and rates of insecticides, number of applications, spray timings).

Contact the LERGP Extension Team if you need assistance developing a GBM management plan for next season.

Honeyvine Milkweed – Reminder before harvest

Honeyvine milkweed (HvM), also known as climbing milkweed, is a twining, perennial vine which grows rapidly and can reach lengths greater than 10 feet. It reproduces both vegetatively (by sprouting shoots from buds on lateral roots) and by wind disseminated seed dispersal. An HvM vine produces pods which are 3-6 inches long with as many as 50 pods per plant each containing numerous seeds. If not managed up to this point in the season, HvM vines will be in the trellis and producing



Figure 2. Clusters of honeyvine milkweed pods in Concord canopy. Photo – Andy Muza, Penn State.

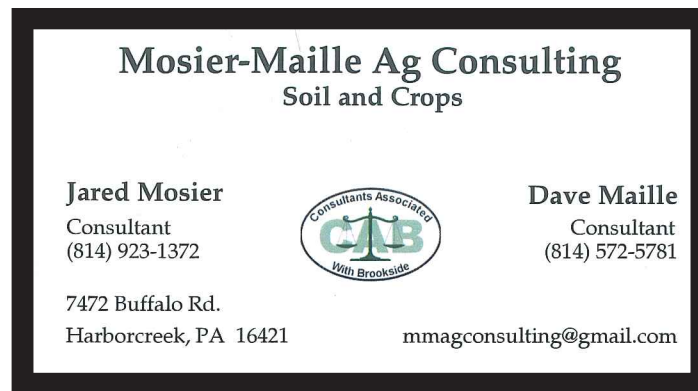
Pods (Figure 2). If pods mature, these will split open and release large quantities of seeds which are wind dispersed.

Any growers that have vineyard blocks where honeyvine milkweed (HvM) has been found in the past should check these sites before harvest. Scout now for this perennial vine. If found, collect seed pods into a sealed, plastic bag and throw bagged seeds into the trash. Remove HvM vines from the trellis and lay in the row. Spot spray with glyphosate (check label for restrictions/precautions/rates) using highest labelled rate. Flag and map HvM locations for future reference. Some growers have spot sprayed for HvM and prevented this weedy vine from becoming entangled in the canopy. However, I have observed new HvM growth in previously sprayed areas (Figure 3). Take the time to return to areas that have been spot sprayed and check for any new HvM vines. Spray any new growth again before the end of the season.

Refer to article, "Honeyvine Milkweed in Lake Erie Vineyards" (LERGP *Vineyard Notes*, July 2014, pages 18 – 21) https://nygpadmin.cce.cornell.edu/pdf/newsletter_notes/pdf42_pdf.pdf for more detailed information on HvM and management.



*Figure 3. Honeyvine milkweed at base of Concord trunk.
Photo – Andy Muza, Penn State.*



Announcements

Safe Harvest 2020: COVID-19 Office Hours for Agricultural Producers and Packers

September 22, 2020
September 29, 2020

Cornell CALS and CCE will host office hours for farmers and packers to answer any questions they might have about managing and responding to protect the farm workforce during COVID-19. Participants will be able to log in from a computer or call in from a phone to ask questions or just to listen. A panel of experts will be available to answer questions immediately, questions that the experts cannot answer right away will be recorded, studied and answered later. The next 6 weeks are a critical time for the farm workforce as seasonal harvest ramps up, so the office hours will repeat every Tuesday at 4:00 PM EST through the end of September. Look for log in information and phone numbers in coming news releases and watch this website: www.agworkforce.cals.cornell.edu.



CORE pesticide training on September 22nd from 9am - 10:50am or September 24th from 6pm - 7:50pm

Josh Putman, Southwest NY Dairy, Livestock and Field Crops Program will provide an overview of the basic information involved in the pesticide application certification process and will present the basics of Integrated Pest Management (IPM) as well as general pesticide safety, regulations and pesticide resistance.

[Register now for this event!](#)

Other links of interest:

[LERGP Web-site:](#)

[Cornell Cooperative Extension website:](#)

[Cornell CALS Veraison to Harvest Newsletter:](#)

[Efficient Vineyard:](#)

[Appellation Cornell Newsletter:](#)

COVID-19 resources:

Need information? View the following Cornell CALS and CCE Resource Pages Updated Regularly

General Questions & Links:

<https://eden.cce.cornell.edu/>

Food Production, Processing & Safety Questions:

<https://instituteforfoodsafety.cornell.edu/coronavirus-covid-19/>

Employment & Agricultural Workforce Questions:

<http://agworkforce.cals.cornell.edu/>

Cornell Small Farms Resiliency Resources:

<https://smallfarms.cornell.edu/resources/farm-resilience/>

Financial & Mental Health Resources for Farmers:

<https://www.nyfarmnet.org/>

Cornell Farmworker Program

www.farmworkers.cornell.edu

www.trabajadores.cornell.edu (en espanol)

