Crop Update - May 14, 2020
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.

In this Crop Update: Reminders for Important Events

- Bud Update - Jennifer Phillips Russo
- Managing Expenses After a Frost - Kevin Martin
- In the Vineyard - Andy Muza
- PA Update - Bryan Hed

Contact Information:

Jennifer Phillips Russo - LERGP Viticulture Specialist:
jir268@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/vFhAEOoCF7jq?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

We look forward to seeing you at
Virtual Office Hours & Coffee Pot Meetings
The Only FRAC Group U6 Fungicide
Labeled for Grapes, Cucurbits, Cherries, and Pome Fruit
Highly Effective on Powdery Mildew
No Cross-Resistance
Protectant / Preventative Action

FRAC Group 3
Labeled for Grapes and Cucurbits
Controls Powdery Mildew, Black Rot, & Anthracnose
Protectant + Curative Activity
Highly Systemic

High Quality Copper
Excellent Mixing Characteristics
Highly Active at Lower Rates
Enhanced Crop Safety

Flexibility, versatility & a unique approach for your disease control program
EPA registered with tolerance exemption
Controls Botrytis & Powdery Mildew

The only FRAC Group 13 Fungicide
Labeled for Grapes, Melons, Winter Squash, Gourds, Pumpkin, and Stone Fruit
Exceptional Preventative Control of Powdery Mildew
No Cross-Resistance

Gowan Company
800.883.1844
Managing Expenses After a Frost

Frost damage is being reported throughout the Lake Erie Region. It has been a number of years since the region has experienced any significant frost events. A significant number of NEWA stations were right on the edge. There are some widespread reports of damage in cold pockets. It will take us a bit of time to understand whether or not the event has caused widespread damage.

Before making any changes in an operation, make sure the extent of the damage is well sampled and measured. Also, have a good understanding of the expected 2019 revenue and cash flow is really important to ensure that net revenue is realized in the most efficient way possible.

The good news is that crop insurance prices are $261 for Concord and average yields are very high. Very few frost events in the last decade and long seasons have sustainably improved average yields. For example, expected area yield in Erie County, PA is 7.6 tons per acre.

Hopefully, crop insurance claims are quite minimal. For a lot of growers, the worst case scenario is a crop insurance payment of $1,500 per acre. This should cover more than double the cost of minimal care. My recommendation is to only reduce expenses slightly. Certain costs can definitely be reduced but overly aggressive cost cutting can increase expenses in 2022. Crop insurance payments are not tax friendly; it makes more sense to balance out practices and taxes.

Obvious places to reduce expenses, in chronological order, are nitrogen applications, phosphorus applications, foliar feeds, late season powdery mildew control and capital expenditures.

For the most part a frost should not significantly impact practices until June 1st. We have some time to do further assessment prior to modifying any practices. The cost savings associated with early season changes are not significant to the operations. Damage should be extensive and validated prior to making any changes in practices. High bud pruning counts is the best risk management strategy for spring frost. Minor frost damage with high bud counts may lead to average and above average crop size. These areas will need normal to high levels of care.
Bud Report

Well this article will come as no surprise to most of you, but Mother Nature has not been kind to us lately. It was looking like we were going to have an early season back in March, but then April’s cool temperatures slowed bud progression down. That just may have been a saving grace for some us.

Our region has suffered from two frost and freeze events. Growers were contacting me with low temperature all across the belt. One grower thought that his buds were fine on initial inspection, because they were firm on the cane, but it turns out they were just frozen solid. I have heard reports ranging from minor to severe damage. National Grape’s, Jim Joy sent me the following photo on Saturday. This could have been from the extreme low temperatures a few weeks ago, but it is a good shot to demonstrate a dead bud. The center is brown not vibrant green as a healthy bud would have. Other buds on the same cane as this one were healthy. Fingers crossed that the majority of our acreage is okay.

![Figure 1. Dead bud photo by Jim Joy](image)

Lake Erie is warmer than it was at this time last year, so hopefully the vineyards closer to the lake stayed a few degrees warmer. Looking at some of the vineyards in the region, many of the secondaries are already pushing indicating that they likely suffered a frost or freeze prior to yesterday. Time will tell. The forecasted warmer weather ahead will push the buds further and give us a better idea of where we stand.

The figures below are for the entire region. The first one is the Growing Degree Days and Precipitation from 1/1/2020 through 5/14/2020. Please note that the GDD corresponds with the legend bar closest to the figure and are indicated by circles. The Precipitation are the squiggly lines that correspond to the farthest legend bar. The second figure is the Differential in GDD and Precipitation compared to last year at this time.

Data Sources:

These reports aggregate data from Cornell’s Network for Environment and Weather Applications (NEWA) stations, Cornell’s Northeast Regional Climate Center’s (NRCC) high-resolution gridded weather database, forecast information from the National Oceanic and Atmospheric Administration (NOAA), and digital elevation models from United States Geographical Survey (USGS).
Listed below are regional resources and activities that are upcoming opportunities for you to learn and ask questions.

**Regional Resources & Activities (11 pesticide recertification credits available):**

- **(Upcoming) Seminar: Ensuring Personal Safety and Production Efficiency as Winery Operations Resume** | May-18

- **(Upcoming) Using Arbuscular Mycorrhizae in your Vineyard, Under-trellis Cover Crops** | Finger Lakes Virtual Tailgate Meeting | May-19

- **Insect management for grapes** | Lake Erie Virtual Coffee Pot Meeting | May-20 (1 DEC credit)


- **Early Season Disease Management** | Lake Erie Virtual Coffee Pot Meeting | May-27 (1 DEC credit)

- **Grape Berry Moth and Mealybug Management Tips** | Finger Lakes Virtual Tailgate Meeting | Jun-02

- **Spotted Lanternfly** | Lake Erie Virtual Coffee Pot Meeting | Jun-03 (1 DEC credit)

- **Open Topic, Questions From the Field** | Lake Erie Virtual Coffee Pot Meeting | Jun-10 (1 DEC credit)

- **Questions from the Field, Virtual Tailgate Meeting** | Finger Lakes Virtual Tailgate Meeting | Jun-16

- **Early Season Canopy Management/Under Trellis Floor Management** | Lake Erie Virtual Coffee Pot Meeting | Jun-17 (1 DEC credit)

- **Enology Discussion, Winemaking Issues** | Lake Erie Virtual Coffee Pot Meeting | Jun-24 (1 DEC credit)

- **Vineyard Establishment, Vineyard care in the first 3 years** | Finger Lakes Virtual Tailgate Meeting | Jun-30

- **Open Topic, Questions From the Field** | Lake Erie Virtual Coffee Pot Meeting | Jul-01 (1 DEC credit)

- **Open Topic, Questions From the Field** | Lake Erie Virtual Coffee Pot Meeting | Jul-08 (1 DEC credit)

- **Winemaking topic TBD** | Finger Lakes Virtual Tailgate Meeting | Jul-14

- **Labor Relations** | Lake Erie Virtual Coffee Pot Meeting | Jul-15 (1 DEC credit)

- **Open Topic, Questions From the Field** | Lake Erie Virtual Coffee Pot Meeting | Jul-22 (1 DEC credit)

- **Topic TBD** | Finger Lakes Virtual Tailgate Meeting | Jul-28

- **Weed Management** | Lake Erie Virtual Coffee Pot Meeting | Jul-29 (1 DEC credit)

- **Botrytis, Cluster/Sour Rot Management** | Finger Lakes Virtual Tailgate Meeting | Aug-11
Hand Sanitizer and Mask Available to Farmers

Cornell Cooperative Extension Chautauqua County is distributing free hand sanitizer and face masks. Sanitizer and face coverings from the NYS Department of Agriculture have been brought to Chautauqua County through a partnership with CCE Chautauqua and Chautauqua County department of Building and grounds.

Lake Erie Regional Grape Program is a distribution point at Cornell Lake Erie Research and Extension Laboratory in Portland.

CCE Chautauqua will distribute from the Jamestown Community College, Jamestown Campus Parking Lot.

Production farms of any type are welcome to come pick up supplies. These farms can include dairy, livestock, grapes, vegetables, farm stands, U-Pick, nursery, equine, and craft beverage. To sign up for your product please go to chautauqua.cce.cornell.edu/resources/hand-sanitizer-and-face-masks-request.

Supplies will be handed out at CLEREL; 6592 West Main Road; Portland, NY at the barn every Monday from 11:00 AM until 2:30 PM until supplies are exhausted.

Or

At Jamestown Community College Jamestown Campus Parking Lot, 525 Falconer Street, Monday, May 18, 11 am – 2:30 pm

Pallets of Hand Sanitizer in the CLEREL barn
In the Vineyard (5-14-20)

Concord grape buds haven’t moved a great deal since last week due to the cool - cold weather. However, according to the National Weather Service, daytime temperatures from today (5/14) – Monday (May 18) will be in the 60’s with a range of 50% - 80 % chance of precipitation every day but Saturday. Due to the warmer temperatures shoot growth should take off and quickly reach the 3” – 5” stage. Bryan Hed has talked about Phomopsis in Crop Updates since April 9th so my only comment is to, “Be prepared to apply a fungicide application for Phomopsis during the 3” – 5” shoot stage”.

Banded Grape Bug & Lygocorus inconspicuous - Insect pests that you should be scouting for in the vineyard at the 3” – 5” shoot stage that have the potential to cause economic crop loss include: Banded Grape Bug and Lygocorus inconspicuous. Nymphs of these insects emerge in the spring from overwintering eggs. Nymphs are small (1/8 -1/4 inch) and difficult to see in flower clusters. Banded grape bug nymphs are green with brown – black colored wing pads and antennae with alternating black and white segments (Figure 1). Lygocorus inconspicuous nymphs are light green (Figure 2). Both types of nymphs have piercing - sucking type mouthparts and feed on flower pedicels and florets in a cluster. Feeding can result in floret drop, reduced berry set and fewer clusters. Scout for these insects by examining flower clusters on a number of shoots in different areas in the vineyard. These insects are often found near vineyard edges and may not be widespread throughout the vineyard. Economic losses can occur when more than 1 nymph per 10 shoots are found. Insecticides listed in the 2020 New York and Pennsylvania Pest Management Guidelines for Grapes for management of these pests include: Sevin 80 Solupak, Danitol 2.4 EC, Imidan 70W, and Assail 30SG.
The extension team has scheduled Virtual Office Hours on Mondays from 10:00 AM to 12:00 PM and Thursdays from 1:30 PM to 3:30 PM. During these hours you can join the already in progress Zoom meeting for as long as you need to get some questions answered.

The team consists of Jennifer Phillips Russo, LERGP Viticulture Extension Specialist, Kevin Martin, Business Management Specialist, and Andy Muza, IPM Extension. The team is planning to continue to hold these meetings until we are able to meet face to face again. We encourage all grape growers with questions to come and ask! The growing season will not wait, and we know there will be questions.

To access these Zoom meetings with a PC, Mac, Linux, iOS or Android go to https://psu.zoom.us/j/8757764969. If using an iPhone one-tap (US Toll): +16468769923,8757764969# or +13126266799,8757764969#

Or to call in dial:
+1 646 876 9923 (US Toll)
+1 312 626 6799 (US Toll)
+1 669 900 6833 (US Toll)
+1 253 215 8782 (US Toll)
+1 301 715 8592 (US Toll)
+1 346 248 7799 (US Toll)
Meeting ID: 875 776 4969

International numbers available: https://psu.zoom.us/u/aWuWELGMj
Meeting ID: 875 776 4969
SIP: 8757764969@zoomcrc.com
All Natural Mowing?

The Vanden Heuvel viticulture research program at Cornell University is conducting a survey to determine grower perceptions of using sheep to mow/sucker in vineyards. The goal of the survey is to guide future research and extension efforts in this area. The survey is completely anonymous. You can complete the survey by clicking on this link: https://cornell.qualtrics.com/jfe/form/SV_80QjMVMgdqlqOOh

Please only complete the survey once for each vineyard operation. If you have any questions, please get in touch with Prof. Justine Vanden Heuvel directly (Justine@Cornell.edu).
**Weather:** At our site by the lake, we have accumulated 0.52” of rainfall and 14.8 growing degree days (gdds) during the first 13 days of May; very cold and dry. As of April 1, gdd accumulations stand at 43. Looking at a short-term forecast, there is rain predicted for Thursday, Friday, Sunday and Monday. Temperatures will still be below average, but it looks like we’ve had the last of the really cold weather (I hope). Although temperatures have dipped below freezing several times over the past week, I think most vineyards should come out of this with little or no damage; we just weren’t far enough along with shoot growth in most places. Unfortunately, this was not the case farther south in Pennsylvania, where below freezing temperatures, particularly on Saturday morning, caused serious damage to shoots in some vineyards.

**Phenology:** Here by the lake, Concord and Niagara buds are poised to reach 50% bud break… maybe today or tomorrow (5/15). Some of our very early varieties, like Jupiter (a table grape) have hit 50% budbreak, but just barely. Farther inland, buds are farther along, but not by much. Warmer weather from here on will likely result in the first rapid shoot growth over the next few days.

**Diseases:** According to NEWA, rain over the next two days will generate an infection period for Phomopsis and black rot. This will not likely be an issue just yet; buds are just breaking in most places. However, the first shoot growth may proceed quickly, bringing us to 3-5” shoots in no time. Be prepared to apply that early mancozeb spray to protect your inflorescences from Phomopsis. The weather may offer just a short window of opportunity to apply that spray; target first, your blocks most at risk. Developing clusters and shoot internodes/leaves are very susceptible and very close to inoculum sources (wood) and there is still plenty of inoculum in wood from previous seasons (particularly 2017). This is a tough target to get just right because we have but one shot at it, not to mention that the weather will almost never cooperate. **But our focus for this first fungicide application should always be minimizing cluster stem infections when they first become exposed and vulnerable to the pathogen.** And if the time is right, don’t let the forecast of rain stop you from making that application; mancozeb and captan are just protectants and the material has to be on the plant for it to do any good. Waiting until after the rain to make the application, will not protect your crop, as none of these materials have ‘reach back’ action.
Other links of interest:

**LERGP Web-site:**

**Cornell Cooperative Extension website:**

**Cornell CALS Veraison to Harvest Newsletter:**

**Efficient Vineyard:**

**Appellation Cornell Newsletter:**

---

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