Cornell Cooperative Extension
Lake Erie Regional Grape Program

PennState Extension

Crop Update - May 7, 2020

Spring is in full bloom with golden rows

In this Crop Update: Reminders for Important Events

- **Bud Progression-Jennifer Phillips Russo**
- **EIDL- Kevin Martin**
- **VIP Reminder- Kim Knappenberger**
- **PA Update- Bryan Hed**

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

We look forward to seeing you at
Virtual Office Hours & Coffee Pot Meetings

Gowan USA

GOWANCO.COM

Torino® FUNGICIDE

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

METTLE® 125 ME FUNGICIDE

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

Badge® SC Fungicide/Bactericide Badge® X2 Fungicide/Bactericide

OMRI LISTED

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

EcoSwing® BOTANICAL FUNGICIDE

OMRI LISTED

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

QUINTEC® FUNGICIDE

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

ISAGRO USA

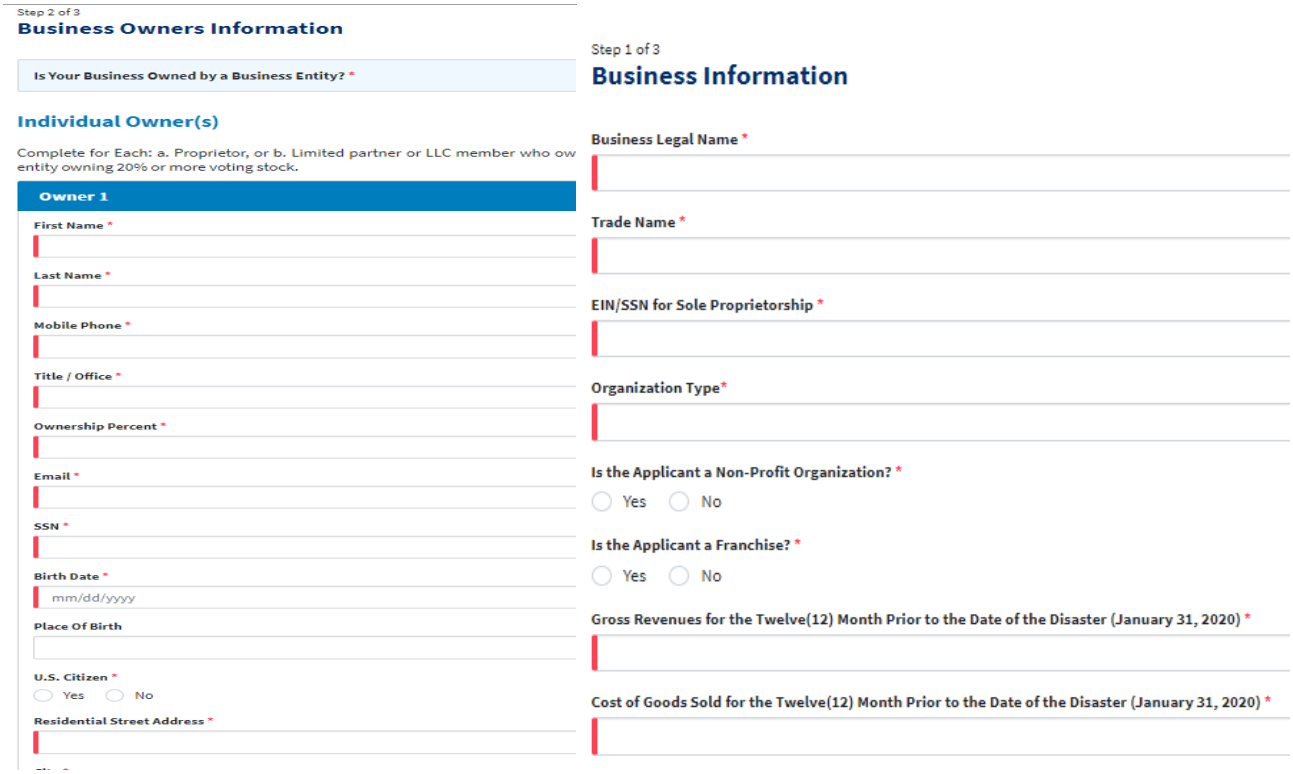
Gowan Company
800.883.1844

Business Management

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

Economic Injury Disaster Loan Emergency Advance

This program (EIDL) was opened up for agricultural businesses on Monday May 3rd. The application for the program is available at SBA.gov. It is quick and easy and many growers have reported getting an advance payment of up to $10,000 in three business days. Once an advanced payment is made the business is eligible for a low interest loan.



Step 2 of 3

Business Owners Information

Is Your Business Owned by a Business Entity? *

Individual Owner(s)

Complete for Each: a. Proprietor, or b. Limited partner or LLC member who ow entity owning 20% or more voting stock.

Owner 1

First Name *

Last Name *

Mobile Phone *

Title / Office *

Ownership Percent *

Email *

SSN *

Birth Date *

mm/dd/yyyy

Place Of Birth

U.S. Citizen *

Yes No

Residential Street Address *

Step 1 of 3

Business Information

Business Legal Name *

Trade Name *

EIN/SSN for Sole Proprietorship *

Organization Type*

Is the Applicant a Non-Profit Organization? *

Yes No

Is the Applicant a Franchise? *

Yes No

Gross Revenues for the Twelve(12) Month Prior to the Date of the Disaster (January 31, 2020) *

Cost of Goods Sold for the Twelve(12) Month Prior to the Date of the Disaster (January 31, 2020) *

ELIGIBLE ENTITY VERIFICATION

Choose One:

- Applicant is a business with not more than 500 employees.
- Applicant is an agricultural enterprise with not more than 500 employees.
- Applicant is an individual who operates under a sole proprietorship, with or without employees, or as an independent contractor.
- Applicant is a cooperative with not more than 500 employees.
- Applicant is an Employee Stock Ownership Plan (ESOP), as defined in 15 U.S.C. 632, with not more than 500 employees.
- Applicant is a tribal small business concern, as described in 15 U.S.C. 657a(b)(2)(C), with not more than 500 employees.
- Applicant is a business, including an agricultural cooperative, aquaculture enterprise, nursery, or producer cooperative (but excluding all other agricultural enterprises), with more than 500 employees that is small under SBA Size Standards found at https://www.sba.gov/size-standards.
- Applicant is a business with more than 500 employees that is small under SBA Size Standards found at https://www.sba.gov/size-standards.
- Applicant is a private non-profit organization that is a non-governmental agency or entity that currently has an effective ruling letter from the IRS granting tax exemption under sections 501(c),(d), or (e) of the Internal Revenue Code of 1954, or satisfactory evidence from the State that the non-revenue producing organization or entity is a non-profit one organized or doing business under State law, or a faith-based organization.

Terms of the loan are favorable. Interest rates are below 3%, and funds can be borrowed for 2 – 30 years. Loans over $25,000 must be collateralized. The ability to pay the loan back will also be assessed. Most businesses with more than 500 employees are not eligible for the program.

The screenshots show nearly all of the information required by the SBA for the advance. As long as the grower knows basic information like telephone number and address, the only remaining information can be found on a schedule F or similar tax return. Most agricultural producers do not track the cost of goods sold (COGS). If that is not tracked, just include all expenses from the 2019 Schedule F.

Viticulture

Jennifer Russo, Viticulture Extension Specialist, LERGP

photo 1. Concord buds at CLEREL on May 7, 2020

Bud Progression

I have had a few grower calls concerned with bud progression and impending cold temperatures. I can report the bud progression at CLEREL called 10% pink as of Saturday morning May 2, 2020. The photo of these Concord buds was taken today, May 7, 2020, at the station. The cooler temperatures have slowed the progression.

This progression stage puts our critical temperature range of 25-28 F. Some reports are calling for frost and snow. Dr. Terry Bates was asked how he felt frost effects the different stages of bud progression. He responded, "*All depends on tissue water content, freezing temps, and duration. The higher the water content of the tissue the more dilute the liquid will be, both inside and outside of the cell. Much of the shoot growth at this point is due to cell expansion from increasing water content. So, larger shoots should freeze at higher temps. Smaller shoots should have more "anti-freeze" (sugars and ions) in the liquid in the cell wall spaces.*
I hope the lake helps keep temps above freezing. Looks like we could get a couple nights of clear sky and low wind…. Clear, still nights with low dew point is where things will freeze more quickly."

Grapevines have the capacity to compensate for damage from the cold. In most cases, it takes from 24 to 48 hours to actually be able to visualize damage extent and at this stage that may not be visible. If you are concerned about your buds, cut some canes and put in water inside the house to push them and assess any bud damage.

CLEREL Local Weather Condition Update

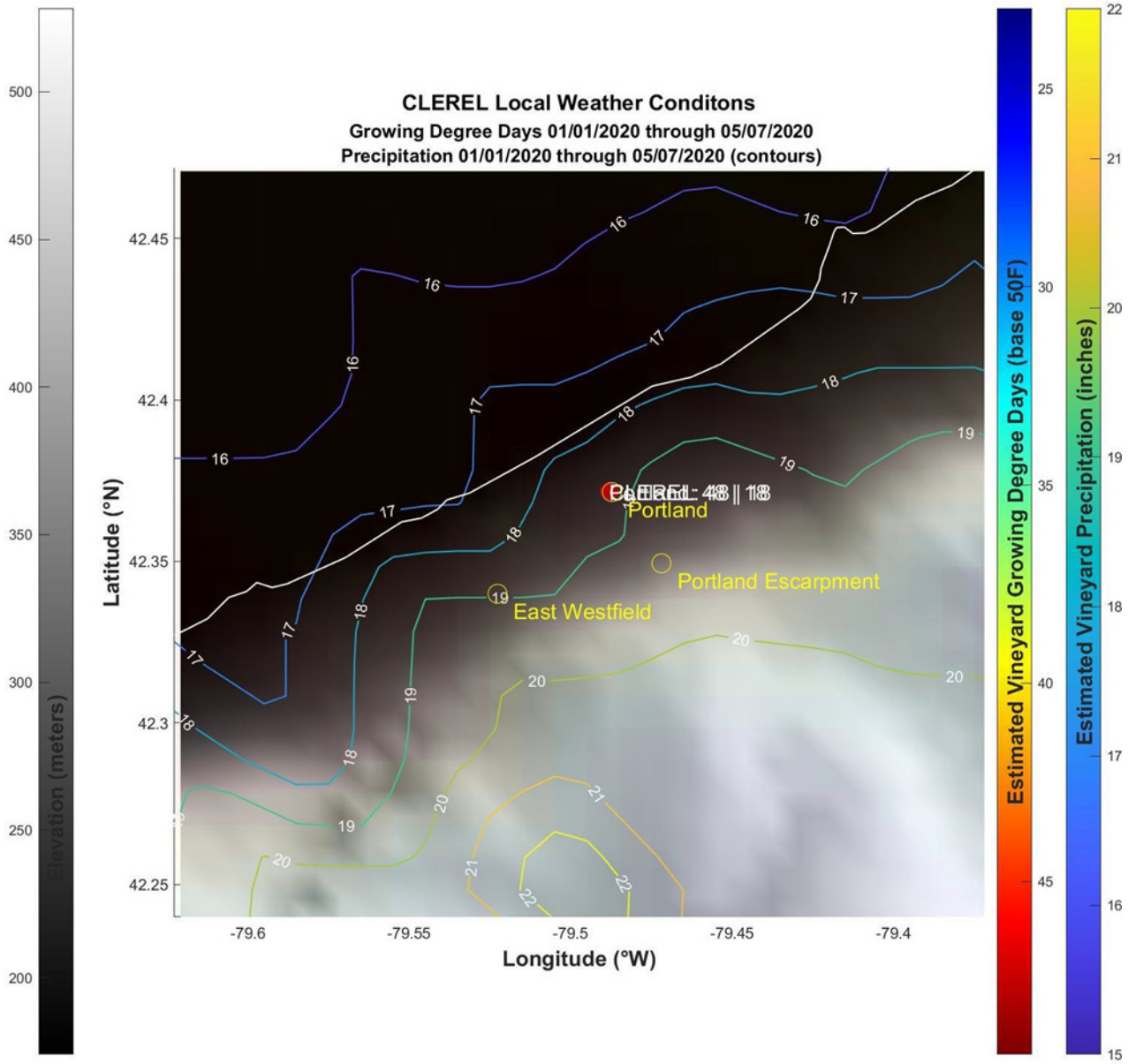


photo 2CLEREL Local Weather Conditions 1/1/2020 through 5/7/2020

NOAA's National Weather Service Forecast by 12 Hour Period

Notes: Weather forecasts are sourced from National Oceanic and Atmospheric Administration's (NOAA) National Weather Service.

National Weather Service Forecast (click to link)

NOAA's Disclaimer (click to link)

UTC Forecast Time: 2020-05-07T04:38:14-04:00
Today: A chance of showers, mainly after 4pm. Increasing clouds, with a high near 55. Southwest wind 6 to 16 mph, with gusts as high as 32 mph. Chance of precipitation is 30%. New precipitation amounts of less than a tenth of an inch possible.

Tonight: Mostly cloudy, with a low around 35. Northwest wind 3 to 8 mph.

Friday: A chance of showers, mainly after 11am. Mostly cloudy, with a high near 41. Northwest wind 8 to 14 mph. Chance of precipitation is 50%. New precipitation amounts of less than a tenth of an inch possible.

Friday Night: A chance of snow showers. Mostly cloudy, with a low around 31. Northwest wind 11 to 15 mph, with gusts as high as 25 mph. Chance of precipitation is 50%. New snow accumulation of less than a half inch possible.

Saturday: Snow showers likely before 4pm, then rain and snow showers likely. Mostly cloudy, with a high near 42. Breezy, with a northwest wind 18 to 25 mph, with gusts as high as 41 mph. Chance of precipitation is 60%. New precipitation amounts of less than a tenth of an inch possible.
Saturday Night: Rain likely, possibly mixed with snow showers before 7pm, then a chance of snow showers. Mostly cloudy, with a low around 36. Chance of precipitation is 60%. New precipitation amounts of less than a tenth of an inch possible.

Sunday: A chance of rain showers before 8am, then a chance of rain and snow showers between 8am and 10am, then a chance of rain showers after 10am. Partly sunny, with a high near 46. Chance of precipitation is 30%.

Sunday Night: A chance of showers. Mostly cloudy, with a low around 39. Chance of precipitation is 40%.

Historical Growing Degree Days (base 50)
Notes: Current season accumulation is reported as the thick blue line from January 1 through date of this report. Historical season data is reported between January 1 and December 31 of each year. The legend indicates how many GDDs had accumulated by the same date in previous years and the final total for the year on December 31.
Data is sourced from Cornell's Northeast Regional Climate Center (NRCC) high resolution gridded data service.

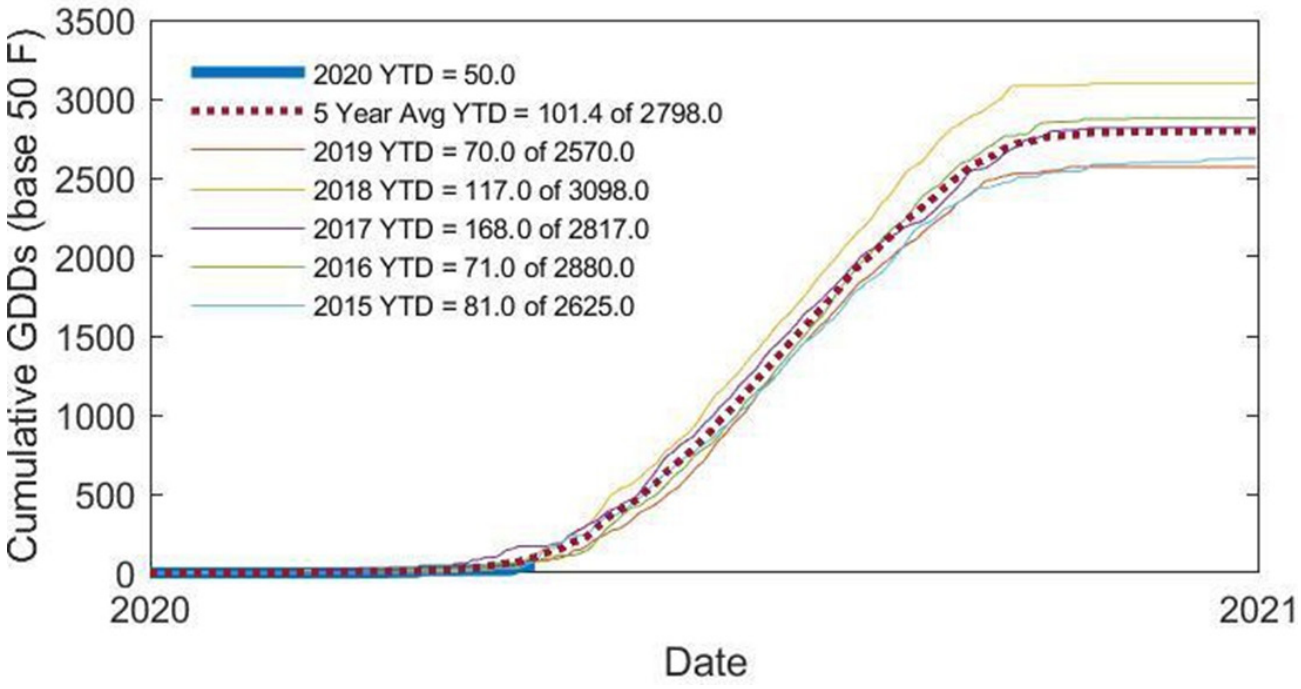


photo 3. Historical Growing Degree Days (base 50)

Per the above Cumulative GDDs graph, we are tracking behind the 5-year average.

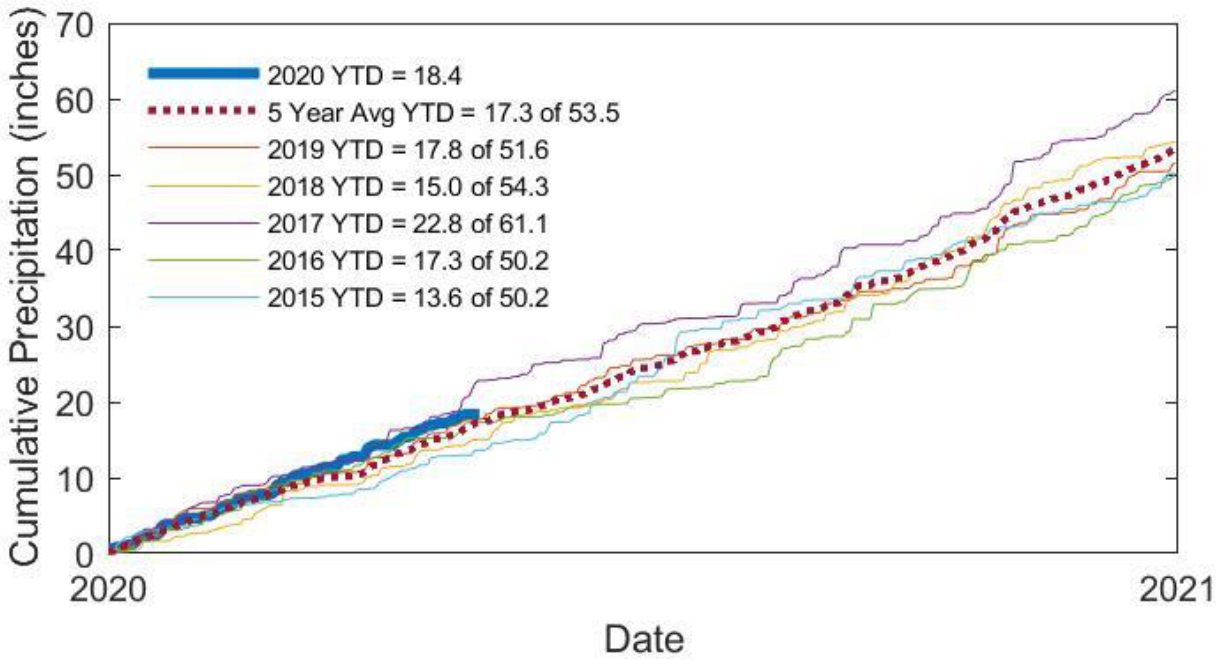


photo 4. Cumulative Precipitation (inches)

Historical Precipitation (inches)

In regards to 2020 cumulative precipitation, we are tracking higher than the 5-year average.

Notes: Current season accumulation is reported as the thick blue line from January 1 through date of this report. Historical season data is reported between January 1 and December 31 of each year. The legend indicates how many inches of precipitation had accumulated by the same date in previous years and the final total for the year on December 31. Data is sourced from Cornell's Northeast Regional Climate Center (NRCC) high resolution gridded data service.

Connect With Us!

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_80QJfMVgdqIqOOh

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).

Vineyard Improvement Program

Kimberly Knappenberger, Viticulture Assistant, LERGP

The Vineyard Improvement Program – Yes, It's still here!

If you have been considering taking advantage of this NYS Ag and Markets and The Southern Tier Agricultural Improvement Fund program, now is the time! This Vineyard Improvement Program grant is available to help with removal of unwanted Concord vineyards that can be replaced by another agricultural commodity. As you all know these things take time, so I would urge you to start this process if you have been thinking about doing it. There are a little under 3 ½ years left of the program unless the funds are depleted before then. The process allows for 1 year to get the removal completed after the contract has been established and then 2 more years to get the replant done. As you can see that brings us right about to the end of the timeline. Some of those participating in the program have been able to complete the replants in less time, but most have not.

If you are interested in seeing if this can benefit you please visit lergp.com/about-vip to learn more about it. You can also email Kim at ksk76@cornell.edu if you have questions. As a reminder this is for New York vineyards in the eligible regions. See the map on the website for details.

Figure 1. Yep, this is a vineyard!

PA Update

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

Weather: We have had just a trace of rainfall and only 14.8 growing degree days so far for the first week in May (cold and dry). The short-term forecast looks to be a continuation of cold temperatures for the next several days, delaying budbreak and early growth. It's just as well since we may see temperatures dip into the low 30s to upper 20s (depending on location) by the wee hours of Saturday morning, with a little bit of snow and rain added, just to make things a bit more miserable. Buds that haven't broken yet or have just broken should be able to withstand temperatures into the upper 20s without too much damage, but time will tell.

Phenology: What a difference a week *doesn't* make; there has been very little progress in grape development since last week. At our location, Somerset and Jupiter (our earliest table grape varieties) are at about 20-50% bud-break, having moved just a tad, but little else has changed.

Diseases: For disease management, little has changed and here's a repeat from last week. The first disease we should be concerned about in early May is **Phomopsis**. Early spring rains release spores of the Phomopsis fungus that emanate from cane lesions (from shoot infections that occurred last year) and from older and dead wood in the trellis (from infections that occurred two or more seasons ago). New shoots are vulnerable to infection just after shoot growth begins. Inflorescences are generally first vulnerable a little later at about 3" of shoot growth, when they first become exposed. That is why the first spray of mancozeb or captan for Phomopsis is generally timed to intercept that 3-5" shoot stage. But that's a ballpark figure. If you see a long, wet forecast timed to hit at 2" (like in 2017 when virtually every Concord vine in the belt was nailed with Phomopsis), you may want to at least try to cover your vineyards most at risk first. The same thing happened in 2018: rains at about 1-2" shoots left a new "crop" of Phomopsis lesions on the first couple of nodes/internodes because we were waiting for 3-5" again, before applying that first spray. So, keep an eye on the forecast. Prolonged wetting periods (which maximize the severity of infection periods), are what generally leave us with the worst outcome from this disease. However, when the rains hit before maximum exposure of inflorescences, most of the damage is observed as shoot lesions as opposed to cluster stem lesions, minimizing crop loss.

Now is a good time to practice using the NEWA website http://www.newa.cornell.edu/. If you click on a weather station nearest your vineyard, click on 'Pest forecasts', select 'Grape forecast models' then select 'grape diseases' from the scroll down list, and then click 'calculate', you'll see that the forecast over the next few days predicts an infection period for Phomopsis on May 1, due to the accumulated wetness starting on April 29th. This is too early for us to be concerned about since shoot growth has not begun yet. But, its good practice to get used to viewing the forecast models for grape diseases on NEWA. **Bottom Line:** Timing that first mancozeb spray is often a 'crap shoot', because the weather and timing of shoot growth almost NEVER cooperate. Financially you've got one shot with this spray. Check out the NEWA website and do the best you can protecting those inflorescences ($$) as the most important goal.

Other links of interest:

LERGP Web-site:

Cornell Cooperative Extension website:

Cornell CALS Veraison to Harvest Newsletter:

Efficient Vineyard:

Appellation Cornell Newsletter: