CROP UPDATE
May 13, 2021

Photo-Jennifer Phillips Russo

Cornell Cooperative Extension
Lake Erie Regional Grape Program
In this Crop Update:

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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.

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Coffee Pot Meetings

Coffee Pot meetings have been a staple of the extension work done by the Lake Erie Regional Grape Program. During these meetings researchers and extension associates come together with growers in a relaxed setting to share up to date information and advice on how to take care of the issues that arise in their vineyards. These meetings offer time for the growers to talk to each other and collaborate on what works and what doesn’t work in their experience. In addition, pesticide recertification credits are given for both New York and Pennsylvania growers.

In the past, we would coordinate with growers to have on-farm meetings with coffee and doughnuts providing personal interactions that I so miss. Obviously 2020 brought about challenges and opportunities for all, including how we gathered for these meetings. As of this 2021 growing season and COVID-19 regulations still changing our daily routines, the LERGP Coffee Pot series are, again, a virtual online platform using Zoom to meet with the growers. Although we don’t have the traditional coffee and doughnuts, attendees are able to hear from a wide array of specialists that can help solve some of the problems they are facing in their vineyards and still get credits!

As we all adapt to this changing lifestyle lately, the LERGP team has adapted our meeting times this season. We still meet every Wednesday in May, June, and July, but on the third Wednesday of each of those months we have decided to move the meeting from 7-9 PM to accommodate those of you who find it difficult to either leave the field or your day job at that time. This coming Wednesday, May 19th, 2021, is our first evening session. I bet some of our online attendees will get creative with their replacement of coffee and doughnuts.

Our first coffee pot of the year hosted a special guest speaker, Dr. Katie Gold, Wayne Wilcox’s replacement, and she did a fantastic job explaining her Grape Disease Control Spring 2021. A printable PDF version can be found here and we also sent it out in our last Newsletter. Also, if you missed that coffee pot and would like to watch the recording you can find it on our website www.lergp.com, under the cultural practices tab in the Virtual Coffee Pot Recordings section.

Yesterday’s meeting consisted of 33 attendees with lots of growers led discussions. It was a great meeting to be a part of, where growers were sharing their experiences with honeyvine milkweed, bindweed, and other pests. The discussion prompted me to email Dr. Lynn Sosnoskie, Cornell weed scientist, and ask questions on the fly. She quickly agreed to join LERGP for our podcast series, Between the Vines, to discuss items from grower requests and also asked to set up a meeting to come out and see the honeyvine milkweed to possibly set up trials for management. All of this stemmed from a grower question in an informal setting at our Coffee Pot Meeting. Please join us this coming Wednesday evening on the 19th, to discussion timely viticulture, business management, and Integrated Pest Management and visit with fellow growers to share experiences.

Please register at https://lergp.com/events/.
Bud and Shoot Development

We have been talking much about the freeze events that occurred in late April and very cold spells across the belt since then, especially in the Southwestern portion of the belt from Route 20 up to Sidehill Rd area. Andy Muza, Bryan Hed, and I visited many of those vineyards the first week after and noticed substantial freeze injury in some locations and variable injury in others. The damage has mostly affected Concord grapes because other varieties were, thankfully, not as far along in their bud progression.

The weather cooled back down to seasonal temperatures with GDDs stalling at Portland from May 4th until yesterday May 11th. This change in the weather has seemingly slowed down the shoot and secondary/tertiary bud progression. Some of the vineyards blocks that I revisited did progress, however not by much. We are still in a situation where time will tell just how much freeze damage, if any, your blocks may have endured. Some of the blocks that I have been to the primary shoots just look off. The leaves are not crunch and brown but appear a bit yellow-green and not flattening out. The forecast predicts warmer temperatures that will increase GDDs and promote growth, so time will tell. Some blocks are definitely in the important 3-5-inch phenological stage and sprayers have been out. Please be sure not to change your potential nutrition and spray programing until you are absolutely certain that your blocks have experienced heavy freeze damage. Check out our last couple of LERGP weekly Between the Vines podcasts and video blogs for more information on the freeze damage from our specialists.

NOAA’s National Weather Service Forecast by 12 Hour Period for Portland, NY

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: 2021-05-13T05:37:24+00:00

Thursday: Sunny, with a high near 58. Southwest wind 5 to 12 mph.
Thursday Night: Clear, with a low around 43. Southwest wind 5 to 8 mph.
Friday: Sunny, with a high near 63. Southwest wind 5 to 9 mph.

Friday Night: Mostly clear, with a low around 46. Southwest wind around 9 mph.

Saturday: Sunny, with a high near 62.

Saturday Night: Mostly clear, with a low around 47.

Sunday: Mostly sunny, with a high near 65.

Sunday Night: Partly cloudy, with a low around 50.

Monday: A chance of rain showers after 8am. Mostly cloudy, with a high near 65. Chance of precipitation is 30%.

**Historical Growing Degree Days (base 50) Portland, NY**

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.

In Figure 1. below, the 2021 growing season GDDs are represented by the thick blue line. They have decreased a bit from last week to 133.0 GDDs but are still registering above the historical five-year average of 112.0 GDDs on this date (note the dotted line). As of today, we are tracking the closest to 2018 (the thin purple line) where the GDDs for May 13th that year was 152.0.

![Figure 1. Cornell Lake Erie Research and Extension Laboratory’s Historical Growing Degree Days (base 50)](image-url)
Historical Precipitation (inches) for Portland, NY

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.

In Figure 2. below, the 2021 growing season precipitation in inches are represented by the thick blue line. The Cornell Lake Erie Research and Extension Laboratory in Portland, NY is still tracking much lower in overall precipitation than any of the last five years. CLEREL has registered only 11.4 inches since January 1, 2021. The five-year average for CLEREL on this date (the dotted line) is 18.9 inches. As of today, we are tracking the closest to 2018 (the thin purple line) where CLEREL had registered 16.4 inches accumulation on this date of May 13th, a difference of 5 inches.

Figure 2. Cornell Lake Erie Research and Extension Laboratory's Historical Precipitation in Inches
In last week’s Crop Update (5/6/21) I reported on freeze/frost injury in vineyard blocks in Erie County, PA from Rt. 5 to south of I-90. I revisited many of these same sites this week to check on shoot progression. With average daily temperatures in the 40’s across the region this past week, shoot movement has been slow.

In vineyard blocks (from Rt. 5 to midway to Rt.20), shoot lengths ranged from 2” – 4” (Figure 1) and there was minimal injury in these areas. Vineyard blocks (just south of Rt. 20 to midway to Sidehill road) were still stalled at last week’s shoot lengths, between 1.5”– 3.5”. Shoots in these areas are alive but have a light green - yellowish coloration and exhibit variable degrees of leaf injury (Figure 2).

Figure 1. Concord Shoot (3” length). Photo – Andy Muza, Penn State.

Figure 2. Leaf injury on young Concord shoot due to low temperatures. Photo – Andy Muza, Penn State.

According to the National Weather Service, daytime temperatures from today through next Monday will be in the low to upper 60’s and on Tuesday and Wednesday may reach 70 degrees. Since there is a chance of showers on Monday and Tuesday, a fungicide application is advised before the rain, in vineyard blocks where shoot lengths are at 3” - 5”, to prevent Phomopsis infections.

Vineyard blocks (around Sidehill road and up the escarpment), that I checked, had dead primary buds ranging from 88% - 94%. Secondary buds in this area are at bud swell – 1” range (Figure 3). (on next page)
Figure 3. Dead primary and 1” secondary shoot (Concord). Photo – Andy Muza, Penn State.
Weather: At our site by the lake, we have accumulated just 1.07" of rainfall and 30.9 growing degree days (gdds) during the first 12 days of May; cold and dry. As of April 1, gdd accumulations stand at 128. The short-term forecast looks relatively dry through the weekend, but there is a 50 and 30% chance of rain predicted for Monday and Tuesday, respectively, next week. Temperatures over the next several days will remain a little below average.

Phenology: We started out this season with 50% bud break about 3 weeks ahead of last year. Ice cold conditions during the first half of May have cut that lead in half and shoot growth has been put on hold. In fact, we had more than twice as many gdds during the first 12 days of April (69.7), as we’ve had in the first 12 days of May (30.9). After an early bud break, the 3 weeks that followed have only resulted in about 2” of shoot growth on Concord vines here by the lake. Farther inland, shoots are farther along, but not by much, and primaries that survived the frosts we’ve had, are struggling to recover and resume growth.

Diseases: According to NEWA, a Phomopsis infection period occurred on May 3-4. This infection period may lead to the development of lesions on internodes 1 and 2 of some shoots. Wetting periods on May 7 and 9 appear to have occurred at temperatures too low for Phomopsis, according to the model. Currently, shoot growth in much of the belt is poised to enter that 3-5” stage - which is likely to occur in time for rains on Monday/Tuesday of next week - as we finally begin to resume growing degree day accumulations today. We recommend a mancozeb or captan application to protect inflorescences from damage from Phomopsis. Target first, your blocks most at risk. Developing clusters and shoot internodes/leaves are very susceptible and very close to inoculum sources (wood) at this time. You don’t have to apply full rates or high gallonage at this spray. For example, 2-3 lbs of a mancozeb formulation in 30-40 gallons/acre is probably sufficient at this time. Good coverage while minimizing runoff onto the ground is the key. Our focus for this first fungicide application should be to minimize cluster stem infections when inflorescences first become exposed and vulnerable to the pathogen at around 3-5” of shoot growth.
Information for you
Kate Robinson, Administrative Assistant, LERGP

2021 Coffee Pot Meeting Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Meeting #</th>
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<tr>
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<td>10:00</td>
<td>2021 LERGP Coffee Pot Meeting #1</td>
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Registration Requirements- Please Read!

To receive DEC and PDA pesticide credits, you are required to register for each of the coffee pot meetings you plan to attend. You do this at the LERGP web-site.

Choose the coffee pot meeting you would like to attend-
Click on “view details”
Click on “Register for this event now”
Then send a copy of your pesticide license to kjr45@cornell.edu, In the e-mail include your Date of Birth. This step only needs to be done one time, but continue to register for subsequent meetings.

Registration is open until 8:00am the day of morning meetings and 4:00pm on evening meetings.
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)