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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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Business Management

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

Pruning Labor Market

Looking back at pruning season it seems clear that the market for labor was even tighter than prior years. A greater volume of renewal work extended into June this year. Anecdotally costs were up in PA. Recent legislation in NY has driven total costs up more sharply.

Reviewing farm payrolls in NY showed total average pruning costs at 42.5 cents per vine and renewal costs at 16.1 cents per vine. Pruning costs were up more significantly, renewal speeds must have increased to partially compensate for higher hourly rates. Data indicated that overtime rules did very modestly increase costs. Overtime payments were made for day of rest work. Laborers rarely exceeded 60 hours per week. An overtime threshold of 40-50 hours per week would have had a significant impact without additional management strategies.

Higher minimum wages are perhaps to blame for the majority of cost increases. This is somewhat speculative, as we do not know for sure if the short supply of labor or minimum wage are driving these higher prices.

For growers new to paying into unemployment insurance, this represents the next largest cost. More than half of growers report seasonal labor taking advantage of unemployment insurance. Use of the insurance will result in a higher cost over time.

Despite the additional, unseen costs of pruning, the decision to transition remains complex. The biggest disadvantage of hand pruning is not yet the actual cost. It is the risk of a labor shortage at a critical time. Some growers can make the switch entirely. Full-time employees handle hand follow-up and renewals. Others still rely on traditional migrant labor. Mechanized pruning can make the recruitment for these employees challenging. Building relationships and increasing rates of pay before a transition may be prudent.

After local unemployment rates went temporarily crazy last year, they've all fallen to levels very close to historical averages. With unemployment at 6.3% in the Lake Erie Region, it still remains higher than the extremely low levels seen just before the beginning of the Covid-19 pandemic. Workforce size is down, so despite that higher unemployment rate it is not likely high enough to make recruiting additional labor easy. I would expect to see higher prices for all forms of farm labor, not just pruning.

This year the growth in mechanization continues. Manufacturers of machine pruners report a steady growth in demand. As it has been for the past three years, prices for mechanized pruning are slightly less than hand pruning. The least costly option typically includes hand follow-up if grapes are expected to meet brix standards. The use of machine pruners has increased in variability. The purchase or construction of a machine no longer guarantees a farm's transition to mechanization. Phasing in a practice can be useful to minimize risk. Be sure, though, to evaluate farm size relative to the investment. Leasing or contract work can also be a practical way for less acreage to transition to mechanization.

Viticulture

Jennifer Russo, Viticulture Extension Specialist, LERGP

NOAA's National Weather Service Forecast by 12 Hour Period at the Cornell Lake Erie Research and Extension Laboratory

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)

Overnight: A chance of rain showers and patchy fog. Cloudy, with a low around 67. West wind around 6 mph. Chance of precipitation is 30%. New rainfall amounts less than a tenth of an inch possible.

Thursday: A chance of rain showers and patchy fog before 8am, then patchy fog and a slight chance of rain showers between 8am and 2pm, then a chance of showers and thunderstorms. Mostly cloudy, with a high near 74. West wind 3 to 9 mph. Chance of precipitation is 50%. New rainfall amounts between a tenth and guarter of an inch possible.

Thursday Night: A chance of showers and thunderstorms. Mostly cloudy, with a low around 61. Northwest wind 6 to 9 mph. Chance of precipitation is 50%. New rainfall amounts less than a tenth of an inch possible.

Friday: Rain showers likely before 2pm, then showers and thunderstorms likely. Partly sunny, with a high near 71. North wind around 10 mph. Chance of precipitation is 60%. New rainfall amounts between a tenth and quarter of an inch possible.

Friday Night: Showers and thunderstorms likely. Partly cloudy, with a low around 61. North wind around 8 mph. Chance of precipitation is 60%. New rainfall amounts between a tenth and quarter of an inch possible.

Saturday: A chance of rain showers. Mostly sunny, with a high near 74. Chance of precipitation is 30%. New rainfall amounts less than a tenth of an inch possible.

Saturday Night: A chance of rain showers before 2am. Partly cloudy, with a low around 63. Chance of precipitation is 30%. Independence Day: Sunny, with a high near 80.

Sunday Night: Partly cloudy, with a low around 68.

Monday: A slight chance of showers and thunderstorms after 2pm. Mostly sunny, with a high near 85.

<u>Historical Growing Degree Days (base 50)</u>

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.

The cumulative GDDs for Portland, NY as of July 1, 2021 are 898, which is 68.4 GDDs higher than the five-year average of 829.6 (Figure.1). This year, thus far, is tracking closest to 2017 on this date.

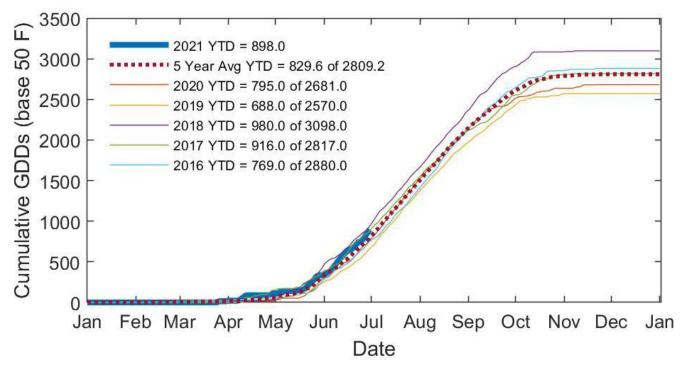


Figure 1. Cornell Lake Erie Research and Extension Laboratory Historical Growing Degree Days (base 50) in Portland, NY

<u>Historical Precipitation (inches)</u>

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 cumulative precipitation in inches from January 1, 2021 for CLEREL in Portland, NY is 16.1 denoted by the thick blue line on the graph. Compared to the past five-year average of 24.7 inches by July 1, 2021, this year is behind by 8.6 inches. Also, the year 2016 had the least amount of precipitation totaling 20.5 inches by July 1, and 2021 is 4.4 inches behind last place. If you have not terminated cover crop or weed competition for water, it is critical that you do so.

Crop Estimation Preparation

Cornell Lake Erie Research and Extension Laboratory (CLEREL) officially called Concord bloom on June 7, 2021. Dr. Terry Bates research on Concord berry development determined that at 30 Days After Bloom (DAB) berries reach approximately 50% of their final fresh weight. That means that July 7th our crews will be out taking crop estimation in our blocks at CLEREL. Hopefully you recorded the bloom date for your vineyard blocks and crop estimation should be on your radar. Estimating your crop is essential to help make decisions for both the grower and the processor. Terry was our guest speaker at the June 23, 2021 Coffee Pot Meeting and mentioned using the MyEV Data Collector Tool to guide you in your crop estimation efforts. Uses this tool, you can walk your vineyards and make not of where the crop is heavy and where it is lighter then visualizing it on a map. That map can guide your sampling efforts to capture the variation and improve your crop

estimation as accurately as possible. Here is a link to Terry's blog post on <u>Assess Your Freeze</u> <u>Damage with a MyEV data Collector</u>.

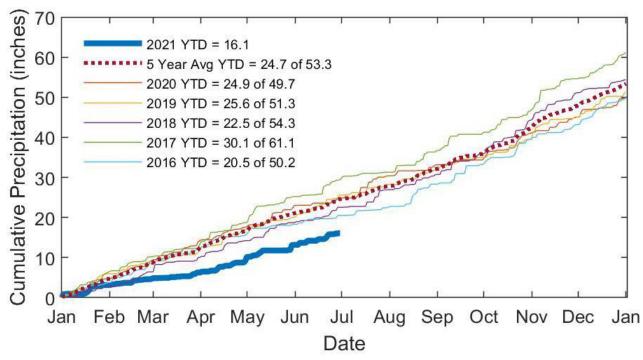


Figure 2. Cornell Lake Erie Research and Extension Laboratory in Portland, NY Cumulative Precipitation and Five-year Average in inches.

The same concept may be applied to crop estimation. If you were unfortunate to experience frost/ freeze damage this season, you will also need to conduct crop estimation in those blocks to get a better idea of all of your representative blocks. Below is our guidance on how to do crop estimation and the Crop Estimation Guide to help in your preparations:

Bloom date and days after bloom:

This system is based on bloom date, and in order to be accurate you need to know when your grapes were at 50% bloom. The 50-year average date for 50% bloom is June 14th. Count off starting at your bloom date and accrue the respective days-after-bloom (DAB). On the chart the DAB is found in the shaded "Time of Season" and not to be confused with "% of Final Berry Weight" directly below.

Row Spacing:

Like bloom date, you need to know your vine spacing. Row spacing determines the length of a row that will equal 1/100th of an acre. The wider the row, the shorter the sampling length. For example, sampling a block with a 10' row you will need to clean pick 45.9 feet. If your rows are at 7.5' spacing, you need to clean pick 58.1 feet. If you have 9-foot row spacing and your panels are at 24 feet then this should be easy. However, it is best to determine your row spacing and cut a length of rope to guide your sampling lengths rather than rely on post lengths that have been changed out over the years.

Sampling:

Once the row spacing and sample distance is calculated, clean pick and weigh the samples. The more samples you take, the better your prediction will be. It also helps to take samples from areas of known variation across the vineyard. For example, take 2-3 samples from high vigor, medium vigor, and low vigor sections of the vineyard and apply your predictions appropriately to those sections. If you are using a harvester to clean pick panels walk behind afterwards to assess how



Length of rope used to guide harvester on distance of sample (determined by row width).

many grapes are still on the vine/or that are on the ground.

Using the Chart:

Once you have the sample, the chart does the rest of the work for you. Follow the corresponding DAB down and the respective weight over and you have the estimated tons/acre at harvest. For example, let's say it's July 7th or 40 DAB (bloom on June 7th) and the average from 4 samples weighs 100 pounds. I would have an estimated 8.3 tons/acre potential crop.

Things to keep in mind:

If you have an accurate bloom date for your vineyard, follow the crop estimation chart to predict final harvest weight. If you're not and you are using the actual berry weight samples to come up with your multiplication factor, be reasonable in what you think your final berry weight will be. Some vineyards tend to have smaller average weights and

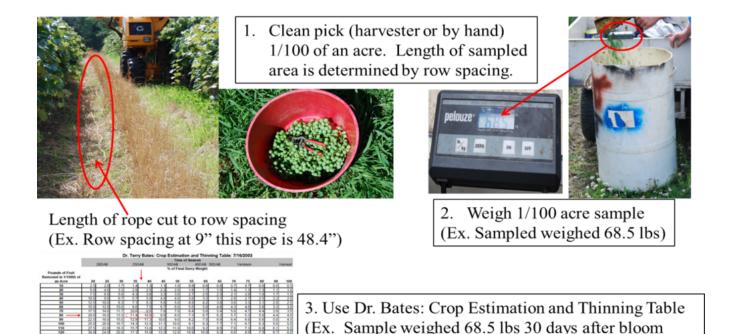
some tend to be larger – and you should be starting to get an idea where your vineyard fits. Be reasonable – it is unlikely (highly unlikely) that your Concord vineyard will average 4.0g berries at harvest even if your 30 DAB weight was 2.0 g.

Getting it right is important. Underestimating crop potential can lead to delayed harvest waiting for the grape to ripen and the BRIX to rise. Overestimating a crop load may result in unwanted thinning or unnecessary expensive chemicals being used to care for a crop that is not there. Having an accurate crop estimation can help you make many cultural practice decisions thought the rest of the season. The following is a break-down of the process.

Crop estimating at 30 DAB for 'Concords' is common for most growers. When the berries are at 50% of the final berry weight (like the example shown above) all you needed to do for final estimation is shift the decimal point over one place. However, the estimation table will work throughout the season. One thing to keep in mind when using the chart is to double check you are using time of season (DAB) in the shaded area to match up the column below.

Crop Estimation Protocol

Collecting a little bit of information from the vineyard during the growing season can greatly improve your prediction of final yields with better accuracy than the eyeball method. Know your Bloom Date. Calculate how many vines equate to 1/100th of an acre (use the Table on the back) and Days After Bloom (DAB).



weight)

estimation table show 6.85 tons/acre at final berry

photo 2. Step-by-step pictures of crop estimation process

Yield Components

Information you need to collect for an accurate crop estimate include:

- 1. Vines per acre (real count, not an estimate)
- 2. Spatial Maps if Available to direct sample collection
- 3. Know how many Days After Bloom when samples were taken
- 4. Average lbs fruit per vine
- 5. Provided Concord Crop Estimation Table

The math is easy:

vines per acre x lbs of fruit per vine x multiplier (2 if 30 DAB)/2,000 (convert tons) = yield per acre

Example: Concord planted

- Vines per acre. If the number is not known already, simply multiply the distance between the vines by the distance between the rows, then divide 43,560 (number of square feet in an acre) by that number to get the number of vines per acre. In 6' x 9' row spacing (9x8 = 72); 43,560/72 = 605
- Clusters per vine. 30 DAB collect and count the clusters on samples from areas of known variation across the vineyard. For example, take 2-3 samples from high vigor, medium vigor, and low vigor sections of the vineyard and apply your predictions appropriately to those sections, spatial maps can direct you to management zones. Calculate the average number of clusters per vine based on these counts. If you are using a harvester to clean pick panels walk behind afterwards to assess how many grapes are still on the vine/or that are on the ground. Let's say 50 clusters per vine.
- Average cluster weight. Weigh each sample taken above, be sure to subtract the weight

of the bucket or bin used from total weight. Let's say our average sample weight is 4.134 lbs. Divide by 50 clusters = 0.08lbs/cluster

Let's Do the Math:

vines per acre (807) x clusters per vine (50) x 30 DAB ave. cluster weight (0.08lbs) x 2 = $807 \times 50 \times 0.08 \times 2 = 6,456$ lbs/acre (2,000 lbs/ton)

Crop Estimation is 3.23 tons/acre

Other Cultivars: clusters per vine x vines per acre x lag phase cluster weight x multiplier = yield per acre

Mechanical Crop Estimation

Like bloom date, you need to know your vine spacing. Row spacing determines the length of a row that will equal 1/100th of an acre. The wider the row, the shorter the sampling length. For example, sampling a block with a 10' row you will need to clean pick 45.9 feet. If your rows are at 7.5' spacing, you need to clean pick 58.1 feet. If you have 9-foot row spacing and your panels are at 24 feet then this should be easy. However, it is best to determine your row spacing and cut a length of rope to guide your sampling lengths rather than rely on post lengths that have been changed out over the years.

Sampling:

Once the row spacing and sample distance is calculated, clean pick and weigh the samples. The more samples you take, the better your prediction will be. It also helps to take samples from areas of known variation across the vineyard. For example, take 2-3 samples from high vigor, medium vigor, and low vigor sections of the vineyard and apply your predictions appropriately to those sections. If you are using a harvester to clean pick panels walk behind afterwards to assess how many grapes are still on the vine/or that are on the ground.

Using the Chart:

Once you have the sample, the chart does the rest of the work for you. Follow the corresponding DAB down and the respective weight over and you have the estimated tons/acre at harvest. For example, let's say it's July 25th or 40 DAB (bloom on June 15th) and the average from 4 samples weighs 100 pounds. I would have an estimated 8.3 tons/acre potential crop.



Dr. Terry Bates: Crop Estimation and Thinning Table: 7/16/2003 Time of Season 20DAB 25DAB 30DAB 40DAB 50DAB Veraison Harvest % of Final Berry Weight Pounds of Fruit Removed in 1/100th of 100 an Acre 35 2.5 2.0 1.0 0.9 8.0 0.7 0.6 0.5 10 1.7 1.4 20 5.0 4.0 3.3 2.9 2.5 2.2 2.0 1.8 1.7 1.5 1.4 1.3 1.3 1.1 1.0 30 7.56.0 5.0 4.3 3.8 3.3 3.0 2.7 2.5 2.3 2.1 2.0 1.9 1.7 1.5 40 10.0 8.0 6.7 5.0 4.0 3.6 3.3 3.1 2.5 2.0 50 12.5 10.0 8.3 7.1 6.3 5.6 5.0 4.5 4.2 3.8 3.6 3.3 3.1 2.8 2.5 6.7 5.5 4.6 60 86 7.5 6.0 5.0 4.0 3.0 15.0 12.0 10 0 43 3.8 3.3 70 17.5 14.0 11.7 10.0 8.8 7.8 7.0 6.4 5.8 5.4 5.0 4.7 4.4 3.5 80 20.0 16.0 13.3 11.4 10.0 8.9 8.0 7.3 6.7 6.2 5.7 5.3 5.0 4.0 8.2 5.6 4.5 90 22.5 15.0 12.9 10.0 9.0 7.5 6.4 6.0 5.0 18.0 11.3 6.9 7.7 100 25.0 20.0 16.7 14.3 12.5 11.1 10.0 9.1 8.3 7.1 6.7 6.3 5.0 110 27.5 22.0 18.3 15.7 13.8 12.2 11.0 10.0 9.2 8.5 7.9 7.3 6.9 6.1 5.5 120 30.0 20.0 17.1 15.0 10.9 10.0 92 8.6 8.0 7.5 6.0 24.0 13.3 12.0 6.7 130 32.5 26.0 21.7 18.6 16.3 14.4 13.0 11.8 10.8 10.0 9.3 8.7 8.1 7.2 6.5 140 35.0 28.0 23.3 20.0 17.5 15.6 14.0 12.7 11.7 10.8 10.0 9.3 8.8 7.8 7.0 37.5 25.0 9.4 7.5 30.0 18.8 16.7 15.0 13.6 12.5 10.7 10.0 8.3 150 21.4 11.5 32.0 26.7 22.9 160 40.0 20.0 17.8 16.0 14.5 13.3 12.3 11.4 10.7 10.0 8.9 8.0 42.5 34.0 28.3 24.3 21.3 18.9 17.0 15.5 14.2 13.1 12.1 10.6 8.5 170 11.3 45.0 36.0 30.0 25.7 22.5 20.0 16.4 15.0 12.9 10.0 9.0 180 18.0 13.8 12.0 11.3 27.1 23.8 47.5 38.0 31.7 21.1 190 19.0 17.3 15.8 14.6 13.6 12.7 11 9 10.6 9.5 50.0 33.3 25.0 22.2 10.0 40.0 Row Spacing determines length of 1/100th of an acre 10.0 feet row spacing = 43.5 feet = 1/100th of an acre A grower has 9 foot row spacing and clean picks 48.4 feet at 25 days after bloom. 9.5 feet = 45.9 feet = 1/100th of an acre The fruit weighs 80 pounds and the grower estimates that the berries are between 9.0 feet = 48.4 feet = 1/100th of an acre 35% and 40% of final berry weight. According to the table, the crop estimate is 8.5 feet = 51.2 feet = 1/100th of an acre between 10.0 and 11.4 tons per acre. 8.0 feet = 54.45 feet = 1/100th of an acre 7.5 feet = 58.1 feet = 1/100th of an acre Disclaimer: This table gives the relationship between time of season and % final berry weight on an average year. Year to year variability in weather related berry growth adds error to Calculation 43, 560 square feet per acre this table. Information on current year berry growth can be obtained from the Fredonia Vineyard Lab (or) it is strongly suggested that individual growers start Divide by row spacing and then collecting berry weight information from their own individual vineyard blocks. divide by 100 to get 1/100th of an acre

Figure 3. Dr. Terry Bates Concord Crop Estimation and Thinning Table 7/16/2003

Phenological Resources:

- Grape Disease Control, Spring 2021 | Katie Gold, Cornell University
- Enterprise Tool for Eastern US Small Vineyard Management | Cornell University
- Spotted lanternfly experts debunk myths about the prodigious, pestilent pest | Amy Duke, Pennsylvania State University







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PA Update

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

In the Vineyard (7 -1- 21) -

Grape Berry Moth (GBM) - Time to spray for High Risk sites

This week (6/28-29) while scouting, I concentrated on looking for GBM eggs at a few High Risk sites in both North East and Lake City, PA. At 2 of these sites, that consistently have high GBM population levels, I examined 100 clusters/site for eggs. Eggs were found on only 2-3% of the clusters at this time (Figure 1). However, eggs are very difficult to see, especially in field evaluations, so undoubtedly many eggs were not detected. At NEWA stations closest to these sites, the accumulated GBM degree days were 728 and 735 on the days that clusters were examined. According to the Table of NEWA stations around the Lake Erie Region (provided by Kim Knappenberger), 810 DD are expected to be reached today (July 1) – July 6 for all stations (except Sheridan). The GBM Model states that, "Females are active and egg-laying is at its peak. Control measures should be timed to coincide with 810 DD in high risk vineyards. For materials that must be ingested, e.g. Intrepid, Altacor (also Delegate and Verdepryn), it is important to get materials on as close to 810 DD as possible. For low and intermediate risk vineyards, scout between 750-800 DD for damage and apply control measures, timed to coincide with 810 DD, if more than 6% damaged clusters are found." "For materials that are contact insecticides, e.g. pyrethroids and carbamates, apply between 811 and 900 DD."



Figure 1. Grape berry moth egg on Concord berry. Photo – Andy Muza, Penn State.

NEWA location	Wild Grape Bloom date*	GBM GDD total for 6/30/2021	Date expected to hit 810
Ransomville	5/31/2021	710	7/5/2021
Burt	6/6/2021	586	(not on chart)
Corwin	6/2/2021	679	7/6/2021
Brant	6/1/2021	713	7/5/2021
Versailles	6/1/2021	683	7/6/2021
Hanover	6/2/2021	682	7/6/2021
Sheridan	5/22/2021	884	6/27/2021
Silver Creek	6/3/2021	658	7/7/2021
Silver Creek Double A	5/26/2021	777	7/2/2021
Dunkirk Airport	5/29/2021	747	7/3/2021
Forestville	5/27/2021	730	7/4/2021
East Fredonia	5/31/2021	695	7/5/2021
Fredonia	6/2/2021	667	7/6/2021
Brocton Escarpment	5/31/2021	694	7/6/2021
Portland Escarpment	5/30/2021	708	7/5/2021
Portland	6/1/2021	692	7/6/2021
Portland (LERGP West)	5/29/2021	738	7/4/2021
East Westfield	6/1/2021	686	7/6/2021
Westfield	6/2/2021	678	7/6/2021
Ripley	5/27/2021	735	7/4/2021
Ripley Escarpment	5/26/2021	748	7/3/2021
Ripley State Line	5/26/2021	759	7/3/2021
North East State Line	5/26/2021	730	7/5/2021
North East Sidehill	5/25/2021	773	7/2/2021
North East Lab	5/26/2021	773	7/2/2021
Harborcreek	5/26/2021	789	7/1/2021
Harborcreek Escarpment	5/30/2021	675	7/6/2021
Lake City	5/26/2021	762	7/3/2021
*Estimated date provided by NEWA website			

PA Update

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

Weather: At our location by the lake, June finished up a little drier and much warmer than average with 2.86 inches of precipitation and about 635 growing degree days (gdds). Our precipitation since April 1 is about 3" below our 20 year average. We have accumulated about 1003.3 growing degree days since April 1, way ahead of our 20 year average.

Phenology and Diseases: We are currently at about 3 weeks past the end of bloom and Concord/ Niagara berries should be resistant to powdery mildew. Recent rain has generated infection periods for downy mildew, black rot, and Phomopsis. There is a 50% chance of rain on Friday, but the outlook for the weekend is drier with highs in the mid to upper 70s to low 80s.

Continue to scout your vineyards, looking for signs of black rot and downy mildew. This year, fruit is likely to remain susceptible to black rot until about the middle (juice grapes) to end (wine grapes) of July. However, if you've controlled black rot on Concord and Niagara up to now, and there is little to no black rot to be seen through scouting, there may be little need to continue sprays beyond the second post bloom spray for that disease. For wine grapes, especially Vitis vinifera, sprays for black rot (mancozeb products, sterol inhibitors) will need to continue.

For downy mildew, fruit should be fast developing resistance to direct infection (but not quite there yet), but cluster stems will remain susceptible for a few weeks longer, especially for susceptible varieties like Niagara and many wine grape varieties. Infection of cluster stem tissue can still lead to crop loss through shelling and "leather rot" of berries. Leaves may also require protection, particularly if downy mildew has been spotted. This disease is capable of explosive spread under the right conditions, and so must be scouted for on a regular basis on susceptible varieties, especially through periods of regular rainfall (we've recorded measurable rainfall on 6 of the last 7 days). Pay attention to wetting periods and know what is developing in your vineyards through scouting. Epidemics of downy mildew can strip vines of their canopies, and severely hamper ripening of the crop and the wood.

Powdery mildew control on juice grapes shifts to protecting leaves and their ability to synthesize sugars. Its time to stop paying attention to rain events with respect to powdery mildew; every day is an infection period for secondary cycles of this disease (no rainfall required). Accurate yield estimates will be important to helping you make further management decisions with regard to this disease, especially on Concord. Vineyards with heavier than average crops will benefit from continued mildew protection to maximize the efficiency of canopies for sugar production. There is no formula for just how long you need to continue leaf sprays for powdery mildew. Summer powdery mildew leaf sprays are "insurance policies". The longer you continue to protect your leaves and keep canopies functioning at maximum efficiency, the more likely you'll ripen that crop by harvest. However, your level of risk depends on the size of your crop; how much above average your production is. For smaller than average crops, further protection of leaves at this time is unlikely to be necessary to get your crop ripe, in all but the worst of years. The more 'above average' your crop is, the more likely it is that continued protection will be necessary to ripen the crop by harvest.

Updates and Information

Kimberly Knappenberger, Viticulture Assistant, LERGP

NEWA 3.0 grape management models are available now

(Originally posted by Dan Olmstead on NEWA Blog on May 20th, 2021)

Updated grape berry moth and grape disease models are available now as part of the NEWA 3.0 online decision support platform. These useful resources, combined with your own user account that saves favorite stations and biofix dates, will make the process of tracking pest and disease risk easier and more efficient.

Watch these videos to quickly get started with NEWA 3.0

Create a NEWA account (5 min)		
Configure your NEWA dashboard (7		
min)		
NEWA dashboard navigation (9 min)		

Then watch these videos to familiarize yourself with the updated grape management models

How to use the NEWA grape berry moth model (13 min)

How to use the NEWA grape diseases model (16 min)

Help us out by reporting bugs and problems

NEWA 3.0 is still in beta testing mode and we need your help to crowdsource final issues and bugs that the development team may have missed.

Contact the NEWA Help Desk if you have any problems, have questions or (especially) if you find a bug or glitch. Do this by sending an email to support@newa.zendesk.com with abundant details, screenshots, and other information that might be helpful for a quick resolution.

NEWA is part of the <u>New York State IPM Program</u> and <u>Cornell Cooperative Extension</u> at <u>Cornell University</u>. NYSIPM partners closely with the <u>Northeast Regional Climate Center</u> to make NEWA available to growers in member states nationwide.

Fast Fact about the Vineyard Improvement Program

If the soil/location of a Concord vineyard has caused it to not be successful you can remove that vineyard and replant that acreage in a different location. The vineyard needs to be completely removed and a cover crop/crop planted there, then if you want to replant a vineyard (even Concord!) and you have a better piece of land available, you can do that! Reimbursement from the Vineyard Improvement Program covers 50% of removal costs up to \$1,500 and 25% of replant costs up to \$1,500. Contact Kim at ksk76@cornell.edu if you have any questions or visit our website.



Figure 1 Concord vineyard on a steep slope

Free Hand Sanitizer and Masks
If you still need it, we still have it! Contact Kim at ksk76@cornell.edu.

Other links of interest:

LERGP Web-site:

Cornell Cooperative Extension website:

Cornell CALS Veraison to Harvest Newsletter:

Efficient Vineyard:

<u>Appellation Cornell Newsletter:</u>

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)

