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.
The Lake Erie Regional Grape Program is a partnership between Cornell University, Penn State University and the Cornell Cooperative Extension Associations in Chautauqua, Erie and Niagara County NY and Penn State Extension in Erie County PA.
CFAP 2

Corona Virus Food Assistance Program 2.0 is live. This program was originally created to provide financial assistance to farms that were directly impacted by Corona virus. Early on, supply chains broke down and there was price volatility in certain crops. Some crops could not be harvested. CFAP was designed to reimburse those farms for some of their losses.

CFAP 2 is a different program altogether. Commodity based restrictions are no more. If a farmer is growing it, the farmer is getting paid something. All that is required is a simple application. This program has been live for two weeks.

To apply contact your local FSA office. Some offices are open by appointment, but all can be contacted via phone. Applications need to be finalized by December 11, 2020. More information can be found at farmers.gov/cfap

This update is being provided now because I wanted to gather some specific information about grapes and cooperatives. For better or worse, payments will match 2019 sales. This means that payments will be based on certificates issued in 2019. It will not include certificates that matured in 2019.

To determine gross revenue before you contact FSA, have your schedule F ready. The grape payment would typically be calculated on gross sales of grapes that show up on lines 2, 3(a) and/or 8. Line 2 would typically include payments from cooperatives. Line 3 might include certificates or dividends. Line 8 sometimes includes cash payments for grapes where the buyer did not provide a 1099. This will vary based on software and accountant methodology. No accounting for expenses is necessary. This payment is based on gross sales, not net.

<table>
<thead>
<tr>
<th>2019 Sales Range</th>
<th>Percent Payment Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0 to $49,999</td>
<td>10.60%</td>
</tr>
<tr>
<td>$50,000 to $99,999</td>
<td>$5,300 + 9.90%</td>
</tr>
<tr>
<td>$100,000 to $499,999</td>
<td>$9,250 + 9.70%</td>
</tr>
<tr>
<td>$500,000 to $999,999</td>
<td>$48,049 + 9.00%</td>
</tr>
<tr>
<td>Sales over $1 million</td>
<td>$105,800 + 8.80%</td>
</tr>
</tbody>
</table>

As you can see these payments are slightly graduated as gross sales go up, but only slightly. As specialty crop commodity growers profit comes through volume. Paying based on a percentage of gross sales will dramatically increase profitability. In the best of times profitability does not exceed 30%. This payment will represent somewhere between 30% and 100% (or more) of 2019 net income. In other words $6,000 for a typical hobbyist or $25,000 for a typical full-time grower.
Harvest Summary and Financial Year in Review

The 2020 crop, at least for Concord, is in the books. From what I have heard, harvest was the most normal thing about 2020. We are happy that most growers had a safe and (mostly) successful harvest. Nothing surprising when seeing data from processors. This crop was not one for the record books, for many processors it was the smallest harvest since 2012. Despite harvesting the smallest crop in 7 years, overall crop size was nearly double the 2012 crop. Payments are expected to continue to trend higher or at least stay high. Between the higher prices and CFAP 2.0, average net revenue for growers should beat many of the previous 7 years.

Yields from processors reflect production beyond the Lake Erie Region as grapes are shipped in and around the entire tri-state area. Major processors have been averaging 175,000 tons. This year yields at the plants were down 13% to approximately 155,000 tons. In the context of last year, with more than 200,000 tons, this year felt rather light.

Mixed into these averages were some severe disasters for individual growers. Unharvested acreage, yields below 2 tons, and significant acreage below 4 ton were all observed. At these levels higher prices provide little assistance. CFAP 2.0 and crop insurance will keep most of these growers on track for profitability. However, that assumes CFAP eligibility and high levels of crop insurance coverage. With CFAP payments based on last year’s very successful crop, for most growers the real wild card will be how much risk was assumed on the insurance side of things. Premiums have been rising and with rising premiums (and 7 good years in a row) came policy cancellations. Given the trends of this most recent disaster to be focused on our most vulnerable areas, there is hope that risk management strategies were more robust than average sites.

Cash market prices had a fairly significant range this year. Growers receiving $300 per ton may see higher gross revenue than recent years with some record breaking yields. Stacking CFAP 2.0 on top of that income may create a temptation, or perhaps occasionally a valid reason, to accelerate some depreciation.

One word of caution on over-doing it is to keep in mind how historically low-income taxes are right now. This provides an opportunity to affordably build cash reserves so long as modified adjusted gross income (MAGI) remains below $200,000. A MAGI target threshold could be adjusted upward for growers regularly having high levels of MAGI and adjusted lower for growers that regularly have lower levels.

With income above those levels, the first stop should be to investigate depreciated capital. With the number of challenging years strung together, growers should invest in capital that increases efficiency. While it normally does not make sense to purchase tractors early to increase tax savings, it may just simply be time to replace part of an aging fleet. Focus on increasing reliability and maintaining equipment is on area to invest. While making capital purchases, take care to make sure they fit the future operation you plan on managing. The tractor or implement that best fit your

Payments are capped at $250,000 per entity. Family farms with multiple active participant/owners can work around this cap. Needless to say, this is the direct subsidy program that a lot of growers have been looking for that I did not think we would ever see again. To be fair, that is the general theme of 2020. Good luck and happy harvesting.
operation in 2000 or 2005 may not be the equipment you need in 2025. As your operation grows, the efficiency of larger scale equipment is much greater when it is purchase is part of a replacement. It can be difficult to justify expensive multi-row equipment or even a larger fertilizer spreader if one is already owned and reliable.

Beyond equipment, employer (owner) sponsored retirement plans can be an easy way to decrease taxable income. These plans are not necessarily flexible if employers have a lot of employees but can certainly allow fairly large amounts of pre-tax savings.

Finally, supplies that can be used to replenish inventory and put into service may offset net income. This is certainly the most flexible option but does have its limits. While it typically makes sense to lower tax burdens whenever the opportunities arise, savings can be minimal whenever taxable income falls below $326,000. By overdoing purchases, one might decrease the flexibility of 2021 income and create a tax burden for 2021 that is harder to plan around.

Overall, these are great conversations to have with growers. This kind of strategic business planning is welcome after years of low prices and struggling with net income losses, rather than with taxes. With many growers producing acceptable yields, hopefully most growers that were hit hardest by return crop and frost can continue to avoid difficult conversations and remain successful with programs like crop insurance and CFAP 2.0.
A Brief Year in Review

What a difference a year can make. I am very proud of our industry. Agriculture does not stop for pandemic viruses and we all were forced out of our comfort zones to live, work, and continue to be productive under COVID restrictions. This year, due to the restrictions in place from COVID-19, the group was unable to conduct business as usual. Our offices closed to the public in efforts to stop the spread of the virus, educational outreach became a challenge to overcome, and in-person group meetings were canceled but we all persevered. Enter technology.

In an effort to continue the sharing of important research, as well as maintaining the collaboration of ideas from the growers, the LERGP team was successful in setting up Virtual Coffee Pot meetings. The LERGP team worked with the New York State Department of Environmental Conservation (DEC) and the Pennsylvania Department of Agriculture (PDA) who both approved offering pesticide recertification credits at these meetings to aid our growers. The LERGP offered 13 opportunities to receive pesticide recertification credits even with the COVID restrictions 2020.

It wasn’t an easy or seamless transition for most of us, but we all worked together and Zoom became a common word in most of our households. Additionally, special guest speakers with expertise in viticulture and enology from all over the country were invited to present their research in this informal setting and answer grower questions face-to-face since traveling wasn’t an issue with the virtual platforms.

In addition to the Virtual Coffee Pot meetings, the team delivered a virtual 2020 Pest Management Spray Schedule program. Andy Muza and Bryan Hed lead an interactive meeting so that growers had the ability to ask questions concerning specific pest problems or potential problems in the 2020 season. Topics that were addressed include: timing of spray applications at critical growth stages; pesticide options, efficacy and cost; and resistance management.

We postponed our Winter Growers Conference in March 2020 and rescheduled it for August 2020. Unfortunately, the pandemic climate was just not safe for us to gather in large crowds and deliver educational outreach and for the first time in our history, our Grower Conference was canceled in 2020 altogether.

The LERGP team was forced to innovate ways of being available for our growers. We instituted Virtual Office Hours, where we were available online to answer questions. We continued to produce weekly crop updates and podcasts along with monthly newsletters, and our specialists were available via email, phone, and in-person for farm visits. It wasn’t the smoothest of growing seasons, but all-in-all we were able to provide you with not only timely viticulture, business management, and integrated pest management outreach, but we kept you abreast of the ever-changing COVID resources and guidelines to help us continue to be productive as an industry during this pandemic time.
But as I mentioned earlier, agriculture does not stop. Early on in our growing season, Mother Nature added additional stress as temperatures hovered around and dropped below freezing in the later hours of May 8\textsuperscript{th} and early May 9\textsuperscript{th}. The Concord primary buds had already pushed so the injured vines compensated and pushed their secondaries only to be tested again with a frost event on May 12-13\textsuperscript{th}. Unfortunately, there were sections of our Grape Belt that were hit severely, and so I began the process of disaster declaration in Erie and Cattaraugus Counties in New York. Other reports from around the region were that the crop was approximately 20\% lighter than average.

For the remainder of the growing season, the weather was hot and dry. Just when we thought that we would reach the point of drought, the rains came and then left just as quickly. The hot weather and lower crops made it a record year for some in sugar accumulations. One processor reported that the average sugars on the first day of their harvest were higher than 2019’s average sugars on the last day of harvest. Harvest seemed to come on fast and end in record time for some as well.

Through all the difficulties that 2020 presented to all of us, I commend you all for persevering. Many of you jumped into the technology piece via Zoom meetings to stay connected and get the timely information and your questions answered. We heard back from many of you that you actually enjoyed the Virtual Coffee Pot platform and the recorded sessions to go back and reference at a later time. Moving forward, we plan on incorporating them into our educational outreach. We look forward to holding in-person instructional meetings, field demonstrations, and Coffee Pot meetings on grower farms in the future, but until then know that we are available to answer your questions. Here’s to a productive and ‘normal’ 2021 growing season!
2020 Vineyard Scouting – A Recap of Crop Updates

Vineyard scouting was conducted weekly at various sites extending from Girard/Lake City area to North East, Pennsylvania. The objective was to provide timely information, throughout the season, on potential/developing pest problems in vineyards. Monitoring of vineyard blocks began in May and continued until mid-September. Scouting information along with accompanying photos of pest problems, obtained during the weekly monitoring, were reported in the Crop Updates. The following is a recap of scouting information from the 2020 Season which was reported in the Crop Updates from May 14 – September 17.

FROST
A hard frost hit the Lake Erie Region on the morning of May 13 and some NEWA weather stations recorded temperatures below 29 F. I assessed a total of 13 Concord blocks from May 20 - 26 in the eastern and western areas of Erie County, PA. for primary bud injury caused by the frost event (Figure 1). In summary, frost injury was highly variable throughout the region and severe injury was not widespread across all areas of the grape belt.

Vineyard blocks assessed (north of Rt. 5 and south of I-90) had minimal - low primary bud injury. In North East, PA (just north of Middle Rd.) primary bud injury ranged from 38% - 61%. In Harborcreek/Lake City/ Fairview, PA (vineyards in areas south of Rt. 5 to about midway to Rt. 20) the primary bud injury ranged from 62% - 96%.

DISEASES
Phomopsis – Growers were advised in Crop Update (5/14) to, “Be prepared to apply a fungicide application for Phomopsis during the 3” – 5” shoot stage". By June 1 Phomopsis symptoms on leaves and shoots were visible. However, Phomopsis was not a problem during the 2020 season.

Black Rot - Lesions on Concord leaves were visible by June 8. On 6/25 black rot leaf lesions were easy to find in a Concord block in a border row near woods. However, at most sites black rot levels were low. By 7/20 only a scattering of leaf lesions and infected berries were found in most vineyard blocks. At this point in the season Concord berries were near the end of their susceptibility to infection. But growers were cautioned that Vitis vinifera varieties would remain susceptible to infection for about 2 more weeks.

Downy Mildew (DM) - No downy mildew was observed in any of the blocks that were scouted on 6/24. However, Bryan Hed checked a Vidal block where DM was already present. By 7/20 I had still not found DM in any Concord or Niagara vineyards. But, for the first time in the season, a few DM
leaf lesions were found in a Delaware block. On 8/5 DM leaf lesions were starting to appear in a Niagara vineyard. A week later there was a slight increase in the number of leaf lesions in this vineyard, although still not at a level to cause concern. On 8/10 I revisited a Delaware block where DM was first reported (Crop Update - 7/23). At this site, DM was still hanging in there with fresh lesions showing on some leaves, despite weather conditions that had not been particularly favorable for this disease the previous 2 weeks. On 9/9, for the first time in the season, a few DM leaf lesions were found at 2 different Concord blocks (Figure 2). Infections were likely due to rain events of the previous 2 weeks which generated several DM infection periods.

Growers were advised that even though DM was at low levels in our region, if present this disease has the potential to increase rapidly under favorable weather conditions. Bryan Hed indicated that, “Wine varieties that are susceptible can be very vulnerable to leaf loss from downy mildew (especially vinifera) and may need continued protection.”

**Powdery Mildew (PM)** - On June 29 I began finding powdery mildew on berries and pedicels and small colonies starting to appear on some leaves. By 7/20 only low levels of leaf infections were observed. By 7/30 colonies of PM were starting to appear on younger leaves (Figure 3). But overall, canopies looked healthy with low levels of PM evident. Growers were reminded that, “The need for additional fungicide applications in Concord vineyards will depend on the amount of powdery mildew leaf infections in your vineyard(s) and crop load.” It was advised to continue scouting vineyards and to conduct crop estimations to determine potential crop size.

The result, concerning powdery mildew in 2020, is that the hot, dry, sunny weather during much of the season kept pressure to low-moderate levels in Concord vineyards across the region.

**Critical Fungicide Application Periods**

I checked vineyards on (6/5) and (6/8), and no bloom was observed in Concord vineyards. However, I suspected that at least trace bloom in Concord would begin within the next few days. So, growers were advised that if an Immediate Prebloom Fungicide Application had not already been applied, then do so NOW. Growers were also reminded in Crop Updates (6/11,18 & 25) that, “Primary and secondary shoots in frost injured blocks will be at different phenological stages. Therefore, clusters on secondary shoots will also have to be protected against diseases during critical growth stages (e.g., Immediate Prebloom, first Postbloom).”

By June 12, trace bloom was evident in some blocks of Concord vineyards in the North East, PA area (south of Rt. 5 to about midway to Rt. 20). On 6/15 in the Lake City, PA area (north of Rt. 5) all Concord blocks and a Niagara block scouted had at least some trace bloom evident. Full bloom was recorded on 6/14 at the Portland, NY station and on 6/18 at the North East, PA station.

With Concords in bloom, Crop Update 6/18 indicated that, the next critical fungicide application would
be the first Postbloom spray which should be applied within 10 – 14 days of the Immediate Prebloom spray. This is a critical spray needed to protect rachises, pedicels (berry stems) and berries for our four major diseases (Phomopsis, Black Rot, Downy Mildew and Powdery Mildew). Fungicide products which are highly effective against these diseases should be used. The following Crop Update (6/25) advised that, “Ideally, a second Postbloom fungicide spray should be applied (within 14 days of first Postbloom spray) to ensure that fruit is protected from infection throughout the susceptible period for black rot, powdery and downy mildew.”

**INSECTS**

**Grape Flea Beetle and Climbing Cutworm** - Growers were reminded as early as Crop Update (4/16), that as buds start to swell the first insects of economic concern will start to appear in vineyards. Both grape flea beetle and climbing cutworms feed on grape buds during the bud swell stage.

**Banded Grape Bug & *Lygocorus inconspicuous*** - Crop Update (5/14) indicated that, “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.*”

**Rose Chafer** – On June 8, a few beetles were observed in a vineyard in Lake City, PA. Since beetles had emerged from the soil and moving into vineyards, growers were encouraged to scout. By June 25, the economic threat of losses due to rose chafer was over unless these insects could be easily found still feeding on young berries.

**Grape Leafhopper (GLH)** - adults and feeding injury on basal leaves was observed as early as June 8. No additional leaf feeding was seen until 7/20 when stippling was observed on interior leaves in a Concord block. In Concord blocks, scouted the following week, there was a slight increase in leaf feeding and adults and a few nymphs were observed. But, in an unmanaged block, adults, nymphs and leaf feeding were easy to find. Growers were advised to keep an eye out for potential increases in GLH population levels in the coming weeks. However, GLH never became a problem in most vineyards during the 2020 season despite the hot, dry weather.

**Japanese Beetle** - beetle populations and feeding injury was low- moderate in Concord and Niagara vineyard blocks that I checked this season.

**Grape Berry Moth (GBM)** - On June 12 GBM larvae were found in clusters of wild grapes but no GBM larvae were collected in Concord clusters. By June 24 I did find 1 larva in a Concord cluster next to a wooded edge and growers were also reporting finding webbing/larvae in Concord clusters. Crop Update (7/2) indicated that webbing in clusters was not difficult to find in High Risk Concord sites. Red discoloration of injured berries was also visible in Concors (Figure 4). The ability to easily find GBM webbing in clusters this early in the season was a red flag indicating that GBM pressure was likely to be high this season. Growers were also warned that, if the temperatures are higher than average throughout the season then a fourth generation of GBM could be expected. Growers were informed that it was nearing

---

*Figure 4. Grape berry moth larva entry hole and red discoloration of berry due to injury. Photo – Andy Muza, Penn State*
TIME to SPRAY for the Second Generation of GBM. The projected date to reach 810 DD ranged from 7/7 to 7/13 depending on vineyard site. It was suggested that insecticide applications of ingested materials could begin between 730-750 DD which is only about 2-3 days before 810 DD. This would provide a few days cushion ensuring that the application was achieved before the 810 DD target. It was advised to, “Check the GBM Degree Day Model in NEWA [http://newa.cornell.edu] choosing the closest station near your vineyard for more specific timings”. Also, not to neglect scouting Low and Intermediate Risk sites to determine if injury levels indicated that a spray may also be needed in these areas. Crop Update (7/9) reminded growers that there was “Still TIME to SPRAY” in High Risk vineyards if a contact insecticide is used.

Crop Update (7/30) informed growers of the upcoming Third Generation of GBM which was projected to reach 1620 DD between August 8 – 11 for most sites. The following Crop Update (8/6) was a reminder that, “All High and Severe Risk sites should receive an insecticide application for the third generation.” Spray application timings for ingested and contact insecticides were suggested. A second insecticide application, using a material in a different chemical class, was highly recommended at High Risk sites. Crop Update (8/20) again emphasized the importance of: an insecticide application in High Risk sites; highly recommended a second application at these sites; and scouting for injury levels in Intermediate and Low Risk sites.

On 9/9, I checked 5 High – Severe Risk areas for potential Fourth Generation GBM egg laying (2430 GBM DD). I found at least a few eggs at 3 of the 5 sites. At only 1 site were eggs easy to find, even though 2430 GBM DD had not yet been reached. This indicated the variability that occurs even at High and Severe Risk sites, particularly later in the season. On 9/14, I again scouted a few High – Severe Risk sites in the North East, PA area for Fourth Generation GBM egg laying. I found at least some eggs at these sites but mostly observed remnants of hatched eggs (most likely from Third Generation egg laying) and GBM injured clusters (Figure 5).

Figure 5. Remnant of hatched grape berry moth egg on Concord berry. Photo – Andy Muza, Penn State.
First a recap of our weather at the North East lab in 2020: Andy Muza has presented a nice recap of the frost damage that occurred earlier in spring. Here I will present a brief recap of some other weather aspects (temperature and rainfall) of the 2020 growing season.

Heat Accumulation (growing degree days (gdds)): After experiencing a fairly average season in 2019, weather conditions were noticeably hotter again in 2020. After a cooler than average April and May accompanied by a late start to the season (50% bud break was almost two weeks behind average for our location), conditions finally began to heat up in June. Bloom was also a bit behind, but only by about 3 days. This made for a very short pre-bloom period (only 34 days from 50% budbreak to 50% bloom at our location!!!) and a bit of a scramble to keep rapidly expanding plant tissue protected with timely fungicide applications. Then came July; according to the Erie Times News, July 2020 was the second hottest in Erie PA city history, displacing the previous second hottest July recorded back in 1887 (the hottest is still from 1921, almost 100 years ago). August brought in cooler weather but was still well above average for heat accumulation, and the season finished off in September and October with average to slightly cooler than average weather. Overall, this combination was favorable for grape production; the season was relatively short (our Vignoles grape went from bud break to 21 brix in 100 days!!!), the most critical periods for fungal fruit infection were generally hot and dry, and there was no shortage of sugar by harvest. On the other hand, crop size in many vineyards was crippled from the start by late frost damage, and many other farms reported only average to below average crop levels to ripen; disappointing. The season was over by mid-October as the last Concord loads rolled into the processors.

Rainfall: Rainfall during 2020 was basically above average from April through July, and then dry through the end of September. Fortunately, rainfall during the critical fruit protection period (from immediate pre-bloom through fruit set (mid June to mid July) was low and infrequent, making for low disease pressure and many opportunities to make timely applications of fungicides to protect developing fruit. As Andy mentions, pressure from all the major diseases was generally low in the vast majority of vineyards in 2020.

Disease management trials: Despite relatively low disease pressure in 2020, we managed to teased out some informative results from our trials at the North East lab this year. We conducted several trials on Concord, Chambourcin, Chancellor, Niagara, Vidal, Vignoles, NY 81, Geisenheim, and Riesling grapes this year to look at some new products and evaluate existing ones for control of black rot, powdery and downy mildew, and harvest bunch rot. Here are the basics.

1. **Comparison of standard fungicides with succinate dehydrogenase inhibitor (SDHI) fungicides, for powdery mildew control.** We've been encouraging Concord growers to try the SDHI fungicides, specifically Endura, for several reasons: i) the price of Endura dropped significantly in 2020 (the 4.5 oz rate will cost you around $20/A), ii) SDHIs have seen little use in the Lake Erie region (no expectation for resistance to be an issue), iii) some growers have been seeing less than stellar performance from the old standards, Quintec and Vivando, and iv) the SDHIs are very effective on powdery mildew. So, we ran a trial to compare standard fungicides (Quintec (4 fl oz) and Vivando (15.4 fl oz)) with a couple of the SDHIs (Endura (4.5 oz) and Luna Experience (6 fl oz)) for fruit protection. **Results:** For the second year, the SDHIs performed best, Quintec fell in the middle, and Vivando was last, being significantly less effective than Quintec and the SDHIs (Endura and Luna). If you're looking to try Endura (or even better,
but more expensive, Luna Experience) in 2021, I strongly suggest you apply it at the ‘first post bloom’ time slot (immediately after bloom and within 10-12 days of your immediate pre-bloom spray) for maximum effect.

2. In another trial, we evaluated **Bioline** - a foliar applied fertilizer/enhancer - for its effect on yield and as a suppressor of powdery mildew on Concord grape. In the first year, two pre and two post bloom applications were made to compare (1) Bioline, with (2) a conventional rotational program of Quintec (4 fl oz), Vivando (10.3 fl oz), and Tebustar (4 oz), and (3) a combination of 1+2 (the conventional program tank mixed with Bioline) and (4) an untreated check. **Results:** None of the treatments significantly reduced powdery mildew fruit infections but combining a conventional rotation with Bioline was the most effective for controlling powdery mildew on *Concord leaves*. There was no significant effect on brix or yield in year one. More to come over the next two seasons.

3. **Evaluation of a new fungicide for powdery mildew control.** There’s a new sterol biosynthesis inhibitor fungicide called Cevya. Currently it has been approved for use in PA but not NY; NY DEC approval is anticipated this fall. Cevya is good to excellent on powdery mildew, from results of several trials in PA and NY. However, 2020 was the first year of trial work for black rot control: Cevya provided excellent control of black rot on Concord and Chambourcin fruit, providing complete control of this disease when applied either before infection (as a preventative) or up to 5 days after infection. In our trials to evaluate phytotoxicity to native and hybrid grapes (you remember the difenoconazole debacle), it appears to present no injury issues to Concord, Niagara, Chancellor, Chambourcin, Vignoles, and Vidal grapes, even when applied multiple times at double the label rate. Unfortunately, there’s a caveat: Cevya is **not currently labeled for use on labrusca or labrusca hybrid grapes**….ONLY **VINIFERA**. However, label expansion is anticipated in the near future, so stay tuned!

4. **Evaluation of experimental fungicides for control of downy mildew.** We also tested a new product from Gowan for downy mildew control on our Chancellor grapes. Though our disease pressure was relatively low (only 5-6% crop loss on completely unsprayed vines), we did get a decent test. **Result:** I do not know the nature of this new active ingredient, but it was very effective at controlling downy mildew on Chancellor clusters, comparable to mancozeb. We hope to test it again in 2021.

5. **For wine grapes:** We continue to examine mechanized defoliation of the fruit zone (at ‘just before bloom’ and at ‘fruit set’) for effects on bunch rot development of Riesling, Vignoles, and Pinot gris/noir at harvest. Our results over the last several years have shown consistently that mechanical fruit zone defoliation (at either timing), as part of an IPM program with effective fungicides, will help to reduce bunch rots (Botrytis and sour rot) over fungicides alone, on susceptible varieties like Pinot Noir/Gris, Riesling, Chardonnay, and Vignoles. Trellis systems like ‘vertical shoot position’ and ‘4-arm kniffen’, that produce more two-dimensional canopies, tend to maximize the beneficial effects of mechanized defoliation over that of a high wire no-tie system that produces a more three-dimensional canopy.
Grape Commodity Survey Results

108 traps were placed in 8 vineyards and 2 nurseries during the 2020 growing season in an effort to survey the area for three invasive species. The target moths this year were Cryptoblabes gnideiella (Christmas Berry Webworm), Lobesia botrana (European Grapevine Moth), and Eupoecilia ambiguella (European Grape Berry Moth). After their initial set up trips were made to each of the sites every other week. These traps that are loaded with pheromone lures are initially screened in the field. Traps that contained moths of any kind were collected and screened at the lab. No target moths were collected during the entirety of this survey. In addition, no Spotted Lanternfly adults or egg masses were observed when scouted for in connection with this project.

NEWA

Our local network of Rainwise and Onset stations in the Lake Erie Region are accessible on newa.cornell.edu. The stations provided a great amount of information during this past growing season with minimal disruptions and were able to provide the crucial data needed for the grape pest model calculations. One exception is the station in East Westfield located on Felton Road in Westfield. This is currently our only station that connects with its own cellular data plan. Unfortunately it stopped collecting data in late May and has been out of service the entire growing season. Rainwise support assured that we will be receiving it back from being serviced in the near future and that it should be reliable moving forward. The NEWA website is looking forward to some improvements that I hope to be able to update you on soon. I will keep you posted.

As always, if you notice data that doesn’t seem correct for current conditions please contact Kim (ksk76@cornell.edu) and she will look into it. Sometimes sensors stop working properly or rain buckets get clogged and just need to be cleaned out. The models are only as good as the data going in!
PPE Update (masks and hand sanitizer)
Since May of this year CLEREL has been a distribution point for the free hand sanitizer and masks from the NYS Department of Agriculture through Cornell Cooperative Extension Chautauqua County. During this time growers and farmers in the county have picked up:
- 884 gallons of hand sanitizer
- 4,455 masks
- 895 2 ounce spray bottles

We are thrilled to have been a part of keeping our grower community safe. There is still a decent supply of both the gallon jugs and masks for those who still need them. Again, the products are available to production farms of any type, including dairy, livestock, grapes, vegetables, farm stands, u-pick, nursery, equine and craft beverage. To sign up for free product follow this link. [chautauqua.cce.cornell.edu/resources/hand-sanitizer-and-face-masks-request](chautauqua.cce.cornell.edu/resources/hand-sanitizer-and-face-masks-request)

Vineyard Improvement Program
The Vineyard Improvement Program is gaining a little traction this fall now that harvest is wrapped up and growers are making assessments of existing/abandoned Concord blocks and how they fit into their business plan. It is encouraging to see the number of plans being submitted for abandoned vineyards that are currently only serving as a source of pest infection, as well as not creating any revenue for the landowner. If you want to know more visit [https://lergp.com/about-vip](https://lergp.com/about-vip) or contact Kim Knappenberger (ksk776@cornell.edu), Kevin Martin (kmm52@psu.edu) or Jennifer Phillips Russo (jjr268@cornell.edu).
Lake Erie Regional Grape Program Team Members:

Andy Muza, (ajm4@psu.edu) Extension Educator, Erie County, PA Extension, 814.825.0900
Jennifer Russo, (jjr268@cornell.edu) Viticulture Extension Specialist, 716.792.2800 ext 204
Kevin Martin, (kmm52@psu.edu) Business Management Educator, 716. 792.2800 ext. 202

This publication may contain pesticide recommendations. Changes in pesticide regulations occur constantly, and human errors are still possible. Some materials mentioned may not be registered in all states, may no longer be available, and some uses may no longer be legal. Questions concerning the legality and/or registration status for pesticide use should be directed to the appropriate extension agent or state regulatory agency. Read the label before applying any pesticide. Cornell and Penn State Cooperative Extensions, and their employees, assume no liability for the effectiveness or results of any chemicals for pesticide usage. No endorsements of products are made or implied.

Cornell University Cooperative Extension provides equal program and employment opportunities.
Contact the Lake Erie Regional Grape Program if you have any special needs such as visual, hearing or mobility impairments.
CCE does not endorse or recommend any specific product or service.

THE LAKE ERIE REGIONAL GRAPE PROGRAM at CLEREL
6592 West Main Road
Portland, NY 14769
716-792-2800