Crop Update - June 25, 2020

Jennifer Phillips Russo

CLEREL Farm in June
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- Recorded Coffee Pot Meetings, Update on masks and Sanitizer-Kim Knappenberger
- In the Vineyard- Andy Muza

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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

Click here to watch recorded Coffee Pot meetings!
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Labeled for Grapes, Cucurbits, Cherries, and Pome Fruit
Highly Effective on Powdery Mildew
No Cross-Resistance
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FRAC Group 3
Labeled for Grapes and Cucurbits
Controls Powdery Mildew, Black Rot, & Anthracnose
Protectant + Curative Activity
Highly Systemic

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

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

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

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Covid-19: Do you have a Plan Yet?

Attached in this week’s crop update is NYS guidance for agriculture operations during Covid-19. NYS is requiring written plans for operational business. While this guidance is not required for PA growers, it is a good resource for best practices. NYS breaks down the guidance in two categories. Things growers need to do and things growers should do. For PA growers, many of the things that “must” be done are not legally required but I would highly recommend.

Liability to visitors is the biggest concern. If the law requires acts, it is possible that an assumption of negligence will be assumed when laws are violated. PA growers should also be concerned about liability but to a different degree. One thing everyone should do is check and see what their liability coverage will provide. One great way to reduce risk is make sure employees are properly covered by workers’ compensation. This will eliminate most liability risk associated with employee claims.

Right to Farm

Another legal question has popped up regarding Agricultural protection in NYS. Agricultural operations inside of Ag districts are protected by NYS Ag and Markets Law Section 305-A. Municipal governments can be irritated by agriculture. The activities seem to contradict the purpose of municipal regulation in many fairly well developed communities. Farms cause smells, bright lights and noise. To an outsider it can be a nuisance and municipalities are in the business of regulating nuisances and maintaining property values. In most of the Lake Erie Region Agriculture drives the economy. Municipal board members often have a direct connection with agriculture and the importance of agriculture is patently obvious. Section 305-A is extremely important on Long Island and in the Hudson Valley. Without it or something similar there might be communities without agriculture.

Section 305 is not without its limits; it certainly does not permit anarchy. The biggest limitation is health and safety. If a municipality can show a regulation is implemented to protect public health or safety, 305 will not protect the agricultural practice. If the agricultural practice is not “sound” 305 will also not protect the practice. Furthermore, Section 305 does not protect “sound agricultural practices” from reasonable land use regulations or ordinances.

A farmer could hire a lawyer to bring a 305 action and protect their own right to farm. The best part of 305, however, is that it empowers the commissioner of agriculture to bring such an action upon his or her own initiative. To translate, that means farmers with very strong 305 claims have an army of Ag and Markets attorneys working for them to litigate the issue if necessary.

Section 308 reviews allow the commissioner to issue opinions as to whether particular agricultural practices are sound. These opinions help avoid unnecessary litigation and often result in the modification of local laws or changes in the way they are enforced to avoid litigation. Most opinions issued result from propane cannons used as bird control and dogs used to protect livestock. Both of these issues are very fact specific and while Ag and Markets typically finds the practice to be sound,
that is not always the case. Propane cannons, for example, may not be a sound agricultural practice. It will depend on the season they are being used, the frequency they are being fired, and the time of day. Once or twice Ag and Markets has even found that very loud noises are exempt from 305 protections because of health concerns. Questions about grape pumice are also a local concern. The handling of pumice is sometimes subjected to local regulations. Whether or not the use of pumice is a sound agricultural practice is similar to a bird cannon. It depends.

305 was designed and written to protect the ability of farms to keep farming. It does not eliminate all concerns farmers might have. Occasionally being a good neighbor, as required or defined by local land use laws, might even cost a farmer money. That doesn’t necessarily mean 305 protections will apply. Using common sense, attempting to mitigate nuisances and being a good farmer will go a long way in making sure the Department of Ag and Markets will protect your right to farm.
Interim Guidance for Prevention and Response of COVID-19 at Farms
Revised May 27, 2020

This guidance is provided for farm owners, operators, and farm workers so they can incorporate these procedures into farm protocols to prevent and respond to COVID-19.

Background

Stop the Spread
Signage reinforcing social distancing (6 feet), hand-washing, and respiratory health should be posted in prominent locations promoting this message. Signs in alternative languages are also available.

Hand Hygiene
Regular hand washing with soap and water, for at least 20 seconds, should be done:
- Before and after eating.
- After sneezing, coughing, or nose blowing.
- Avoid touching face and hair.
- After using the restroom.
- Before handling food.
- After touching or cleaning surfaces that may be contaminated, including cell phone and/or clothing.
- After using shared equipment and supplies.

What steps should be taken?
All farms should continue performing routine cleaning and sanitation of their facilities. Additionally, high-risk locations (see below) warrant cleaning and disinfection on a regular schedule.

- Maintain social distancing of at least 6 feet (2-meters) for all workers at the worksite and housing settings. Wear face coverings when in public and unable to be socially distance. Wear face coverings when in shared vehicles.
- Coordinate with Local Health Department (LHDs) on worker screening and appropriate housing accommodations for workers.

Workers: Follow all steps listed in the “STOP THE SPREAD” poster. Also, use a face covering if in the presence of others when you are unable to maintain social distancing.

If an individual with laboratory confirmed COVID-19 was symptomatic or positive while on your farm:
Immediately get medical attention for that individual and contact your local health department. Clean and disinfect the area.

Set up and maintain hand washing and equipment sanitizing stations in all common work and housing areas that include soap, water, and paper towels. Hand sanitizer containing at least 60% alcohol can also be provided for workers with unsoiled hands. Hand sanitizer is not effective on heavily soiled hands.
Respiratory Hygiene and Face Coverings

- Cover coughs and sneezes with tissues or the corner of elbow.
- Dispose of soiled tissues immediately after use.
- Anyone who is over two years old and able to medically tolerate a face-covering, must cover their nose and mouth with a face-covering when in public and unable to social distance per Executive Order 202.17 and Executive Order 202.18, and extensions thereof. This includes wearing face coverings when in vehicles. Additional information can be found at Interim Guidance on Executive Orders 202.17 and 202.18 Requiring Face Coverings in Public During the COVID-19 Outbreak, April 17, 2020.
- Employers must provide essential workers with face coverings, free of charge, to wear when interacting with the public per Executive Order 202.16, and extensions thereof. Additional information can be found at Interim Guidance on Executive Order 202.16 Requiring Face Coverings for Public and Private Employees Interacting with the Public During the COVID-19 Outbreak, April 14, 2020.

Social Distancing

Maintain a 6 foot distance (about 2-meters) from others to minimize the spread of COVID-19:

- Monitor and remind workers to maintain a 6 foot distance throughout their shift. This should occur at all locations, including fields, orchards, vineyards, pack houses, milking parlors, barns, etc.
- Stagger workers over and within rows/aisles.
- Adjust product flow for adequate inspection or sorting with fewer workers on the line.
- Workers must wear face coverings when in public and in cases where social distancing is not possible.
- Those whose job duties permit a continued separation of greater than 6 feet do not have to wear a face covering, unless under quarantine status (see below).
- Use a tape measure or measuring stick to demonstrate a 6 foot distance, which is about 3 arms lengths of the average adult male.
- Advise workers to avoid direct physical social greetings, such as handshakes, hugs, or fist and elbow bumps, and encourage waves and smiles instead.
- Provide adequate time and space for workers to clock in and out of their shifts, while maintaining a safe distance apart.
- Hold meetings and trainings in small groups, so workers can maintain a 6 foot distance and still hear the speaker.
- Provide space to allow workers to maintain a 6 foot distance from others during rest and meal periods.
- Avoid carpooling in shared vehicle spaces where social distance cannot be maintained. Wear face coverings when in a vehicle.
Routine Cleaning

Standard Infection Control Practices
As part of standard infection control practices, routine cleaning should be rigorous and ongoing. Cleaning supplies and time must be provided by operators for individuals to routinely clean on the worksite and in housing. Surfaces touched most frequently must be prioritized for routine cleaning because these surfaces can be reservoirs for germs and an exposure pathway for transmission of COVID-19.

Examples of priority areas for routine cleaning include:
- High contact surfaces that are touched by many different people, such as light switches, steering wheels, utensils, handrails, cart handles, equipment buttons, conveyors, tank handles, shared equipment and doorknobs/handles.
- Feeders.
- Storage containers.
- Floors and walls.
- Trash containers.
- Restrooms.
- Heat and air conditioner vents.
- Horizontal surfaces and light fixtures.
- Frequently used equipment.
- Uniform, protective equipment and/or linens.

Identify and routinely clean and disinfect high-risk locations, even before a confirmed case of COVID-19 occurs.

Examples of high-risk locations include:

Packing Houses, Storage Rooms, Milking Parlors, Barns, Sheds, and Tank Rooms
- Clean and disinfect frequently accessed surfaces/equipment regularly.
- Discard or launder wipes/cloths after each use.

Restrooms
- Clean and disinfect all restroom surfaces, fixtures, doorknobs, push plates, and switches (at least once daily).

Examples of frequently touched surfaces:
- Shared equipment;
- Counters, tables and chairs;
- Door handles and push plates;
- Levers and steering wheels;
- Handrails;
- Kitchen and bathroom faucets;
- Equipment surfaces;
- Equipment buttons;
- Light switches;
- Remote controls;
- Shared phones, keyboards and electronics;
- Shared sleeping areas.

Note: Some surfaces or equipment are difficult to clean or are sensitive to liquids. When shared, they may contribute to indirect transmission. Locations with shared-use equipment should provide posted signs regarding proper hand-hygiene before and after using such equipment, to minimize disease transmission. Also, consider using removable washable covers to protect hard to clean equipment hardware against spills and to facilitate cleaning.
Dining Areas/Breakrooms
- Clean and disinfect counters, tables, and chairs regularly (at least once daily).

Locker Rooms/Sleeping Quarters
- Clean and disinfect surfaces, tables, chairs, beds, cots and lockers regularly (at least once daily).

Other Frequently Touched Surfaces or Equipment or Areas
- Clean and disinfect frequently touched surfaces on a periodic schedule, as operational considerations allow (at least once daily).

Cleaning and Disinfection
Cleaning removes germs, dirt, and impurities from surfaces or objects. Disinfecting kills germs on surfaces or objects.

Cleaning and disinfection supplies and instructions on how to use the supplies should be provided to farm workers, for both work and housing areas. Those individuals responsible for cleaning and disinfection should be provided and use protective equipment (e.g. gloves) as recommended on product labels. Carefully read and follow all label instructions for safe and effective use.

Step 1: Cleaning
Always clean surfaces prior to use of disinfectants, in order to reduce soil and remove germs. Dirt and other materials on surfaces can reduce the effectiveness of disinfectants. Clean surfaces using water and soap or detergent to reduce soil and remove germs. For combination products that can both clean and disinfect, always follow the instructions on the specific product label to ensure effective use.

Step 2: Disinfection
Cleaning of soiled areas must be completed prior to disinfection, to ensure the effectiveness of the disinfectant product. Use the Department of Environmental Conversation’s (DEC) list of products registered in New York State identified as effective against COVID-19. This list corresponds to those identified by the EPA. DEC registration will not be listed on disinfection product labels. If you have any questions about NYSDEC pesticide registration, please call the NYSDEC Bureau of Pesticide Management at (518) 402-8748. If these products are unavailable, disinfect surfaces using an EPA- and DEC*- registered disinfectant labeled to be effective against rhinovirus and/or human coronavirus. If these commercial products are unavailable, it is also acceptable to use a fresh 2% chlorine bleach solution (approximately 1 tablespoon of bleach in 1 quart of water). Prepare the bleach solution daily or as needed.

Label directions must be followed when using disinfectants to ensure the target viruses are effectively killed. This includes adequate contact times (i.e., the amount of time a disinfectant should remain on surfaces to be effective), which may vary between five and ten minutes after application. Disinfectants that come in a wipe form will also list effective contact times on their label.

For disinfectants that come in concentrated forms, it is important to carefully follow instructions for making the diluted concentration needed to effectively kill the target virus. This information can be found on the product label.
Step 3: Disposal
Place all used gloves and other disposable items in a bag that can be tied closed before disposing of them with other waste. Wash hands with soap and water for at least 20 seconds immediately after removing gloves or use an alcohol-based hand sanitizer containing at least 60% alcohol if soap and water are not available. Soap and water should be used if hands are visibly soiled.

Local Health Department (LHD) Coordination
Operators should work closely with their LHD to address the screening, isolation and quarantine status, and housing needs of their workers. Operators providing housing to workers should devise a plan if a large number of workers require separate accommodations due to quarantining restrictions imposed by the LHD, or for workers requiring isolation if they become symptomatic. Farm workers are considered essential workers and may continue to work while under quarantine provided the required conditions outlined below are followed.

Screening Guidance
Identify staff responsible for screening workers and coordinating appropriate housing for workers under quarantine or isolation, as set forth below and in conjunction with LHDs.

- Before reporting to the worksite, screening must review the worker’s international travel.
- Screening must be conducted as workers enter the worksite, and every 12 hours thereafter.
- Screening should ask workers if they have any COVID-19 related symptoms, such as cough or shortness of breath, or if they have had exposure to anyone who either tested positive for COVID-19 or had symptoms of COVID-19.
- Screening should also check if the individual has a temperature greater than or equal to 100.0°F.

Workers Potentially Exposed to a Confirmed or Suspected Case of COVID-19
The following workers should be precautionary quarantined for 14 days when not at work on the farm, even if they are asymptomatic:

- Workers who in the past 14 days have been in close or proximate contact with someone who was infected with COVID-19.
- Workers who in the past 14 days traveled from another country or who were on a cruise ship (including river cruises).
- Any worker the LHD believes should be quarantined for precautionary reasons.

Workers who are considered essential personnel, as described in the Department’s Health Advisory: Protocols for Essential Personnel to Return to Work Following COVID-19 Exposure or Infection, who meet quarantine criteria described above, may be allowed to work in accordance with the Department’s Health Advisory and if they:

- Remain asymptomatic.
- Remain in quarantine when not at work. Workers may be quarantined in their own home or at a location designated by the operator that meets LHD quarantine requirements.
- If it is difficult to provide for 6 foot separation between essential workers while in quarantine, essential workers may be quarantined in a recreational vehicle, a motel/hotel room, at home in their own room, etc.
- Rely on LHDs and employers to provide essential needs such as healthcare, food, medications, and laundry.
- Undergo temperature monitoring and symptom checks upon arrival to work, and at least every 12 hours thereafter while at work, and self-monitor (i.e. take temperature, assess for symptoms) twice a day when not at work. Operators must have thermometers on site to perform temperature checks.
- Wear a face covering while in the presence of any other individual.
- Immediately stop work and notify their supervisor if they develop ANY symptoms consistent with COVID-19. The LHD may be consulted on next steps as outlined below.
- Testing should be prioritized for essential personnel with symptoms.

**Workers Confirmed or Suspected of COVID-19**

Workers who have tested positive for COVID-19, regardless of whether or not they are displaying symptoms of COVID-19 and workers who are displaying symptoms of COVID-19, such as a temperature greater than or equal to 100.0°F, cough, or shortness of breath, should be isolated and not permitted to return to work for at least 10 days, or in accordance with any federal or state health guidance issued subsequent to this guidance.

Workers in isolation must:
- Remain isolated in their own room with the door closed;
- Use their own bathroom, if possible. If the employer is providing housing for the affected worker(s), please work with your LHD to arrange how to isolate the worker(s) from others;
- Be monitored by the LHD, as appropriate; and
- Be provided essential needs such as healthcare, food, medications, and laundry.

Isolated workers may not report to work until:
- At least 10 days have passed since symptoms first appeared, AND
- At least 3 days (72 hours) have passed without a fever and without the use of fever-reducing medications, AND
- Respiratory symptoms including cough and shortness of breath improve.

**Worker Housing Guidance**

All worker housing should provide for adequate social distancing, cleaning and disinfection, and the necessary controls to prevent transmission of COVID-19:
- Work with LHDs to screen and assign workers to appropriate housing based on guidance above.
- House workers in the smallest groups possible.
- Distance beds at least 6 feet apart.
- Increase ventilation in all housing areas, including living and sleeping, cooking and eating, and bathroom and shower areas, by opening doors and windows, if outdoor temperatures are agreeable.
- Implement social distancing measures for common areas, such as scheduling staggered use of these areas.
General Isolation/Quarantine Shelter Requirements

- Separate sleeping quarters, with the ability to close the door and separate bathroom facilities for each individual or family group.
- Access to a sink with soap, water, and paper towels.
- Restrict interaction with others outside of a family group.
- Restrict use of shared spaces.
- Provide cleaning supplies, e.g. household cleaning wipes.
- Food must be delivered to the person’s quarters.
- Supply face coverings for individuals.
- Garbage must be bagged and left outside by the door of each of the quarters for routine pickup. Special handling is not required.
- A system for temperature and symptom monitoring shall be implemented for assessment in the living quarters.

More Information

New York State Department of Health’s COVID-19 Webpage:
- https://coronavirus.health.ny.gov/home

Listing of Local Health Departments:
- https://www.health.ny.gov/contact/contact_information/

Centers for Disease Control and Prevention Webpage:

FDA guidance regarding food, food handling:

Cornell CALS COVID-19 Resources and Response:
- https://cals.cornell.edu/covid-19-response
Post Bloom Update

Today is June 25, 2020 and at the Cornell Lake Erie Research and Extension Laboratory we are eleven days post bloom. I have been receiving calls from growers around the region that are finding Grape Berry Moth larvae on the florets/clusters. Please be sure to get out there and check your blocks using the table below to guide you on Grape Berry Moth GDD scouting dates and check NEWA for the station closest to you for the second generation. Also, last week I discussed the differences in phenology between the primaries and secondary clusters and that still applies in regard to spray timing. If you had minimal frost damage and more primaries than secondaries and cost is an issue, then focus on the sprays for the primaries. If you are in a heavily damaged area, I would suggest that you time sprays to take care of both the primary and secondary clusters. If this is your case, you are already working with reduced crops and protecting those clusters and keeping them clean is necessary.

Virtual CORE Pesticide Training & DEC Recertification Credits Approved!

Looking for DEC credits? Join Field Crops Specialist, Josh Putman, on July 14th from 9am – 10:50am, or July 21st from 6pm – 7:50pm VIRTUALLY to learn about current regulations, pesticide use, labels, and pesticide formulations. Cost of the training is $20 per person and 1.75 DEC credits were approved in the CORE category. Please have your applicator license present to receive recertification credits and if you are planning to obtain your applicator license, this training will be a great introductory course for the exam. Follow us on our Facebook page and register at our SWNY website for these events.
As of today, June 25, 2020, the Research Station in Portland, NY has 692 Growing Degree Days and 24 inches of precipitation.

Notes: Year-to-date Growing Degree Days (GDDs) are reported as color-coded symbols your vineyard (star), nearby vineyards(circles), and CCE offices (squares). Year-to-date precipitation is reported as color-coded contours. Site symbols are annotated with GDD and precipitation (e.g. 110 12 indicates 110 GDDs and 12 inches of rain). Yellow circles are NEWA stations closest to your site. GDDs and precipitation are sourced from Cornell’s Northeast Regional Climate Center (NRCC) high resolution gridded data service which calculates GDD using daily high/low temperatures, not hourly. Elevation data is sourced from United States Geographical Survey (USGS) digital elevation model.

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.
Today: A chance of showers, with thunderstorms also possible after noon. Mostly sunny, with a high near 74. Southwest wind 10 to 14 mph. Chance of precipitation is 40%. New rainfall amounts of less than a tenth of an inch, except higher amounts possible in thunderstorms.

Tonight: A slight chance of showers before 10pm. Partly cloudy, with a low around 62. South wind around 10 mph. Chance of precipitation is 20%.

Friday: Sunny, with a high near 80. West wind 11 to 15 mph.

Friday Night: A chance of showers, then showers likely and possibly a thunderstorm after 2am. Increasing clouds, with a low around 70. Southwest wind 7 to 12 mph increasing to 13 to 18 mph after midnight. Chance of precipitation is 70%. New rainfall amounts between a quarter and half of an inch possible.

Saturday: Showers and possibly a thunderstorm before 2pm, then a chance of showers. High near 75. Breezy, with a southwest wind 20 to 25 mph, with gusts as high as 38 mph. Chance of precipitation is 80%. New rainfall amounts between a half and three quarters of an inch possible.

Saturday Night: A chance of showers. Mostly cloudy, with a low around 68. Breezy. Chance of precipitation is 40%. New precipitation amounts of less than a tenth of an inch possible.

Sunday: Mostly sunny, with a high near 77. Sunday Night: Partly cloudy, with a low around 65.

**Historical Growing Degree Days (base 50)**

You will note that for 2020, we are tracking just below the five-year average on Growing Degree Days.

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.

7-Day GDD Forecast & Grape Berry Moth Model GDD Forecast

Use this table as a tool to inform you when to start scouting for Grape Berry Moth and also check the NEWA station closest to your location.

Future GDD total accumulations are estimated using temperature forecasts sourced from National Oceanic and Atmospheric Administration’s (NOAA) National Weather Service. If you report a date (send me an email) for wild grape bloom near you the GBM model will use it, otherwise wild bloom date will be estimated.

Table 1. 7-Day Growing Degree Day Forecast and Grape Berry Moth Model Growing Degree Day Forecast for Cornell Lake Erie Research and Extension Laboratory 6/25/2020 through 7/1/2020

<table>
<thead>
<tr>
<th>Date</th>
<th>Phenology (GDD base 50F)</th>
<th>Grape Berry Moth Model (GDD base 47F, after wild bloom) New Generations (start scouting at 750 and 1470)</th>
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</tr>
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<td>586</td>
</tr>
</tbody>
</table>

Historical Precipitation (inches)

When looking at the graph below, you will note that 2020 is the thick blue line that is below the precipitation for 2017, but slightly above the five-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.

Dr. Terry Bates posted this article to our CLEREL Facebook page this morning, a proud read.

The Great Grape Graft That Saved the Wine Industry
Grape varieties from North America seemed harmless to French winemakers. But destructive bugs were imported with the plants.

June 23, 2020

If American culture has spread across the surface of the globe, it’s also found under the earth: in the great grape stocks that endangered, then saved the European wine industry in the nineteenth century.

In midcentury, French winemakers imported species of grapes from the eastern coast of the United States and Canada to see if they could mix them with European varieties to make new kinds of wine grape. But as is often the case with plants sent around the world, the grapes were not all the winemakers got. A species of tiny aphid came along for the ride.
Starting in the early 1860s, the blight devastated the European wine industry for two decades. These aphids, first called *Phylloxera vasatrix* and now known as *Daktulosphaira vitifoliae*, suck their food from the roots of grapes. While American grapes had evolved tolerance to the attack, Old World grapes were completely defenseless. Grape phylloxera, as the blight is commonly known, simply sucked the vineyards of Europe to death. Starting in the early 1860s, the blight devastated the European wine industry for two decades. The disease moved to places where Old World vines had been transported, such as South Africa, New Zealand, Australia, and California, whose infant wine industry was based on imported grapes.

Winemakers went to desperate measures to try to stop the blight, but the hard-won solution turned out be an old agricultural strategy for improving fruit trees. Old World vines above ground were grafted to aphid-tolerant American rootstock, and with that, the wine industry was saved.

Today, almost all the world’s wine has American roots. Literally. From Three Buck Chuck to the Grand cru you have to mortgage the house for, the grapes are grown on roots native to North America. In fact, most of the mighty rootstock exported to Europe to save the vineyards came from Missouri.

German immigrants to that state took to winemaking, using varieties of both imported and native grapes. Journalist Chris Opfer touches on their story in his profile of the Norton grape, a native variety developed in the 1820s in Virginia before being taken up by growers in the Midwest. After Prohibition, which included the forced uprooting of vineyards, the Norton virtually disappeared. In 1965, the father of the contemporary Norton grower Opfer profiles “discovered Norton grapes growing wild on a bootlegger’s property.” The Norton is now back to being pressed for wine, legally.

Of course, the purple majesty of American grapes—and “grape flavor”—is the Concord, a cultivar of the native *Vitis labrusca* or fox grape, with perhaps some other native grapes thrown in. Grape cultivator Ephraim Wales Bull lived in Concord, Massachusetts, the town made famous by the Transcendentalists, and knew the Emerson/Thoreau/Hawthorne/Alcott crowd. He wanted a hearty grape variety that could withstand the rigorous New England climate; his juicy, aromatic grapes were first exhibited in 1853. Today, they’re used to make everything grape flavored, from candy to jelly to kosher wine.

The Norton and Concord are only two of the hundreds of native grape varieties cultivated in North America. They are used for food and drink—table grapes, raisins, grape juice, wine—and as ornamental plants. They have names like Cayuga, Scuppernong, Catawba, Frontenac, Mustang, Niagara…and every one of them has a history. Like the great wine grapes, their roots, anchored into terroir of all sorts, are a gift to the world.
the original research behind our articles for free on JSTOR.

**The Norton Grape: American Viticulture's Native Son**
By: chris opfer
Gastronomica, Vol. 11, No. 3 (Fall 2011), pp. 92-95
University of California Press

**“He Sowed; Others Reaped”: Ephraim Wales Bull and the Origins of the ‘Concord’ Grape**
By: Edmund A. Schofield
Arnoldia, Vol. 48, No. 4 (Fall 1988), pp. 4-15
Arnold Arboretum of Harvard University

### Phenological Resources:
- Insecticides for control of spotted wing drosophila | Art Agnello, et al., Cornell University
- Grape Insect and Mite Pests-2018 Field Season | Greg Loeb, Cornell University
- Early Season Grape Disease Management | Katie Gold, Cornell University

### Regional Resources & Activities (8 pesticide recertification credits available):
- **(Upcoming)** Vineyard Establishment, Vineyard care in the first 3 years | Virtual Tuesday Timely Topics | Jun-30
- Open Topic, Questions From the Field | Lake Erie Virtual Coffee Pot Meeting | Jul-01 (1 DEC credit)
- ASEV Webinar: Fruit Flies and Their Role in Causing Sour Rot | Megan Hall, University of Missouri | Jul-02
- Open Topic, Questions From the Field | Lake Erie Virtual Coffee Pot Meeting | Jul-08 (1 DEC credit)
- Winemaking topic TBD | Virtual Tuesday Timely Topics | Jul-14
- Labor Relations | Lake Erie Virtual Coffee Pot Meeting | Jul-15 (1 DEC credit)
- Open Topic, Questions From the Field | Lake Erie Virtual Coffee Pot Meeting | Jul-22 (1 DEC credit)
- Topic TBD | Virtual Tuesday Timely Topics | Jul-28
- Weed Management | Lake Erie Virtual Coffee Pot Meeting | Jul-29 (1 DEC credit)
- Botrytis, Cluster/Sour Rot Management | Virtual Tuesday Timely Topics | Aug-11
- ASEV Webinar: Lifecycle Modeling and the Impacts of Climate Change | Gwen-Alyn Hoheisel, WA State University | Oct-22
- ASEV Webinar: Invasive Species Response: Lessons from the European Grapevine Moth Collaborative Program | Monica Cooper, UC, Cooperative Extension | Nov-12
- **(New)** Spotted Lanternfly -- Understanding its Ecology and the Threat | Pesticide Management Education Program, Distance Learning Center (1 DEC credit)
- **(New)** Management of Grape Berry Moth | Pesticide Management Education Program, Distance Learning Center (1 DEC credit)
- **(New)** Implementing NEWA into a Vineyard IPM Strategy | Pesticide Management Education Program, Distance Learning Center (1 DEC credit)
Recordings of Coffee Pot Guest Speakers

We have had a few questions about how to access the previous virtual coffee pot meeting recordings of guest speakers, so here is a repeat (with more information!) and the link.

Challenges often give rise to opportunities that weren’t previously available. That is exactly what has happened with our virtual coffee pot meetings. COVID-19 has caused a great deal of disruption in all of our lives, but it has also opened up some opportunities. The LERGP has been able to invite guest speakers to Coffee Pot meetings (as I am sure you all know by now!) via Zoom to bring you up to date research and innovation. We are excited to announce that we have recorded these sessions with the speakers and they are available to view on our website at https://lergp.com/2020-virtual-coffee-pot-meeting-guest-speakers. From the home page on the website you would click on Cultural Practices, and find 2020 Virtual Coffee Pot Meeting Guest Speakers. There you will find recordings from:

- 5.13.2020 Dr. Terry Bates on Vineyard Nutrition
- 5.20.2020 Dr. Greg Loeb on Insect Management
- 5.27.2020 Katie Gold on Early Season Grape Disease Management
- 5.27.2020 Bryan Hed on Early Season Grape Disease Management
- 6.3.2020 Heather Leach on Spotted Lanternfly
- 6.10.2020 Terry Bates – bloom talk
- 6.10.2020 Kevin Martin – Farm Safety Plans
- 6.17.2020 Michela Centinari – Under Vine Cover Crops
- 6.17.2020 Justine Vanden Heuvel – Canopy Management
- 6.24.2020 Misha Kwasniewski – Flavor Development in the Vineyard
- 6.24.2020 Chris Gerling – Impacts of Late Season Sprays on Wine Quality

We hope you will take advantage of this resource. This has been a very special opportunity to provide outside expertise for our grower community.

Recertification credits are not available for watching these recordings online, however they are available to those who attend the Virtual Coffee Pot meetings on Wednesday mornings at 10:00. If you still haven’t registered, you can do so by clicking this link.
Update to Distribution of Hand Sanitizer and Masks:

On Monday, June 29th we will be having another distribution day at CLEREL in Portland from 10:00 AM to 12:00 noon. We have received more masks and small spray bottles, in addition to the gallon jugs of hand sanitizer. If you are interested in picking up some supplies please sign up for your free product at chautauqua.cce.cornell.edu/resources/hand-sanitizer-and-face-masks-request.

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

Production farms of any type are welcome to come pick up hand sanitizer. These farms can include dairy, livestock, grapes, vegetables, farm stands, U-Pick, nursery, equine, and craft beverage. If you know of anyone that still needs some please send them the link to register. Once registered you will be contacted at the number left on the online request form to confirm pick up time.

For those of you who have already picked up gallon jugs of hand sanitizer with the hand pump, I’m sure you have noticed how fast and how much comes out. A simple trick that some have tried is to put a piece of a pool noodle or pipe insulator on the pump to keep it from pressing all the way. This will reduce the amount of sanitizer dispensed.
In the Vineyard (6-25-20) –

This week I scouted a few vineyard blocks (6/24) in the Lake City, PA area that included Concord, Delaware and Fredonia varieties.

Insects

Rose Chafer – only 2 rose chafers were found in Concord blocks. However, rose chafers were observed feeding on Staghorn sumac flower clusters. The economic threat of losses due to rose chafer is over unless these insects can be easily found still feeding on young berries. After bloom, as berries develop, these insects concentrate on other food sources. Although they may continue to feed on grape leaves the amount of injury in Concord vineyards is not of economic concern.

Grape Berry Moth – last week I reported that no GBM larvae were found in Concord flower clusters but were collected in wild grape clusters. This week I did find 1 larva in a Concord cluster next to a wooded edge (Figure 1). Growers were also reporting to Jennifer Russo that they were finding webbing/larvae in Concord clusters.

GBM overwinter as pupae and adults begin emerging in mid to late May in the Lake Erie Region. After mating, female moths begin laying eggs, mostly in wild grape clusters. However, since all overwintering GBM do not emerge at the same time, later emerging females may also lay eggs in clusters in commercial vineyards. So, at this time in the season, larvae being found in clusters are from the first generation resulting from egg laying by overwintering adults.

Diseases

In a Concord block in a border row near woods, black rot leaf lesions were easy to find with some leaves plastered with lesions (Figure 2). No powdery or downy mildew was observed in any of the blocks that were scouted. However, Bryan Hed checked a Vidal block where downy mildew was already present. By next week I suspect that powdery mildew should start to show up on Concord clusters.

By now most growers should have applied their first Postbloom fungicide spray. If this spray has not been applied yet, then make this fungicide application as soon as possible. Again, this is a critical
spray to protect fruit from infections of Phomopsis, black rot, powdery and downy mildew. Scout vineyard blocks after this spray to determine the efficacy of this application. 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. This fungicide application is a must if black rot leaf lesions, which are sources of inoculum for berry infections, are evident. (Check the NEWA station [http://newa.cornell.edu](http://newa.cornell.edu) closest to your vineyard blocks for 5-day weather forecasts and for disease models).

As mentioned in the previous two Crop Updates, 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 during critical periods for disease management (e.g., Immediate Prebloom, first Postbloom).

Figure 2. Numerous black rot lesions on Concord leaf. Photo – Andy Muza, Penn State.
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/](https://eden.cce.cornell.edu/)

Food Production, Processing & Safety Questions:

[https://instituteforfoodsafety.cornell.edu/coronavirus-covid-19/](https://instituteforfoodsafety.cornell.edu/coronavirus-covid-19/)

Employment & Agricultural Workforce Questions:

[http://agworkforce.cals.cornell.edu/](http://agworkforce.cals.cornell.edu/)

Cornell Small Farms Resiliency Resources:

[https://smallfarms.cornell.edu/resources/farm-resilience/](https://smallfarms.cornell.edu/resources/farm-resilience/)

Financial & Mental Health Resources for Farmers:

[https://www.nyfarmnet.org/](https://www.nyfarmnet.org/)

Cornell Farmworker Program

[www.farmworkers.cornell.edu](http://www.farmworkers.cornell.edu)

[www.trabajadores.cornell.edu (en espanol)](http://www.trabajadores.cornell.edu)