

# Cornell Cooperative Extension

## Finger Lakes Grape Program

### Quarterly Report: July —September 2022

#### Program Highlights

- Results from a preliminary trial on methods to improve management of late-season bunch rots showed that pre-bloom leaf removal and exposure to ultraviolet light both helped to reduce rot incidence and severity compared to chemical treatments. These promising early results will help support new applied research trials that will determine if these treatments can be cost-effective for growers to implement.
- We completed three NDVI scans at each of our five cooperating vineyards as part of our project to introduce digital viticulture tools to Finger Lakes grape growers. We will be meeting with the growers over the winter to discuss the maps developed using the NDVI data, and possible changes to their vineyard practices in those blocks to address the variation identified in the scans.
- The 2022 grape harvest got underway in late August. While rains caused some problems with fruit rots in the first couple weeks, much of the fruit that was harvested in September has been clean and of good quality. Yields have been impacted, extensively in some cases, by winter injury to more winter-sensitive varieties like Gewürztraminer, Merlot and Sauvignon blanc. The overall assessment of the season at this point is “low quantity, but high quality.”

#### Sour rot trial shows promising initial results

One of the major focuses of the FLGP over the past few years has been to find better ways to control late-season bunch rots, which negatively impact both the quality of the grapes and growers' revenues. We are particularly interested in practices that do not involve multiple chemical treatments because of their high cost and gradual ineffectiveness due to the development of pesticide resistance, which we documented in Finger Lakes vineyards.

This year, we worked with Dr. Katie Gold, grape pathologist at Cornell AgriTech, to set up a trial to evaluate two different practices – pre-bloom leaf removal and exposing fruit to ultraviolet light – to see if they can reduce the incidence and severity of bunch rots compared to chemical applications. Our results from this year showed that both practices resulted in less rot development than just the chemical treatment alone. This is an encouraging result, and based on it, the FLGP will be working with Dr. Gold and other Cornell scientists to develop a proposal for a more robust trial to determine if these new practices can be cost-effective treatments for growers to reduce bunch rots in grapes, while also reducing pesticide use.



*Pinot gris grapes with sour rot developing. The disease is caused by multiple microorganisms and spreads rapidly by fruit fly activity.*



*Cabernet Franc ready to be harvested*

*Photo: Hans Walter-Peterson*

## New tools for measuring and mapping vineyard variability

We continued our scanning of vineyards this summer as part of a USDA-funded project led by Dr. Terry Bates, director of Cornell's Lake Erie Research and Extension Laboratory. The project is intended to introduce growers to new sensors and data management tools like the 'MyEV' mapping system to improve their ability to manage vineyard variability. We completed three NDVI scans at each of our five cooperating vineyards this year, and provided that data to the growers for them to begin using with the MyEV online tool. Next steps will be to meet with the growers both individually and as a group to review the maps that were generated this year and to discuss what management changes each of them might consider making based on those maps.



*One of the NDVI sensors used to map vineyard variability during the growing season.*

## Harvest 2022 Begins



*'Marquette' grapes harvested from the Finger Lakes Teaching & Demonstration Vineyard. This fruit was sold to a local winery to help support operation of the vineyard. Other varieties are used for winemaking instruction by Finger Lakes Community College students.*

The 2022 grape harvest got underway in the Finger Lakes the week of August 22 with E&J Gallo's Canandaigua winery bringing in Aurore grapes, which are always the first to be harvested in the region. After a very dry summer, about 2" of rain fell during the first 10 days of harvest, which caused some bunch rot to develop in early ripening varieties. Fortunately, rainfall returned to normal in September, and many days were sunny and warm in between the rain showers, so disease development became less of an issue as harvest pressed on.

The concerns about below-average yields in some varieties came to fruition for many growers, especially in *vinifera* varieties like Gewürztraminer, Sauvignon blanc, Syrah, and Cabernet Franc. Native varieties like Concord and modern, disease-resistant cultivars like Cayuga White and Marquette were less affected by this winter's cold, and yielded closer to normal crops. While yields are down this year, the consensus through the first half of harvest is that quality is excellent. If the weather continues to cooperate in October, that will likely be the final assessment for the 2022 vintage – low quantity, but high quality.



## Grower Meetings

### *Tailgate Meetings*

- Tuesday, July 12 (virtual) – 14 attendees
- Tuesday, July 26 (Naples, Ontario County) – 24 attendees
- Tuesday, August 9 (virtual) – 12 attendees
- Tuesday, August 23 (Dresden, Yates County) – 25 attendees

### *“Introduction to Digital Viticulture” Workshop – August 24, 2022 @ Cornell AgriTech*

This workshop introduced growers to some of the tools and technologies that are available to them right now (or in the very near future) to help them make more informed decisions regarding where and how to address various issues in the vineyard, including disease management, crop loads, the influence of soil characteristics on vine health and productivity, and much more. Speakers included Hans Walter-Peterson (FLGP), Dr. Katie Gold (Cornell AgriTech), Dr. Yu Jiang (Cornell AgriTech), and Kathleen Kanaley (Ph.D. candidate, Cornell AgriTech).



## Cornell Cooperative Extension Finger Lakes Grape Program

Hans Walter-Peterson—Team Leader  
Donald Caldwell—Viticulture Technician

The Finger Lakes Grape Program is a Cornell Cooperative Extension partnership between Cornell University and the Cornell Cooperative Extension Associations in Ontario, Seneca, Schuyler, Steuben, Wayne and Yates Counties.

<https://blogs.cornell.edu/flxgrapes/>

*“Cornell Cooperative Extension is an equal opportunity, affirmative action educator and employer”*

