

# NYWGF RESEARCH - FINAL REPORT

Funding for fiscal year: 2022

## SECTION 1:

**Project title:** Continuing Veraison to Harvest Newsletter and Fruit Sampling in 2022

### **Principal Investigator with contact info:**

Chris Gerling  
Senior Extension Associate, Department of Food Science  
Cornell AgriTech at the NYS Agric. Expt. Station  
Cornell University  
P:315-787-2277  
Email: [cjg9@cornell.edu](mailto:cjg9@cornell.edu)

### **Co-PI Collaborators with contact info:**

Hans Walter-Peterson  
Area Extension Educator  
Finger Lakes Grape Program  
P:315-536-5134  
Email: [hcw5@cornell.edu](mailto:hcw5@cornell.edu)

Alice Wise  
Senior Extension Educator  
Suffolk CCE  
P:631-727-3595  
Email: [avw1@cornell.edu](mailto:avw1@cornell.edu)

Jennifer Russo  
Extension Associate  
Lake Erie Regional Grape Program  
P:716-792-2800  
Email: [jjr268@cornell.edu](mailto:jjr268@cornell.edu),

James Meyers  
Extension Educator  
Eastern New York Commercial Horticulture Program  
P: 845-417-8005  
Email: [jmm255@cornell.edu](mailto:jmm255@cornell.edu)

**New Research**  **Continued Research**

**Amount Funded** \$25,405

## **SECTION 2:**

**Project Summary Impact Statement:** Since 2007, The Veraison to Harvest newsletter has been a joint effort of grape and enology extension programs throughout New York. This weekly newsletter provides growers and winemakers with timely information on fruit ripening (objective metrics such as Brix, TA, pH, and YAN, sampled from 50-80 vineyards throughout NY), regional updates on harvest issues, any suggested adjustments to winemaking practices due to the weather in a given season, and brief articles highlighting current research projects and activities as they happen.

### **Objectives:**

1. *Provide industry with the data-based statewide weekly newsletter, “Veraison to Harvest,” to inform harvest and winemaking decisions and promote production of quality grapes and wines in New York.*
2. *Collect, process, and analyze fruit samples from four regions of NY during each week of the 9 week harvest season to provide the industry juice and wine grape growers and winemakers with ‘real time’ snapshots of fruit ripening progress and fruit composition.*
3. *Provide brief updates in “Project Focus/ Program Update” articles to inform industry about ongoing research projects.*

### **Materials & Methods:**

1. Personnel from Lake Erie, Finger Lakes, Hudson Valley, and Long Island extension programs will collect fruit samples from 10-20 vineyards in each region every Monday or Tuesday from shortly after veraison, continuing through harvest.
2. The Enology Extension laboratory will process fruit and provide analytical data on brix, pH, titratable acidity, and (on selected sample dates) Yeast Assimilable Nitrogen.
3. Thursday of each week, regional extension programs will provide a written assessment of conditions in their region regarding weather, phenological stage, and other relevant information.
4. Chris Gerling (Extension Enology) will compile these reports and also deliver one to two articles weekly on seasonal topics and provide appropriate data-backed recommendations on relevant topics.
5. *Veraison to Harvest* will be formatted and delivered via e-mail alerts on Friday of the same week.

### **Results/Outcomes/Next Steps:**

Our experience since 2007 is that industry readers use this publication as an objective source of timely information to use as a benchmark against which they gauge and evaluate the situation on their own farm or winery. For novice growers or those new to the industry (including Cornell students), the weekly fruit composition tables provide real-world examples of how fruit maturity progresses over the harvest season. In our 2011 survey, 94% rated the fruit maturity reports as ‘moderately to highly valuable’, and 60% rated the newsletter overall as ‘highly valuable’.

In 2022, there were eight issues published, which are accessible here: <https://cals.cornell.edu/viticulture-enology/research-extension/veraison-harvest/2022-newsletters>

A discussion of the project was held at BEV NY, where options including a podcast, a map website and extending the newsletter outside the harvest season were discussed. We plan to launch a new survey of readers to find more clarity on what format(s) they prefer.

We have also begun a data analysis project with an engineering graduate student and Dan Olmstead from IPM/ NEWA to see if artificial intelligence models might bring new insights with better integrated weather data.

### **Technology Transfer Plan:**

Distribution of the newsletter to 1500 statewide enrollees of Viticulture and Enology extension programs IS the technology transfer plan. [\*Veraison to Harvest\*](#) is also a vehicle for communicating both current information and current research to the producer audience. Each week's newsletter will feature:

- **Around New York:** Reports from 4 regional grape extension programs (FLGP, LERGP, ENYCHP, and Long Island
- **Concord berry curve:** Terry Bates' graphic reporting berry weight and Total Soluble Solids (Brix)
- **Fruit Composition report:** berry weight, brix, pH, TA, and YAN from 20 varieties and 58 vineyards statewide (in 2022)

**Attachments:** relevant charts and graphs, photos etc.

### **SECTION 3:** (

#### **Project summary and objectives:**

Veraison to Harvest is a truly statewide look into New York grapes and wine at the most exciting time of the year. Starting around Labor Day and continuing through the end of harvest, berry samples are collected from every region and sent to Cornell AgriTech for analysis. The data from these samples is then added to a newsletter that is sent to 1,500 email addresses every Friday. The newsletter also contains articles relating to other ongoing projects or timely topics for growers and winemakers. From juice to wine, from Riverhead to Peru to Portland, this project shows the depth and breadth of our industry as well as the research and extension that support it.

#### **Importance of research to the NY wine industry:**

In the words of one winemaker, Veraison to Harvest is a document of the season. The newsletter provides a permanent record of grape ripening, weather data and also personal observations from extension personnel and producers. Growers can use the weekly data as a "sanity check" to put their own sampling into context and read about what's being harvested nearby. This information can also be used to monitor ripening conditions across years and how broader weather systems may or may not impact season and vintage variation.

#### **Project Results/next steps:**

In 2022, there were eight issues published, which are accessible here: <https://cals.cornell.edu/viticulture-enology/research-extension/veraison-harvest/2022-newsletters>

A discussion of the project was held at BEV NY, where options including a podcast, a map website and extending the newsletter outside the harvest season were discussed. We plan to launch a new survey of readers to find more clarity on what format(s) they prefer.

We have also begun a data analysis project with an engineering graduate student and Dan Olmstead from IPM/ NEWA to see if artificial intelligence models might bring new insights with better integrated weather data.

**Supporting attachments:** (Choose a maximum of 1 supporting figure or table to demonstrate results if desired)

	<b>Portland (LERGP West)</b>	<b>Ransomville</b>	<b>Geneva</b>	<b>Highland HLV</b>	<b>Riverhead (LIHREC)</b>	<b>Peru (Dimock)</b>
April	3.61	2.16	2.00	5.62	6.42	4.80
May	3.34	2.62	1.66	2.76	3.78	1.71
June	1.37	3.56	5.18	2.57	3.84	4.88
July	3.49	2.02	1.95	2.45	3.89	3.21
August	3.98	0.02	2.80	1.30	1.96	2.08
September	6.08	0.85	3.29	3.82	4.29	2.88
October	4.73	2.84	0.42	3.78	6.97	2.11
<b>Total</b>	<b>26.60</b>	<b>14.07</b>	<b>17.30</b>	<b>22.30</b>	<b>31.15</b>	<b>21.67</b>

2022 Rainfall by month across New York State