

# Finger Lakes Vineyard Update

## Katie Gold Named to Grape Pathology Position at Cornell AgriTech

*Hans Walter-Peterson*



Katie Gold has been named as the new assistant professor of Grape Disease Ecology and Epidemiology at Cornell AgriTech in Geneva. Katie is currently completing her Ph.D. at the University of Wisconsin - Madison. Upon completion of her Ph.D., she will conduct postdoctoral research at the NASA Jet Propulsion Lab (JPL) in California from August 2019 through January 2020. While at JPL, Katie will gain experience with the latest hardware and software for remote imaging with future application to digital agriculture and grape production. She will begin her tenure-track assistant professor position on February 1, 2020 with responsibilities that are 60% research and 40% extension.

Her research and extension seminars were on the topics of "Hyperspectral systems for pre-symptomatic potato disease detection" and "Agricultural sensors in Grape IPM", highlighting some of the tools and approaches that she will bring to the position. Katie is already setting up collaborations for her grape work in New York and plans to attend the American Society for Enology and Viticulture - Eastern Section Meeting in

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## 2018-2019 Bud Cutting Results

Donald Caldwell, FLGP

With pruning season coming to a close and vineyard blocks beginning to be tied, it's time to take a look at how our grapevines made it through the winter.

According to the our lab-based data on hardiness from vineyards around the Finger Lakes, bud damage at several of our testing sites would be expected to be around 10% damage on Cabernet Franc and a little less on Riesling. Exceptions include East Keuka which might see between 10-20% damage on Cabernet Franc, Sodus which could see close to 50% on both sensitive varieties, and 50% damage on Cabernet Franc on East Seneca. Keep in mind that we place our temperature recorders in the coldest location of any block (typically where Concord or Cayuga White are planted), so these numbers should be taken with a grain or two of salt. The bigger question, though, is how do the predictions based on our lab results compare to actual damage out in the field?

Turns out, they were pretty good, but with a few exceptions. Riesling and Cabernet Franc buds from both West Seneca and West Cayuga showed right around 10% damage. Data entered by commercial growers on our online bud cutting survey showed 8-16% damage on Riesling from different blocks on East Seneca and one site on West Canandaigua. There were two outliers that showed significantly more damage from bud cutting than the lab results indicated. The West Keuka site showed 42% damage on Cabernet Franc and 24% on Riesling. Crown gall was a major presence in these blocks, and a minor occurrence in a West Seneca vineyard that showed 30% death of Cabernet Franc buds in early February, so bud hardiness seemed to have been compromised in these cases. Vine health and other factors that vary from vineyard to vineyard will influence cold hardiness, so your mileage may vary compared to these results or those of your neighbors.

We have also heard several reports of cracked or split trunks. Whether this was due to fluctuating temperatures in February and March, and how it might affect early growth, is an open question and worth keeping an eye on. But in general, the results from our freezer runs this winter match up fairly well with the data from our bud dissections, showing that our vines came through the winter in pretty good shape. Congratulations, you now have permission to start worrying about spring frost.

Location	Variety	Bud injury
<b>Teaching Vineyard (Dresden)</b>	Riesling	11.0%
	Cabernet Franc	11.1%
	Lemberger	23.0%
	Grüner Veltliner	13.1%
	Chardonnay	11.5%
	Cayuga White	13.0%
	Vidal blanc	8.0%
	NY81.0315.17	13.3%
	Marquette	2.0%
<b>West Keuka</b>	Riesling	23.7%
	Cabernet Franc	41.8%
<b>West Cayuga</b>	Riesling	9.0%
	Cabernet Franc	11.0%

## Fungicide Label Updates

*Alice Wise, CCE-Suffolk County (with minor edits by Hans Walter-Peterson)*

The information below is condensed from the 2019 NY/PA Pest Management Guidelines for Grapes. The Guidelines will have more complete information on each of these products.

**NOTE:** For those who ordered a copy of the Grape IPM Guidelines when you enrolled, they have been printed and will be mailed out to you next week. If you will be coming through Penn Yan anytime after next Tuesday and want to pick yours up (and save us the postage cost), please let Brittany Griffin know (315-536-5134 or [bg393@cornell.edu](mailto:bg393@cornell.edu)) and she will set it aside for you.

- Aprovia – active ingredient benzovindiflupyr, labeled for powdery mildew (PM) control. Same chemical family as Endura (boscalid) and related component of Pristine. Also labeled for black rot (BR), phomopsis (PH) and anthracnose. However, in trials, Aprovia provided only modest control of BR. No data on the other 2 diseases.

- Aprovia Top – has the addition of difenoconazole for PM, BR & anthracnose. Labeled for PH but no data. There is PM resistance worldwide to the DMI fungicides (difenoconazole and related fungicides). Limit applications to three per season, no more than two consecutive and don't apply to existing infections.

- Azaka – azoxystrobin, same active as and very similar to Abound in performance; in trials found to be moderately less effective than Abound.

- Dexter Max – mixture of azoxystrobin and mancozeb. Has a 66 day PHI due to the mancozeb. Labeled for all the diseases. Should perform well versus downy mildew (DM), BR and PH. However, resistance could be an issue for PM and Botrytis. Advisable to tank mix with sulfur.

- EcoSwing – a new botanical product, an extract of *Swinglea glutinosa*, a plant originally from Southeast Asia and South America. The label lists powdery mildew, Botrytis and sour rot. There are a lot of crops on the label and the same rate is listed for all, likely meaning there is not a lot of collective experience with this product. Low impact status.

- Flint Extra – trifloxystrobin. Flint Extra is the new liquid formulation; however, existing supplies of the old dry formulation, Flint 50WG, can be used up. The recommended rates for PM, BR, PH and Botrytis have all been increased substantially.

- Meteor – active is iprodione, same as Rovral.

- Presidio – grapes are no longer on the label; however, it is still legal to use older product that still has grapes on the label. This was verified with the Valent folks.

- Prolivo – pyriofenone, same chemical family as the active in Vivando. In NY trials, it controlled PM similar to Vivando. To limit resistance to PM, make no more than three applications per season, no more than two consecutive applications. Advantage over Vivando – Prolivo has a 4 hr REI and 0-day PHI while Vivando is 12 hrs and 14 days, respectively.

- Torino – phenylacetamide; controls PM only. Torino has been around a few years. Just a reminder that it is new chemistry and thus a good rotational product. Two applications max.

- Trionic – triflumizole, the same active ingredient as Viticure, an older sterol inhibitor. PM resistance is a concern. Does not provide reliable control of BR.

(Much thanks to Alice for letting me reproduce her article from last week's "Long Island Fruit & Veg Update" as well as to Bryan Hed, Penn State, and Wayne Wilcox, Cornell emeritus grape pathologist)

## Ag Labor

*Richard Stup is Cornell's Agricultural Workforce Development specialist. He publishes articles and other information related to ag labor on his website, <http://aqworkforce.cals.cornell.edu/>. We will occasionally include some of Richard's articles in the Vineyard Update, such as those printed below, but you can sign up to receive notifications about everything he publishes via email on that same site.*

### **Social Security No-Match Letters are in the Mail**

Many employers and payroll service providers are finding unwelcome correspondence in their mailboxes, Social Security "no-match" letters are back. A no-match letter means that the Social Security Administration (SSA) has found one or more employee records submitted by the employer that doesn't match either the name or social security number that SSA has on file. [Examples of these notices](#) can be found on SSA's website. During the Obama administration, SSA stopped sending no-match letters altogether, but the Trump administration decided to resume them. Many employers will remember that during the Bush administration these letters were sent frequently and employers had a specific process to follow in order to get "safe harbor" from legal consequences while the issue was sorted out. Unfortunately, the Bush era "safe harbor" rules are no longer in effect and employers will need to navigate some uncertain decisions.

### *"Constructive Knowledge"*

The problem for employers is that immigration officials and prosecutors consider an employer's receipt of a no-match letter from SSA as evidence of "constructive knowledge" that an employee may not be authorized to work in the U.S. Essentially, "constructive knowledge" is a legal term indicating that a reasonable person, given the facts and information available to them, should be able to infer that the employee is not authorized to work. U.S. Immigration and Customs Enforcement (ICE) will ask for no-match letters when conducting records audits or other enforcement actions. Employers who knowingly employ individuals who are not authorized to work are in violation of current immigration laws and are in jeopardy for fines and criminal prosecution.

### *Proceed With Caution*

Simply ignoring a no-match letter is not a good option because ICE could consider the employer to have "constructive knowledge" and to be willfully employing an unauthorized person. Furthermore, [SSA does share information with ICE](#) so immigration enforcement actions such as an audit could be prompted by no-match letters. However, employers shouldn't just fire an employee, or take any other adverse employment action, based on receiving a no-match letter. A no-match letter alone is not an indication that an employee is not authorized to work in the U.S. In fact, the no-match letter says it "does not address your employee's work authorization or immigration status." There could be a simple explanation for a mismatch such as a number getting transposed on a document or the person's name changed, such as through marriage, but they failed to notify SSA. If an employer takes adverse action against an employee, such as firing, simply based on a no-match letter, then they could be sued for discrimination. The no-match letter states: "You should not use this letter to take any adverse action against an employee, such as laying off, suspending, firing, or discriminating against that individual, just because his or her SSN or name does not match our records. Any of those actions could, in fact, violate State or Federal law and subject you to legal consequences."

## Ag Labor (continued from page 4)

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### *Next Steps*

Employers who receive a no-match letter will first need to create an account and login to SSA's [Business Services Online](#). Unlike the letters from years ago, the new letters don't include the names and social security numbers that are in error, you have to log-in to SSA's site to even learn which employees are referenced.

After the employer retrieves the list of employees with information that does not match SSA records, check business and personnel records to determine if a typographical error is the source of the discrepancy. If such an error is found, the employer can file a form W2-C to correct the information with SSA. More information about this correction process is contained in SSA's Business Services Online and it should be completed within 60 days of receiving the no-match letter. Of course, it's a good practice to verify that the correction took place and to document all employer actions.

If the employer finds no typographical or clerical error, then you will have to involve the employee in resolving the discrepancy. Inform the employee about the no-match letter from SSA and ask the employee to verify the accuracy of the information in your business records with the information found on their social security card. Instruct the employee to follow up directly with the SSA to resolve any discrepancies. Finally, document all of your business actions to show that you took reasonable steps to address and resolve the matter.

For more information, see the following related posts:

From the Michael Best law firm: <https://www.michaelbest.com/Newsroom/205321/Social-Security-No-Match-Letters-Return>

From Western Growers: <https://www.wga.com/blog/ssa-distributes-no-match-letters-tax-year-2018>

Employers with specific questions about dealing with no-match letters or other employment situations should seek legal counsel

### **New H-2A Resource from USDA**

USDA has a new resource available that many farmers might find useful. [Farmers.gov](#) is being constructed as the federal government home page for farmers to reach a lot of different resource at USDA from financing to conservation to temporary seasonal or temporary workers. It was this last offering that caught my attention.

Farmer who use or are considering seasonal or temporary farm workers should check out: <https://www.farmers.gov/manage/h2a>. There you will find helpful information about the H2-A Visa Program for seasonal and temporary farm workers. The site includes: general info, various possible application paths, an H-2A application checklist that you can customize for your needs, a summary of program costs, info about which application expenses are deductible, and a variety of other helpful program details.

### **The State of the Agricultural Workforce in New York**

There are many questions about and much interest in the agricultural workforce in New York. My colleagues in Cornell's Dyson School, Jenny Ifft and Tom Maloney, joined me in developing a publication to help answer many of those questions and to capture a snapshot of this large and diverse workforce that is so critical to farms and rural communities. We've based our work on the most recent and relevant research we could find and pulled it together in a clear and readable format. Please read and share [The State of the Agricultural Workforce in New York](https://dyson.cornell.edu/wp-content/uploads/sites/5/2019/03/Cornell-Dyson-eb1901.pdf). (<https://dyson.cornell.edu/wp-content/uploads/sites/5/2019/03/Cornell-Dyson-eb1901.pdf>)



*Hobart and William Smith Colleges, Geneva, NY*

*July 16-18, 2019*

## Shaulis Symposium at ASEV-ES focuses on Digital Viticulture.

Geneva, NY. A special vineyard tour and symposium entitled “Digital Viticulture: New Tools for Precision Management” will be featured as part of the annual American Society for Viticulture and Enology- Eastern Section (ASEV-ES) conference at Hobart and William Smith Colleges in Geneva, NY on July 16 through July 18.

The two-day program and vineyard tour will bring together suppliers, researchers, and growers to explore the tools and concepts of precision viticulture. New technologies, such as inexpensive sensors, digital imaging, geographical information systems, and precision machinery are converging to make precision viticulture possible. This field tour and symposium will focus on tools, concepts, and platforms for putting it all together to manage vineyards.



*Dr. Nelson Shaulis*

“Nelson Shaulis and others developed principles of vine physiology that form the basis of modern viticulture over the past 50 years”, said Tim Martinson, Senior extension associate with Cornell University. “Yet growers have lacked the tools to apply these principles on a vine by vine basis until now. New precision ag technologies are finally making it possible to vary management within a vineyard to achieve management goals.”

The ASEV-ES conference, featuring presentations on enology and viticulture from students and researchers of the Eastern Section, will take place on Tuesday, July 16. The conference includes lunch and Wines of the East reception.

The vineyard tour and demonstrations on Wednesday, July 17 will include variable-rate shoot thinning, mechanical crop estimation, yield monitors, sensors for measuring soil and canopy characteristics, UAV and tractor-mounted imaging systems, and tools for canopy management. The tour includes lunch and reception featuring regional wines.

The Shaulis Symposium on July 18 will focus on applying viticultural principles to address within-vineyard variability. Four sessions will cover the three-step process of implementing precision management: Measure, Model, and Manage. The symposium will include lunch and reception.

- Session 1: Physiology of vine balance and precision viticulture
- Session 2: Metrics for management: Sensors, drones, satellites, and analytical equipment
- Session 3: Models for management: Translating data to practical tools for deciding ‘what I need to do and where’.
- Session 4: Examples of applied digital viticulture.

Registration options for each day are available. Conference, Vineyard Tour, and Symposium information is available at [www.asev-es.org](http://www.asev-es.org).

**DIGITAL VITICULTURE** Nelson J. Shaulis Symposium  
**ASEV** AMERICAN SOCIETY FOR ENOLOGY & VITICULTURE Eastern Section

New Tools for Precision Management  
**July 17-18, 2019** Hobart & William Smith Colleges in Geneva NY  
 Held in conjunction with **ASEV-Eastern Section Conference July 16.**  
 For more information about the conference and symposium visit [www.asev-es.org](http://www.asev-es.org)

**Vineyard Tour and Demonstrations July 17**

- **View demonstrations** of new sensors, robots, imaging technologies, and map-guided, variable-rate equipment
- **Experience** equipment demos by industry vendors
- **Enjoy Lunch, Reception, and Wine Tastings** from Keuka and Seneca wine trails while networking

**Nelson J. Shaulis Symposium July 18**

- **Learn from experts** how digital tools are applied to manage variable vineyards, reduce labor, and improve yield and quality
- **See digital tool application** examples from New York, California, and France

Map-based Management Zones

GPS-Enabled Tractor  
 Variable-Rate Thinning  
 NDVI Sensor  
 3-D Cluster Imaging

**Dr. Nelson Shaulis** and others developed principles of vine physiology that form the basis of modern viticulture. Yet growers have lacked the tools to apply these principles on a vine-by-vine basis to manage variable vineyards.

**New technologies** such as inexpensive sensors, digital imaging, geographical information systems, and precision machinery are converging to make precision viticulture possible. This field tour and symposium will focus on tools, concepts, and platforms for putting it all together for managing vineyards.



**July 17 Field Day and Vineyard Tour:** Demonstrations of sensors, mapping technology, and variable-rate GIS-ready equipment for vineyard management. Tour includes lunch and wine reception featuring regional wines.

- **Morning:** Clearview Vineyards, Branchport, NY. Focus on spatial crop load measurement, yield monitors, tractor-mounted NDVI sensors, mechanical yield estimation, brix mapping, GPS-enabled tractors
- **Afternoon:** Anthony Road Vineyards, Seneca Lake, NY. Focus on vinifera: Drones, Imaging systems including drones and cluster imaging systems, novel sensors, tools for canopy management.

**July 18 Nelson J. Shaulis Symposium:** The symposium will focus on applying viticultural principles to address within-vineyard variability using the three-step process: MEASURE, MODEL, and MANAGE. Symposium includes lunch and reception

- **Session 1:** Physiology of vine balance and precision viticulture
- **Session 2:** Metrics for management: Sensors, drones, satellites, and analytical equipment
- **Session 3:** Models for management: Distilling a flood of data to practical tools to guide management decisions
- **Session 4:** Examples of “Digital Viticulture” from around the world.

**Conference, Tour, and Symposium information at:**

[www.asev-es.org](http://www.asev-es.org)

## Upcoming Events

Don't forget to check out the calendar on our website (<http://flgp.cce.cornell.edu/events.php>) for more information about these and other events relevant to the Finger Lakes grape industry.



### Tailgate Meeting #1

*Tuesday, April 30, 2019 4:30 – 6:00 PM*  
*Three Brothers Wineries & Estates*  
*623 Lerch Road, Geneva NY*

Our first Tailgate Meeting of the season will be held at Three Brothers just south of Geneva. Pesticide credits will be available for each Tailgate Meeting this season. No registration required – just bring a chair and your questions and observations about what's going on in the vineyard.

### Spring Grape IPM Meeting

*Wednesday, May 15, 2019 4:30 – 6:00 PM (with dinner following)*  
*Doyle Vineyard Management*  
*10223 Middle Road, Hammondsport NY*

Come one, come all for this year's Spring Grape IPM meeting! Come for the credits and the information, stay for the food! Speakers will cover topics including disease and weed management, the latest on the Spotted Lantern Fly, insecticide use for managing fruit flies and sour rot, and more. And don't forget to stick around afterwards for dinner and some social time with your fellow growers.

The meeting is free to those who are enrolled in the FLGP for 2019, and \$15 per person for those who are not (\$25 at the door, which will be limited). In order to have an accurate count for dinner, we need everyone to register for the meeting by Friday, May 10. Please register at <https://flgp.cce.cornell.edu/event.php?id=391> or call Brittany at 315-536-5134.



# Finger Lakes Vineyard Update

## 2019 GDD & Precipitation

FLX Teaching & Demonstration Vineyard – Dresden, NY					
Date	Hi Temp (F)	Lo Temp (F)	Rain (inches)	Daily GDDs	Total GDDs
4/12/2019	69.2	41.1	0.00	5.2	20.5
4/13/2019	69.3	47.3	0.00	8.3	28.8
4/14/2019	54.9	41.9	0.54	0.0	28.8
4/15/2019	49.4	37.6	0.21	0.0	28.8
4/16/2019	51.1	35.9	0.04	0.0	28.8
4/17/2019	61.5	34.5	0.00	0.0	28.8
4/18/2019	65.6	51.7	0.01	8.7	37.5
Weekly Total			<b>0.80"</b>	<b>22.1</b>	
Season Total			<b>1.24"</b>	<b>37.5</b>	

GDDs as of April 18, 2018: 0.0

Rainfall as of April 18, 2018: 1.18"



### Seasonal Comparisons (at Geneva) as of April 12

#### Growing Degree Day

<sup>1</sup> Accumulated GDDs for each month.

	2019 GDD <sup>1</sup>	Long-term Avg GDD <sup>2</sup>	Cumulative days ahead (+)/behind (-) <sup>3</sup>
April	26.4	64.1	
May		255.5	
June		480.9	
July		642.1	
August		592.7	
September		357.6	
October		110.1	
TOTAL	26.4	2503.0	

<sup>2</sup> The long-term average (1973-2017) GDD accumulation as of that date in the month.

<sup>3</sup> Numbers at the end of each month represent where this year's GDD accumulation stands relative to the long-term average. The most recent number represents the current status.

## 2019 GDD & Precipitation (continued from page 7)

### Precipitation

	2019 Rain <sup>4</sup>	Long-term Avg Rain <sup>5</sup>	Monthly deviation from avg <sup>6</sup>
April	1.38"	2.85"	
May		3.13"	
June		3.60"	
July		3.44"	
August		3.21"	
September		3.57"	
October		3.39"	
TOTAL	1.38"	23.16"	

<sup>4</sup> Monthly rainfall totals up to current date

<sup>5</sup> Long-term average rainfall for the month (total)

<sup>6</sup> Monthly deviation from average (calculated at the end of the month)

## Additional Information

Become a fan of the [Finger Lakes Grape Program on Facebook](#), or follow us on [Twitter \(@cceflgp\)](#) as well as YouTube. Also check out our website at <http://flgp.cce.cornell.edu>.

Got some grapes to sell? Looking to buy some equipment or bulk wine? List your ad on the [NY Grape & Wine Classifieds website](#) today!

### Finger Lakes Grape Program Advisory Committee

**Eric Amberg**- Grafted Grapevine Nursery

**Bill Dalrymple**- Dalrymple Farm

**Matt Doyle**- Doyle Vineyard Management

**Eileen Farnan**- Barrington Cellars

**Chris Gerling**- Cornell University Extension

**Mel Goldman**- Keuka Lake Vineyards

**Luke Haggerty**- Constellation Brands

**Tina Hazlitt**- Sawmill Creek Vineyards

**Cameron Hosmer**- Hosmer Winery

**Harry Humphreys**- Overlook Farms

**Richard Jerome**- Jerome's U-Pick

**Gregg McConnell**- Farm Credit East

**Herm Young**- Young Sommer Winery

**John Santos**- Hazlitt 1852 Vineyards

**Dave Smith**- Smith Brothers Farms

**Justine Vanden Heuvel**- Cornell University

**Derek Wilber**- Swedish Hill Winery

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## Cornell Cooperative Extension Finger Lakes Grape Program

Hans Walter-Peterson—Team Leader

Donald Caldwell—Viticulture Technician

[flgp.cce.cornell.edu](http://flgp.cce.cornell.edu)



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