



Finger Lakes Grape Program

July 2, 2014

Finger Lakes Vineyard Update

Equipment Demonstration Meeting

Links To

Hans Walter-Peterson

Thursday, July 10 4:00 – 5:30 PM

Finger Lakes Teaching & Demonstration Vineyard

1020 Anthony Road

Penn Yan NY 14527 ([click here for a map](#))

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The FLGP will be hosting a brief demonstration of a couple of pieces of vineyard equipment next Thursday, July 10 at the Finger Lakes Teaching & Demonstration Vineyard. Peter Martini will be demonstrating his Collard leaf remover, which uses high-pressure pulsed air to remove leaves in the fruit zone. Peter has used this machine in several vineyards around the Finger Lakes, including his own, and will talk about his experience with the machine so far. We will also be running a mechanical finger weeder for cultivation under the trellis that we have been using at the Teaching Vineyard this season, developed by a company called KULT.

You can see more information about the [Collard leaf remover](#) at Lakeview Vineyard Equipment's website.

You can watch a short video of the weeder produced by the company [by clicking here](#).

We are not endorsing either of these pieces of equipment, nor have we done any real field trials to see just how effective they are at what they claim to do, but we wanted to give growers an opportunity to see both of these pieces at work.



Mechanical finger weeder



Head of the Collard leaf remover.

Upcoming Events

Tailgate Meeting Egresi Vineyards

July 8, 2014

Equipment Demonstration Meeting

July 10, 2014

IPM

Hans Walter-Peterson

Downy Mildew

Downy mildew lesions are starting to appear up in the canopy a bit more frequently over the past week or so, especially in more sensitive native (Niagara) and hybrid (Cayuga White, Aureore) varieties, as well as vinifera blocks. Lesions have been showing up on suckers for a few weeks now, but more signs of infection are showing up on leaves, and a few clusters, in fruiting zones.



*White DM spores on young cluster.
DM infection prevented most of
these flowers from setting berries.*

Once the initial infections develop from overwintering inoculum in leaf litter and soil on the ground, which happens before bloom, further infections result from spores that come from the white, fluffy-looking growth on the underside of the leaf. These spores are only produced at night when the relative humidity in the air is very high, and are spread by wind to new tissues. These new infection sites need to be wet for a few hours in order for the fungus to establish itself. The time between “generations” of spores (from infection to developing new spores) depends on the temperature. Infections can occur anywhere between the low 50s to mid 80s Fahrenheit, with the mid to upper 70s being the sweet spot (this information comes from the 2014 NY/PA Pest Management Guidelines for Grapes, pg. 16). Berries develop resistance to new DM infections about 4 weeks after the start of bloom (which will be somewhere in early to mid-July this year, depending on variety), but leaves remain susceptible to new infections throughout the season, particularly younger ones.

As I mentioned, lesions also have been appearing on suckers. Because of the level of winter injury in a number of vineyards this year, maintaining healthy suckers that can be trained into new trunks next year is just about as important as maintaining a healthy canopy and crop. If downy mildew pressure is increasing on suckers, check to see if the sprayer is applying at least some spray down low enough so that they receive protection too (this would be a great application of the sensors that Andrew Landers has been using in apple trees to avoid spraying where there's no foliage). Another option, and more environmentally sound probably, is to spot spray downy materials (phosphorous acid products, Revus, Ranman, etc.) on those areas where DM is developing on suckers.

One final note that we put out every year but is still worth repeating – the phosphorous acid (PA) products like ProPhyt, Phostrol and Rampart are very good at handling DM infections after they have established and reducing sporulation from existing infections, which helps to keep new infections from developing (they don't actually 'eradicate' existing infections, like some of the potassium salts or Stylet Oil do to powdery mildew). The pathogen is capable of developing resistance to these materials, so be sure to use them in rotation with other forms of control for DM. The recommendation in the IPM Guidelines is that PA products should not be used in more than two consecutive sprays, and no more than four times per season.

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IPM (Continue from page 2)

Grape Berry Moth (GBM)

According to the GBM model, some of our warmer sites, including the Teaching Vineyard in Dresden, will be reaching the 810 GDD threshold for the first spray to control grape berry moth by the end of the week or this weekend. The first generation of GBM should be starting to enter vineyards about now, so growers with areas that have trouble with GBM should be scouting and preparing to include an insecticide spray in their next upcoming spray. Most materials that are effective against GBM have at least 7 days of longevity on the fruit, so if you can't spray right around 810 GDDs as suggested, it would be better to spray a few days early rather than a few days later.

[Weather Data](#) [Pest Forecasts](#) [Station Pages](#) [Crop Management](#) [Crop Pages](#) [About Weather Stations](#)

Grape Forecast Models

Select a disease or insect:
Grape Berry Moth

Weather Station:
Dresden (FLGP/FLCC)

Date of Interest:
7/2/2014

Calculate

MapResultsMore info

Grape Berry Moth Results for Dresden (FLGP/FLCC)
Wild Grape Bloom: 5/31/2014
Wild Grape Bloom date above is estimated based on degree day accumulations or user input. Enter the actual date for blocks of interest and the model will calculate the results more accurately.
Accumulated degree days (base 47.14°F) wild grape bloom through 7/2/2014: 712 (0 days missing)

Daily Degree Days for Dresden (FLGP/FLCC)

Base Temp	Past	Past	Current	5-Day Forecast		Forecast Details		
	Jun 30	Jul 1	Jul 2	Jul 3	Jul 4	Jul 5	Jul 6	Jul 7
47.14F - GBM	32	33	32	23	18	18	22	27
Accumulation	664	698	730	753	772	790	811	838

NA - not availableDownload Time: 7/2/2014 11:00

Pest Status	Pest Management
Start of flight of first generation grape berry moth is expected at this time.	Prepare to scout low and intermediate risk vineyards for grape berry moth damage when DD accumulation after wild grape bloom reaches 750-800 DD. During scouting, determine if damage from first generation larvae exceeds the treatment threshold of 6% damaged clusters. If above threshold, control measures should be applied at 810 DD.

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.

FLGP Tailgate Meeting

Tuesday, July 8 5:00 – 6:30 PM

Egresi Vineyards

10887 County Road 78, Prattsburg NY

Our next Tailgate Meeting will be held on Tuesday, July 8th at 5:00 PM at Egresi Vineyards in Pulteney.

These meetings are held every other week at various grape farms around the Finger Lakes, and are intended to be informal, small-group meetings where FLGP staff and growers can ask questions and discuss issues about vineyard management, IPM strategies or other topics appropriate for that point in the growing season. Growers are eligible to receive 0.75 pesticide recertification credits at each meeting this year.

Here are the dates and locations of the rest of our Tailgate Meetings this season.

Date	Address
July 22	Dalrymple Farm, 7890 County Rd. 131, Ovid NY 14521
August 5	Hunt Country Vineyards, 4021 Italy Hill Road, Branchport NY 14418
August 19	Dr. Frank's Vinifera Wine Cellars, 5230 Route 414, Hector NY 14841



Vineyard Equipment Demonstration

Thursday, July 10 4:00 – 5:30 PM

Finger Lakes Teaching & Demonstration Vineyard

1020 Anthony Road, Penn Yan NY 14527

See the announcement in this week's Update for information about this meeting. No pre-registration is required.

Finger Lakes Vineyard Update

Finger Lakes Grape Program

July 2, 2014

2014 GDD Accumulation

2014 GDD & Precipitation

FL Teaching & Demonstration Vineyard – Dresden, NY					
Date	Hi Temp (F)	Lo Temp (F)	Rain (inches)	Daily GDDs	Total GDDs
6/25/14	72.6	67.1	1.32	19.9	835.9
6/26/14	77.2	66.5	0.00	21.9	857.8
6/27/14	84.0	60.3	0.00	22.2	879.9
6/28/14	84.7	62.6	0.00	23.7	903.6
6/29/14	85.8	66.0	0.00	25.9	929.5
6/30/14	88.5	71.1	0.01	29.8	959.3
7/1/14	89.6	71.2	0.00	30.4	989.7
Weekly Total			1.33"	173.6	
Season Total			12.83"	989.7	

GDDs as of July 1, 2013: 982.5

Rainfall as of July 1, 2013: 10.91"

Seasonal Comparisons (at Geneva)



Growing Degree Day

	2014 GDD ¹	Long-term Avg GDD ²	Cumulative days ahead (+)/behind (-) ³
April	52.1	65.6	-3
May	298.3	247.3	+3
June	516.9	480.6	+4
July	28.5	642.3	+5
August			
September			
October			

¹ Accumulated GDDs for the month.

² The long-term average (1973-2013) GDD accumulation for that month, or up to the most recent records in the current month.

³ Numbers at the end of each month represent where this year's GDD accumulation stands relative to the long-term average. For example, at the end of April 2014, we were 3 days behind average accumulation. The most recent number represents the current status.

2014 GDD Accumulation

Precipitation

	2014 Rain ⁴	Long-term Avg Rain ⁵	Monthly deviation from avg ⁶
April	2.90"	2.90"	0.00"
May	3.64"	3.11"	+0.53"
June	3.23"	3.60"	-0.37"
July			
August			
September			
October			

⁴ Monthly rainfall totals up to current date

⁵ Long-term average rainfall for the month (total)

⁶ 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, “The Grape Lakes – Viticulture in the Finger Lakes” at <http://flg.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!

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