LERGP Crop Update June 30 , 2016

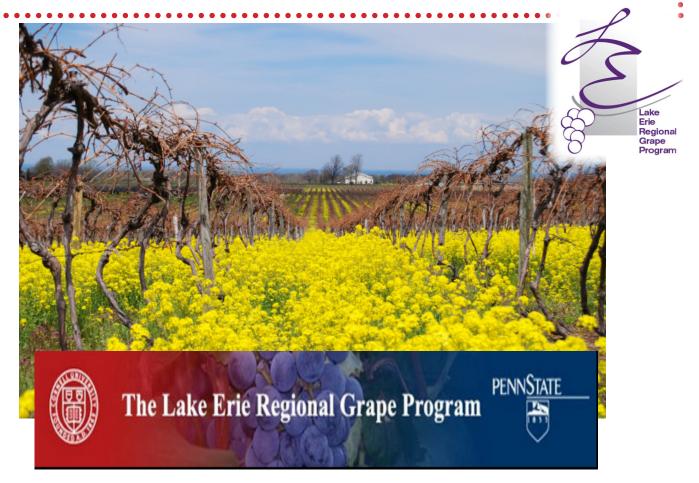
Important dates:

July 6, 2016- Coffee Pot Meeting 10:00am- David C. Nichols Farm, 1906 Ridge Rd. Lewiston NY 14092 every Wednesday following: Coffee Pot meetings- see enclosed schedule

August 2, 2016- Wine QualityWorkshop (rescheduled from April 13, 2016) at CLEREL August 11, 2016 Craft Beverage Summit at CLEREL- more information to come oon this! August 31, 2016- Cornell Vegetable Program Field Day at CLEREL September 1, 2016- Cover Crop Conference at CLEREL

****Crop Updates will be circulated on a weekly basis beginning with this edition.****

Have a happy and safe 4th of July weekend!



Building Strong and Vibrant New York Communities

Diversity and Inclusion are a part of Cornell University's heritage. We are a recognized employer and educator valuing AA/EEO, Protected Veterans, and Individuals with Disabilities.

Cover Crop Workshop and Field Day

September 1, 2016 @ CLEREL 9:00am-4:00pm 6592 West Main Rd. Portland, NY 14769

Join the Lake Erie Regional Grape Program for a full day of education surrounding cover crops in Concord vineyards.

- Current research
- Leading scientists in cover crop research
- Tour demonstration plots
- Hear local growers sharing their experience

Fee: \$10; includes morning refreshments and lunch





Register by August 25, 2016 at the LERGP web-site <mark>Registration</mark> or call Kate at 716-792-2800, e-mail: kjr45@cornell.edu





2016 LERGP Coffee Pot Schedule

May 4-10:00am Betts 7365 East Route 20, Westfield NY 14787 May 11-10:00am Ann & Martin Schulze-2030 Old Commer Rd. Burt NY 14028 May 18-10:00am John Mason 8603 W Lake Rd. Lake City PA 16423 May 25-10:00am Dan Sprague- 12435 Versailles Plank Rd. Irving NY 14081 3:00pm Peter Loretto-10854 Versailles Plank Rd. North Collins NY 14111 June 1-10:00am Phillip Baideme- 7935 Route 5, Westfield NY 14787 3:00pm Tom Meehl Cloverhill Farm 10401 Sidehill Rd North East PA 16428 June 8-10:00am Earl & Eileen Blakely 183 Versailles Rd. Irving NY 14081 3:00pm- Paul Bencal 2645 Albright Rd Ransomville NY 14131 June 15- 10:00am Leo Hans-10929 West Perrysburg Rd. Perrysburg NY 14129 3:00pm - Evan Schiedel/Roy Orton - 10646 West Main Rd. Ripley NY 14775 June 22-10:00am Archer Pratz 9210 Lake Rd North East PA 16428 3:00pm-Alicia Munch-761 Bradley Rd. Hanover NY 14136 June 29-10:00am Kirk Hutchinson-4720 West Main Rd. Fredonia NY 14063 3:00pm Fred Luke 1755 Cemetery Rd. North East PA 16428 July 6-10:00am David C. Nichols Farm 1906 Ridge Rd. Lewiston NY 14092 July 13-10:00am Beckman Bros. 2386 Avis Dr. Harborcreek PA 16421 July 20-10:00am Brant Town Hall- 1294 Brant North Collins Rd. Brant NY 14027 July 27-10:00am Tom Tower 759 Lockport Rd. Youngstown NY 14174

Business Management

Kevin Martin Penn State University, LERGP, Business Management Educator

Thinning and Drought: Business Considerations

With reports of significantly above average set in Pennsylvania and certain areas in New York, yesterday's coffee pot turned to crop estimation and thinning. The business operations of grape growers remain highly diverse. Growers' opinions on the matter were even more diverse than the business operation. A different marketing contract can help move the line up and down, justifying the economics of crop thinning sooner or later.

Simply having a marketing contract will justify crop thinning at some theoretical point, in all cases. That is not to say Concords die, or even don't get ripe eventually when you don't thin. In certain cases, it will make sense to thin, even when Concords live and eventually reach something close to 15 brix. In other words, I'm not saying you have to take 16 tons down to 12 tons. I'm just saying, in most cases you'll make more money if you do.

This will not be an easy topic this year. Not only are prices low but crop levels and vine productivity are highly variable. A crop size that is a problem in one area might not be a problem in another. This year is a great reminder why disease management is the second best investment a grower can make, but row middle management is usually the best investment a grower can make. To maximize the efficiencies of those investments, we can let experts discuss the specific recommendations that vary based on weather conditions and other factors. This year, growers should be relying on any strategy that reduces (eliminates) competition. Growers that have implemented practices to preserve water will see those investments pay dividends this year. Cover crops, organic matter, and mulch all require time to see a payoff. For growers struggling to see how those practices, particularly the expensive ones, do (or don't) justify themselves in dry years, this will be a great year to observe.

I touch on row middle management, yet again, because it does look like drought stress might be a possible factor this year. If it becomes one, as vines shut down, water status may impact thinning decisions. While we are not there yet, that basically means row middle management will be directly related to yield this year. Fall cover crops designed to increase available moisture in subsequent years are inexpensive. Row middle herbicide and weed termination are also inexpensive (see last week for details). Unrolling hay, spreading mulch, and trickle irrigation are more expensive operations that require a detailed plan by the grower to justify the expense.

The economic recommendations for crop thinning remain the same this year as every year. The optimal production of concord grapes is having an average of 14.5 – 14.75 brix by the third week of September. Site variability or variable vineyard management should have 25% of the vineyard between 14.9 - 15.2 brix on the first day of harvest. The variability of that recommendation is dependent on the terms of your marketing contract. Obviously, that kind of precision is entirely impossible. Growers will miss the mark on both sides of that target. Crop load management that maximizes your chances of getting close to that target will allow you to improve long-term revenue, while operating in a lower risk environment.

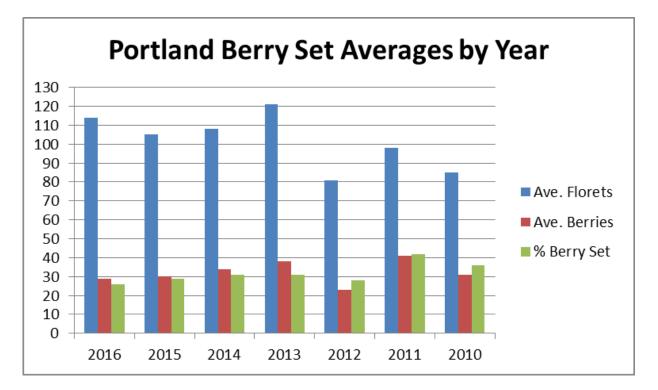
Not to overstate the obvious, but as always knowledge is power. Taking the time to do crop estimation is always a valuable investment.

Cultural Practices

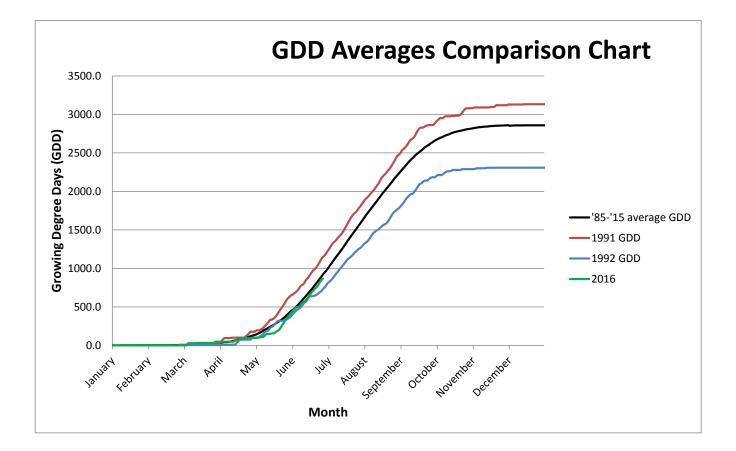
Luke Haggerty Viticulture Extension Associate Lake Erie Regional Grape Program

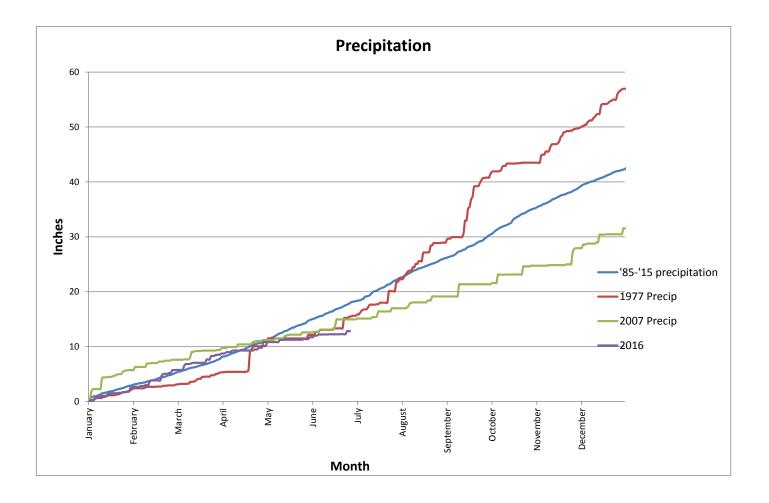
Berry Set and Crop Estimation

As we progress into July, it becomes time to determine fruit set and start the conversation of crop estimation. Phenology data collected by CLEREL staff includes 'berry set' (below) and the start of the 'berry curve' (next week). The 'average berry set' data shows that our test block is slightly below average. However, most of the vineyards I have been in, and reports from growers, suggest that most vineyards have high cluster counts and high berry numbers.



With potential of a large crop, dry conditions, and the importance of making quality standards, crop estimation will again be an important vineyard function. Concerned growers are already bringing up the subject of crop thinning. Although crop thinning might be an option for some vineyards, crop estimation is an important first step. Based off our bloom date (50% bloom) as of today (June 30th), we are 18 days after bloom and are gearing up to perform crop estimation at 30 days after bloom.





IPM

Grape Rootworm – scouting conducted on June 28, 2016 in the eight project vineyard blocks found emergence of grape rootworm adults still underway in blocks that had not yet received an insecticide. Those vineyards where an insecticide had been applied decreased the populations to zero. All vineyard blocks will be scouted the first week of July to document continued emergence, or reemergence, patterns.

It is not too late to scout for grape rootworm. Traditional timing of scouting was the 4th of July weekend so you may be catching peak emergence by going out now (only continued research will tell us if that is true). We have several materials available for use against grape rootworm. In alphabetical order they are; Admire Pro, Danitol, Leverage 360, Sevin, and Sniper (a generic bifenthrin) If you are growing grapes in New York and want to use Admire Pro, Danitol, Leverage 360 or Sniper for grape rootworm you will need a copy of the FIFRA 2ee recommendation for that use. You can find a copy of these recommendations on the LERGP website under IPM at; http://lergp.cce.cornell.edu/ipm.php?season=summer

Pennsylvania growers do not have this restriction as they can use any of the above mentioned insecticides as they are labeled for use in grapes.

Grape Berry Moth – according to the NEWA model we are still well below the 810 DD (611 DD as of June 30 at the Portland Lab) needed to time an insecticide application in vineyards at intermediate and high risk for damage from grape berry. We are looking toward the second weekend of July before we accumulate 810 DD with the current long range forecast. However, it is recommended that you continue to check the grape berry moth model for the station nearest you on the NEWA website http://newa.cornell.edu to get the latest model information. The table below shows the GBM model results from NEWA for the Portland site.

Grape Berry Moth Results for Portland

Wild Grape Bloom: 6/1/2016

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.

Daily Degree Days for Portland									
Base Temp	Past	Past	Current	t 5-Day Forecast Forecast Details					
	Jun 28	Jun 29	Jun 30	Jul 1	Jul 2	Jul 3	Jul 4	Jul 5	
47.14F - GBM	20	18	20	20	19	20	23	26	
Accumulation	574	591	611	631	650	670	693	719	

Accumulated degree days (base 47.14°F) wild grape bloom through 6/30/2016: 598 (0 days missing)

NA - not available

Download Time: 6/30/2016 10:00

North East PA Update

Byran Hed Research Technologist Lake Erie Grape Research and Extension Center

<u>Weather:</u> At our site, we have recorded just 1.92" rainfall for June; down from our average of about 3.1" for June. We have accumulated about 509 growing degree days (gdds) for the month, very close to average (average is about 512). According to Accuweather, there is a chance for rain on Friday (July 1), but I think most of us are losing faith in rain forecasts this summer. In the longer term forecast, there is an abundance of warm, dry weather ahead to continue our current trend.

We are about 2 weeks past Concord bloom, depending on your proximity to the lake. That means that we are fast approaching the end of the Concord fruit susceptibility period to powdery and downy mildew. Niagara fruit will also be nearing resistance to powdery mildew, but clusters will remain susceptible to downy mildew for probably 2-3 weeks longer (cluster stems remain susceptible to downy for about 2 weeks longer than fruit). But dry weather up to now has pretty much shut down any possible threats to the development of black rot, downy mildew and Phomopsis and vineyards are looking very clean with the exception of a little powdery mildew here and there. Last Monday's rain did generate short infection periods for these diseases, but timely post bloom sprays ahead of that rainfall should have protected area vineyards from this threat. If you suspect this infection period did happen to generate some disease in your vineyard, look for downy mildew on low leaves in the vineyard about 5 days later (aboutSaturday/Sunday). Black rot takes longer to manifest itself, and symptoms from this infection period will take two weeks to show up. Since secondary cycles of powdery mildew have kicked in, every day is an infection period and powdery mildew disease development is not dependent on rainfall anymore. That said however, powdery mildew is off to a slow start and little if any disease has been found in area vineyards thus far.



In the Vineyards, PA

Andy Muza County Extension Educator Penn State, LERGP

In the Vineyard

<u>Diseases</u>

No symptoms of **downy mildew** or **black rot** were observed in Concord or Niagara blocks checked this week. However, **downy mildew sporulation** was found on a cluster (Figure 1). **Black rot lesions** were also observed on 2 leaves on wild grapes (Figure 2). Although continued dry weather is starting to cause water stress concerns the lack of rainfall has shut down infections of phomopsis, black rot and downy mildew. **Powdery mildew** (Figure 3) was found sporadically on clusters in a Niagara block and in a few Concord sites.

Insects

Grape Berry Moth – Concord berries have developed to the stage where red stings (i.e., red berry discoloration due to GBM larval feeding injury) are visible (Figure 4). At one Severe Risk site, 20% of clusters (5/25 clusters examined) had at least 1 berry with feeding injury. Within the next 8 – 12 days 810 GBM degree days may be reached (depending on temperatures and site). Start closely following the GBM Degree Day Model in NEWA <u>http://newa.cornell.edu/index.php?page=berry-moth</u> to determine when an insecticide application should be applied in high and severe risk sites.



Figure 1. Downy Mildew sporulation on wild grape cluster



Figure 2. Black rot lesions on wild grape leaf



Figure 3. Powdery Mildew on young Concord berries



Figure 4. Grape Berry Moth Larvae feeding injury on young Concord berry

2016 eNEWA Grape Project Subscription Sign-Up

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Dunkirk	Finger Lakes Region	Lodi (Shalestone)
Erie	Aurora	Lodi (Standing Stone)
Harborcreek	Branchport	Penn Yan
North East Escarpment	Dresden (FLGP/FLCC)	Romulus (B. wood Grove)
North East Lab	Dundee (Weimer)	Romulus (Thirsty Owl)
Portland	Fayette 3 Brothers	Varick (Swedish Hill)
Portland Escarpment	Geneva	Watkins Glen
Portland Route 5	Geneva (Bejo)	Watkins Glen (Lakewood)
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Select eNEWA Delivery Times (write in times below) Delivery requests should be on the hour.

Mail to: Tim Weigle, CLEREL, 6592 West Main Road, Portland, NY or scan and email to thw4@cornell.edu



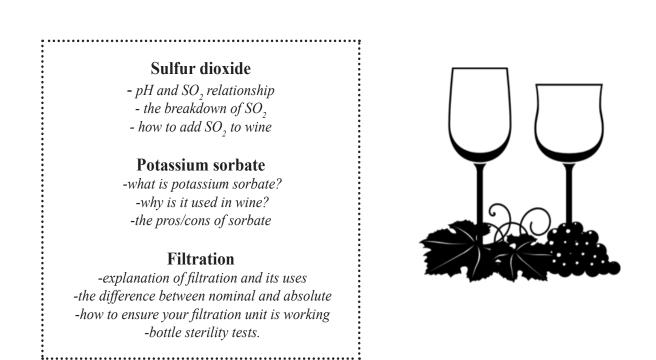
Winery Quality Control Workshop

Stabilize your wine - Filtration, Sulfur Dioxide and Potassium Sorbate

Registration: 8:30am; Program- 9:00am-4:00pm Cost: \$50.00 per person(includes morning coffee and lunch) Where: CLEREL, 6592 West Main Rd. Portland NY 14769 716-792-2800 ext-201



Denise Gardner, Enology Extension Associate, Penn State University Chris Gerling, Enology Extension Associate, Cornell University Anna Katharine Mansfield, Associate Professor of Enology, Cornell University



Please Register by July 22, 2016

Name of Winery represented:		Phone:	
Email:			
Name(s) of attendees: 1)	2)	3)	
4) 5)	6)	/	
Total cost @ \$50.00/person xperso	n/people = \$		2
Please make checks payable to LERGP	and mail to:		F
LEDCD 6502 West Main Dd Dortland		C	

LERGP, 6592 West Main Rd. Portland NY 14769, ATTN: KATE Contact Kate at kjr45@cornell.edu or 716-792-2800 ext 201 for more information.



***You may also register on-line at http://lergp.cce.cornell.edu/. You can register up to 3 participants and pay with a credit card.



The Only FRAC Group U6 Fungicide Labeled for Grapes & Cucurbits Highly Effective on Powdery Mildew No Cross-Resistance Protectant / Preventative Action



FRAC Group 3 Labeled for Grapes Controls Powdery Mildew & Black Rot Protectant + Curative Activity Highly Systemic





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



Mite control on Grapes Knockdown and Residual

> Dave Pieczarka 315.447.0560

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7653 Dutton Rd. Harborcreek, PA 16421 Jared Mosier Phone: (301) 512-3977 jsmosier1@gmail.com

LERGP Website Links of Interest:



Check out our new Facebook page!!

Cornell Lake Erie Research & Extension Laboratory Facebook page https://www.facebook.com/Cornell-Lake-Erie-Research-and-Extension-Laboratory-678754995584587/?fref=ts

Table for: Insecticides for use in NY and PA: http://lergp.cce.cornell.edu/submission.php?id=69&crumb=ipm|ipm

Crop Estimation and Thinning Table: http://nygpadmin.cce.cornell.edu/pdf/submission/pdf65_pdf.pdf

Appellation Cornell Newsletter Index: http://grapesandwine.cals.cornell.edu/cals/grapesandwine/appellation-cc_____



Veraison to Harvest newsletters:

http://grapesandwine.cals.cornell.edu/cals/grapesandwine/veraison-to-harvest/index.cfm

Go to http://lergp.cce.cornell.edu/ for a detailed calendar of events, registration, membership, and to view past and current Crop Updates and Newsletters.





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