



LAKE ERIE REGIONAL GRAPE PROGRAM

Electronic Crop Update for May 9, 2013

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UPCOMING EVENTS

Please visit our LERGP Website at: <http://lergp.cce.cornell.edu/> for a detailed calendar. Please remember to RSVP for those events that require one! UPCOMING EVENTS are also listed toward the bottom of this Electronic Update.

Please remember to let us know if you have changed or are in the process of changing your email address so we can keep the Electronic Crop Update coming to your inbox!
[Please email Edith at: emb35@cornell.edu.](mailto:emb35@cornell.edu)

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YIELD MONITORING SPRING 2013 - James Taylor, Ph.D.

Two weeks ago (*April 25 Electronic Crop Update*) there was a short announcement in the crop update asking if there was any interest in yield monitoring amongst growers (*A short video on yield monitoring in Lake Erie is available at: <http://www.youtube.com/watch?v=dtUXdFVFI4w>*). So far there has been a deafening silence (with the exception of one grower). To clarify, we are not asking you to lay your money on the table; rather we want to understand the level of interest in the technology in Lake Erie region. From a purely research perspective we will continue to use (and evaluate) the yield monitor on our harvester. However, the level of interest expressed by you will determine the amount of effort we put into extending and assisting the adoption of the technology. We do not want to waste our resources if it is not of interest to you (even in the medium term). We realise that growers are not necessarily keen on capital investment after last year, but hopefully things are not as dire in the coming years.

If you are interested in knowing; the cost (and possible cost-sharing), how it operates in more detail, the ease of use of the system, what to realistic expect from the information obtained, how to proceed with purchase/installation or any other question then please let James Taylor (james.taylor@cornell.edu; [716-792-2800](tel:716-792-2800) ex 212) or someone else at CLEREL know. We will be in contact with interested parties (hopefully plural) to organise a get together in the near future.

WEATHER DATA: Edith Byrne

Weather Data North East PA

DATE/YEAR	HIGH	LOW	DAILY PRECIP.	GDDs	TOTAL APRIL GDDs	TOTAL JAN GDDs
Week 4/24/13	62	34	0.46	0	38.5	64
Week 4/30/13	71	57	0.00	14.5	86.5	163.5
Week 5/8/13	67	54	0.34	10.5	178	255
Week 5/8/12	63	53	0.47	8.0	137.5	268
AVERAGE	65.1	45.1	0.13	6.59	130.06	156.00
AVERAGE HIGH MAY 2013 = 72 (thru 5/8/13)			AVERAGE HIGH MAY 2012 = 68.38 (thru 5/8/12)			
AVERAGE LOW MAY 2013 = 54.50 (thru 5/8/13)			AVERAGE LOW MAY 2012 = 51.7 (thru 5/8/12)			
MAY Rainfall accumulation = 0.34"						
APRIL Rainfall accumulation = 3.44"						
Rainfall accumulation 1/1/13 through 5/8/13 = 9.49"						

FROM NORTH EAST, PA: Bryan Hed

Weather: Here at the North East PA lab, we have accumulated 104 growing degree days during the first 8 days in May. Our gdd total since April 1 equals 178. We just recorded our first serious wetting period since bud break; 0.5" rainfall on May 8, right out of the blue. This rainfall has resulted in about 20 hours of wetness so far in our open, well aerated location by the lake (possibly more in areas with poor air movement) at an average temperature of about 57 F (temperatures may have been even warmer farther inland).

Phenology: We recorded 50% bud break in Concord on May 2/3 and we are currently at about the 1-2" shoot stage here on the lake. Shoots farther inland are more in the 2-4" (or more) stage of growth.



Diseases: It's Wet, Wet, Wet and [Phomopsis](#) 'is all around' in vineyard blocks with heavy inoculum pressure. Research at Cornell by Wayne et al. has shown that an application of mancozeb (3 lbs/A) at early stages of shoot growth can protect inflorescences that are just becoming exposed to the potential for infection by this fungus. This is particularly critical where inoculum pressure is high and weather conditions are ripe for infection; rainfall and average temperatures on May 8 provided conditions for a moderately severe infection

period for [Phomopsis](#). How do you know if you have high inoculum pressure? Scout your vineyards for scabby lesions and splitting along the first 1-3 internodes of year-old canes. These symptoms indicate a source of the fungus and the potential for spore release (during periods of rainfall) onto shoots from buds along/below the infected internodes. Focus your eye on vineyard blocks most at risk (as described above) and look for the lesions on year-old canes that are oriented downward, below the trellis wire, especially

under pruning stubs and old or dead cordon wood. Canes emanating from above the cordons, oriented upward, are less likely to show evidence of infection as fungal spores naturally flow or drip downward during release. I suspect this recent infection period will leave symptoms of the disease that can be observed 2-3 weeks from now, on leaves and shoot tissue along the first couple of internodes, and possibly on cluster stems. And, more rain is in the immediate forecast; Accuweather and Skybit are calling for rain to resume on Friday morning, May 10, that could leave tissue wet for another extended period of time (24-30 hours?) with average temperatures in the 50s and 60s (potential for another severe infection period). If you haven't gotten a spray on yet, you may be hard pressed to do it today (May 9) as cloudy, cool conditions are just not allowing vines to dry off any time soon before the next wetting period. Keep an eye on the weather, and with the limited opportunity to spray, focus on your blocks (especially Niagara) that are most at risk.

GRAPE PHENOLOGY: Kelly Link

We reached 50% Bud Break (Phenology Field Score = 4.0) at both the Portland and Fredonia Farms on Friday, May 3rd. The 35 year average for 50% Bud Break in the Fredonia Historical Vines (pruned Balanced 30+10) is May 4th (this includes 2012, which had a 50% Bud Break date of April 25th). The five year average for 50% Bud Break in Portland is May 2nd.

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On May 3rd, the "Wild Grape" (Riparia) at Fredonia had 50% of the buds at the First Flat Leaf Stage (Phenology Field Score = 5.1). The shoots were between 2.5 – 3.0 inches long. The Silver "Wild Grape" on the Portland Farm was at 50% Bud Break. The wild Riparia had 15-20% of the buds at the First Flat Leaf Stage, and the shoots were approximately 2.5 inches long.

shoots were at the Second Flat Leaf Stage (Phenology Field Score = 5.2). The florescence (clusters) are now clearly visible (*See photograph*).

While conducting a quick scout of the Phenology vines on the Portland Farm on Wednesday, May 8th, I found the shoots to be approximately 2.5-3.5 inches long. Many

Keep an eye out for my next Phenology Report as we get closer to Bloom. Just a heads up, the 48 year average for Bloom in the Fredonia Historical Vines is June 14th.

Early Season Disease Management

Table 1. Infection events reported on NEWA for May 9, 2013

Station	Phomopsis	Powdery mildew	Black rot
Versailles	No	Yes	No
Sheridan	Yes	Yes	Yes
Silver Creek	No	Yes	No
Portland Escarpment	Yes	Yes	Yes
Portland (CLEREL)	Yes	Yes	No
Portland Route 5	Yes	Yes	No
Ripley	Yes	Yes	Yes
North East Escarpment	Yes	No	No
Harborcreek	*	*	*
North East Lab	Yes	No	Yes
Ransomville	Yes	Yes	Yes
Appleton North	Yes	Yes	Yes
Appleton South	Yes	Yes	Yes

*Currently changing file transfer protocols to the new IP-100. We hope to complete the process this Friday and have a full data set available shortly after that.

As seen in Table 1, there is a widespread infection event for Phomopsis Cane and Leaf Spot across the Lake Erie Region initiated by the rainfall that started on May 8. With most vineyards getting to the 3 inch shoot growth stage, this is a critical time to for protection against Phomopsis. According to the Disease Management notes on the Grape Disease Infection Events for the stations found on NEWA, “The early spray at around 3 inch shoot growth, when clusters first become visible, is most important for controlling rachis infections, shoot infections that serve as future sources of inoculum, and infections that move from berry stems into the fruit. [A minimal spray program should include at least one application during this period to protect against infection events](#), especially in blocks with a history of Phomopsis.

Table 1 also shows infection periods for powdery mildew and black rot across much of the region as well. Neither of these diseases is as important at this growth stage as is Phomopsis, especially in Concord vineyards. However, if you have varieties that are highly susceptible to powdery mildew (*V. vinifera* and some hybrids) and had a problem with powdery mildew last year, you may want to look at starting your disease management program with early season sprays for this disease.

While the black rot model indicated that conditions were favorable for infection by this disease, we are still too early in the season to make fungicide applications against it. If you had a problem with black rot last year (which is unlikely due to the dry summer we experienced in most of the belt), this would be a good time to ensure that all mummies have been dropped to the ground and buried by either cultivation or mulching.

More information on the output of the disease models, as well as hourly weather information, can be found

on the NEWA web site at <http://newa.cornell.edu>

Coffee Pot Meetings have started

The Lake Erie Regional Grape Program Extension Team held their second week of Coffee Pot meetings yesterday at the Betts Vineyard in Westfield and Beckman Farms in North East. You will notice a couple of changes to the Coffee Pot meeting format this year. In order to visit with more growers each week we have added an afternoon Coffee Pot meeting in a different location each week. We have also scheduled a guest speaker for each meeting.



Those who attended the meeting yesterday learned about sprayer application technology from safety to calibration from Dr. Andrew Landers. Next week, Wayne Wilcox will join the LERGP Extension team at Dan Sprague's Vineyard, 12435 Versailles Rd, Irving, NY at 10 AM, followed up by a meeting at Cambria Wine Cellars with Peter Smith, 4434 VanDeusen Rd. in Lockport, NY.

One thing that hasn't changed is the ability for participants to earn New York and Pennsylvania Pesticide Recertification

credits by attending the meetings.

Coffee Pot meeting locations change each week and with two a week, there will be a Coffee Pot meeting held in a location near you a number of time during the growing season.

BUSINESS MANAGEMENT: Kevin Martin

Maximum Long-Term Yields and Minimum Spray Application Costs.

Dr. Andrew Landers was in the area yesterday for our Coffee Pot meetings at the Betts' and Beckmans' vineyards. If you did miss it, hopefully it was because of the rush to apply the first pre-bloom spray. We had the opportunity to discuss potential savings as a result of sprayer calibration, deposition, and technology. Last week, the business management crop update discussed the gross costs of every row application.

Of particular interest was the measured volume of material and water that misses the target in pre-bloom sprays with traditional application methods. With a typical traditional air blast sprayer, 85% of the volume of water ends up as drift and on the canopy floor. When spraying every-other row deposition rates on the alternate rows are even lower. A 4lb rate of EBDC and a sticker will run approximately \$17 per acre. That recommended rate does not assume 100% deposition, of course. It is likely, however, that the effective rate on one side of the canopy is less than .5lbs per acre. Of the \$17 per acre, less than \$3 may end up in the canopy.

Modern techniques, too numerous to discuss, that improve deposition can lead to a substantial increase in effectiveness as well as a decrease in material cost. An inch or two of rain has the potential to wash off 50% of the product. It is easy to see why growers could really struggle to lower phomopsis inoculum levels if their starting point is less than .5 lb of material.

The stark divide between growers that believe strongly in three post-bloom sprays and growers that may struggle to get the research to work for them could be wrapped up in issues with deposition and sprayer calibration. Of course, the weather is to blame as well. Growers with the best of intentions, waiting for shoots to hit 4" had vulnerable shoots exposed to phomopsis infection yesterday and today. Growers that decided to make an application on Monday or Tuesday took a risk that shoots could grow considerably before rain actually came. Timely application of this early spray is highly dependent on the reliability of the weather forecast.

In research vineyards we see an improvement in yield that easily justifies multiple applications of EBDCs. A yield improvement does not present itself every year but does show that effective management of inoculum, when weather conditions permit, is the best strategy. Preventing the build-up of inoculum means that when weather does not cooperate and young shoots are exposed to an infection period, there will not be an economic impact on yield.

NEW WEBSITE AND PASSWORD FOR ACCESS TO ELECTRONIC CROP UPDATE AND MORE

Edith Byrne

In today's Electronic Crop Update you will want to look at the full on-line version! But when you click on the link, you will be taken to our new [website](http://lergp.cce.cornell.edu/) which we are happy to introduce you to (<http://lergp.cce.cornell.edu/>). You will see a brand new home page that is pretty cool looking! We have four local shots taken around the Lake Erie region representing Fall, Winter, Spring and Summer.

At the very top of the page you will see ***Welcome! And Log In Enroll***. Because you are receiving this Electronic Crop Update via email means you are an LERGP member. Click on the ***Log In*** link and under password please enter ***"grape2013"***. That is the member password for our site. What this gives you is access to the on-line version of the Electronic Crop Update that I mentioned in the first paragraph. You can click on ***view latest Electronic Crop Updates*** and you will be immediately taken to the Update. You also have access to all Crop Updates and Newsletters by clicking on ***review all Newsletters link***. Please do not give the password to anyone who is not a member.

Below the images you will find *Announcements* and *Upcoming Events*. The *Announcements* are what we want to draw your attention to, such as the Coffee Pot Meetings starting up. *Upcoming Events* is a little more specific... You will see our Google Calendar which we hope you are used to looking at. In addition, you can ***view all events***, and ***view details*** of specific events. If you go ahead and click on the ***view all events*** link you will be taken to a page where you can see the events for May, June and July listed. From there you can see back to earlier months, or ahead to later months. We have not included all the Coffee Pot Meetings as of yet, but are in the process of doing so. Something that is new is an online registration and I will go into more detail for you in an upcoming email.

In the red panel under the Lake Erie seasonal images, you will find the links for ***Business Management, Cultural Practices, IPM*** and ***Vine Nutrition and Soils***. You can click on those for content from our specialists.

In future emailing's we will have more tutorials on what is available on our website. ***REMEMBER***, your password into the site is ***grape2013!***

As always if you need any help at all navigating the website, please give Edith a call at 716-792-2800 ext. 209.



Go to <http://lergp.cce.cornell.edu/> for a detailed calendar of events. *Please remember to RSVP for those events that require one!*


THE GROWING SEASON HAS BEGUN!

Coffee Pot Meetings are free. Come find out what is happening in our local vineyards and talk with the Team. Look for notices in Electronic Crop Updates, Upcoming Events Notices, and on the Website and mark your calendars! We look forward to seeing you at several of our Wednesday meetings this year!

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COFFEE POT MEETINGS: All Coffee Pot Meetings are held on Wednesdays

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	May 15, 2013	10:00 am to 12:00 pm	Dan Sprague Farm/Vineyard, 12435 Versailles Rd. Irving NY 14081
	May 15, 2013	2:00 pm to 4:00 pm	Peter Smith Farm/Vineyard, 4434 Van Deusen Rd. Lockport NY 14094
	May 22, 2013	10:00 am to 12:00 pm	Nick Mobilia Arrowhead Wine Cellar, 12073 E Main Rd. North East PA 16428
	May 22, 2013	2:00 pm to 4:00 pm	Rick Walker Farm/Vineyard, 2860 Rte 39, Forestville NY 14062

WINEMAKER'S ROUNDTABLE: Misc. – Fruit/Dessert/Fortified

DATE: Monday May 20, 2013

TIME: 4:00 – 6:00

LOCATION: Lakeview Wine Cellars, 8440 Singer Rd, North East, PA 16428

TOPIC: *Misc. Fruit/Dessert/Fortified*

These are informal meetings designed to provide a venue for sharing information, getting to know each other and increasing our collective knowledge and winemaking skills to raise the quality and visibility of wines from our regions.

Please bring wines that you wish to discuss, whether problem wines or wines with merit. All provide an opportunity for learning! This meeting is open to all commercial winemakers in the region and beyond, so encourage your colleagues to attend. Lake Erie and Niagara regions share commonalities that do not exist between our regions and other regions in NY, PA or OH; exploring these similarities will help us all understand the potential of our own region. Please make the effort to attend as many of the meetings as you can as each of us has something to contribute to the greater good.

No RSVP is required, and there is no charge.

HOPS PRODUCTION IN THE LAKE ERIE REGION

DATE: Saturday June 15, 2013 (*Pre-register by Friday June 7, 2013*)

TIME: 8 am to 4 pm

LOCATION: Cornell Lake Erie Research & Extension Laboratory, 6592 West Main Road, Portland, NY 14769

COST: \$75.00 General | \$65.00 NeHA Members

(you can join or renew your membership at: www.northeasthopalliance.org)

Participants will learn about commercial hops production; starting with classroom instruction on production practices from Hops growers from MD, PA and NY, as well as Cornell University Extension staff. You will also have a Hop Yard tour for a first-hand look at the hop yard construction and a discussion with

hops growers on practices they use in their hop yards. The event will wrap up with local brewers discussing their use of hops in the brewing process as well as the market for Lake Erie Hops.

REGISTRATION: Pre-register by Friday June 7, 2013

Contact Kate Robinson

Phone: (716) 792-2800 ext. 201

Email: kjr45@cornell.edu

Class size is limited, be sure to sign up early to ensure a spot in the class

PDF Registration Form: http://nygpadmin.cce.cornell.edu/pdf/event/pdf64_pdf.pdf

Or enroll online at: http://lergp.cce.cornell.edu/event_preregistration.php?event=64

PLEASE NOTE: Next Electronic Crop Update will be Thursday May 16, 2013

Lake Erie Regional Grape Program Crop Update is an e-mail newsletter produced by the Lake Erie Regional Grape Program and sent out by subscription only. For subscription information, please call us at 716.792.2800 ext. 201. For any questions or comments on the format of this update please contact Tim Weigle at: thw4@cornell.edu.

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