

LERGP Crop Update

April 28, 2016

Important dates:

May 4, 2016- First Coffee Pot Meeting, 10:00am-Betts' Farm 7356 East Route 20 Westfield NY

every Wednesday following: Coffee Pot meetings- see enclosed schedule

June 11, 2016- Hops Conference at CLEREL (see enclosed flyer for additional information)

August 2, 2016- Wine Quality Workshop (rescheduled from April 13, 2016) at CLEREL

September 1, 2016- Cover Crop Conference at CLEREL

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

If you are not getting an e-mail from Katie indicating that they are available, or you do not know the current password, please contact her at kjr45@cornell.edu or call at 716-792-2800.



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.



2016 Hops Production in the Lake Erie Region Conference

June 11, 2016

9 AM - 4 PM

Cornell Lake Erie Research and Extension Laboratory
Meeting Room and Hop Yards
6592 West Main Road, Portland, NY 14769

Featured Speakers

Brad Bergefurd - Ohio State University

Margaret Kelly - NYS Ag & Markets

Jimmy Walsh - Brewer, Five & 20 Spirits & Brewery

Mario Mazza - Owner, Five & 20 Spirits & Brewery

Stephan Schmidt - Schmidt Farms

Justin & Chris Whipple - Whipple Brothers Farms

Samuel Fuller - Empire State Development

Kevin Martin - LERGP Penn State

Tim Weigle - NYS IPM Program & LERGP

Becoming profitable with Hops Production

This workshop is designed to provide background and start up information related to hops production, as well as, offer information on the techniques that will help you to become profitable with hops production.

Topics will include choosing the right plants, site selection, trellis layout, and nutrition. Also covered will be how to work with a brewery to give them the hops they are looking for, and in what form.

There will be in-field opportunities to interact with speakers in the CLEREL hopyards.

Registration: \$75 per person

To Register:

Contact Kate at (716) 792-2800 x201 or kjr45@cornell.edu

For credit cards please visit our website at:

<http://lergp.cce.cornell.edu>



Class size is limited to 80 each day, sign up early to reserve your spot



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

Cost of Establishment and Production: Concord Grapes in the Lake Erie Region of New York

As part of the SCRI proposal, LERGP staff are working to create benchmark costs for the establishment and maintenance of ConCORDs. We've completed our first roundtable discussion for hand pruned Concord operations. Small groups of growers discuss their operation and help researchers validate assumptions that are used to compile a benchmark budget. We appreciate the help of growers that already participated, as it involves a two-hour time investment.

As we compile the data, one thing that is really jumping out is the consistency between operations. We specifically selected larger hand-pruned Concord vineyards. In doing so, we have found the operations to be managed much more similarly than expected. As a result, we would like to see how these patterns change in more mechanized operations.

As we compile this data we would like to continue the gathering of data for different operation types. The two largest variables left to consider are farm size and pruning methods.

If you're interested in participating and you operate a farm greater than 90 acres and your operation pre-prunes that acreage, please fill out the survey below. Also, if you're interested in participating and you operate a farm that is less than 40 acres, please fill out the survey below. For our small farmers, the type of pruning does not matter. We'd be interested in hearing about your experiences either way.

<http://goo.gl/forms/jLnsjAJTp6>

At this time the focus of this cost survey is exclusive to native varieties. A cost survey of hybrids is already complete and published (thanks participants!). A cost survey of vinifera, specific to the Lake Erie region, is not yet practical because of the number of acres grown in the area. There is already a guide for the Finger Lakes. <https://dyson.cornell.edu/outreach/extension-bulletins>

Bud Development Update: 10% Pink Called, Progression of Bud Break

Phenology: Despite the cool weather bud progression is moving right along. As expected, there is variation across the region. However, on most sites Concord buds are showing lots of pink with some leaf tips starting to peel away from the buds.

As part of our phenology project, Ted Taft has been collecting data on bud progression. Major milestones such as 10% pink, bud break and bloom are declared by Ted. At our Portland site, Ted reports that Concord buds were at 10% pink on Friday April 22. In 2015 10% pink occurred on May 3rd putting us a little over a week ahead of last year. Looking at data going back to 1970 the average date for 10% pink at Fredonia is April 18th and bud break on May 5th. The spotty warm weather has been progressing things along slowly. With the recent frost events a delayed bud break would not be a bad thing.



Freeze Events: Once again Mother Nature continues to test bud hardiness. Tuesday April 26th temperatures dipped below freezing blanketing the region in another coat of frost. From grower reports, observations, and looking at NEWA data it seems that most of the region went unaffected as most temperatures were in the low 30's. However, growers in Cattaraugus, Erie and north eastern part of Chautauqua counties received temperatures in the upper 20's and have reported bud damage. In this crop update you will find an article by Dr. Bates that lists the temperature thresholds as the buds progress.

What Happens to Plant Tissue During a Freeze Event?

T. Bates, Cornell Lake Erie Research and Extension Laboratory,

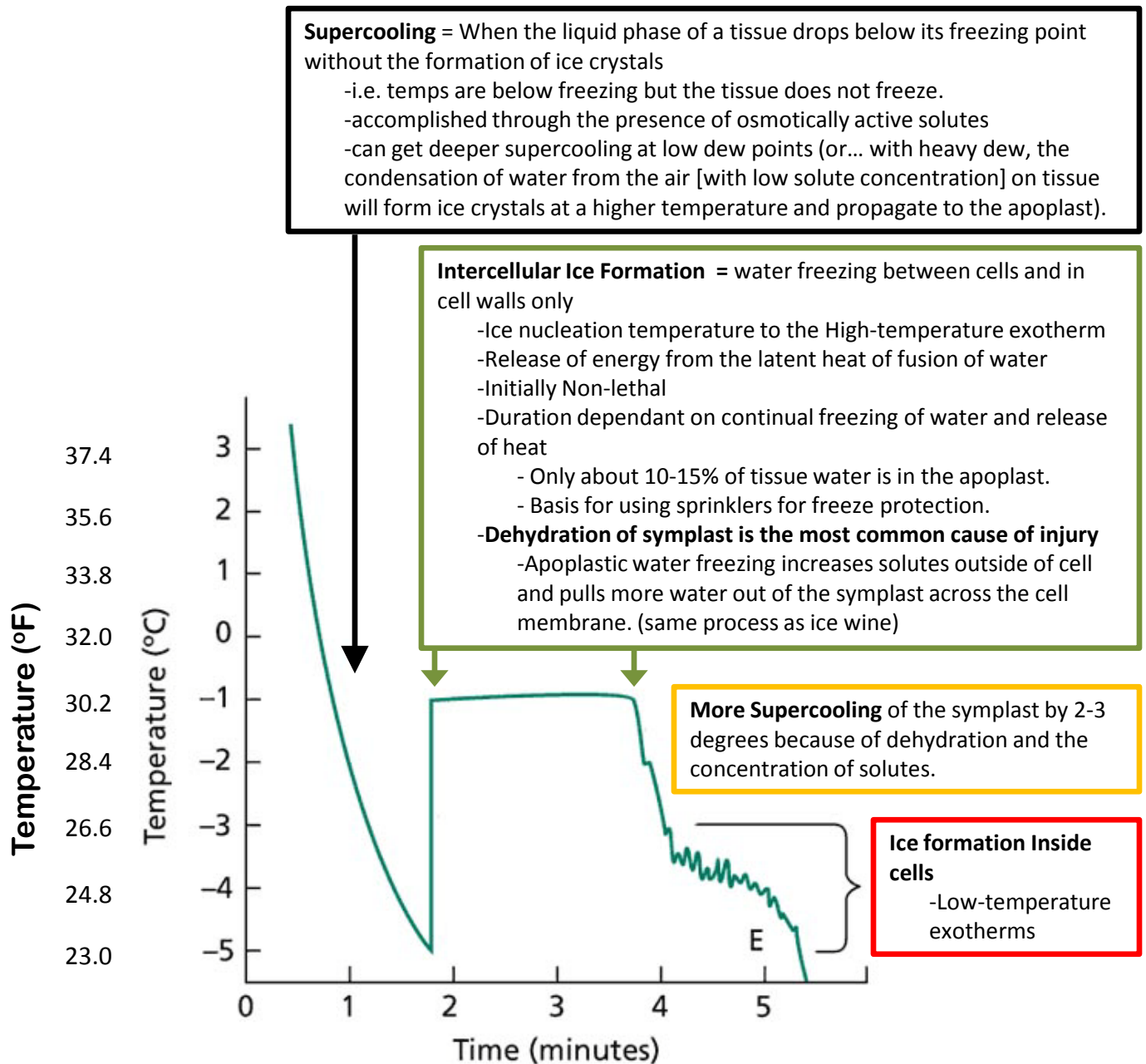


Chart from *Plant Physiology* by Taiz & Zeiger

Bud scales and down form extraorgan "ice sinks"

Less water -----More Water

Floral tissues do not supercool but they do resist dehydration during extracellular ice formation



eNEWA for Grapes

Would you like to see the current weather and grape pest information found on NEWA (Network for Environment and Weather Applications) <http://newa.cornell.edu>, without having to click through the website? Then eNEWA is for you. eNEWA is a daily email that contains current weather and pest model information from a station, or stations, near you. The email will contain; 1) high, low and average temperature, rainfall, wind speed and relative humidity 2) the 5-day forecast for these weather parameters, 3) GDD totals (Base 50F), 4) 5-day GDD (Base 50F) forecast and 5) model results for powdery mildew, black rot, Phomopsis and grape berry moth. The weather information is provided for, not only the current day, but for the past two days as well.

We will continue testing of eNEWA for Grapes in 2016. You can choose from any number of stations located near you for delivery of this information via email each day at a time specified by you. Please keep in mind that you will receive a separate email (approximately 3 pages in length) for each station you choose. Once during the growing season and again after harvest, you will be asked to complete a short survey to assist us in improving the eNEWA for grapes email system. If you would like to be a part of this project just fill out the form found in this newsletter and return to:

CLEREL c/o Tim Weigle
6592 West Main Road
Portland, NY 14769

Or you can scan it and send it to me at thw4@cornell.edu

2016 eNEWA Grape Project Subscription Sign-Up

Subscriber information

Name _____

Email address _____

City _____

Select Location(s) (circle as many as you like, or write in below)

Lake Erie Region

Appleton, North

Appleton, South

Dunkirk

Erie

Harborcreek

North East Escarpment

North East Lab

Portland

Portland Escarpment

Portland Route 5

Ransomville

Ripley

Sheridan

Silver Creek

Versailles

Finger Lakes Region

Aurora

Branchport

Dresden (FLGP/FLCC)

Dundee (Weimer)

Fayette 3 Brothers

Geneva

Geneva (Bejo)

Hector

Interlaken (Airy Acres)

Lakemont

Lansing

Lodi (Lamoreaux)

Lodi (Shalestone)

Lodi (Standing Stone)

Penn Yan

Romulus (B. wood Grove)

Romulus (Thirsty Owl)

Varick (Swedish Hill)

Watkins Glen

Watkins Glen (Lakewood)

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

North East PA Update

Byran Hed
Research Technologist
Lake Erie Grape Research and
Extension Center

Weather: We have accumulated just 1.46" of rainfall in April so far at our site by the lake, only about half our average rainfall for the month. April has also been colder than average; by the lake we have accumulated just 29.4 growing degree days in April, compared to our long term average of about 80 gdds. Farther inland (North East escarpment) accumulations are little better (about 47 gdds). With the cool forecast, 29.4 gdds might just be our total for the month (though we might rake in a couple gdds on Saturday). That said, we will have accumulated more gdds in March (42.6) than April this year. Aside from the cool forecast, we may see some drizzle in the North East PA area on Friday, April 29.

Phenology: Here by the lake, Concord grapevine development is at late bud swell with just a few buds showing pink. I am doubtful we will see 50% bud break here by the lake before the end of April. After a mild winter and a warmer than average March, I never would have guessed bud break would be delayed until May this year. This is welcome news. According to research at Michigan State University (<http://orchardkeeper.com/pdf/IllustratedSpringFrostDamageThresholds.pdf>), the current stage of grapevine development should be able to withstand temperatures down to 21F before we see 10% bud kill. Buds that have burst will be hardy down to 25 and 16F before we see 10 and 90% bud kill. Though we dipped down to 29.5F by the lake on Wednesday morning, to my knowledge there are no temperatures of that sort in the short term forecast.

Diseases: As is the case every year, the first disease we should prepare to control is Phomopsis. The first spray for Phomopsis is applied at about 3-5" of shoot growth and its purpose is to protect the newly exposed inflorescences from this fungus, which can 'bite' off parts of the inflorescence, particularly the 'shoulder', leading to crop loss. Fungicides that contain mancozeb or ziram are the best choice at this time; both are effective. Cost is probably the determining factor, with mancozeb products generally being less expensive than ziram. You don't need to apply the full 4 lb per acre rate at this time either, making this spray rather inexpensive overall. Captan is also very effective on Phomopsis, but check with your processor for any restrictions on its use. Captan also carries a 48-96 hour reentry interval depending on formulation, compared to ziram (48 hours) and mancozeb (just 24 hours); a potential downside if you're struggling (like we are) to get your tying and other early season maintenance done this year. All three materials are strictly surface protectants, subject to wash off by rainfall. The need for this early spray can be determined by considering block history and the amount of overwintering inoculum present on wood. Vineyards that have been machine pruned, rows that border woods and streams, and low areas, are going to be at higher risk and will likely benefit most from this spray. You can scout vineyard blocks, looking for the characteristic 'dark, scabby' lesions on year-old canes, to get some idea of the risk you face. Lots of old wood (hence, machine pruned vineyards) is also a big red flag for high inoculum levels this spring. For this reason, vineyards (particularly Niagara and cold sensitive wine varieties) that have undergone drastic renewal over the past couple of years, may be at a reduced risk due to the lack of old, infested wood in the trellis. However, where old, dead/dying trunks were retained and used as support for new trunks during the renewal process, a fair level of Phomopsis may have already developed on the new trunks; only an examination of the bark on new trunks (scouting) will tell. This early shoot growth spray is also extremely important for preventing Phomopsis lesions on those first four internodes of new shoots (the ones most at risk at the time that they are expanding). Lesions on these internodes cannot be pruned out later this fall/winter and so this spray can prevent or minimize overwintering lesion formation for next year's infections.

Please see photos of Phomopsis lesions on year old Concord canes on next page.



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When: Tuesday, March 22, 2016

Where: Williams Center at SUNY Fredonia - 280 Central Ave., Fredonia, NY 14063

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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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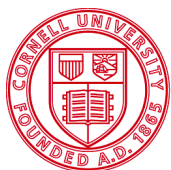
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Contact the Lake Erie Regional Grape Program if you have any special needs such as visual, hearing or mobility impairments.

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