

The Lake Erie Regional Grape Program

PENNSTATE



Crop Update October 19, 2017

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Employment

Opportunity:

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(9)

Lake Erie Regional Grape Program Viticulture Specialist:

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The job will be posted until Tuesday, October 31st. External applicants will need to apply through the Cornell Careers site; the direct link to the posting is: <u>http://tiny.cc/Viticulture_WDR00012524</u>. Internal applicants (including Temporary Employees) will need to apply through Workday.

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Business Management

Kevin Martin, Penn State University, LERGP, Business Management Educator

Vine Nutrition

Working with Dr. Bates, we have revisited vine nutrition recommendations and made some slight changes based on the relationship between the business of growing grapes and the science of growing grapes. Many growers loosely follow recommendations or rarely take soil and petiole tests. These growers will see little change in recommendations. Growers pushing vine size and yields above 6 and even above 10 are another story; their strategy should likely change. Given the impact of vine health on brix in 2017, Extension will likely continue this conversation into 2018. The primary change in recommendations revolves around soil pH.

Other growers have been pushing vines and yields. Those that do so successfully also focus investment and labor on vine nutrition. Previous recommendations concluded that optimal soil pH is 5.5 and should be adjusted if below 5.0. A generation ago, optimal pH for Concord vineyards was 5.0. Those recommendations had more to do with the business of growing Concords than the science. Fertilizer was relatively cheap, yields were relatively low and the effort required to increase soil pH was not always justifiable.

As yields continue to increase it has become clear that the impacts of ignoring the scientifically optimal pH has created a significant business risk. For many, 2016 was a large crop and a dry year. The importance of potassium becomes significantly higher as we move from 4 to 7 to 10 ton yields. Following a dry year, we saw some potassium deficiency, even when levels of potassium in the soil were above 200 lbs per acre.

These vines needed more potassium to ripen the 2017 crop above 16.0 brix. We could add potassium, that might work. With levels above 200, the metaphorical bucket might already be full. If it is, additional potassium could get wasted. A grower could spend \$120 per acre and continue to see deficiency. For less money, we can get a bigger

Nutrient		Target Ibs/acre		
Phosphorus	(P)	4	I	8
Potassium	(K)	150	I	200
Calcium	(Ca)	1000	-	4000
Magnesium (Mg)		200	I	500
Boron	(B)	0.5	I	4
Iron	(Fe)	40	I	100
Manganese (Mn)		20	I	100
Copper	(Cu)	1	I	1
Zinc	(Zn)	4	I	4
Aluminum	(AI)	0	I	200
Organic Matter		3%	-	4%
p.H.		5.5%	-	6%
Buffer p.H.		5.5%	1	6%

bucket. We saw deficiency in vineyards with pH as high as 5.5. For \$100 per acre the grower can increase the pH to 6.0, add 1/3 the amount of potassium, and reduce the risk of wasted fertilizer.

The higher pH will almost always have a beneficial impact on micronutrient availability and conflict. Based on soil tests we've reviewed so far; most recommendations will be aiming for 6.0. Occasionally recommendations will be modified for an even higher pH, based on levels of aluminum. The science of soil health remains unchanged. The business of growing grapes continues to evolve.

Tim Weigle, NYSIPM, Cornell University, LERGP Team Leader

Grape Berry Moth a Problem? Map It!

Most growers have taken the opportunity to get a GIS map of their vineyard operation through the Lake Erie



GIS Mapping

Regional Grape Program. While these maps are a great tool to let you know the exact acreage of each block for pesticide and fertilizer applications, they can also aid in determining how extensive your grape berry moth problem is. This process is as easy as heading out to a vineyard block with a history of damage from grape berry moth and documenting the extent of the damage. For blocks that have not been harvested, a quick look using the grape berry moth risk assessment scouting protocol will give you an idea of how many rows, or post lengths, are affected. If the block has been harvested, looking under the row for shelled grapes is, often times, a good indicator. Once you have secured this information, contact Kim at LERGP to set up an appointment. Using the information you have collected she will be able to pull up your map, outline the affected area on you

maps, and

provide you with the number of acres that are affected by grape berry moth. What we have found is that while it is easy to determine that a vineyard has a problem with grape berry moth, it is extremely difficult to visualize the extent of the problem. Getting an accurate estimate of the acres affected by this pest will provide you the information you need to make informed decision on the economics of management options. Call Kim at 792-2800 or e-mail at ksk76@cornell.edu.



Grape Berry Moth damage causing shelling berries

A COLLABORATIVE EFFORT – EBC AND CORNELL UNIVERSITY TEAM UP TO PRODUCE HARVEST ALE

Ellicottville Brewing Company, Ellicottville, NY, and Cornell University have once again teamed up to use hops grown at the Cornell Lake Erie Research and Extension Laboratory (CLEREL) in Portland, NY. Every year since 2013 members of the Lake Erie Regional Grape Program extension and research staff have taken sacks of wet hops to EBC in Ellicottville, NY to assist brewers Dan Minner and James "Miyagi" Antonio in brewing a harvest ale. What makes this beer special is that it can be brewed only once per year as the addition of wet hops can happen only during the hops harvest season. This is due to the use of wet hops, which are harvested and delivered as quickly as possible for use in the brewing process, without any of the additional processing like drying or pelletizing. For the first time since this project began, EBC employees were able to come to CLEREL and assist in the hops harvest.

In years past, the hops varieties Cascade and Chinook were used in all stages of the brewing process – bittering, aroma, and dry hopping at the end. This year, the variety Cashmere replaced Chinook, and a good deal of the Cascade, typically used. Cashmere is known as a dual-purpose hop that can be used for additions of both bitterness and aroma. The aroma characteristics of the hop are intensively fruity and provide flavors of lemon, lime, peach and melon. If you have a good palette you might also be able to pick up coconut, lemongrass and herbs.

Another first this year was a bit of experimentation of how the cones were prepared for immersion into the brew kettle. After all, who at Cornell University isn't up for a little experimentation? Previously, the hop cones were left intact, packed into muslin bags containing approximately 2 pounds each and suspended in the brew kettle. For the 2017 ale, cones were fed through a mulching device in order to expose more of the lupulin glands that contain the oils responsible for the bittering and aroma properties the hops provide. The mulched hops were then placed in the muslin bags and suspended in the brew kettle. For the past four years this harvest ale has gone under the name Hopicity. There was talk on the brew room floor of renaming the brew to better represent the number of 'firsts' that took place this year.

The hops used in this brew are somewhat unique, not only for being local, being harvested and brewed within an 18 hour window, but also because they were grown as part of a project looking at how alternative management practices can be used to control pests. As part of a project funded by the New York Farm Viability Institute, management of Twospotted spider mites using biocontrol was examined in the Cascade planting. The Cashmere were part of the same project but had different weed management strategies ranging from propane weed burners and rotary hoes to hay mulch applied. Tim Weigle, NYS Integrated Pest Management Program, has been looking at ways to manage hop pests using sustainable practices. One of the reasons behind this is that hops are considered a specialty crop so there are limited conventional materials labeled for use against hop pests in New York. Creating Integrated Pest Management strategies for hop growers will allow them to economically manage pests while producing a quality crop. This will be instrumental in ensuring the hops supply needed not only for local harvest ales but also to keep the farm breweries supplied with the hops they need to produce beers from ingredients produced in New York.

The Hopyards at CLEREL are a combined effort of members of the NYS IPM Program and the Lake Erie Regional Grape Program. A short video of our hops taking their annual trip to EBC is on the LERGP website as Podcast 35 at <u>http://lergp.com/podcasts/</u>

The picture on the front page is our crew at EBC in Ellicottville helping with the brewing of the harvest ale





FOR IMMEDIATE RELEASE

Contact: Sue King, (202) 690-8122 Teresa White, (202) 690-8123

Countdown to Census: What You Need To Know Only eight weeks until producers start to receive the 2017 Census of Agriculture

IEWS RELEA

NATIONAL AGRICULTURAL STATISTICS SERVICE United States Department of Agriculture • Washington, DC 20250 Ag Statistics Hotline: (800) 727-9540 • www.nass.usda.gov

WASHINGTON – Sept. 25, 2017 – In just a couple months, farmers and ranchers across the nation will start receiving the 2017 Census of Agriculture. Producers can mail in their completed census form, or respond online via the improved web questionnaire. The U.S. Department of Agriculture's National Agricultural Statistics Service has extensively revised the online questionnaire to make it more convenient for producers.

"The updated online questionnaire is very user-friendly – it can now be used on any electronic device, and can be saved and revisited as the producer's schedule allows," said NASS Census and Survey Division Director Barbara Rater. "Responding online saves time and protects data quality. That's our mission at NASS – to provide timely, accurate, and useful statistics in service to U.S. agriculture. Better data mean informed decisions, and that's why it is so important that every producer respond and be represented."

New time-saving features of the online questionnaire include automatically calculating totals, skipping sections that do not pertain to the operation, and providing drop-down menus of frequent responses. Producers still have one week to try the online questionnaire demo on the census of agriculture website (www.agcensus.usda.gov).

The census website will continue to be updated with new information through the census response deadline of February 5, 2018. One recently added feature is a new video from Secretary of Agriculture Sonny Perdue reminding all producers to respond when they receive their 2017 Census of Agriculture in the mail later this year.

Revisions and additions to the 2017 Census of Agriculture aim to capture a more detailed account of the industry. Producers will see a new question about military veteran status, expanded questions about food marketing practices, and questions about on-farm decision-making to better capture the roles and contributions of beginning farmers, women farmers, and others involved in running the business.

Response to the census of agriculture is required by law under Title 7 USC 2204(g) Public Law 105-113. The same law requires NASS to keep all information confidential, to use the data only for statistical purposes, and only in aggregate form to prevent disclosing the identity of any producer. The

time required to complete the questionnaire is estimated at 50 minutes. In October, NASS will make a census preparation checklist available on the census website to help producers gather necessary information in advance.

Conducted once every five years, the census of agriculture is a complete count of all U.S. farms, ranches, and those who operate them; it is the only source of uniform, comprehensive, and impartial agriculture data for every state and county in the country. Farmers and ranchers, trade associations, government, extension educators, researchers, and many others rely on census of agriculture data when making decisions that shape American agriculture – from creating and funding farm programs to boosting services for communities and the industry. The census of agriculture is a producer's voice, future, and opportunity.

For more information about the 2017 Census of Agriculture, visit www.agcensus.usda.gov or call (800) 727-9540.

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NASS provides accurate, timely, and useful statistics in service to U.S. agriculture. We invite you to provide occasional feedback on our products and services. Sign up at http://bit.ly/NASS_Subscriptions and look for "NASS Data User Community."

USDA is an equal opportunity provider, employer and lender. To file a complaint of discrimination, write: USDA, Director, Office of Civil Rights, 1400 Independence Ave., S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice), or (202) 720-6382 (TDD).





Growers in Erie County, Pennsylvania

Chuck McIlhenny (PA Rural Health, Worker Protection Compliance Assistance) will be heading up to our area to do **WPS Compliance Assistance** Visits on Thursday & Friday, November 16 & 17 for anyone who wishes to review their compliance status from an educational perspective. These individual farm visits are to assist growers with information and materials so that you are prepared **just in case** a WPS inspection is conducted at your farm by personnel from the Pennsylvania Department of Agriculture.

Interested growers should contact Chuck at this email address:

(chuckmc4wps@gmail.com) or at 814-330-5948 so he can make sure to schedule your visit at a convenient time.

Don't hesitate to contact him with any concerns or questions.

North East PA Update

Bryan Hed, Research Technologist, Lake Erie Grape Research and Extension Center

Weather: We finished up September with just 2.7" rainfall at our location, well below our 20 year average of 4.3". We accumulated 478 growing degree days (gdds) during September (a bit warmer than average) and currently have about 2943 gdds since April 1 (well above average). We have recorded 3.55" precipitation so far in October and our gdd accumulation has already topped 230 (our 18 year average total gdds for the entire month is 157). Dry, warm harvest weather will prevail through the weekend but temperatures look to be shifting to more seasonable levels by next week when gdd accumulations will finally come to a grinding halt.



As we finish out the warm, dry 2017 season, I've compiled a few fun facts from our weather data since 1999 at the North East lab:

- Our hottest October over the past 18 years was in 2007 (315 gdds)

- Last year, the second hottest October, racked up 253 gdds and we will probably top that in 2017, but fall short of beating 2007.

- Overall, this will be the second hottest growing season (April 1 to October 31) in the past 18 years. Last year was the hottest.

- Plotting the past 18 years of year x gdd total (April 1- Oct 31) we see an obvious linear trend upward over this period from 1999 to 2017; our growing seasons have been getting warmer, by about 15 gdds per year, from 1999 to present.

We are currently conducting our Concord harvest at the North East lab (today and tomorrow) and we have been observing a fair amount of shelling of fruit from vines (pennies on the ground). Comparing harvested and unharvested rows, it appears most of the shelling occurred as a result of the heavy winds we've had over the past few days, rather than the shaking of the harvester (berries lost ahead of the harvester during harvest operations).



INSURING GRAPES

NY, 2017

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NYS Grape Crop Insurance Performance



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PLEASE PARTICIPATE IN THE ONLINE NEWA SURVEY

EDITORS NOTE: NEWA provides weather and pest model information for a large number of commodities across an ever increasing number of states. It is important for grape growers in New York and Pennsylvania to provide your input into this survey so any improvements to the NEWA website are made with the grape industry in mind. While this is a busy time of year, I encourage you to take the 10 minutes out of your busy day to complete this survey.

The Network for Environment and Weather Applications (NEWA) wants you to take our online survey — it'll only take about 10 minutes of your time.

Take the survey now:

https://cornell.qualtrics.com/jfe/form/SV_0GRIhOIDI5HwbR3

Whether you've used NEWA's online pest forecast models for years or have never used NEWA at all, we will benefit from your responses. Why? Because we are building a new website at newa.cornell.edu, one that'll be as easy to use on your smart phone as on your desktop, and we want to build it *the way you want it to be*.

NEWA is an online agricultural decision support system that uses real time weather data, streamed over the internet from 573 weather stations throughout the Northeast, Midwest and mid-Atlantic. NEWA provides insect and plant disease pest management tools, degree days, and weather information for growers, consultants, Extension educators, faculty, and others.

NEWA models and resources are available free of charge, and are used to make informed localized crop management decisions. The NEWA website will be upgraded soon and we want to know what users', new and old, want and need out of the new website.

All responses are anonymous and confidential and will not be shared with any outside group.

Thank you for participating!

For more information:

Dan Olmstead 315.787.2207 <u>dlo6@cornell.edu</u>

NEWA Coordinator, New York State IPM Program Cornell University, NYSAES 630 West North Street Geneva, NY 14456

NEWA is a Partnership of the New York State Integrated Pest Management Program and the Northeast Regional Climate Center.







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Hours of Operation: Monday - Friday 8:00am - 5:00pm Saturday 8:00am - Noon



LERGP Links of Interest:

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.

LERGP Web-site: http://lergp.com/

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

Efficient Vineyard Web-site: https://www.efficientvineyard.com/

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-cornell/

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

NEWA: http://newa.cornell.edu/





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