

# The Lake Erie Regional Grape Program



Upcoming Events:

# Electronic Crop Update for July 18, 2013

PENNSTATE

Please visit our LERGP Website at: <u>http://lergp.cce.cornell.edu/</u> for a detailed calendar. Please remember to RSVP for those events that require one! UPCOMING EVENTS are also listed toward the bottom of this 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! <u>Please email Edith at: emb35@cornell.edu</u>.

#### WEATHER DATA: Edith Byrne

DATE/YEAR	HIGH	LOW	DAILY PRECIP.	GDDs	<i>TOTAL</i> APRIL GDDs	<i>TOTAL</i> JAN GDDs	
Week 7/2/13	75	60	0.00	17.5	926	951.5	
Week 7/10/13	83	67.8	0.30	25.5	1118.95	1144.5	
Week 7/17/13	84	73	0.00	28.5	1281	1306.5	
Week 7/17/12	88	74	0.00	31	1392.5	1523	
AVERAGE	81.7	63.9	0.07	22.76	1223.80	1248.72	
GDDs accumulated July 2013 = 387.50 (thru 7/17) GDDs accumulated July 2012 = 410 (thru 7/17)							
GDDs accumulated June 2013 = 455.00 GDDs accumulated June 2012 = 532.50							
GDDs accumulated May 2013 = 260.5				GDDs accumulated May 2012 = 393			
<u>Average</u> GDDs accumulated July = 357.89 (thru 7/17)							
<u>Average</u> GDDs accumulated whole month July = 662.57							
This year compared to AVERAGE: JAN. GDD: AHEAD 2.54 / APR. GDD: AHEAD 2.51							
This year compared to 2012: JAN. GDD: BEHIND 9.51 / APR. GDD: BEHIND 4.90							
		<u>2013</u>		<u>2012</u>			
<u>Average</u> High Jul	y	79.18 (las	st week 71.77)	82.41 (last week 82.50)			
Average Low July	1	66.41 ( <i>las</i>	st week 58.57)	65.82 (last week 65.50)			
JULY Rainfall accumulation = 1.73" JUNE Rainfall accumulation = 7.69" MAY Rainfall accumulation = 4.14"							
Rainfall accumulation 1/1/13 through 7/10/13 = 22.71"							

# GRAPE CULTURAL PRACTICES: Luke Haggerty

I'm finally here! After spending the past three years at the University of Minnesota where I received training and contributed to the University's research vineyard I'm ready to get out and meet the grape growers of NY and PA. I feel fortunate to be joining such respected researchers and extension associates and look forward to creating relationships with everyone involved in the bulk juice industry.

I recently received my master's degree from the University of Minnesota's Applied Plant Sciences Graduate Program. As a former research assistant I have a strong background in profiling specific sugar and acid concentrations during grape berry development and creating tools for predicting optimal harvest times. In addition to conducting research projects I have been involved with many outreach and education efforts to local growers which I plan to continue.

New to the area, I would really like to start putting on some miles and meeting the many people involved in this industry. I'm very excited to be here and I encourage you to call me at (716) 792-2800 Ext. 204, and set up a site visit as I would really like to meet you. Hope to see you soon!

## FROM NORTH EAST, PA.: Bryan Hed

*Weather*: Here at the North East PA lab, we have accumulated 385 growing degree days during the first 17 days of July. Our gdd total since April 1 equals 1282. Our rainfall total for July is still 0.91 inches (not a drop since last week). However, parts of Erie got rain earlier today and there is a chance for thunderstorms later today (July 18), tomorrow, and Saturday. We should see temperatures cooling off on Saturday, and back to sunnier, drier conditions to start next week.

**Phenology**: At our location, 30 days from 50% bloom occurred on July 14, when Concord berries were about 1.7 grams. Concord berries are currently averaging about 15.7 mm in diameter and are just under 2 grams per berry.

*Diseases*: At 4.5-5 weeks past bloom, Concord and Niagara fruit are resistant to <u>powdery</u> and <u>downy mildew</u>, and should be developing resistance to <u>black rot</u>. If scouting does not reveal any problems with black rot, our disease control efforts should now focus on controlling leaf infections of powdery and downy mildew. We are seeing some downy and powdery mildew on leaves of unsprayed Concord and Niagara here at the lab, but the incidence is still low. Since in most cases, we are dealing with a rather large crop this year, maintaining canopies at optimum efficiency is important. If you are applying additional sprays bump up your gallons per acre, especially if you are applying an eradicant like Nutrol or any of the potassium bicarbonates. If you want to continue synthetic sprays (for example, Toledo, Vivando, Quintec, etc), you should be mixing in an eradicant for resistance management. For Niagara, sulfur would be an effective, inexpensive option for powdery mildew.

## NYS IPM FACT SHEETS FOR GRAPES:

- Powdery Mildew: <u>http://nysipm.cornell.edu/factsheets/grapes/diseases/grape\_pm.pdf</u>
- Downy Mildew: <u>http://nysipm.cornell.edu/factsheets/grapes/diseases/downy\_mildew.pdf</u>
- Black Rot: <u>http://nysipm.cornell.edu/factsheets/grapes/diseases/grape\_br.pdf</u>

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#### **GRAPE INTEGRATED PEST MANAGEMENT: Tim Weigle**

### Insect Update

**Grape Berry Moth** – According to the Phenology-based degree day model found on NEWA http://newa.cornell.edu/ we are well past the 810-910 range where insecticide applications should have been made for the second generation of grape berry moth. The next event will be scouting at 1470 – 1620 DD to determine the need for an application against the third generation. NEWA shows that all stations are about 300 DD away from the start of this time frame (We are currently at 1117 DD at Portland (CLEREL). Although we have been picking up more than 30 DD a day with the heat we have been experiencing, a cool down is forecast so we should be looking at scouting in about 10 days. The best way to time scouting for your vineyard is to access the NEWA website and get the information specific to the station(s) nearest you.

**Eastern Grape Leafhopper** – We have been seeing more leafhopper feeding damage in vineyards over the past week. <u>Grape leafhopper</u> is considered to be a secondary pest that rarely requires treatment. The only time it has been shown to have an impact was during a drought with a full crop. If you make applications for grape berry moth there is typically no need to make a separate application for leafhopper as the insecticides used for GBM will take care of leafhopper. Right now most of the leafhopper feeding is contained on the inner leaves of the canopy. Keep monitoring the level of feeding so it does not get out of hand.



**Grape Rootworm** – Once again, <u>grape rootworm</u> feeding is easily found in a number of vineyards across the belt. While very heavy in some vineyards, feeding damage (*see photo to the left*) is light in others. If you have a vineyard with heavy foliar feeding from adults, now is the time to make an application while the adults are still active above ground. Once eggs are laid the larvae will head underground and start feeding on the roots of the grapevine. Yesterday the CLEREL research and extension crew did tap studies (*see photo below*) in several vineyards in an effort to determine populations. We were able to find some adults but the number coincided with the low level of feeding.

We would like to continue to assess damage and the level of adults around the belt. If you have a vineyard with heavy rootworm feeding please give me a call (715) 792-2800 Ext. 203. We can make an assessment and talk to you about participating in a study into how best to control grape rootworm.



#### **BUSINESS MANAGEMENT: Kevin Martin**

#### Custom Crop Thinning: The answer requires more questions.

As you are reading this I am sure you would like the answer in the first sentence so you can get back to thinning. Knowing what to charge demands a few questions as rates should be different from grower to grower.

#### Do you want to Custom Crop Thin?

Some growers need to maximize the efficiency of their investments, burn the midnight oil, reduce debt and profit from custom work. Other growers are collecting social security, have the harvester paid off and are still working 50 or more hours per week. Price yourself competitively if you would like to garner as much custom work as possible. If you do not want to over-extend yourself make sure you are recovering your costs and an additional profit of 10% - 20%. If that price is not competitive, make it home in time for dinner.

#### How efficient is your harvester?

Newer harvesters have reported wide variations in maintenance costs. This is not necessarily brand specific, often it is operator specific. You know more about these costs than I do so think about them critically. With a Gregoire harvester I would think specifically about belts and pulleys. If the grower does not require you to measure the quantity of fruit removed, you could offer a discount in the neighborhood of 5%.

#### How long does it take?

Charging by the hour is a good place to start. However, using a clock might not be a best practice. To charge all customers equally, the amount of crop you're taking off matters. In general lower RPMs and higher ground speeds equate to far less harvesting head hours as compared to harvest. The more crop you remove per pass the higher the harvesting head RPMs and lower the ground speed. An increase in forward travel speed results in 10% - 30% more acres per hour. Lower RPMs result in an additional 15% - 30% less hours on the harvesting head.

### Charging by the hour or the acre?

If you charge by the hour and your primary concern is not gaining custom work market share prices in the area of \$200 - \$250 per hour would be reasonable. This translates to an acreage charge of \$75 - \$120 per acre. If your own operation does not require thinning, I would charge at least this much. Setting up and clean up will result in an additional \$60 - \$175 in costs. Trying to remove more than four ton of fruit might require considerably lower ground speeds and higher rates per acre. Charging by the hour does build most costs associated with greater fruit removal into the equation. I would recommend it if you do not want to gain market share. If you would like to generate additional revenue with your machine the culture of charging by the acre may push you in that direction. My advice would be to adjust your acreage rates based on goals of the operator and tonnage you are required to remove. I would avoid charging by the ton because changes in berry weights would result in an inefficient incentive to thin earlier or it would merely add unnecessary complications.

### Are you doing anything else?

Accurate removal of crop is challenging enough and it is not something you can guarantee. Accurate crop estimation and weather prediction are about risk management and not about accuracy. Growers should make these decisions for themselves. I would be wary about giving advice regarding the amount of fruit to remove.

I would be equally wary about taking crop estimates with a harvester for another grower. If you feel you must, make sure the grower selects where the samples are taken. Charge by the hour for the service the same as you would for thinning.

### IN THE VINEYARD with Andy Muza

## **INSECTS**

• <u>Grape Berry Moth</u> (GBM) – Eight High – Severe Risk Concord sites were examined this week in Erie County, PA. to check levels of GBM injury at this point in the season. A total of 25 clusters were examined for GBM feeding injury in rows bordering woods at each site. A cluster was recorded as injured if any berries showed signs of GBM injury.

Six of the 8 sites examined already showed a range of 44 – 60% of the clusters with at least 1 GBM sting. This should serve as an early alert that areas with a history of GBM problems should be scouted throughout the season and the GBM Degree Day Model on NEWA at http://newa.cornell.edu/index.php?page=berry-moth should be monitored to determine the next spray application.

- **Japanese Beetle (JB)** JB beetles were found at low-moderate levels in vineyard blocks. Population levels may be higher in one block or a portion of a block so scouting is important to get an overall picture of population levels. At this point numbers observed did not require treatment but check for increasing numbers.
- <u>Grape Leafhopper</u> (GLH) Adults, nymphs and leaf stippling were observed and varied widely among blocks. A few blocks had higher numbers than expected and we are receiving reports of increasing numbers at some sites.

#### DISEASES

- <u>Downy Mildew</u> (DM) DM has been observed on clusters and/or leaves in Concord, Delaware, Fredonia, Catawba and Niagara blocks. Enough inoculum is around that new leaf infections are a concern especially on susceptible varieties (e.g., Niagara Delaware, etc.). Depending on the weather and inoculum levels, additional sprays may be needed.
- <u>Black Rot</u> (BR) not much BR has been observed in the vast majority of blocks I have examined over the past few years. However, this week I have checked 2 Concord blocks where this disease has exploded. I have also received reports of other blocks with BR problems. In addition, I have been able to find at least some BR in vineyards that have been scouted.

According to Wayne Wilcox, (**Grape Disease Control, 2013**), "Concord berries are highly susceptible to infection from cap fall until 3 – 4 weeks later and can be infected up to 5 - 6 weeks. Protection should continue throughout the entire period of susceptibility if infections got started in the vineyard for one reason or another …".

Vineyards that have had BR problems in the past should be checked to see if BR infections are prevalent in these sites. Contact a member of the LERGP Extension Team if a BR problem is found.

• <u>Powdery mildew</u> (PM) – PM starting to increase on leaves throughout the region so keep an eye on buildup to determine if a later season spray may be needed, especially since crop levels are high in many blocks.



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

### LAST COFFEE POT MEETING of 2013

1 DEC credit available

Coffee Pot Meetings are free. Come find out what is happening in our local vineyards and talk with the Team.



**July 24, 2013** 10 am – 12:00 noon

Leo Hans Farm/Vineyard, 10929 W. Perrysburg Road, Perrysburg, NY 14129

LERGP SUMMER GROWERS' CONFERENCE DATE: Thursday July 25, 2013 - NEXT WEEK! TIME: 8:00 am – 5:00 pm LOCATION: LERGP @ CLEREL, 6592 W. Main Road, Portland, NY 14769 REGISTRATION DEADLINE: Tuesday July 23, 2013 COST (includes Lunch): LERGP Member \$25.00 | Non-Member cost \$50.00 [\$25.00 late Registration fee]

Do you need DEC Credits? Do you like hearing the latest in technology information and what is occurring in our area vineyards? Would you like to see the latest in research at the CLEREL Vineyards? If you answer *YES*, then we have *the program* for you!

Register now for the LERGP Summer Growers' Conference! Space is limited to the first 70 enrollees and seats are filling!

New this year for your convenience is the ability to pay online with a credit card. Please go to the REGISTRATION PAGE at: <a href="http://lergp.cce.cornell.edu/event\_preregistration.php?event=32">http://lergp.cce.cornell.edu/event\_preregistration.php?event=32</a>.

A **Draft** *AGENDA* and downloadable Registration Form are also available for those who wish to mail in a form at: <u>http://lergp.cce.cornell.edu/event.php?id=32</u>.

**Trade Show** with: Green Hoe Co. Inc., LaPorte Farm Equipment Inc., Larry Romance & Son Inc., Militellos, North East Fruit Growers Inc., NYCAMH, Texas Refinery Corp.,Z&M Ag & Turf

If you have any questions at all, please give Kate Robinson a call at 716-792-2800 ext. 201 or an email at <u>kjr45@cornell.edu</u>. *We look forward to seeing you on the 25th!* 

Information can be found at: <u>http://lergp.cce.cornell.edu/event.php?id=32</u> *Please phone or email any questions to either:* <u>Kate Robinson</u> 716-792-2800 ext. 201 | <u>kjr45@cornell.edu</u> **or** <u>Kevin Martin</u> 716-792-2800 ext. 205 | <u>kmm52@psu.edu</u>

# \*\*REGISTRATION DEADLINE - Grape Twilight Meeting & Erie Co. Horticultural Society's Annual Chicken BBQ (see below – REGISTRATION IS MANDATORY)

Monday July 29, 2013

## FRUIT FIELD DAY

DATE: Thursday August 1, 2013

**TIME:** 8:00 am to 5:00 pm

LOCATION: New York State Agricultural Experiment Station, Geneva, NY

**COST:** \$30.00 per person (\$40.00 per person for walk-ins) | Lunch will be provided.

## PREREGISTRATION IS REQUIRED

Register now to learn about Cornell's latest research and extension efforts in tree fruits, grapes, hops, and small fruits at the Fruit Field Day, August 1st, from 8:00 a.m. to 5:00 p.m. at the New York State Agricultural Experiment Station in Geneva, NY. Attendees will travel by bus to the research plots to hear presentations by researchers; for a complete list of talks:

http://blogs.cornell.edu/stationnews/cicada-fest-at-the-hudson-valley-lab-grabbing-a-bite-on-the-fly/presentations-fruit-field-day-2013/.

Pre-registration is required for the \$30 rate; register on-line at: <u>http://is.gd/ffd2013</u>. *The event will be held at the Fruit and Vegetable Research Farm South, 1097 County Road No. 4, one mile west of Pre-emption Road in Geneva, NY. Signs will be posted.* 

### GRAPE TWILIGHT MEETING & ERIE COUNTY HORTICULTURAL SOCIETY'S ANNUAL CHICKEN BBQ

DEC Credits available.

**DATE:** Thursday August 8, 2013

FARM EQUIPMENT DISPLAY (various vendors): 3:30 pm - 7:00 pm

**GRAPE PROGRAM:** 5 pm – 6 pm; Chicken BBQ to follow

LOCATION: Gravel Pit Park,10300 West Main Road (Rt. 20), North East, PA 16428

**COST:** The BBQ is *free* but **REGISTRATION is mandatory**. If you do not register, a meal will not be reserved for you. Register by Monday, July 29, by calling Penn State Extension Erie County at (814) 825-0900. *This meeting will be assigned 2 Category pesticide re-certification credits pending approval by the Pennsylvania Department of Agriculture.* 

Pesticide re-certification credits have also been applied to NY DEC for New York growers.

• Insect and Disease Management Updates: Bryan Hed and Jody Timer, Lake Erie Regional Grape Research & Extension Center, North East, PA; Andy Muza, Tim Weigle and Kevin Martin, LERGP Extension Team.

## LAST WINEMAKER'S ROUNDTABLE MEETING of 2013

### Topic: Vinifera Reds

DATE: Monday August 19, 2013

**TIME:** 4:00 – 6:00

LOCATION: CLEREL Meeting Room, 6592 West Main Road, Portland, NY 14769

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.

#### HOLD THE DATE: Wednesday August 21, 2013 LERGP TWILIGHT MEETING AND THOMPSON AG PIG ROAST

More details to follow as they become available! Check here and on the website.

#### PLEASE NOTE: Next Electronic Crop Update will be Thursday August 1, 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: <u>thw4@cornell.edu</u>.

### Lake Erie Regional Grape Program Team Members:

Andy Muza, Extension Educator, Erie County, PA Cooperative Extension, 814.825.0900

Tim Weigle, Grape IPM Extension Associate, NYSIPM, 716.792.2800 ext. 203

Kevin Martin, Business Management Educator, 716. 792.2800 ext. 205

Subscribe to Appellation Cornell Newsletter: <u>http://grapesandwine.cals.cornell.edu/cals/grapesandwine/appellation-cornell/index.cfm</u>

Appellation Cornell Newsletter Index: <u>http://grapesandwine.cals.cornell.edu/cals/grapesandwine/appellation-cornell/</u>

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

This publication may contain pesticide recommendations. Changes in pesticide regulations occur constantly, and human errors are still possible. Some materials mentioned may not be registered in all states, may no longer be available, and some uses may no longer be legal. Questions concerning the legality and/or registration status for pesticide use should be directed to the appropriate extension agent or state regulatory agency. Read the label before applying any pesticide. Cornell and Penn State Cooperative Extensions, and their employees, assume no liability for the effectiveness or results of any chemicals for pesticide usage. No endorsements of products are made or implied.

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#### THE LAKE ERIE REGIONAL GRAPE PROGRAM at CLEREL 6592 West Main Road Portland, NY 14769 716-792-2800