



The Lake Erie Regional Grape Program



Crop Update for June 12, 2014



Upcoming Event Dates to put on your calendar:

Please note the deadline for registration for each event.

June 18th, 2014- COFFEE POT MEETINGS: *Note that there are 2 meetings on this date!*

10:00am- Dan Sprague Farm, 12435 Versailles Plank Rd. Irving NY 14081

3:00pm- Evan Schiedel/Roy Orton, 10646 W Main Rd. Ripley, NY 14775



June 21, 2014- Hops Production in the Lake Erie Region

Full day conference focusing on the process of commercial Hops production. The morning program will consist of oral presentations presented at CLEREL and then after lunch the group will move outside to the hopyard.

Deadline for pre-registration: Thursday June 19, 2014

August 20, 2014- Thompson Ag Pig Roast- more info to come-

Information and registration forms for all of the listed events are available in this update.

Registration is also available on-line for most programs at our web-site: lergp.cce.cornell.edu



The password for the LERGP web-site changed on April 24th. An e-mail was sent to everyone who has renewed their membership for the 2014 year with the new password. If you believe your name has been omitted in error, please give me a call at the office, 716-792-2800 ext 201, or stop in and we can review.

Thank you!
Katie

Business Management

Practicing Discretion: Using Consecutively Large Crops to Justify Enhanced Production Practices

Kevin Martin, LERGP, Penn State University

Getting out in the vineyards, we are starting to see the potential for some growers to have relatively impressive yields. Winter injury and varying thinning practices will likely create significant variability of crop size.

As a result differential block management has the ability to produce significant efficiency gains. Spray programs, from a cost perspective, should be fairly uniform until post-bloom. Later sprays, a second application of nitrogen, and cover crops all have the potential to create variable production practice costs.

These production practices typically add between \$30 and \$50 per acre in cost, per practice. Within that range, if the practice is necessary, usually costs are easily recouped. Adding these costs without regard for specific needs can just as easily result in lower profitability. The following list is hypothetical. While no grower does everything on this list, it is a fairly comprehensive list of practices done as an insurance policy, without regard for actual need. For the sake of sustainability and efficiency, rather than buying insurance, always make these enhancements when you think they're necessary.

- Urea Application \$217
- Immediate Pre-bloom \$73
- Third Post-Bloom \$70
- Aggressive Herbicide First Application \$67
- Feeds and Stickers \$50
- Row Middle Mow * 3 \$36

The total costs of these practices are \$513. Realistically, depending on vineyard conditions, a grower could reduce these costs by \$200 - \$370 per acre. These costs represent the total cost of the practice. For instance, even if you do not need to spend \$73 on a pre-bloom application, you'll need to spend at least \$45.

Many of these examples were a bit over the top, but expenses can vary considerably based on actual need. It is extremely unlikely a vineyard would just happen to need enhanced practices in all of these different areas simultaneously. The following is a list, given current prices, of an acceptable range.

- Urea Application \$0 - \$50
- Immediate Pre-bloom \$35 - \$50
- Third Post-Bloom \$0 - \$20 (Plus Insecticide)
- Herbicide \$20 - \$50
- Feeds and Stickers \$5 - \$30 (Entire season)
- Row Middle Mow \$12 - \$25 (Entire season)

Cultural Practices

Defining Grape Bloom

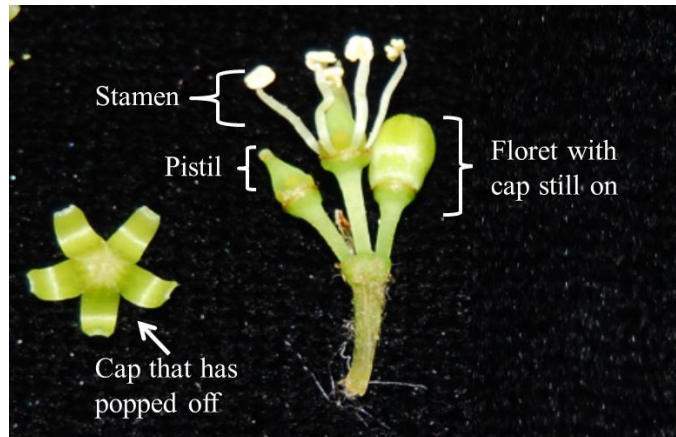
Luke Haggerty

Viticulture Extension Educator

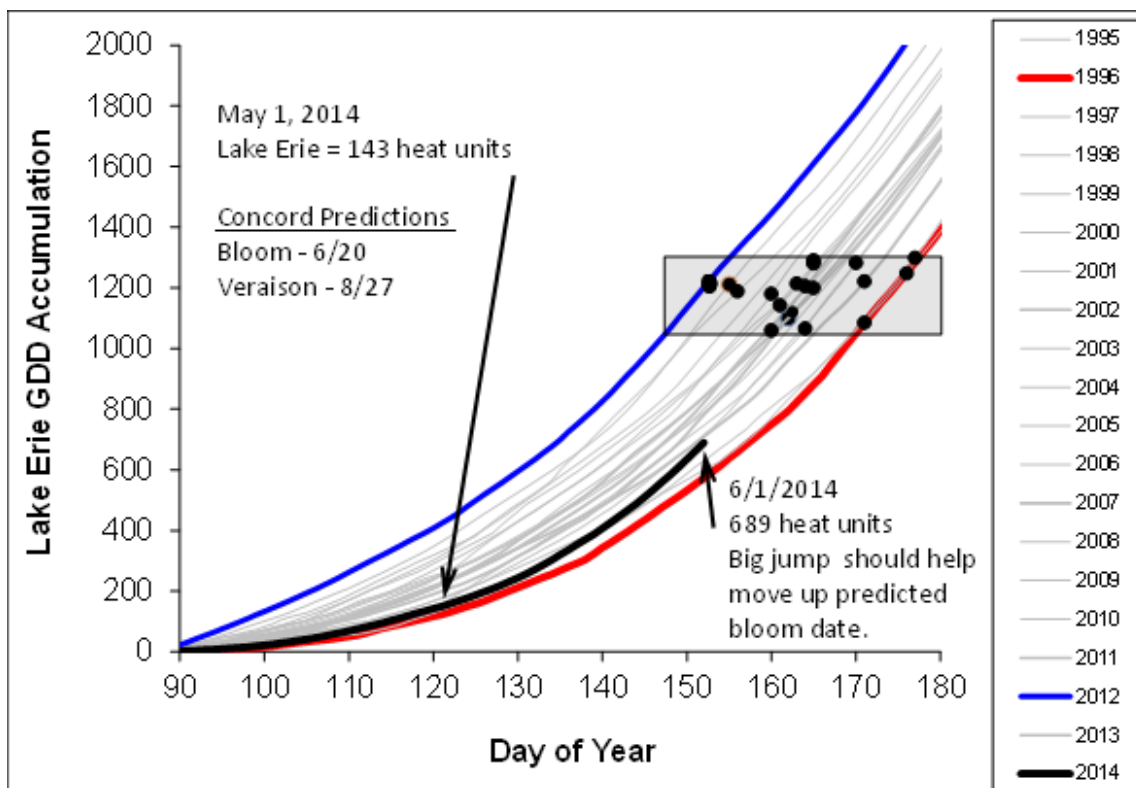
Lake Erie Regional Grape Program

As of Thursday, the 12th of June the concord bloom is getting real close. With a few caps popping off florets there are multiple reports of trace bloom in the warmer sites and others that are real close to bloom. I've started to see trace bloom in our Route 20 Concord block, as well as, apparent evidence of trace bloom in the Fredonia, and Portland 'Niagara' blocks. To clarify, the term 'trace bloom' is used when we find the first evidence of a floret that has popped its cap. For example, this morning I walked five rows of Concord before I found a cluster with one floret that had popped its cap revealing the stamens and pistil. We will declare 'bloom' when 50% of the grape florets have popped their caps on 50% of the check vines. Here at CLEREL, the **average** bloom date is June 14. The consensus around the lab is that bloom will most likely occur early next week on our Route 20 block and, depending on the weather, in all of our blocks by the time the next crop update comes out. The final term I would like to define is 'full bloom' and is used when all florets in the cluster have popped their caps throughout the block.

Going over the phenology and Growing Degree Day (GDD) data for the past 50 years the averaged JAN GDD accumulated at bloom is 608 and the averaged APR GDD is 584. Here at CLEREL we have accumulated 548 GDD for the JAN calculation. GDDs are useful for timing many processes, but there are years when timing of heat units such as GDDs can be misleading, especially early season. For example, the standard deviation for the averaged GDD at bloom is 35.4 which could be three real cool days or one real hot day off, but looking at the long term data we have had bloom anywhere between 517 and 658 GDDs with a difference of 141 GDDs. A difference this large could be the amount of heat units accumulated over a week or longer as we usually accumulate 110 GDDs during a full week in early June. Although, this year we have not swayed far from average.



Picture and diagram produced by Luke Haggerty



The above graph was developed by Dr. Terry Bates to show Lake Erie GDD accumulation. Lake Erie had a nice jump in heat units helping to move things along faster than first predicted. The lake correlation for June 1 puts bloom on June 18. However, Dr. Bates reports that if the heat trend continues then bloom will occur on average (June 14th) or a day or two behind (15th or 16th).

Weather and Growing Degree Day Information

DATE/YEAR	HIGH	LOW	DAILY PRECIP.	GDDs	TOTAL APRIL GDDs	TOTAL JAN GDDs
Week of 5/28/14	69	55.71	0.04	86.5	339.5	339.5
Week of 6/4/14	75.7	56.71	0.06	113.5	453	453
Week of 6/11/2014	72.4	54.70	0.18	95	548	548
Average(from 1964)	75.3	56.40	0.09	115.4	512	538
June Precip. Week 1 = .39" Week 2 = 1.23" Week 3 = xx.x" Week 4 = xx.x"						
Total Precip:March = 2.62" April = 3.66" May = 5.5"						

Lake Erie Grape Region NEWA Weather Data

Location	Date	High (F)	Low (F)	Precip.Past 7 days (in)	Total Apr GDD
North East Lab, PA	06/12/14	81.8	68.4	1.68	519
Harborcreek, PA	06/12/14	81.2	66.9	1.36	538.6
North East Escarpment	06/12/14	78.5	66.6	2.22	539.8
Ripley	06/12/14	79.9	67.3	2.34	544.1
Portland Route 5	06/12/14	82.1	45.9	1.87	496.9
Portland CLEREL	06/12/14	80.1	67	1.59	502.6
Portland Escarpment	06/12/14	79.4	66.5	1.74	533.2
Silver Creek	06/12/14	80.1	67.4	NA	460.7
Sheridan	06/12/14	88.6	78.2	NA	NA
Versailles	06/12/14	70.5	78.8	NA	489.3
Appleton	06/12/14	79.8	60	0.8	374.1
Somerset	06/12/14	79.8	62.2	0.67	469
Appleton South	06/12/14	79.4	62.6	0.74	448.6

Note: All Weather data reported as of 6/12/2014. NA=Sensor Malfunction

IPM

Tim Weigle, *NYSIPM, LERGP*

Grape berry moth – determining the date of wild grape bloom (50% of the florets open on a majority of clusters) is essential for using the new grape berry moth model on NEWA. While the model will provide an estimated bloom date the best way to use the model is by using the bloom date of a wild grape near each of your blocks. It appears that there will be a larger difference in bloom dates, depending on vineyard location, this year than in years past. If you have recorded wild grape bloom in your area, please pass it along to me at thw4@cornell.edu. I would like to use it to help with model improvements.

Banded grape bug is still worth scouting for, especially in vineyards where they have been a problem in the past. I have noticed that in Route 20 vineyards it appears they have progressed to the late nymphal to adult stage. Once banded grape bug reaches the adult stage it is no longer a threat to grapes as it becomes a predator on soft bodied insects. Vineyards along Route 5 and the escarpment, that may be lagging behind Route 20 vineyards in development, may see development of banded grape bug delayed a bit as well and should continue to be scouted.

Grape rootworm. Mark Amidon, National Grape Cooperative, sent in a heads up that he found grape rootworm in the area. They are not out in large numbers yet, but the early risers have made it above ground. Greg Loeb and I are working on a grape rootworm project this year and I would like to get a better handle on how widespread the problem is. Please contact me at thw4@cornell.edu if you see grape rootworm feeding in your grapes. It is often difficult to spot the pest itself which is why we look for the leaf feeding of the adults to help time sprays. Not sure what rootworm feeding looks like? The fact sheet on the NYS IPM Program website will provide you with that information and more: <http://www.nysipm.cornell.edu/factsheets/grapes/pests/grw/grw.pdf>

Eutypa, and other forms of trunk damage, can still be easily seen in most vineyards. When you get done with your immediate pre bloom fungicide applications it would be worth your time to get out, if you haven't already, into each vineyard block to identify vines containing shoots with shortened internodes and small, yellow cupped leaves. If it looks like they might carry a crop this year you can flag them for removal during the dormant season. Regular replacement of infected, or injured vines, is key in keeping your vineyard block producing at maximum potential.



In the Vineyard (6-12-14) – *Andy Muza, Extension Educator, Erie County, PA Cooperative Extension*

Diseases

There is still time to apply an IMMEDIATE PREBLOOM spray if you have not already done so. Depending on the weather and location, many of the Concord vineyards in the Lake Erie Region should start blooming soon (this weekend or sometime next week).

Another reminder, this spray and the POST BLOOM sprays are CRITICAL periods for protection of fruit. IF you do an excellent job now (good coverage and use of highly effective fungicides against phomopsis, black rot, downy and powdery mildew) then your job for the rest of the season will be much easier.

Do not stretch your POST BLOOM spray beyond 14 days from the IMMEDIATE PREBLOOM spray. Tighten your schedule to 10 days if weather is rainy and there were disease problems last season (high inoculum levels). Consult the [2014 New York and Pennsylvania Pest Management Guidelines for Grapes](#) for effectiveness of fungicides for disease management.

Phomopsis – observed phomopsis on leaves but occurrence less than last season. Shoot symptoms less than in past few years. However, phomopsis still poses potential problems through POST BLOOM period.

Black Rot – observed small amounts of lesions on leaves particularly on shaded border rows near woods.

Downy Mildew – present to some degree in majority of vineyards **last season**. Thunderstorms through this time period will trigger infection periods so protection is needed. Areas along wood lines and low lying areas where water collects should be especially checked for symptoms of disease. Don't forget to be observant of suckers because often sucker leaves will show first symptoms of disease.

Insects

Rose Chafer ALERT – I received a call on Tuesday from a grower in North East, PA that rose chafers were beginning to emerge. Later that day I checked his vineyard and a small number of beetles were starting to feed on cluster florets.

Rose chafer populations can increase rapidly due to mass emergence of beetles over a few days, so scout NOW and OFTEN over the next 2 weeks. A fact sheet on Rose Chafer from Ohio State,

http://www.oardc.ohio-state.edu/grapeipm/rose_chafer.htm) recommends an insecticide application if a threshold of 2 beetles per vine is reached.

Grape Berry Moth (GBM) – Wild grape bloom was 100% in areas that I checked. So it is time to start tracking GBM development using the degree day model in NEWA (<http://newa.cornell.edu/index.php?page=berry-moth>).

Hopefully, wild grape bloom (50% bloom) was recorded **at each of your sites** and entered into the model. The model begins calculating degree days for GBM development based on the bloom date for wild grape that you enter. If a bloom date is not indicated then the model will **estimate** a date based on the location of the weather station that is used.

Leafhoppers – a few grape and potato leafhopper adults were observed.

News from the North East, PA Lab

Bryan Hed, Research Support Technologist in Plant Pathology

Weather: Total rainfall during June is currently at 2.05". Our growing degree day total from April 1 to June 11 is 495. Predicted temperatures (Accuweather) will remain cooler than average through Saturday, after which things start to heat up on Sunday. Rain is predicted to clear out by Friday morning (June 13) and stay clear into the middle of next week when rain returns.

Phenology: We are beginning to see the first flowers opening on some of our Minnesota hybrids, which can be anywhere from 2-6 days ahead of the Concords (depending on the season).

Disease: We have spotted our first downy mildew symptoms on our Chancellor grapes, on sucker growth near the ground (none in the canopy yet). Infection for these symptoms likely occurred during rain periods on June 3 (a little over a week ago). Also, we may have had conditions for additional infection periods for all diseases on June 8 and June 11-12. This comes at a critical time for protection of inflorescences, and soon, fruit. Hopefully everyone has applied their immediate pre-bloom spray (trace bloom is imminent) and is planning their first post bloom spray within 10-14 days. These two sprays are the most critical sprays of the season for all grape varieties!!! Use best materials at full rates and enough gallons/acre for best coverage. We are also seeing some black rot lesions on leaves in the cluster zone on unsprayed vines that will add to the inoculum source for future fruit infections. When you see such lesions, it's an indication that your post bloom sprays will be critical for reducing fruit loss.


For wine grape growers that will be renewing vines with severe trunk damage; remember that you need to protect new sucker growth from powdery and downy mildew. Vigorous new sucker growth is very susceptible to these diseases and is very close to inoculum sources in the vineyard (downy mildew originates from inoculum in the soil, and powdery mildew originates from inoculum in bark on trunks). Normally we remove this growth and may not realize how susceptible these tissues are to primary infections in spring. For example, when we allow for sucker growth in our Chancellor vineyard (very susceptible to downy mildew), we generally detect downy mildew on suckers before we see it develop in the canopy. Direct sprays to maintain healthy renewal suckers, and try to achieve a balance of enough good quality suckers that will inhibit the growth of bull-wood (which make poor quality trunk replacements), without allowing for thick bushy growth from the base of vines that can be difficult to adequately penetrate and protect with fungicides. This is a balancing act that may have to be adjusted on a vine to vine basis, but is essential to renewing a vineyard to full production as quickly as possible.





2014 LERGP Coffee Pot Locations



May 7th	10:00am	Ann & Martin Schulze 2030 Old Coomer Rd. Burt NY 14028
May 14th	10:00am	John Mason 8603 W. Lake Rd. Lake City PA 16428
May 21st	10:00am	Leo Hans 10929 W Perrysburg Rd. Perrysburg NY 14129
May 28th	10:00am	Bob & Dawn Betts 7365 E Rte 20. Westfield, NY 14787
June 4th	10:00am 3:00pm	Clover Hill Farms- 10401 Sidehill Rd. North East, PA 16428 Brant Town Hall- Back entrance 1294 Brant North Collins Rd Brant NY 14027
June 11th	10:00am 3:00pm	The Winery at Marjim Manor, 7171 East Lake Rd.Appleton NY 14008 Chris Ortolano-2053 Lake Rd. Silver Creek NY 14136
June 18th	10:00am 3:00pm	Dan Sprague- 12435 Versailles Plank Rd. Irving NY 14081 Evan Schiedel/Roy Orton -10646 W Main Rd. Ripley NY 14775
June 25th	10:00am 3:00pm	Tom Tower 759 Lockport Rd. Youngstown NY 14174 Archer & Pratz Inc.- 9813 Lake Road, North East 16428
 <u>3:00pm meeting is an updated address- afternoon meeting times have been updated to 3pm</u>		
July 2nd	10:00am	Peter Loretto- 10854 Versailles Plank Rd. North Collins NY 14111
July 9th	10:00am	Kirk Hutchinson- 4720 W Main Rd. Fredonia NY 14063
July 16th	10:00am	Earl & Irene Blakely 183 Versailles Rd. Irving NY 14081
July 23th	10:00am	Fred Luke- 1755 Cemetery Rd. North East PA 16428
July 30th	10:00am	Carl Vilardo- Walker Rd. Westfield NY 14787

Hops Production in the Lake Erie Region

When: Saturday, June 21, 2014

Time: 8 AM – 4 PM

Where: CLEREL

6592 West Main Rd.

Portland NY, 14769

Cost: \$75 for members of the Northeast Hops Alliance and LERGP Members
\$100.00 for non-members

Class size is limited; sign up early to ensure a spot in the class.

To register: Contact Kate at (716) 792-2800 x 201 or kjr45@cornell.edu

Participants will learn about commercial hops production; starting with classroom instruction on production practices from commercial hops growers from Pennsylvania and New York as well as Cornell University extension staff. The talks will provide an overview of hops production from before they are planted in the ground to the processing and marketing after harvest.

In the afternoon participants will head out to the CLEREL hop yard for a firsthand look at hop yard construction and a discussion with hops growers on the practices they use in their hop yards. A small scale harvester prototype will be available for viewing in the afternoon.

Topics to be covered

Planting a hop yard

Nutrition basics

Short trellis hops production

Processing – what to do with your hops after harvest

Marketing hops

Determining pricing for selling hops



Hops Production in the Lake Erie Region

Saturday, June 21, 2014
at

Cornell Lake Erie Research & Extension
Laboratory
6592 West Main Rd.
Portland, NY 14769



\$100.00 General

\$75.00 NeHA & LERGP Members

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

Name: _____
St.Address: _____
City, State, Zip _____
Phone Numbers: Home _____ cell _____
E-mail address: _____
of hills you have: _____

Names of additional registrants:	NeHA Member	Non-member
_____	\$75.00	\$100.00
_____	\$75.00	\$100.00
_____	\$75.00	\$100.00
_____	\$75.00	\$100.00
_____	\$75.00	\$100.00

Total number of registrants: _____ Total paid: _____

Registration questions:

Contact: Kate Robinson at 716-792-2800 ext 201 or e-mail: kjr45@cornell.edu

Mail form and payment made out to LERGP to:

LERGP, c/o Kate Robinson 6592 West Main Rd. Portland, NY 14769

2014 Lake Erie Regional Grape Program Enrollment

****This form is for NY Growers ONLY- PA Growers call 814-825-0900 to register**

Fees:

\$70.00 \$_____ **GRAPE Program** -Chautauqua county landowner
(*\$45.00 program fee, \$25.00 Chautauqua County Base Fee*)

\$65.00 \$_____ **GRAPE Program**- Cattaraugus, Erie, NY or Niagara
(*\$45.00 program fee, \$20.00 County base fee*)

\$100.00 \$_____ **GRAPE Program** -Out of Program Region Resident

\$25.00 \$_____ 2014 Cornell Guidelines for Grapes

\$25.00 \$_____ Hardcopy mailing of Newsletters***

Total \$_____ (Please make check payable to LERGP)

Program fees do
not include 2014
Cornell Guidelines for
Grapes

I am interested in the educational work of Cornell Cooperative Extension in Niagara, Chautauqua and Cattaraugus County. Any current re-
corded enrollee 18 years of age and older shall have voting and nominating privileges to hold office in the Association of their local county.

☐ I am 18 years of age or older and signed_____

☐ New ☐ Renewal

Farm Name:_____

Name:_____ Spouse's Name: _____

Address:_____ City:_____

State:_____ Zip Code_____

Home phone:_____ Cell Phone :_____

***Due to budget constraints, all correspondence will be conducted through e-mail. Please provide your
e-mail address below. If you would like to receive hardcopies, mark the \$25.00 additional fee line above
and include with payment.***

EMAIL ADDRESS_____

Please return form and payment to:

Feel free to call w/ questions:

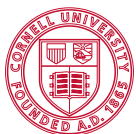
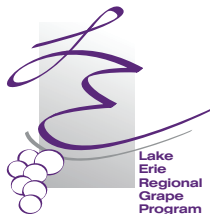
LERGP

716-792-2800 Ext 201

6592 West Main Rd.

Portland NY 14769

Attn: Katie



Cornell University

PENNSTATE



College of
Agricultural
Sciences



Cornell University
Cooperative Extension

LERGP Website Links of Interest:

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>

Go to <http://lergp.cce.cornell.edu/> for a detailed calendar of events.

Please remember to RSVP for those events that require one!



Next Crop Update: June 19, 2014

Lake Erie Regional Grape Program Team Members:

Andy Muza, (ajm4@psu.edu) Extension Educator, Erie County, PA Cooperative Extension, 814.825.0900

Tim Weigle, (thw4@cornell.edu) Grape IPM Extension Associate, NYSIPM, 716.792.2800 ext. 203

Kevin Martin, (kmm52@psu.edu) Business Management Educator, 716. 792.2800 ext. 205

Luke Haggerty, (llh85@cornell.edu) Grape Cultural Practices, 716.792.2800 ext. 204

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.

Cornell University Cooperative Extension provides equal program and employment opportunities.

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

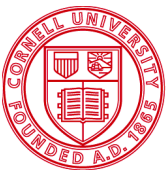
CCE does not endorse or recommend any specific product or service.

THE LAKE ERIE REGIONAL GRAPE PROGRAM at CLEREL

6592 West Main Road

Portland, NY 14769

716-792-2800



Cornell University
Cooperative Extension



College of
Agricultural
Sciences