LAKE ERIE REGIONAL GRAPE PROGRAM

Electronic Crop Update for August 9, 2012

IN THIS UPDATE:

Go to http://lergp.cce.cornell.edu/EventsCalendar.htm for a detailed calendar of events including maps via Google calendar! Scroll to the bottom of the page for Google calendar and click on the event. 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.

Weather Facts

WEATHER *FACTS*: Edith Byrne

DATE / YEAR	*HIGH*	*LOW*	*DAILY PRECIP.*	*GDDS*	*TOTAL APRIL GDDS*	*TOTAL JANUARY GDDS*
Week 7/18/12	84	70	0.04	27	1419.5	1550
Week 7/26/12	80	70	1.27	25	1596.5	1727
Last Week 8/1/12	76	66	0	21	1729	1859.5
August 8, 2012	***83***	***66***	***0***	***24.5***	***1892***	***2022.5***
August 8, 2011	80	69	0.00	24.5	1935.5	1944
August 8, 2010	83	64	0.10	23.5	1982	1985.5
AVERAGE	**80.3**	**63.1**	**0.17**	**21.71**	**1697.43**	**1722.34**

This year compared to AVERAGE: JAN. GDD: Ahead 13.83 / APR. GDD: Ahead 8.96

August 2012 Pcp = 1.09" / July 2012 Pcp = 4.46" / 2012 Total Precipitation through 8/1 = 21.44"

PRECIPITATION LAST WEEK: 1.09" / GDDs ACCUMULATED LAST WEEK = 163.00

GDDs accumulated July 2012 = 725.5	*GDDs accumulated June 2012 = 456.5*	*GDDs accumulated May 2012 = 393*
	2012	***2011***
Average High* thru *August 8	**80.88**	**80.75**
Average Low* thru *August 8	**65.13**	**67.25**
Average High July	81.35	80.97
Average Low July	65.54	66.00
Average High June	75.23	73.87
Average Low June	60.27	58.30

INTEGRATED PEST MANAGEMENT: Tim Weigle

Integrated Pest Management

Got Rootworm?

Jim Joy of National Grape Cooperative brought in a bag of Grape Rootworm beetles that he found on a tractor and sprayer that had recently gone through a vineyard showing Grape Rootworm feeding damage. While we would typically not see adults this late in the season, a quick check of the fact sheet showed that the life span of a Grape Rootworm adult can range from 1 to 7 weeks. With the warm temperatures we have experienced this year it should not be surprising that an insect is extending its stay in area vineyards. While we should be getting to the end of even a 7-week lifespan, now would be an excellent time to get out and scout vineyards for grape rootworm feeding. Remember that with Grape Rootworm it is the larvae feeing on the roots that does the damage, but the adult stage is the best time to apply control measures. Start your monitoring in vineyards where you have seen an unexplained decrease in vine vigor, but try to get a look in all blocks as this pest seems to be making a resurgence in Lake Erie region vineyards, especially in Chautauqua County, with no real rhyme or reason as to soil type.

Grape Rootworm Foliar Feeding

***Grape Berry Moth* Model on NEWA**

Using a standard of May 24, 2012 as the date of wild grape bloom (biofix) the table below shows where we stand across the Lake Erie Region in terms of degree day accumulation and grape berry moth development. Using this date we are well past the time where insecticides that need to be ingested, such as Altacor and Intrepid should be used. According to the model pest status, we can expect continuous pressure from grape berry moth through harvest. What this means is that the length of generations of GBM are becoming longer due to extended egg-laying which leads to overlapping of generations. Therefore, model results are no longer good predictors of timing of population pressures due to the overlap.

What does this mean? In vineyards where scouting at 1470 – 1620 DD showed GBM damage over threshold, there may be a need for multiple additional insecticide applications, especially in the very high pressure vineyards. This is due to the extended egg-laying and overlapping generations. Continuous coverage in these high pressure vineyards is necessary to avoid excessive crop loss, especially in vinifera varieties and those varieties that are susceptible to Botrytis infections.

Location	Degree Days on Aug 2	Forecasted Degree Day Accumulation Aug 7
North East Lab	1929	2045
Harborcreek	1903	2019
North East Escarpment	1904	2014
Ripley	1944	2046
Portland Route 5	1899	2007

Portland (CLEREL)	1861	1969
Portland Escarpment	1879	1987
Silver Creek	1837	1949
Sheridan	1869	1983
Versailles	1817	1923
Lockport	1839	1955
Ransomville	1853	1969
***Appleton, North**	1647	1795

If we use May 22 as the biofix date the model predicts the following degree day accumulations.

Location	Degree Days on Aug 2	Forecasted Degree Day Accumulation Aug 7
North East Lab	1959	2075
Harborcreek	1932	2048
North East Escarpment	1935	2045
Ripley	1975	2078
Portland Route 5	1930	2038
Portland (CLEREL)	1891	1999
Portland Escarpment	1908	2017
Silver Creek	1867	1979
Sheridan	1905	2019
Versailles	1851	1958
Lockport	1878	1994
Ransomville	1891	2006
Appleton, North*	1680	1829

*Niagara County growers with vineyards near Lake Ontario (North Appleton station) reported a wild grape bloom date around May 29, 2012. Using that date as the biofix would give you 1716 DD on August 9, which is still in the range for an application of a contact insecticide for management of grape berry moth. This points out how important it is to use the information that reflects the conditions found in and around your specific vineyard sites, rather than to use an cookie cutter approach of what the average conditions in the belt are.

If you have any questions on how NEWA can be used in your vineyard IPM strategy, do not hesitate to get in touch with me at (716) 792-2800 x203 or by email at thw4@cornell.edu.

GRAPE CULTURAL PRACTICES: Jodi Creasap-Gee, Ph.D.

CONCORD, Taken August 9, 2012

Veraison – As mentioned last week, color is indeed developing in Concords, with the official Cornell veraison listed below. In normal years, we talk about crop thinning prior to this stage, but with the small crop this year, there's no need to mention it more than to say we don't need to mention it.

From Kelly Link:
The following is the phenology reading taken Wednesday, August 8th:

Official Veraison = 5% of the berries on a majority of clusters within a "vine scouting area" (1' – 2' wide section on the right and left side of the vine, top to bottom) show color change.

Since I am looking for Veraison on primary and secondary shoots, my "vine scouting area" was reduced to each shoot on a cane that was tagged for phenology rating (I'm using the same shoots that I used to call 10% pink, bud burst, & bloom).

Fredonia (balanced 30+10) = < 1% Veraison on Primary Shoots, 0% Veraison on Secondary Shoots

*Portland (120 Nodes) = **13% Veraison** on Primary Shoots, 2% Veraison on Secondary Shoots*
*Portland (balanced 20+20) = **8% Veraison** on Primary Shoots, 0% Veraison on Secondary Shoots*
*Portland (80 Nodes) = **25% Veraison** on Primary Shoots, **12% Veraison** on Secondary Shoots*

We have official Veraison at Portland on Primary Shoots. The four year average for Veraison at Portland is August 13th. The earliest Veraison on record is August 5, 1991 in the Fredonia Historical Vines.

What else is important around veraison? As has been mentioned throughout the season, the small 2012 crop and excellent growing conditions (save where it's really dry) have built up vine size and should lead to excellent crop potential for 2013. With that in mind, nutrient management, which may have been skipped in 2012, should be planned for 2013's potentially large crop. How do you plan for it? Soil and petiole testing. If your vines are showing leaf symptoms, or if you're just in need of taking annual samples, now is the time (70-100 days after bloom) to get petioles collected and brought to CLEREL for shipping. Soil testing can be done anytime – before harvest, after harvest, but preferably when the soil is not sopping wet, which shouldn't be too difficult this year in most vineyards.

Petiole sampling – how to:
(Watch the video by clicking here or on the picture!)

SELECTING THE VINES:

1. **Select an area** containing at least 30-50 vines of the variety to be sampled if possible. These 30 vines should be representative of: (a) a problem area, or (b) the average of the vineyard. The final fertilizer suggestions will apply **ONLY** to the area represented by the selected vines.
2. **Select 30-50 Vines** to represent the sample. If more than one area or block is being sampled, give each area a **REFERENCE NUMBER** and record this number for future reference. If you have the fields identified with either a number or a letter, this may be used for the reference number. When the diagnosis sheet is returned, it will refer to this field number/name.
3. **Be sure to maintain thorough records of your sampling dates, techniques, and locations.** Maintaining proper records will enable you to observe patterns over time and to treat specific areas in a timely and efficient manner.
4. **Remember:** Soil analysis in addition to petiole testing will provide the most accurate picture of what's going on in your vineyards. A soil or petiole test alone will not necessarily indicate whether a vine requires a specific nutrient or if the soil requires a change in the pH.

COLLECTING PETIOLE SAMPLES:

1. **Time Of Collection.** Collect petiole samples **at bloom** or **70 - 100 days after bloom** (late August or early September). Samples should not be taken after harvest.

2. **Materials Needed:** A 2 or 3 brown paper lunch bag.

   Procedure:

   Select the youngest mature leaf opposite the first or second flower cluster of the shoot which is well exposed to light and free from injury and disease. The petiole is the slender stem that attaches the leaf blade to the shoot.

   Remove and discard the leaf blade and keep only the petiole. The 60-100 petioles constitute the sample. Place all 60-100 petioles in the paper bag and mark the identification number on the bag. Collect no more than 2 leaves from each vine. Be sure to collect petioles throughout the vineyard to obtain a representative sample of the block.

3. **Wash The Petioles** before they wilt to remove spray residue and dust. This may be done by dipping the petioles in a weak detergent solution (a couple of drops of Tide, etc., in 2-3 cups water) and then rinse quickly and thoroughly with clean water. Do not allow the petioles to remain in the detergent or rinse water for more than one minute. Blot the petioles dry on a paper towel or clean dish towel then place them loosely in the bag. Allow the petioles to dry at room temperature until they become crisp, or for a faster drying time, place bags in oven at 200°F for 30 minutes.

IN THE VINEYARD: Andy Muza

In The Vineyard

INSECTS

Grape Berry Moth (GBM) – An insecticide application for the third generation of GBM should have been applied at 1620 degree days or 1720 DD (depending on mode of action of insecticide used) at high risk sites according to the GBM Model. This DD accumulation was reached around July 27 – first week of August (depending on site) in the Lake Erie Region.

In a season with high temperatures and high populations of GBM there is a greater overlap of generations (extended egg laying) as the season progresses. This translates into a greater risk of GBM infestations from this point in the season through harvest. Throughout August high risk sites should continue to be scouted (**at least weekly**) to determine if GBM injury levels are increasing. As the GBM Model indicates additional insecticides may be needed at high pressure sites. If you decide to apply additional insecticides then **good coverage is critical**.

The start of egg laying for the fourth generation of GBM (2430 degree days) is **projected** to occur around the end of August – first week of September. Continue to check the GBM Degree Day Model at http://newa.cornell.edu/index.php?page=berry-moth
to determine when the start of egg laying for the fourth generation of GBM will occur at your sites. **(Note:** For the most accurate determination of GBM DD calculations for your blocks choose the weather station closest to your vineyard and input the Wild Grape bloom date that you recorded for that site).

DISEASES

Downy mildew (DM) – DM was observed on leaves in a Delaware block scouted this week. Thunderstorms over the next few days could lead to an increase in downy mildew infections. Varieties with a high susceptibility to DM will need to be monitored especially if the frequency of thunderstorms increases during the remainder of this season.

Another Early Season: Preparing To Minimize Harvest Costs Per Acre

This will be the fourth harvest year since I started with LERGP. Of those years, three have been "unusually" early. Rather than a problem with ripening we face what feels like a truncated growing season. GBM, at least according to the model is due back in early September. We reached veraison here at CLEREL yesterday. Tentative harvest schedules for major processors are out, with some anticipating (perhaps optimistically) before October 1st. In keeping with current trends we've wrapped up our last coffee pot. Typically running through August, there would just not be enough time between the last coffee pot and first day of Concord harvest.

With prices not yet announced, a straightforward growing season and a reduced crop the last coffee pot meeting was not suffering from an overabundance of topics. The remaining obvious issue for Concord growers is what to harvest and what to skip. A worksheet allowing you to input variables and calculate your harvest costs was created in 2009 in response to the frost damage that year. Take a look at it if you'd like to compile the variables in your operation that impact your individual costs.

Also important is thinking critically about harvest costs and ways to manage harvest differently this year in response to a lighter crop. For growers with severe damage, this year could turn out to be difficult for your laborers as it is for you. There is the potential to reduce costs per acre substantially by reducing labor. Typically growers have additional labor in an effort to keep the harvester moving. Most of the delays are related to loading or trucking.

While speed remains somewhat critical, given the expectation of a truncated season, there is an opportunity to reduce labor cost. Side-bins on newer harvesters are generally reserved to avoid minor delays with a 3-4-man crew. With crops at 2 ton per acre, the side bin could easily replace one laborer; reducing tractor, fuel and labor costs. Covering three acres per hour a single 3-ton trailer would have just over ten minutes to unload and return to the harvest site. The delay to the harvester would only be the time it takes to unload the side bin. For an average harvester, that would typically add between fifteen minutes and a half hour per day assuming 2 tons per acre and 2 semi-loads per day. On the benefit side, tractor hours would be reduced by at least 6, while labor hours would be reduced by at least 11.

With many farms using older harvesters and harvesting less than 200 acres an approach that limited total laborers to three individuals would make sense. Many small farms already do that. Some, which find that too burdensome, may find that reduced tonnage, despite the truncated harvest schedule could make a labor reduction possible.

Upcoming Events

Go to http://lergp.cce.cornell.edu/EventsCalendar.htm for a detailed calendar of events including maps via Google calendar. Scroll to the bottom of the page for Google calendar and click on the event. Please remember to RSVP for those events that require one!

LERGP TWILIGHT MEETING AND THOMPSON AG PIG ROAST

DATE: Wednesday, August 15, 2012 **REGISTER BY FRIDAY, AUGUST 10, 2012!**

TIME: 3pm – 5pm

LOCATION: Thompson Ag, Cornell of Angell and Hanover Roads in Hanover, NY

3:00 – 3:30 PM Cost/Benefit Analysis of Pest Management Strategies, Kevin Martin, Extension Educator, Lake Erie Regional Grape Program.
3:30 – 4:00 PM Insect Management Updates and Roundtable Discussion
4:00 – 4:30 PM Disease Management Updates and Roundtable Discussion
4:30 – 5:00 PM Update on Viticulture Projects at CLEREL and in the Lake Erie Region

PA Credits have been applied for / 1 NYS Credit available
Pig Roast sponsored by Thompson Ag to follow. To register please contact: Kate at 716.792-2800 x 201.

PLEASE NOTE: Next Electronic Crop Update will be Thursday, August 16, 2012

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, or look for subscription forms at http://lergp.cce.cornell.edu/Join_Lergp.htm. For any questions or comments on the format of this update please contact Tim Weigle at: thw4@cornell.edu.

Team Members and Other Publications

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

NY Grape & Wine Classifieds – New Address! - http://flgclassifieds.cce.cornell.edu/

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