

LAKE ERIE REGIONAL GRAPE PROGRAM Electronic Crop Update for May 31, 2013

IN THIS UPDATE: WEATHER DATA UPDATE FROM NORTH EAST, PA. GRAPE IPM BUSINESS MANAGEMENT GRAPE PHENOLOGY UPCOMING EVENTS

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 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 DATA: Edith Byrne

| DATE/YEAR | HIGH | LOW | DAILY PRECIP. | GDDs | <i>TOTAL</i> APRIL GDDs | <i>TOTAL</i> JAN GDDs |
|--|------|---------------------|---------------------------------------|------------------------|----------------------------|--------------------------|
| Week 5/15/13 | 77 | 51 | 0.03 | 14 | 221.5 | 298.5 |
| Week 5/22/13 | 87 | 67 | 0.00 | 27 | 344 | 421 |
| Week 5/30/13 | 84 | 69 | 0.03 | 26.5 | 411.5 | 488.5 |
| Week 5/30/12 | 69 | 56 | 0.00 | 12.5 | 440.5 | 571 |
| AVERAGE | 72.2 | 53.6 | 0.05 | 13.07 | 338.79 | 364.74 |
| GDDs accumulated May 2013 = 233.5 GDDs accumulated May 2012 = 383.5 | | | | | | |
| GDDs accumulated April 2013 = 72 | | | Average GDDs accumulated May = 267.11 | | | |
| | | 2013 | | 2012 | | |
| Average High May | V | 68.93 (last | t week 70.05) | 71.16 (<i>last</i> we | eek 68.59) | |
| Average Low May | , | 50.59 (<i>last</i> | t week 52.77) | 54.06 (<i>last</i> we | eek 51.64) | |
| This year compared to AVERAGE: JAN. GDD: Ahead 9.47 / APR. GDD: Ahead 5.56 | | | | | | |
| This year compared to 2012: JAN. GDD: BEHIND 6.31 / APR. GDD: BEHIND 2.22 | | | | | | |
| MAY Rainfall accumulation = 4.13" | | | | | | |
| APRIL Rainfall accumulation = 3.44" | | | | | | |
| Rainfall accumulation 1/1/13 through 5/30/13 = 13.28" | | | | | | |

FROM NORTH EAST, PA: Bryan Hed

Weather: Within the past week, we experienced another 'cool down', and for four days virtually no degree day accumulation, suggesting a pause in grapevine development. Here at the North East PA lab, we have accumulated 310 growing degree days during the first 29 days of May, easily surpassing our 14 year average of 234 for May. However, it comes nowhere close to our record of 390 gdds in May from last year (which blew previous years out of the water). Our gdd total since April 1 equals 384. The storms on Tuesday brought us a whopping 2.5 inches of additional rainfall bringing our May total to 4.3 inches (well above average)...what a difference a day makes! According to Skybit and Accuweather, conditions should dry out today (May 30) and tomorrow(although there is a slight chance of a shower Friday afternoon) with more rainfall scattered throughout Saturday, June 1. High temperatures will hover around 80F for the next 3 days.

Phenology: Shoot growth has slowed over the past week as temperature lows dipped down to around 40F over May 23-27. So, minimal change in growth to report here by the lake, with Concord shoots ranging in the 6-7 leaf stage.

Diseases: The heavy storms we experienced on Tuesday generated infection periods for virtually all the major grape diseases. Most, if not all vineyards are at or past the 5-6 leaf stage for the commencement of <u>downy mildew</u> season. A pre-bloom spray is in order for that 10-12" of shoot growth, if you haven't done so already. For juice grapes, this application should at least contain a material that protects vines from downy mildew, <u>black rot</u>, and <u>Phomopsis</u>. We are observing Phomopsis infections on leaves and shoots along nodes 1-3 where protective sprays were omitted during the rainfall periods of May 9 and 11. These infections will not produce inoculum for new infections until next year, but they will add to the challenge this disease presents the following spring and some of these infections (if they became established on inflorescences) could spread into berries later this summer.

If you had a fair amount of **powdery mildew** in the vineyard last year, you may also want to include a material for that disease at this time. There are some very inexpensive powdery mildew materials that can be tank mixed with a mancozeb material to cover all the major diseases. For wine grapes, a material for powdery mildew is a must at this time and for sulfur tolerant varieties, that material is an option. After reading Wayne Wilcox' Grape Disease Control update, I am reminded of the effect of low temperatures (below 40F) on the powdery mildew fungus during the early shoot growth stages. The cold nights of May 12-14 and more recently May 23-26 when temperatures ranged within 42-35F (at least here by the lake), should work in our favor (excluding any frost damage of course): Wayne's research shows that under similar conditions, new powdery mildew infections (we have had primary infection periods on 8-10, and 23 of May) 'take longer to form colonies and produce secondary spores that spread the disease, and the colonies that do form are reduced in size'. So, those cold nights had the potential to cripple the development of the first mildew infections. With bloom likely to occur within the next 2 weeks, this could help aid our fruit infection control efforts as we apply our most critical sprays of the season, the immediate pre-bloom and 1st post bloom sprays. Nevertheless, there's no substitute for scouting of inflorescences and leaves for mildew infections that will keep you informed of the pathogen's progress in YOUR vineyard. The discovery of mildew colonies before bloom is a big red flag for tightening spray intervals and using your best fungicide options throughout bloom and early fruit development (which is not a bad habit to get into in any year), whether you're growing wine grapes or juice grapes. The likelihood of finding pre-bloom mildew infections is also related to the level of powdery mildew you developed on your leaves by late last summer.

Another reminder: this is also a good time to scout for symptoms of <u>Eutypa</u>. On affected arms, new shoots beyond Eutypa cankers will appear stunted and yellowish (chlorotic) with cupped leaves, and they are easiest to identify at about this stage of shoot growth. These infected sections of the vine will eventually die and add more inoculum to the vineyard. Infected sections of the vine should be removed at least 6 inches back into healthy wood, removed from the vineyard, and either buried or burned.

GRAPE INTEGRATED PEST MANAGEMENT: Tim Weigle

The question of the day is "when will bloom be?" The estimates and guesses that are floating around are anywhere from June 5 to June 10. June 10 matches Dr. Terry Bates last estimate of Concord bloom being ahead of schedule by 3-4 days compared to the average of June 14. We are seeing vineyards close to Lake Erie, and also further inland lagging behind vineyards along the Lake Plain by about 2 days. Every vineyard is different so you will need to get out and take a look. The bio-indicators of Concord bloom, bloom in locust trees and wild grape bloom have both been seen across the belt.

While do you need to know when wild grape bloom occurred? The date of wild grape bloom is critical in the use of the new model which assists in the timing of management for grape berry moth. Entering the date of wild grape bloom into the GBM model on NEWA (<u>http://newa.cornell.edu/</u>) triggers the model to start accumulating degree days for use in the model. Grape bloom can be very specific to a vineyard location. From observations and reports from the field, the earliest locations reported wild grape bloom starting on May 25, with a large number reporting bloom in wild grapes on May 26 and 27.

I would be very interested in compiling a database of wild grape bloom across the Lake Erie belt. Please send me your observations of wild grape bloom to <u>thw4@cornell.edu</u>

As shown in Table 1, the thunderstorms that moved through the belt on May 28 and 29 brought heavy rains and infection periods for Powdery mildew, Phomopsis and Black Rot.

If you have already started your disease management program, keep intervals tight, between 10 and 14 days. It is more important to maintain your spray intervals than it is to time a spray immediately prior to bloom. Making sure you spray every row, rather than every other row, is critical at this time. With the forecast calling for the possibility of frequent rain events, combined with the inoculum of the four major diseases peaking during bloom, making sure you have complete coverage is critical for keeping primary infections in check.

| Table 1. Infection events reported on NEWA for May 28 & 29, 2013 | | | | |
|--|------------------|--------------------|-----------|----------|
| Station | <u>Phomopsis</u> | Powdery mildew | Black Rot | Rainfall |
| Versailles | Yes | Yes | Yes | 0.03* |
| Sheridan | Yes | Yes | Yes | 1.98 |
| Silver Creek | Yes | Yes | Yes | 2.39 |
| Portland Escarpment | Yes | Yes | Yes | 2.93 |
| Portland (CLEREL) | Yes | Yes | Yes | 2.16 |
| Portland Route 5 | Offline | All data estimated | | |
| Ripley | Yes | Yes | Yes | 2.05 |
| North East Escarpment | Yes | Yes | Yes | 3.51 |
| Harborcreek | Yes | Yes | Yes | 3.40 |

| North East Lab | Yes | Yes | Yes | 2.76 |
|---------------------------------|-----|-----|-----|------|
| Ransomville | Yes | Yes | Yes | 1.78 |
| Appleton North | Yes | Yes | Yes | 1.20 |
| Appleton South | Yes | Yes | Yes | 1.23 |
| * Rain amount is not confirmed. | | | | |

BUSINESS MANAGEMENT: Kevin Martin

Pre-bloom Investments

Gathering data on something as specific as pre-bloom investments would be a significant undertaking. Anecdotally, with two coffee pots a week, it appears that pre-bloom investments have increased from 2011. Most growers are concerned and/or pleased with the progression of the season and the potential crop. In the conversations I've had this crop potential motivates the increased investment.

The average number of pre-bloom sprays is just over two. More than half of growers are spraying every row for at least one of these sprays. A growing number have multi-row sprayers and do not have a choice in the matter. Herbicide applications are proceeding at their normal pace, although it appears growers are purchasing more expensive materials, on average. Herbicides offer adequate control at various price points. Timing and rotation is essential. If you do not have a cash flow problem and see potential for a large crop, spending more on herbicide control upfront makes sense.

An investment in crop load management in this time frame is typically limited to pruning. Extremely aggressive pruning, or fairly cautious growers has lead to some interesting pre-bloom investments. Any reduction in crop load, prior to bloom, comes with risk. The most obvious risk is a late season frost, which fortunately has not happened. Fruit set and berry size compensation frustrate accurate early season crop estimation. I would suggest keeping the costs of early crop manipulation under \$20 per acre.

To the extent that the vine is capable of compensation, your efforts to reduce crop may be frustrated. I would anticipate any manipulation to be mechanized. I would also not try to cover an entire farm and leave plenty of checks. If one could cut a 25-ton crop to 12 ton with a shoot thinner, obviously that would be cost effective insurance. There is a reason we have not seen 25-ton crops, the vine is about to compensate for the estimates you may have been making. For growers that decided to leave up an extra 50 or 75 buds some concern this early in the season may be warranted.

Keep in mind, though, most growers will have a market (albeit not entirely lucrative) at 14.5 brix. We expect the large majority of acreage to reach that level of maturity with the help of potentially aggressive fruit thinning. While fruit thinning is more expensive, per acre. It allows you to postpone manipulation until you have a much better idea of actual crop size. At that time you'll know what set looked like and have a fairly good idea of berry size. If those variables reduce your crop size considerably, you'll have much less thinning to do, perhaps none at all.

GRAPE PHENOLOGY: Kelly Link

Grape Phenology



Thursday, May 30, 2013 - I walked outside this morning and was hit with a familiar aroma – *Locus is in bloom*! That means concord grape bloom is just around the corner. Scouting today I found no signs of bloom in the concords on the Portland and Fredonia farms. I did not find any signs of bloom in the Silver "Wild Grape" at Portland, but I did find the "Wild Grape" (Riparia) at Portland and Fredonia to be at about 80% Bloom (*See photograph, left*). The 48 year average for 50% Bloom in the Fredonia Historical Vines is June 15th. The four year average for 50% Bloom on the Portland Farm is June 9th. On May 21st, Dr.

Bates made a prediction of Bloom to be about June 11th or 12th based on the Lake Erie GDD. Looking at the lake temperature to date, it appears this trend is holding steady.



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!

COFFEE POT MEETINGS: All Coffee Pot Meetings are held on Wednesdays

1 DEC credit available

Coffee Pot Meetings are free. Come find out what is happening in our local vineyards and talk with the Team. Look for notices in Electronic Crop Updates, Upcoming Events Notices, and on the Website and mark your calendars! We look forward to seeing you at several of our Wednesday meetings this year!

| June 5, 2013 | 10:00 am - 12:00 pm | 21 Brix Winery, 6654 West Main Road, Portland, NY 14769 SPEAKERS: Mark Chien, Denise Gardner |
|---------------|---------------------|---|
| June 5, 2013 | 2:00 pm - 4:00 pm | Courtyard Winery (Randy Graham) 10021 West Main Road - Route 20 North East, PA 16428 SPEAKERS: Mark Chien, Denise Gardner |
| June 12, 2013 | 10:00 am - 12:00 pm | Chuck Alessi @ Marion J. Fricano Memorial Town Park, Upper Shelter, 11083 Gowanda State Park, North Collins, NY 14111 <i>SPEAKER: Kevin Martin</i> |
| June 12, 2013 | 2:00 pm - 4:00 pm | Donna Merritt Farm/Vineyard, 1964 Rte. 39, Forestville, NY 14063 <i>SPEAKER: Kevin Martin</i> |
| June 19, 2013 | 10:00 am - 12:00 pm | Jeff Schultz Farm/Vineyard, 2707 Albright Road, Ransomville, NY 14131 SPEAKER: James Taylor, Ph.D. |
| June 19, 2013 | 2:00 pm - 4:00 pm | Mark Martin Farm/Vineyard, 12037 Angell Road, Silver Creek, NY 14136 SPEAKER: James Taylor, Ph.D. |

Please join us following the afternoon (2 pm) Coffee Pot Meeting for: WINERY LAYOUT & DESIGN AND ENOLOGY & WINE GRAPE DISCUSSION

DATE: Wednesday June 5, 2013

TIME: 4:30 pm

LOCATION: Courtyard Winery (Randy Graham) 10021 West Main Road - Route 20, North East, PA 16428

Winery Layout and Design: Kathy Kelley, Horticultural Marketing, Penn State | Enology and Wine Grape

Discussion: Denise Gardner, Extension Enologist and March Chien, Viticulture Extension Educator, Penn m State

Topics include: Creating a visually appealing entrance, Color and wall texture, ceilings and walls, music and other sounds, Layout and guiding customers through the outlet, Placing and promoting merchandise, Giving customers a reason to return: Events

This is an opportunity for winery operators, winemakers, and wine grape growers to provide your input

concerning future programming, voice concerns, discuss problems or any other issues affecting the wine grape industry.

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DATE: FRIDAY JUNE 7, 2013 PREREGISTRATION DUE FOR HOPS PRODUCTION IN THE LAKE ERIE REGION

HOPS PRODUCTION IN THE LAKE ERIE REGION

DATE: Saturday June 15, 2013 (*Pre-register by Friday June 7, 2013*)

TIME: 8 am to 4 pm

LOCATION: Cornell Lake Erie Research & Extension Laboratory, 6592 West Main Road, Portland, NY 14769 **COST:** \$75.00 General | \$65.00 NeHA Members

- (you can join or renew your membership at: <u>www.northeasthopalliance.org</u>)
- Participants will learn about commercial hops production; starting with classroom instruction on production
- practices from Hops growers from MD, PA and NY, as well as Cornell University Extension staff.
- You will also have a Hop Yard tour for a first-hand look at the hop yard construction and a discussion with
- hops growers on practices they use in their hop yards. The event will wrap up with local brewers discussing
- their use of hops in the brewing process as well as the market for Lake Erie Hops.
- **REGISTRATION:** Pre-register by Friday June 7, 2013

Contact Kate Robinson

- Phone: (716) 792-2800 ext. 201
- Email: kjr45@cornell.edu
- Class size is limited, be sure to sign up early to ensure a spot in the class
- PDF Registration Form: http://nygpadmin.cce.cornell.edu/pdf/event/pdf64 pdf.pdf Š
 - Or enroll online at: http://lergp.cce.cornell.edu/event_preregistration.php?event=64

WINEMAKER'S ROUNDTABLE: Red Hybrids

DATE: Monday June 17, 2013

TIME: 4:00 – 6:00

LOCATION: South Shore Wine Company, 1120 Freeport Road, North East, PA 16428

TOPIC: Red Hybrids

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.

PLEASE NOTE: Next Electronic Crop Update will be Thursday June 6, 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>.

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