The Lake Erie Regional Grape Program

PENNSTATE

Crop Update for August 7, 2014

Upcoming Event Dates to put on your calendar:
Please note the deadline for registration for each event.

August 20, 2014- Thompson Ag Pig Roast
3:00-5:00pm, Hanover NY

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**

Business Management

Kevin Martin
Penn State University, LERGP,
Business Management Educator

Value of Estimation and Sampling

While this is a topic for 30 days post bloom, traditionally, it is not too late to reconsider your options. With the news surrounding the Concord grape market, it is essential to have the ability to front load your harvest schedule. There will be an economic value to harvesting the first two weeks of harvest when delivering to any processor. Not only should crop load be adjusted to ensure a normal schedule on day one, I would encourage growers to put themselves in a position to schedule additional loads.

Differential management of vineyards is an essential part of front-loading a schedule. There is no reason for 100% of acreage to hit 15 brix before October 1st. Many growers should aim for 15% - 25% of their acreage to hit at or above targets. Of course, specific standards and processor schedule will make it necessary to craft a strategy particular to you.

While NDVI maps can assist in improving the accuracy of crop estimation, in a few weeks, the same maps may also improve the accuracy of brix sampling. To avoid cancelling a load, getting those brix and understanding exactly where they're located will be of particular importance this year. In an average year, knowing brix has the potential to increase efficiency and crop payments by $2,400. Last year we saw a number of growers losing $10,000 - $15,000 because of cancelled loads and marketing issues. These losses were not because of over-cropping or low brix. They were simply because the grower attempted to harvest in the wrong locations because of a lack of robust sampling.

Typically, a delay of one day costs a harvester between $250 - $5,000. On the higher end, growers have issues catching up because their harvester typically operates near capacity. A lack of sampling is a contributing factor in their decision to not expand a custom harvest operation. It may also be a contributing factor in adding a second harvester to an operation. Those costs escalate even further when cancelled loads are not rescheduled or are rescheduled very late in the season. Harvesting after the first frost can easily reduce yields by 1/3. A variety of factors contribute to the ability to reschedule cancelled loads. Those factors may include lackluster demand for Concords, an above average crop size, and the potential for a late start. Compared to prior years each of these is moderate. The three factors working together do give rise for concern.

Obviously growers have a healthy knowledge of their vineyard blocks. NDVI often reveals patterns that persist from year to year. However, thinning patterns and other factors have created some temporary volatility in crop size as well as vine size. While historical knowledge is valuable, robust sampling will easily pay for itself this year.

Cultural Practices

Luke Haggerty, LERGP,
Viticulture Extension Associate

Estimates of Wine Grape Crop Reduction due to Winter Injury in New York in 2014

Timothy Martinson, Senior Extension Associate, Dept. of Horticulture
Hans Walter-Peterson, Area Extension Educator, Finger Lakes Grape Program
Luke Haggerty, Area Extension Educator, Lake Erie Regional Grape Program
Jim O'Connell, Extension Educator, Eastern NY Horticulture Program
Mike Colizzi, Community educator, Finger Lakes Grape Program
Cornell Cooperative Extension

Cornell Cooperative Extension 30-vine Survey

Methods. We visited 188 vineyard blocks across NY, and did a 30-vine sample in each one. For each vine, we rated them on a 0-5 scale by estimating the number of clusters per vine.

We then used ratings to calculate '% of a Full Crop', based on the assumption that >40 clusters per vine (roughly equal to 8 lb/vine of fruit, at 0.2 lb/cluster, or 3.2 Tons per acre at 6x9 ft spacing) would be the equivalent of a full crop.

Rating	Number of clusters
0	0
1	1 - 10
2	40501
3	20-30
4	31-40
5	>40

By region: We surveyed 91 blocks in the Finger Lakes, 18 blocks in the Hudson Valley, 63 blocks in the Lake Erie Region, and 16 in the North Country. We did not survey in the Long Island region, because Long Island didn't suffer any significant winter injury.

Results. (Table 6-7 below) showed an overall lower estimate than did the grower self-reporting surveys. Those sites with an estimated >40% crop reduction are highlighted in Red.

***V. vinifera*.** All 11 *V. vinifera* varieties (146 blocks surveyed) showed cluster counts indicating >40% crop reduction on average (Table 6). Regional breakdowns (Table 7) showed the same results, with the exception of the 3 Merlot blocks in the Hudson valley, which were nonetheless close (39%) to the 40% threshold.

Hybrids. We surveyed 42 blocks, with a significant concentration in the North Country (Table 7). Overall, four hybrid varieties (Brianna, Frontenac, La Crescent and Noiret) exceeded the 40% threshold. Regional breakdown (Table 7) showed that in the North Country (Thousand Islands region), Brianna, Frontenac, La Crescent, and Marquette exceeded the 40% threshold.

Table 6. Statewide "30-vine" survey estimates, based on cluster number per vine of *V. vinifera,* Hybrid, and *Labrusca*-type wine grape varieties.

Class	Variety	No Blocks	Blocks with >40% Crop Reduction		Estimated Average Clusters Per vine (>40=full crop)			Estimated Percent Crop Reduction		
			No.	%	Ave	High	Low	Ave	Low	High
V. vinifera	Riesling	37	21	57%	19	23	16	53%	44%	61%
	Cabernet Franc	23	15	65%	17	20	14	58%	50%	65%
	Pinot noir	20	17	85%	11	14	8	73%	65%	79%
	Chardonnay	18	15	83%	15	18	12	63%	54%	71%
	Gewurztraminer	14	10	71%	14	17	12	66%	59%	71%
	Merlot	12	8	67%	16	19	13	60%	53%	67%
	Pinot gris	7	5	71%	10	13	8	75%	69%	80%
	Cabernet Sauvignon	6	4	67%	16	19	13	61%	53%	68%
	Lemberger	6	5	83%	15	18	12	64%	55%	71%
	Syrah	2	1	50%	15	17	13	62%	57%	67%
	Gamay Noir	1	1	100%	0	0	0	100%	99%	100%
Hybrid/ *Labrusca*	Marquette	7	3	43%	26	29	22	35%	26%	45%
	Brianna	4	3	75%	17	21	14	57%	48%	65%
	Frontenac	4	2	50%	22	26	18	46%	35%	56%
	La Crescent	4	3	75%	11	15	9	72%	64%	78%
	Noiret	4	4	100%	15	20	12	62%	51%	71%
	Seyval blanc	3	0	0%	34	37	30	15%	7%	24%
	Vidal blanc	3	1	33%	27	30	23	33%	24%	42%
	Niagara	2	0	0%	39	41	35	3%	0%	13%
	Traminette	2	1	50%	27	30	23	33%	24%	43%
	Aurore	1	0	0%	35	38	31	13%	5%	23%
	Catawba	1	0	0%	37	39	33	8%	2%	18%
	Concord	1	0	0%	25	30	21	38%	26%	48%
	Delaware	1	0	0%	32	36	28	21%	11%	31%
	Diamond	1	0	0%	36	39	32	11%	4%	21%
	Edelwiss	1	0	0%	43	44	39	0%	0%	3%
	Elvira	1	0	0%	42	43	38	0%	0%	6%
	Frontenac gris	1	0	0%	36	39	32	10%	2%	20%
	Vignoles	1	0	0%	33	36	29	19%	11%	28%

Table 7. Results of Cornell 30-vine survey with cluster estimates by region.

Region	Variety	No. Sites	Sites with >40% crop reduction		Estimated Average Clusters Per vine (>40=full crop)			Estimated Percent Crop Reduction		
			No	%	Ave	High	Low	Ave	Low	High
Finger Lakes	Riesling	21	8	38%	24	27	20	41%	32%	50%
	Cabernet franc	16	10	63%	19	22	15	53%	45%	61%
	Chardonnay	13	10	77%	17	21	14	57%	48%	66%
	Pinot noir	13	10	77%	12	15	10	70%	62%	76%
	Gewurztraminer	11	7	64%	18	21	15	56%	48%	63%
	Merlot	8	6	75%	15	17	12	63%	57%	70%
	Lemberger	5	4	80%	17	21	14	58%	48%	66%
	Pinot gris	4	2	50%	16	20	14	59%	50%	66%
Hudson Valley	Riesling	5	4	80%	17	21	14	58%	48%	65%
	Cabernet franc	3	2	67%	13	15	11	67%	63%	73%
	Pinot noir	3	3	100%	11	14	9	72%	64%	78%
	Chardonnay	2	2	100%	9	12	7	77%	71%	82%
	Concord	1	0	0%	25	30	21	38%	26%	48%
	Gamay noir	1	1	100%	0	0	0	100%	99%	100%
	Gewurztraminer	1	1	100%	0	0	0	100%	100%	100%
	Marquette	1	1	100%	14	19	10	65%	53%	75%
	Merlot	1	1	100%	0	0	0	100%	100%	100%

Lake Erie	Riesling	11	9	82%	11	14	9	72%	64%	78%
	Cabernet sauvignon	6	4	67%	16	19	13	61%	53%	68%
	Cabernet franc	4	3	75%	12	16	9	69%	60%	76%
	Noiret	4	4	100%	15	20	12	62%	51%	71%
	Pinot noir	4	4	100%	7	10	4	84%	76%	90%
	Chardonnay	3	3	100%	9	13	6	77%	68%	85%
	Merlot	3	1	33%	24	28	21	39%	30%	48%
	Pinot gris	3	3	100%	1	3	0	96%	93%	99%
	Seyval blanc	3	0	0%	34	37	30	15%	7%	24%
	Vidal blanc	3	1	33%	27	30	23	33%	24%	42%
	Gewurztraminer	2	2	100%	0	0	0	100%	100%	100%
	Marquette	2	0	0%	41	42	37	0%	0%	8%
	Niagara	2	0	0%	39	41	35	3%	0%	13%
	Syrah	2	1	50%	15	17	13	62%	57%	67%
	Traminette	2	1	50%	27	30	23	33%	24%	43%
	Aurore	1	0	0%	35	38	31	13%	5%	23%
	Catawba	1	0	0%	37	39	33	8%	2%	18%
	Delaware	1	0	0%	32	36	28	21%	11%	31%
	Diamond	1	0	0%	36	39	32	11%	4%	21%
	Edelwiss	1	0	0%	43	44	39	0%	0%	3%
	Elvira	1	0	0%	42	43	38	0%	0%	6%
	Frontenac gris	1	0	0%	36	39	32	10%	2%	20%
	Lemberger	1	1	100%	3	5	1	93%	88%	97%
	Vignoles	1	0	0%	33	36	29	19%	11%	28%
North Country	Brianna	4	3	75%	17	21	14	57%	48%	65%
	Frontenac	4	2	50%	22	26	18	46%	35%	56%
	La Crescent	4	3	75%	11	15	9	72%	64%	78%
	Marquette	4	2	50%	21	26	18	46%	36%	55%

Summary:
Results of both the online grower survey and '30-vine' CCE survey are in general agreement, and the tables highlight which varieties passed the 40% crop reduction threshold, according to our estimates. Where the two surveys disagree, we have more confidence in our 30-vine survey results, where we actually did formal estimates of crop reduction.

There may be biases in the survey that slightly overestimate the overall percentage of crop reduction. We based these estimates on cluster counts, and thereby got an accurate index of how cluster number was reduced and in what proportion of the vineyards surveyed, but we cut off the maximum at 40 clusters per vine. Although 40-45 clusters per vine is a good indicator of a 'full crop', some undamaged blocks could have up to 60-80 clusters per vine. We also didn't take into consideration the potential increase in cluster size (berry weight and berry number) that typically occurs when vines have a small crop.

Even with these potential biases, we're confident that our results are consistent, and the best we could practically accomplish based cluster counts alone. Cluster number typically explains 70-80% of the variation in yield, with the other 20-30% of variation being due to cluster weight.

Weather Data

Lake Erie Grape Region NEWA Weather Data

Location	Date	High (F)	Low (F)	Precip.Past 7 days (in)	Precip. Jul.Total	Total Apr GDD
North East Lab, PA	8/6/14	77	61	2	1.05	1554
Harborcreek, PA	8/6/14	74	59	1.75	1.00	1600
North East Escarpment	8/6/14	74	59	1.44	0.63	1552
Ripley	8/6/14	75	60	1.06	0.56	1598
Portland Route 5	8/6/14	76	60	1.46	1.24	1533
Portland CLEREL	8/6/14	74	59	1.23	1.00	1531
Protland Escarpment	8/6/14	72	61	1.31	0.94	1555
Dunkirk	8/6/14	74	59	1.95	1.07	1483
Silver Creek	8/6/14	77	60	2.87	1.30	1484
Sheridan	8/6/14	71	60	NA	NA	NA
Versailles	8/6/14	74	57	NA	NA	1467
Appleton	8/6/14	77	57	1.67	0.34	1329
Somerset	8/6/14	78	59	1.26	0.32	1474
Appleton South	8/6/14	79	56	1.2	0.26	1416

Note: All Weather data reported as of 8/6/2014. NA=Sensor Malfunction

DATE/YEAR	HIGH	LOW	DAILY PRECIP	GDDs	TOTAL APRIL GDDs	TOTAL JAN GDDs
Week of 7/17/2014	76	62.90	0.04	136	1290	1290
Week of 7/23/2014	76.4	61.90	0.03	134	1424	1424
Week of 7/30/2014	72.6	60.60	0.29	116	1540	1540
Week of 8/6/2014	**76.3**	**62.10**	**0.14**	**134.5**	**1674.5**	**1674.5**
Average(from 1964)	79.9	62.50	0.20	148.5	1655.3	1679.8
Aug Precip- Wk 1=.99"						
Total Precip: May = 5.5" June = 5.05" July = 4.47"						

IPM Tim Weigle, NYSIPM, LERGP Team Leader

Grape Berry Moth Model on NEWA

According to the Phenology-based degree day model on NEWA, the cooler temperatures we have been experiencing have slowed down the degree day accumulation resulting in the next grape berry moth spray being well over a week away in many locations. In the table below you will notice that the information for Ripley has been highlighted. This is to provide you an example of the type of information that the NEWA website provides to help you make the best use of model information. In the case of Ripley, 3 days of data is missing (see Figure 1) which would lead to a lower DD total which helps to explain why Ripley has only recorded 90 degree days in the past week while others in the area have averaged around 145 - 150 DD in the past week. We are working to get the Ripley dataset repaired.

Scouting of vineyards between 1470 and 1620 DD is the next scheduled event and will be coming up in the very near future for a number of sites. Again, since the model is new and we are still trying to adapt it to large scale implementation, I would suggest scouting near 1470 DD and again close to 1620 DD to see what, if any, significant differences in cluster damage are found.

NEWA Location	Wild grape bloom date*	DD Total on August 7, 2014
Versailles	June 5	1299
Dunkirk Airport	June 8	1316
Silver Creek	June 9	1298
Portland Escarp.	June 4	1355
Portland	June 7	1338
Portland Route 5	June 7	1377
Ripley	June 3	**1364****
North East Escarp	June 3	1366
Harborcreek	June 3	1426
North East Lab	June 5	1370
Ransomville	June 9	1233
South Appleton	June 9	1217
* Estimated date provided by NEWA website ** DD total may be low due to missing data		

Grape Berry Moth Results for Ripley

Wild Grape Bloom: 6/3/2014

Wild Grape Bloom date above is estimated based on degree day accumulations or user input. Enter the actual date for blocks of interest and the model will calculate the results more accurately.

Accumulated degree days (base 47.14°F) wild grape bloom through 8/7/2014: 1351 (3 days missing)

Daily Degree Days for Ripley

Base Temp	Past	Past	Current	5-Day Forecast Forecast Details				
	Aug 5	Aug 6	Aug 7	Aug 8	Aug 9	Aug 10	Aug 11	Aug 12
47.14F - GBM	NA	NA	19	19	23	24	25	23
Accumulation	NA	NA	1364	1383	1406	1430	1455	1478

NA - not available

Download Time: 8/7/2014 8:00

MID- AND LATE SUMMER DOWNY MILDEW CONTROL OPTIONS

Wayne Wilcox
Plant Pathology, Cornell University, NY State Agric. Expt. Sta., Geneva

Plenty of downy out there and likely to be more soon after last week's meteorological festivities. There are a number of spray materials available to help keep this disease at bay for the remainder of the season, here's a quick reminder of some of their basic characteristics.

CAPTAN. It works well, doesn't require a second mortgage to purchase, never has and probably never will have resistance issues. It will also provide good control of some major warm weather late season rots (bitter rot, ripe rot) if those are a potential issue (bitter rot shows up in warm, wet seasons on Long Island, especially on Chardonnay). But you know the downside: 3-day REI (check the label, a few products still have 4-day), it's a no-no for juice grape processors, some winemakers have concerns about late season use, incompatibility with oils. Strictly a protectant, no post-infection activity, and more subject to wash-off than systemic and locally systemic compounds.

COPPER. The original DM fungicide, and it still works. Will also provide some late season control of foliar powdery mildew, especially on cultivars that are only moderately susceptible (e.g., Concord). Lots of formulations on the market, some more pleasant to work with than others. Quite a range of label rates, with some newer low-rate products available. Not too many independent verification of some of the claims being made for their efficacy but that should start changing soon. You know the positives: effective, some OMRI-certified products available, relatively economical. Negatives include the potential or likelihood of injury on some cultivars; some winemaker concerns about late season residues; the need to avoid acidified spray water; indefinite persistence in the soil. Strictly a protectant, no post-infection activity, subject to wash-off.

PHOSPHOROUS ACID PRODUCTS. We've talked about these for years, no need to rehash it to death. Remember, limited protective activity, significant post-infection activity, which is boosted by back-to-back applications and not skimping on the rate. I do hear more anecdotal reports than I'd like to about disappointing performance, not sure how much of that is due to unrealistic expectations or something more worrisome.

As pointed out on several occasions, these are <u>real</u> fungicides (despite how some of them are marketed) and the DM organism can develop a "quantitative" resistance to them after repeated use, as we've encountered with the DMI (sterol inhibitor) fungicides and powdery mildew. This means that, over time, they'll provide progressively less control unless we keep raising the rate or substituting a more active member of the class. We've been able to do the latter with the DMIs (remember when we only had Bayleton and Rubigan?), but phos acid is phos acid, there's really only one form of the truly active component in all of the products out there. And not only is there no option to substitute a more active form, but there's a limit as to how high we can raise the rate due to the potential for plant injury (and cost). So if we beat these materials into the ground, that's it.

<u>Do not</u> add these products to every spray tank during the summer if you want to maintain their efficacy. There's no magic number of "safe" applications per year, but three is a nice round number, with no more than two back-to-back before switching to something else.

PRESIDIO. Another relatively new product unrelated to anything else on the market for grapes. It has given us excellent results in a couple of trials and appears to have some significant post-infection and antisporulant activity in addition to protective activity, although these are not well characterized. It's not cheap. Resists wash-off, 21-day PHI.

RANMAN. Relatively new, it's the only product used on grapes that's in this group of chemicals (Group 21). Has given good results in our trials, appears to be strongest in a protective mode and has performed better on 14-day spray intervals when mixed with a phosphorous acid product, which provides complimentary post-infection activity). Should resist wash-off, 30-day PHI.

REVUS (and REVUS TOP). I've consistently gotten very good results with this compound in my trials. It's a "locally systemic" material that's absorbed by the plant tissues (hence, resists wash-off) and should have at least some post-infection activity, but that does not appear to be its strength. Rather, indications are that it's stronger in the protective mode, although its physical mode of action is not very well characterized. 14-day PHI. Not related to any other product currently marketed in NY, although it is in the same "Group 40" as one of the components of the new product, Zampro (labeled in most states other than NY, maybe next year here).

RIDOMIL GOLD COPPER. The biggest weapon in the arsenal (and priced accordingly). Provides protective, post-infection, antisporulant, and even some eradicative activity. Also has significant vapor phase activity for redistributing the material to unsprayed tissues as a gas, and it moves through the plant systemically. Which does NOT mean that you can get away with applying it sloppily, but these properties make it more forgiving of applications that are anything less than perfect, should anyone ever need to deal with such a situation. Wash-off is not an issue.

Ridomil is at very high risk for resistance development. Using it to "put out fires" is a good way to hasten this process and lose a unique tool. I wouldn't recommend using it to try to rescue a full-blown disaster (and it won't, anyway), but if you see more downy than you're comfortable with this time of year and feel like it has a chance of getting away from you unless you hit it hard, there's nothing better. However, if you're going to use the product this way, use it <u>once</u> per season to get things under control, then switch to something else. You won't go to heck if you use it twice, but the more you do this, the greater the risk. We really want to maintain this control option into the future, so resist the temptation to burn it out. Remember, there's a 42-day PHI.

"STROBILURINS" (Group 11; Abound/Quadris Top, Pristine, Reason). I put "strobilurins" in quotes because Reason is in this group because it has the same biochemical mode of action and resistance risks, even though it's not a true strobie. As mentioned on other occasions, these materials largely working against downy in some states to our south several years ago due to resistance development. We've managed to dodge that bullet to a great extent in NY, probably because we started severely limiting their use after the powdery resistance problems in 2002 (a dozen years ago!). But it's probably a matter of when we'll hit the wall with them, not if.

Strobie resistance can come on suddenly and intensively in a year of high disease pressure (this one qualifies). These can be great products without resistance, but if they don't work then they don't work. If you've been using them conservatively (no more than twice per year) and they've been doing a good job, great. But keep a close eye out, and if it looks like the first application of one of 'em didn't do much, don't rely on a second one.

From Erie County PA.

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

In the Vineyard (8-7-14)

Diseases

Downy Mildew – Despite the number of thunderstorms this season around the region, DM is low in Concord blocks with only 1 site observed with a few leaf lesions and a small amount of berry infections. Fredonia sites checked were clean. Some of the berries in this variety were starting to show color. In Delaware blocks DM leaf infections were showing up in small amounts.

Powdery Mildew – PM is starting to show up on terminal leaves and sporadically on older leaves in the canopy. But overall, PM levels are still low across the region.

Insects

Grape Leafhopper – only 1 site examined showed a buildup of GLH leaf stippling injury with feeding by both adults and nymphs. There are also reports from growers of GLH population increases in certain blocks. This shows that even though region wide GLH is not a problem, each block is different and requires individual scouting.

Grape Berry Moth – This season GBM is the pest to watch. Scouting of high risk sites shows that berry injury is easy to find. Growers are also reporting a higher degree of GBM injury already compared to previous seasons at this time.
Follow the GBM Degree Day Model in NEWA http://newa.cornell.edu/index.php?page=berry-moth , scout, and be prepared to spray for the upcoming August generation when the model indicates.

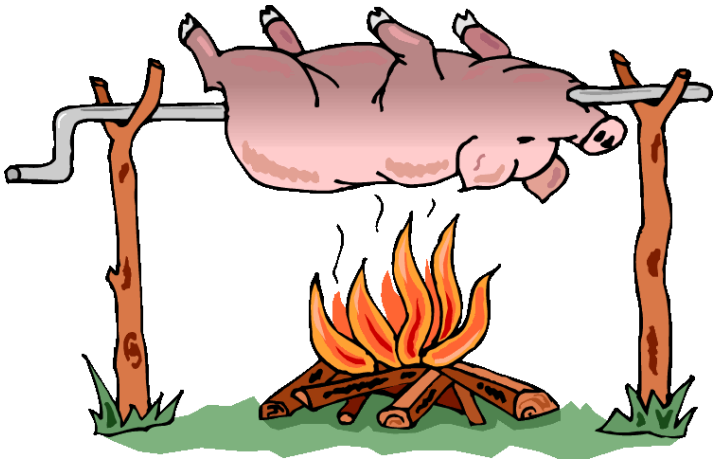
From the North East, PA Lab

Bryan Hed, Research Support Technologist in Plant Pathology
Penn State University

Weather: We recorded 5.61" of rainfall during July, way above average. Our growing degree day total (gdd) from April 1 through July 30 is 1554. Our gdd total for July was 569, below average.

Disease: With all this moisture, it comes as no surprise that our greatest disease management concern continues to be downy mildew. Continue to scout your vineyards, especially your most disease prone blocks, for signs and symptoms of downy mildew. There are lots of effective materials available for control of this disease: phosphorous acids, Reason, Ranman, Revus, Presidio, captan (if you can use it), Ridomil copper (42 day PHI), and good old fashioned copper/lime. All have their strengths and weaknesses. Captan and copper are strictly protectants and are less rain-fast than the others, but they can be used with little or no concern for the development of resistance. If you plan to use copper, avoid applying it to wet, dewy leaves first thing in the morning, as you may increase your chance of injury to leaves. The phos acids may be one of the more cost effective choices for susceptible juice varieties like Niagara and Catawba, but try to limit yourself to 2-3 applications per season. The other materials may be a bit pricier with a higher risk of resistance, but are quite effective at keeping this disease under control.

Powdery mildew has begun to appear on leaves of Concord vines, but the severity of leaf disease has remained very low at our location (1-2% leaf area covered). In the initial rating of our Concord trial in the first week of August, we have found that a second post bloom spray of Harvestmore (10 lb/A applied about a month ago) has reduced powdery on leaves by about 9% when compared to a treatment where the second post bloom spray was omitted (check). Conversely, a second post bloom application of an effective fungicide (Vivando in this case) has reduced leaf powdery mildew by 92% when compared to the check. Keep in mind that the level of inoculum that over-winters to start new cycles next year, is related to the level of mildew that develops on leaves this year, particularly the mildew that forms by Labor Day (work by Wayne Wilcox has shown that powdery mildew infections that occur after Labor Day, are *unlikely, in many parts of the Northeast,* to add to the over-wintering inoculum pool for next year).



Thompson Ag Annual Pig Roast

August 20, 2014
3:00-5:00pm
Hanover NY

Program provided by:
The Lake Erie Regional Grape Program

**DEC credits are available

Agenda:

3:00 – 3:15 PM **Cost/Benefit of Implementing Integrated Pest Management Strategies (IPM)**, Kevin Martin, Extension Educator, Lake Erie Regional Grape Program.

3:15 – 3:30 PM **Late Season Viticulture Update** – Luke Haggerty, Lake Erie Regional Grape Program

3:30 – 4:00 PM **Late Season Disease Management** – Wayne Wilcox, Department of Plant Pathology, Cornell University

4:00 – 4:30 PM **IPM Updates and Roundtable Discussion** –Bryan Hed, Department of Plant Pathology, Penn State, Jody Timer, Department of Entomology, Penn State, Tim Weigle, NYS IPM Program, and Andy Muza, Lake Erie Regional Grape Program

4:30 – 5:00 PM **Effective Spraying** - Andrew Landers, Department of Entomology, Cornell University will provide the audience with the how's and why's of effective spraying from the basics through the finer details.

Please RSVP to Donna at merrwhv@roadrunner.com or call 984-3808(Thompson Ag Office)

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

Program fees do not include 2014 Cornell Guidelines for Grapes

$25.00 $_____ 2014 Cornell Guidelines for Grapes

$25.00 $_____ Hardcopy mailing of Newsletters***

Total $_____ (Please make check payable to LERGP)

I am interested in the educational work of Cornell Cooperative Extension in Niagara, Chautauqua and Cattaraugus County. Any current recorded 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:

LERGP

6592 West Main Rd.

Portland NY 14769

Attn: Katie

Feel free to call w/ questions:

716-792-2800 Ext 201

Lake Erie Regional Grape Program

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!

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

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

Cornell University
Cooperative Extension

Lake Erie Regional Grape Program

PENNSTATE
College of Agricultural Sciences