LAKE ERIE REGIONAL GRAPE PROGRAM

Vineyard Notes

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<tr>
<th>Date</th>
<th>Time</th>
<th>Name</th>
<th>Location</th>
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</thead>
<tbody>
<tr>
<td>May 1st</td>
<td>10:00am</td>
<td>Peter Gugino</td>
<td>Brant Town Hall, Back Entrance at 1294 Brant North Collins Road</td>
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<tr>
<td></td>
<td>2:00pm</td>
<td>Harry Raby</td>
<td>2055 Ridge Rd. Lewiston, NY 14092</td>
</tr>
<tr>
<td>May 8th</td>
<td>10:00am</td>
<td>Bob &amp; Dawn Betts</td>
<td>7365 E Rte 20. Westfield, NY 14787</td>
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<tr>
<td></td>
<td>2:00pm</td>
<td>Beckman Farms</td>
<td>2386 Avis Dr. Harborcreek PA 16421</td>
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<td>May 15th</td>
<td>10:00am</td>
<td>Dan Sprague</td>
<td>12435 Versailles Rd. Irving NY 14081</td>
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<tr>
<td></td>
<td>2:00pm</td>
<td>Peter Smith</td>
<td>4434 Van Deusen Rd. Lockport NY 14094</td>
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<tr>
<td>May 22nd</td>
<td>10:00am</td>
<td>Nick Mobilia</td>
<td>Arrowhead Wine Cellar 12073 E Main Rd. North East PA 16428</td>
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<tr>
<td></td>
<td>2:00pm</td>
<td>Rick Walker</td>
<td>2860 Rte 39, Forestville NY 14062</td>
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<tr>
<td>May 29th</td>
<td>10:00am</td>
<td>Dave Nichols</td>
<td>1906 Ridge Rd. Lewiston NY 14092</td>
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<td>Rich Erdle</td>
<td>12229 Hanford Dr. Silver Creek NY 14136</td>
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<td>June 5th</td>
<td>10:00am</td>
<td>21 Brix Winery</td>
<td>6654 W Main Rd. Portland NY 14769</td>
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<td>South Shore Farms</td>
<td>9450 W Middle Rd. North East PA 16428</td>
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<td>June 12th</td>
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<td>Marion J Fricaro</td>
<td>Memorial Town Park 11083 Gowanda State Rd. North Collins NY 14111-upper shelter</td>
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<td>2:00pm</td>
<td>Donna Merritt</td>
<td>1964 Rte 39. Forestville NY 14063</td>
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<td>Jeff Schultz</td>
<td>2707 Albright Rd. Ransomville NY 14131</td>
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<td></td>
<td>2:00pm</td>
<td>Mark Martin</td>
<td>12037 Angell Rd. Silver Creek NY 14136</td>
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<td>June 26th</td>
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<td>Szklenki Farms Inc.</td>
<td>8601 Slade Rd. Harborcreek PA 16421</td>
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<td>2:00pm</td>
<td>North Collins Sr. Center</td>
<td>11065 Gowanda State Rd. North Collins NY 14111</td>
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<td>July 3rd</td>
<td>10:00am</td>
<td>Earl &amp; Irene Blakely</td>
<td>183 Versailles Rd. Irving NY 14081</td>
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<td>July 10th</td>
<td>10:00am</td>
<td>Paul Bencal</td>
<td>2645 Albright Rd. Ransomville NY 14131</td>
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<td>July 17th</td>
<td>10:00am</td>
<td>John Ziesenheim</td>
<td>8760 Old Lake Rd. Lake City PA 16423</td>
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<td>10:00am</td>
<td>Leo Hans</td>
<td>10929 W Perrysburg Rd. Perrysburg NY 14129</td>
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<td>July 25th</td>
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<td>LERGP Summer Grower’s Conference</td>
<td>CLEREL Portland NY</td>
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Unusual Challenges For Mature Businesses

Businesses can be challenged by a lack of cash flow for various reasons. New businesses, regardless of competitive advantage and profit margins can be challenged by cash flow. Most Lake Erie vineyard operations do not typically face issues relating to cash flow. The businesses tend to be mature ones, conservatively investing capital and usually not growing.

Frost and freeze damage in 2012 impacted grower revenues significantly. For some growers, revenue may still be up. For many growers revenue has fallen precipitously. Management strategies may change slightly if growers will be using a line of credit to plug the hole in their cash flow. Before decisions like that are made, taking a look at your cash flow picture is the place to start.

It is important to look at your individual financial situation and not rely on the advice of other growers. The collective knowledge of the industry can be overwhelmingly helpful. In this situation, however, individual variables dramatically change the cash flow picture from operation to operation.

Revenue

Figure 1 illustrates the cash flow variability that can occur when yields and acreage are equal. All of these hypothetical growers have 100 acres of Concord grapes that yielded 300 tons in 2012. Even when processor payments are relatively equal, the structure of the payment can change cash flow budgeting.

The amount of crop insurance carried also has a significant impact on cash flow. Growers 3 through 6 all have crop insurance. The impact on cash flow varies from a few thousand dollars to an excess of one hundred thousand dollars. Even last year a majority of growers would not have had a meaningful claim if their insurance was a CAT(astrophic) policy.

Production Expenditures

Expenses can also vary considerably, though should not vary as significantly as revenue. The biggest variability should be in mechanization of crop load. Through May, expenses have likely been realized for pruning, trellis maintenance, and renewals. One should target $120 for minimally pruned vineyards.

Figure 2 shows the expenses realized through May 1st. Another total, for sake of comparison, is provided to show expenses just prior to harvest. Costs may vary somewhat more for smaller growers. The realization of certain cash expenses should have a relatively low probability. For example, mechanized thinning of hand-pruned vineyards may be done strategically but is not typically a whole farm practice. It may be more likely that a smaller grower would have his entire farm done, rather than just a portion in an area of extreme risk for berry moth.
For many growers that only have farm cash expenses, the current crop is adequate to cover those expenses by payments realized from the ½ crop in 2012. An extreme example, growers with no crop and CAT insurance would be able to cover 75% of cash expenses. A crop loan, of approximately $15,000 would be necessary. If that grower were a cooperative member, a line of credit would be recommended. Revenue after May is forecasted and more or less could be required.

**Leveraged and Salary Expenditures**
For growers that have leveraged their investment or draw a salary, the cash flow budget is much more challenging. Many business owners vary salary draw considerably, in particular when a household has two incomes.

If a salary is required, even a modest one of forty thousand requires a 60% increase in expenditures. Drawing that salary would either require a moderately high level of crop insurance or credit. It is a perfectly acceptable business practice to draw a salary. However, if it is something you require, it is another reason to think of crop insurance as a mandatory expense.

Even a highly leveraged grower of one hundred acres probably does not have more than five hundred thousand in debt. Interest payments for the year should total between twenty and thirty thousand. Principle payments may be adjusted, depending on the lender. Total loan expenses should not exceed $35,000 on this type of farm. This kind of leveraging allows a younger grower to enter the business. The cash flow budget reveals the additional risk realized with higher debt levels. Again, this is a reason to consider high levels of crop insurance. Without it, the typical grower would have to increase debt (if possible) to make it through the year.

**Accrued Expenditures**
Expenses considered thus far have been limited to expenses related to the 2013 crop, beginning in November. Accrued expenses from prior crop years could significantly impact cash flow budgets. Payments for the 2012 harvest may fall into this period. For the examples above most growers larger than 100 acres do have a harvester. If not, an additional $13,000 – $15,000 for the 2012 crop may push certain farms toward obtaining or expanding a line of credit.

Farmers are in a unique position of paying most taxes, federal income taxes, on an annual basis. This accrued expense may include profits from 2010 – 2012 crop years. This expense has the potential to vary widely and can be significant for larger growers. With monthly or quarterly payments reduced until the next harvest a conservative approach to capital investment may have increased tax liability in 2012. While that bill may hurt, it means the business is coming into 2013 with more resources.

**Other cash flow variations**
While a great number of variables can slightly change cash flow, the previously considered capture most variation. Of an important note, of course is the baseline. The purpose of a cash flow budget is not to determine profitability. It does not determine the long-term sustainability of your operation. It is merely a forecast illustrating the ability of a business to make required purchases at particular points in time. This is why poor businesses may go a long time without a cash flow problem and excellent businesses struggle with cash flow right out of the gate. The greatest single determinate of future success is the amount of wealth you were born into. The amount of cash on hand prior to 2012 crop year payments will influence the outcome of 2013 crop year cash flow budgeting more than anything else.

The largest variability that cannot be assessed across the industry, only on individual farms, is the amount of cash on hand prior to the beginning of 2012 crop payments and 2013 crop expenses. If one had a crop loan larger than the value of the crop, it is entirely possible a farm entered the 2013 crop year with negative cash.
Outlook
As discouraging and dramatic as the loss in 2012 was, most growers remain fairly optimistic in 2013. For the majority of growers, equity losses have slowed in recent years and many have equity to tap if they need to. As shown above, some growers will not find that necessary. This cash flow budget does articulate the challenges facing younger growers. With nearly half of all growers eligible to collect SSI survivors insurance, leveraging and required salary distributions are the exception more than the rule. Younger growers are much more likely to require a salary, as well as, being leveraged. Those growers, if they have not had a chance to build equity, face the greatest risk.

Using NEWA Resources in a Vineyard IPM Strategy

Tim Weigle

NEWA, the Network for Environment and Weather Applications, is a free, web-based information system (http://newa.cornell.edu/) that provides grape growers, processor reps and consultants the information that they need to implement research-based practices into their vineyard IPM strategy. One of the basic principles behind NEWA is that the value of weather data is greater when it can be shared. NEWA creates a central site for growers to access weather and pest information from instruments in, and near, vineyards.

NEWA provides both weather and pest model information from weather instruments that are located in, or near, vineyards across New York with concentrations of instruments in the Lake Erie (12 instruments) and Finger Lakes (16) grape growing regions of New York and Erie County Pennsylvania.

Table 1. NEWA Stations in the Lake Erie and Finger Lakes Grape Growing Regions

<table>
<thead>
<tr>
<th>Lake Erie</th>
<th>Finger Lakes</th>
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<tbody>
<tr>
<td>Versailles</td>
<td>Barrington</td>
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<tr>
<td>Sheridan</td>
<td>Branchport</td>
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<tr>
<td>Silver Creek</td>
<td>Cornell Orchards</td>
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<tr>
<td>Portland Escarpment</td>
<td>Dundee</td>
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<td>Portland</td>
<td>Fayette</td>
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<tr>
<td>Portland Route 5</td>
<td>Geneva (Bejo)</td>
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<tr>
<td>Ripley</td>
<td>Geneva</td>
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<tr>
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<td>Lansing</td>
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<tr>
<td>Harborcreek, PA</td>
<td>Lodi (Lamoreaux)</td>
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<td>North East Lab, PA</td>
<td>Lodi (Shalestone)</td>
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<td>Ransomville</td>
<td>Lodi (Standing Stone)</td>
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<td>Lockport</td>
<td>Ovid</td>
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<td>Romulus</td>
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<td>Varick</td>
<td>Watkins Glen</td>
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<td>Watkins Glen</td>
<td>Watkins Glen (Lakewood)</td>
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access to a grape infection events log and a leaf wetness log, both of which keep a running score of what has occurred so far in the season. The grape disease model information is customizable for each site, or variety, as you have the option of selecting the phenological stage of the grape you would like the disease model to provide information for. Infection periods for Downy mildew are determined separately using DMCast and are found using the link “Grapevine Downy Mildew” in the Pest Forecast box on the Station’s Page. The one insect
model that NEWA runs for grapes is the new Phenology Based Degree-Day model, which will start collecting degree days when the wild grapes come into bloom.

The station page also provides access to weather information that includes the Daily Summary, Hourly Data and Growing Degree Days (using a number of base temperatures). The daily summary is useful in charting how much rainfall occurred each day, a period of days or for the month while the hourly reports give you a better handle on how hard it rained. Growing degree days have been shown to be useful in comparing how one year is stacking up compared to others. If you have collected phenological information over the years such as bud break, bloom, Verasion and harvest or scouting reports for first siting of pests, you can compare growing seasons using the archived weather information found on NEWA. Archived weather information can be accessed from the NEWA home page using the Weather Data drop down menu. Daily summaries, hourly data and growing degree day information has been archived for a station from the time that it was set up.

NEWA has teamed up with the National Weather Service to provide weather forecasts and local radar images as well as linking the pest models with the 5-day weather forecast to provide a future look to help plan in advance. Combining the weather and pest model resources available on NEWA can help you better time pest management applications and determine which materials would be best to use in the current growing conditions. As an example, the rule of thumb is that you will lose one-half of the protection from a pesticide with each 1-inch of rain. However, with fungicides, the need to reapply protection against a particular pest will be affected by 1) the amount of inoculum or pest population present, 2) the phenological stage and susceptibility of the variety, 3) the type of material used in the last application, 4) the number of rain events that have occurred since the last application, 5) the timeframe in which the rain fell (half an inch over a day or 1-inch in an hour), 6) the severity of the infection periods that have occurred since the last application and 7) the weather forecast between now and when the next application is planned.

Scouting and knowledge of your vineyard operation will provide you with the answer to the first three factors. Armed with this information you can make a better informed decision on the need to shorten the spray interval or, in the event of dry weather, extend it a bit. NEWA even provides a link to the New York and Pennsylvania Pest Management Guidelines for Grapes if you have a question about which materials are available for use.

If you would like help in implementing NEWA into your vineyard IPM strategy, please get in touch with me at thw4@cornell.edu or (716) 792-2800 x203
Shoot Thinning: Good for the Vines, but Good for the Wines?

Hans Walter- Peterson

In an ideal vineyard, a grower could simply prune the vines during the dormant season and know that they were perfectly balanced. During the growing season, the right number of shoots would emerge uniformly only in the places that you wanted them to be, with the proper number of clusters to balance that growth, while getting just the right amount of light exposure and air movement around the fruit to prevent disease and develop good color, balanced acidity, and great flavors.

Unfortunately, those vineyards are virtually non-existent in our area, so growers need to use various tools and techniques to manipulate the vineyard canopy and the amount of crop in order to achieve the quantity and quality of crop that they need, while also maintaining healthy vines. One of those tools is shoot thinning, whereby excess shoots or shoots growing in the wrong places are removed from the vine.

In situations where there is excessive shoot growth, shoot thinning can be beneficial for several reasons, including:

- Improving bud fruitfulness by reducing shading in the interior of the canopy;
- Reducing disease pressure;
- Improving fruit exposure to sunlight, which can impact color and flavor development (possibly); and
- It is a relatively fast and inexpensive way (whether by hand or machine) to make adjustments to the canopy structure to bring it closer to “balance.”

Reduces Shading, Improving Bud Fruitfulness

If a large number of shoots are growing in a particular region of the vine, such as the head region (see photo), it creates a situation where many of the leaves and developing buds next to them, which will produce the following year’s crop, receive very little sunlight. The lack of sun exposure on those developing buds reduces the amount of tissue that can develop into clusters (called ‘cluster primordia’) within the buds, and thereby reducing the potential crop for the following year. Without intervention, this can lead to a bit of a vicious cycle as the reduced crop on the vines results in more vegetative growth, which can cause more canopy shading, and so on. Removing excess shoots can help to improve sun exposure on these buds, which will promote cluster formation for the following season.

Reduces Disease Pressure

Not only does shoot thinning allow better sunlight penetration into the canopy, it also helps to improve air movement around the leaves and clusters, which helps to dry the canopy faster and make it less of an attractive landing for new disease infections to establish and spread. In a trial conducted in a Vignoles vineyard in 2011, vines that had been shoot thinned on both mid-wire and top wire training systems had lower levels of botrytis and other associated bunch rots. If you recall, we had a lot more rain at the end of the season that year than we typically do, and significant botrytis infections were the norm. Shoot thinning allowed the fruit to dry out better in between those rain events, which reduced the amount of botrytis in those clusters, as well as the amount of sorting that was required to remove the overly rotted clusters at the winery.
Vignoles clusters from mid-wire (VSP)-trained vines with no thinning (left) and shoot thinning (right).

Influence color and flavor development

We know that the amount of sun exposure that clusters receive can have an impact on color in red varieties, as well as the development of flavor and aroma compounds in aromatic varieties like ‘Traminette.’ Justine Vanden Heuvel from Cornell, along with Gavin Sacks, Tim Martinson and others, has looked at the impact of canopy management practices like shoot and cluster thinning and leaf pulling in hybrid varieties like Corot noir and Marechal Foch, as well as in Riesling. While each of these studies found that shoot thinning by itself could have an impact on the canopy architecture and cropload balance, its impact on fruit chemistry and sensory characteristics of the final wines was inconsistent. In her work with Corot noir, for example, Justine found that cluster thinning had more of an influence on the fruitiness of the final wines than did shoot thinning.

Relatively fast and inexpensive practice

When it is done early in the growing season, shoot thinning can be accomplished relatively quickly and inexpensively once a person gains some experience with the practice. In a trial looking at the impact of shoot thinning and harvest timing in Marechal Foch, Tim Martinson calculated that the practice would take about 1.6 hours/acre, depending on the vine density of the vineyard.

There are also mechanized options for shoot thinning on larger acreages as well. The model produced by OXBO Corporation is probably the best known, and has been demonstrated in the Finger Lakes and Lake Erie regions in previous years. This system uses a set of soft rubber “fingers” to remove the shoots (see photo). The number of fingers, rotation speed and tractor speed can all be varied to adjust the number of shoots that are removed.

It is generally recommended that shoot thinning be done when shoots are between 6-12” long. As shoots elongate past that point, the base of the shoot starts to lignify which makes it more difficult to remove the shoots cleanly. In general, try to target about 4-5 shoots per foot of canopy in VSP-trained vinifera varieties. Hybrid varieties that are trained on high-wire systems can have somewhat higher numbers depending on variety, while native varieties like Concord can have as many as 15 shoots per foot of row in highly productive vineyards.
Shoot thinning removes both reproductive and vegetative growth from the vine, but usually results in an overall reduction of both yield and cropload (yield to pruning weight ratio) (Sun et al. 2012), and therefore is most beneficial in situations where vines are overcropped. If vines already have a low yield to pruning weight ratio (i.e., are undercropped), it’s much less likely that thinning will have any significant impact on fruit quality. However, the other benefits mentioned here – reducing shading and crowding which can improve bud fruitfulness and reduce disease pressure – might be significant enough on their own to potentially justify the practice. The only way to know for sure is to try some thinning in a couple of rows and see if any resulting benefits can justify the cost of the practice.

**Resources:**


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**Nitrogen Information**

*Mike Colizzi*

Buds are pushing and shoots are elongating. This can only mean one thing. The growing season is here. Whether you are ready for it or not, it is time to put the snowplow away and get the glycol out of the sprayer. This can be a very hectic time of the year in vineyards, and there are a lot of important decisions that need to be made. Did you know that Nitrogen is the most used nutrient in grapevines? It can also be one of the hardest to manage. Understanding the role of nitrogen in grapevine growth and development will help you increase quality, yields and efficiency.

Nitrogen is used as the foundation for many plant components including amino acids, nucleic acids, proteins, and pigments. Since nitrogen is crucial to the vine’s growth and development you need to know if the vine is taking up enough. The best way to test for nitrogen is with a bloom time petiole test. Bloom petiole samples are taken from leaves opposite the basal or mid cluster. These petiole tests are also a great way to assess the vines micronutrient status. Adjustments for micronutrients can then be made during the summer through foliar applications.

Uniformly light green leaves, short internode length, reduced crop load, and small leaves are all symptoms of a nitrogen deficiency. These, however, are also symptoms associated with drought, insect damage, and over cropping. It is very important to properly identify a problem. Applying nitrogen when it is not needed can do more harm than just wasting money. Excessive nitrogen coupled with an adequate amount of soil moisture can produce extremely vigorous vines with long shoots, many laterals, and poor wood maturation. Excess vegetation can decrease airflow thus increasing the disease potential. Try to avoid applying nitrogen immediately before or during bloom since this can decrease fruit set by shifting a vine’s focus to vegetative...
growth. A decrease in yield can also be associated with excessive nitrogen application when the canopy shades the buds for next year and decreases fruitfulness.

You may be wondering where all the nitrogen you applied last year went. Most of the nitrogen loss in a vineyard can be attributed to the harvesting of fruit. Grape berries contain 0.18% nitrogen; this means that a five-ton crop will remove around 18 pounds of nitrogen per acre. If winter prunings are removed from the vineyard an additional 0.25% of nitrogen is lost. That being said, if you never put additional nitrogen down the soil reserves will soon be depleted.

It is a good practice to have adequate amounts of nitrogen in the soil at all times rather than allowing them to deplete and then try to catch up. Typically a maintenance rate of nitrogen is between twenty and thirty pounds of actual N per acre. Heavy rates can be as high as eighty pounds per acre. It is advised to use a fifty-fifty split application if you need a high rate or are on soils prone to leaching. The best timing for nitrogen application is the six weeks immediately following bloom. Dehilling or under vine cultivation after an application can help to incorporate the fertilizer and limit the potential for volatilization.

As the vines continue to grow and develop throughout the year it is important to put back at least the nutrients that have been used. Understanding how and when the plant uses those nutrients allows you to better manage them and can save you money and help produce better yields.

Figure 1 A nitrogen deficient canopy. Photo courtesy of the Ontario Ministry of Agriculture Food & Rural Affairs
Enrollment Updates and New Web-site

We have reached the month of May and are well on our way into the growing season. Enrollment has been in progress since last November and, though many have renewed, we are still missing some of you. Unfortunately, we come to a time when we need to finalize our list for the current year and remove those names that have not reenrolled. This would mean that the periodic newsletters will cease to be sent out to those that have not renewed and access to the Weekly Crop Updates will be very limited. Online versions of Newsletters and Crop Updates are now housed on our new web-site. Access to these versions is password protected. This password will be changed on a periodic basis. This organizational process will take place this week. I strongly encourage everyone to make sure they have sent in their enrollment forms. This is a tedious process and it is possible that I may have made a mistake, so if you believe that is the case, please simply give me a call or email me and we can get it corrected. Contact info: Kate at kjr45@cornell.edu or 716-792-2800 ext 201

You can find enrollment forms to print and fill out on our website. I am also including one copy in this month’s newsletter. If you prefer to register online with a credit card you can do so on our new and improved website. The address for the site remains the same, (http://lergp.cce.cornell.edu/) but the appearance has changed quite a bit from before. I think you will find the new features quite convenient. Please feel free to call us with any questions you may have.

Looking for Some Diversity? Look into Hops

New York State used to be the leading producer of hops for the United States. Downy mildew, hop aphid and, finally, prohibition brought a virtual end to hops production in New York State. The repeal of prohibition saw the hops industry expand in the Pacific Northwest where the majority of hops continue to be produced today.

However, with a combination of the buy local movement and a marked increase in the number of microbreweries cropping up across the northeast, there has been a renewed interest in the production of hops in New York and the Northeastern United States. Why would hops be of interest to grape growers? Grape growers will have much of the equipment needed for the field work in hops and many of the pests associated with hops would be familiar to grape growers as well. And, while there would be an increase in the amount of hand work required in the spring of the year, harvest of most varieties would be completed prior to the start of all but the earliest grape varieties.

A hops conference featuring growers from Pennsylvania, Maryland and New York, brewers from local breweries, and extension hops specialist Steve Miller and NYS IPM extension specialist Tim Weigle will be held at CLEREL on June 15, 2013 starting at 8:00 AM and running until 4:00 PM. A complete agenda can be found at: http://lergp.cce.cornell.edu/event.php?id=64. Registration form can be found on the last page of this newsletter.
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Larry Labowski
llabowski@agchoice.com
800-927-3149
www.agchoice.com

Jim Warner
james.warner@farmcrediteast.com
800-929-2144
farmcrediteast.com
2013 Lake Erie Regional Grape Program Enrollment

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

**Fees:**

$65.00 $________ GRAPES - Chautauqua, Cattaraugus, Erie or Niagara county landowner

(Does not include 2013 Cornell Guidelines for Grapes)

$100.00 $________ GRAPES - Out of Program Region Resident

(Does not include 2013 Cornell Guidelines for Grapes)

$25.00 $________ 2013 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
Hops Production in the Lake Erie Region

Saturday, June 15, 2013
at
Cornell Lake Erie Research & Extension Laboratory
6592 West Main Rd.
Portland, NY 14769

$75.00 General
$65.00 NeHA 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? Yes or No
__________________________________________________________________________________________
__________________________________________________________________________________________
__________________________________________________________________________________________
__________________________________________________________________________________________
__________________________________________________________________________________________

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
Cooperatively yours,

Timothy Weigle

Statewide IPM
Senior Extension Associate

Andy Muza

County Extension Educator

Kevin Martin

Senior Extension Associate

Business Management Educator

Cornell Cooperative Extension
LERGP
6592 W Main Rd
Portland NY 14769