

Cornell University Cooperative Extension

Eastern NY Commercial Horticulture Program

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Grapes News

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Phenology Updates

Harvest is well under way for both the Lower Hudson Valley and the North Country. At the Hudson Valley Lab, a few later varieties (e.g. Riesling, Vidal, and Cabernet sauvignon) are still hanging in the vineyard, slowly accumulating sugar.

Pest Updates

The birds are still around, and those growers who haven't netted or employed other deterrents, have harvested the majority of the crop by now.

The weather has been dry in the Hudson Valley these past few weeks (less than 2" rain), helping keep disease pressure to a minimum. With the recent wet weather and warm temperatures, and more of the same in the short range forecast, growers may want to consider a final fungicide application for botrytis and sour rot to get them to harvest.

Final Issue of the Grape Newsletter

Although the 2014 grape growing season started off a bit rocky, it looks to have ended on a more positive note. The low temperatures from this past winter caused a lot of injury across the state. Growers saw 50% primary bud kill in many of their varieties, and some had injury severe enough where the vines died back to the soil line.

The spring season started with plenty of rain and continued through the early part of the summer. At the Highland Lab, almost 12" of rain was recorded between March and July. Downy mildew infections were present in every vineyard I visited and it looked as though there was no end in sight.

Fortunately, though, as verasion approached, the weather improved and so did the outlooks for the harvest season. The harvest continues, with growers steadily working to harvest and crush their grapes in a timely manner.

These next few weeks mark the final stretch of harvest for most. Although the end is in site, it is still important to closely monitor the crop. Warm, humid and wet weather, like we have the potential to see in the coming weeks can serve as ideal conditions for the spread of botrytis and sour rot. If a fungicide is warranted, be aware of the varying days to harvest (DTH) with each product. Some products (e.g. Vangard, Scala), have a 7DTH restriction while others (e.g. Elevate) have a 0DTH.

This is the final issue of the Eastern New York Grape Newsletter for the 2014 growing season. Produce Pages, a combined monthly newsletter of all commodities, will begin November 1 and continue through the winter and into the spring. Regular commodity specific newsletters will begin again sometime in the early spring. *- JMO*

Feel free to contact your local ENYCHP Grapes Specialist if you have any questions on your vineyard. We'd be happy to assist you in any way that we can. *North Country:* Anna Wallis at 443-421-7970 or email <u>aew232@cornell.edu</u> Hudson Valley: Jim O'Connell at 845-691-7117 or email <u>jm098@cornell.edu</u>.

Serving the educational and research needs of the commercial small fruit, vegetable and tree fruit industries in Albany, Clinton, Columbia, Dutchess, Essex, Fulton, Greene, Montgomery, Orange, Rensselaer, Saratoga, Schoharie, Schenectady, Ulster, Warren and Washington Counties

Is Cluster Thinning After Veraison Worth the Effort?

By Hans Walter-Peterson, Finger Lakes Grape Program, in September 2014 issue of Finger Lakes Vineyard Notes

Cluster thinning is often done with the goal of reducing crop load in order to improve the quality of the remaining fruit at harvest. The practice is generally done sometime between fruit set and veraison, and is based on the idea that if there are fewer clusters and berries on the vine, the vine will concentrate more of the sugars, flavor and aroma compounds that it produces into the remaining fruit, and therefore produce wine of better quality.

In some situations, however, growers will wait to drop fruit until the end of veraison and do what is sometimes called a "green drop" or "green thinning", where the last 10-20% of clusters that are changing color slower than the others will be removed from the vines, in order to improve the average ripeness of the remaining crop by reducing the number of underripe clusters. Growers may also sometimes thin their crop after veraison simply because they weren't able to get to it before then because of lack of time or labor. But whatever the reason for doing it, the question should be asked whether the work necessary to do cluster thinning after veraison is ultimately beneficial in terms of quality (because it certainly isn't beneficial to the grower unless they are compensated for the extra work and loss of yields – just sayin').

There have been several studies that have looked at the how cluster thinning at different points in the season impacts the fruit. While there are some fairly consistent effects that are found in these studies when thinning is done before veraison – larger berries, heavier clusters (both due to yield compensation by the vines), improved color or sugar accumulation in some cases – the evidence of any significant impacts to the fruit from thinning after veraison is, well – thin.

As I mentioned above, one of the primary reasons that growers will drop fruit at, or after, veraison is to improve the uniformity of the remaining crop by performing a green drop. While the idea of the practice would certainly seem to make some sense, there is very little evidence that it actually accomplishes that goal by the time harvest rolls around.

In some work done on Cabernet Sauvignon in California, the researchers removed 20% of the crop at veraison either by removing the upper clusters on a shoot or those that were lagging in color development. By the time harvest rolled around, there were no differences in Brix levels between either of the thinned treatments and the unthinned vines (Calderon-Orellana et al. 2014). In addition, they also found that the remaining fruit in the thinned vines had just as much variation in Brix levels as that from the



Pinot noir clusters dropped at the end of veraison.

unthinned vines. Another California study done several years earlier also found similar results – that while fruit uniformity was greater in the thinned vines about 7 weeks before harvest, there was no difference in ripeness or uniformity of ripeness between the thinned and unthinned vines at harvest (Anderson et al. 2007).

This is not to say that there aren't certain situations where dropping clusters between now and harvest might be a good thing to do. For example, removing underdeveloped clusters just before mechanical harvesting would help to improve the uniformity of the remaining crop, as the machine doesn't discriminate between ripe and underripe fruit. This may be especially true in a year like this where there may be a significant number of secondary clusters in some blocks this year due to winter injury to primary buds.

As with any practice in the vineyard, the only way to really know if it works in your situation or not is to set up a small comparison for yourself. If you are going to cluster thin before harvest, I would suggest leaving a few unthinned rows to compare to those that you thin in order to see what impact, if any, that the practice has. Based on what we know about how the vine works and the results from research trials like those mentioned here, though, those impacts might be hard to find in the end.

References:

Anderson, M., H. Heymann, J. Benz, G. S. Howell, and J. Wolpert. 2007. Effect of Crop Load Adjustment on Fruit Ripening, Uniformity, and Sensory Characteristics. Abst. Am. J. Enol. Vit. 58:415A.

Calderon-Orellana, A., L. Mercenaro, K. Shackel, N. Willits, and M. A. Matthews. 2014. Responses of Fruit Uniformity to Deficit Irrigation and Cluster Thinning in Commercial Winegrape Production. Am. J. Enol. Vit. 65: 354-362.

Using Volunteer Labor During Harvest (or anytime)

By Hans Walter-Peterson, Finger Lakes Grape Program, in October 1, 2014 issue of Finger Lakes Vineyard Update

Author's Note: This item appeared in last week's Vineyard Update, but I wanted to include it again in an effort to get the word out about this apparent restriction on using volunteer labor at businesses, including vineyards and wineries. We are still trying to get some clarification about the issue, but for now, it would seem prudent to avoid any problems along these lines and not use volunteers until we have better information on the issue.

There was a recent article from the San Jose Mercury News about a winery in the Castro Valley region of California that was assessed a \$115,000 fine by the state of California for using volunteers at their business. These volunteers, according to the article, were helping out with various functions at the winery - some with the idea of learning about the industry by working at a winery. The winery was cited because none of the workers was covered by workers' compensation or paid a wage for their work at the winery, which is against California law (and federal law, as it turns out).

After seeing this article, I called the NY State Department of Labor to ask if for-profit businesses in New York were also prohibited from using volunteer labor, and the answer was yes. In other words, no for-profit business in New York (including agriculture, as far as I know right now) is allowed to use volunteer labor. There are conditions for allowing an "intern" to work at a business who is not paid (see the US DOL fact sheet reference below).

I don't want to try to interpret New York labor law and regulations here, and please don't take this as any kind of legal advice, but I wanted to get the word out about what I was told regarding this subject. I will try to get some other resources and clarification from the state about this and pass it along when I do, but suffice to say, any growers and wineries who are considering using volunteers to help out during harvest should probably think twice before doing so.

A few links with some more information:

Castro Valley winery fined \$115,000 for using volunteers:

http://www.mercurynews.com/my-town/ci_26541167/ castro-valley-winery-fined-115-000-using-volunteers

Statement from CA Department of Industrial Relations:

http://www.mercurynews.com/extra/ci_26563532/ document-california-agency-fine-winerys-use-volunteer -workers

Fact Sheet #71: Internship Programs under the Fair Labor Standards Act (U.S. Department of Labor): http://www.dol.gov/whd/regs/compliance/whdfs71.htm

Another Warm Winter Likely for Western U.S. South May See Colder Weather

Source: NOAA, full article posted 10/16/14 available at <u>http://www.noaanews.noaa.gov/stories2014/20141016_winteroutlook.html</u>

A repeat of last year's extremely cold, snowy winter east of the Rockies is unlikely. Below average temperatures are favored in parts of the south-central and southeastern United States, while above-average temperatures are most likely in the western U.S., Alaska, Hawaii and New England, according to the <u>U.S. Winter Outlook</u>, issued today by <u>NOAA's Climate Prediction Center</u>.

The Precipitation Outlook favors above-average precipitation across the southern tier, from the southern half of California, across the Southwest, South-central, and Gulf Coast states, Florida, and along the eastern seaboard to Maine. Above-average precipitation also is favored in southern Alaska and the Alaskan panhandle. Belowaverage precipitation is favored in Hawaii, the Pacific Northwest and the Midwest.

Last year's winter was exceptionally cold and snowy across most of the United States, east of the Rockies. A

repeat of this extreme pattern is unlikely this year, although the Outlook does favor below-average temperatures in the south-central and southeastern states.

In addition, the Temperature Outlook favors warmer-thanaverage temperatures in the Western U.S., extending from the west coast through most of the inter-mountain west and across the U.S.-Canadian border through New York and New England, as well as Alaska and Hawaii.

The rest of the country falls into the "equal chance" category, meaning that there is not a strong enough climate signal for these areas to make a prediction, so they have an equal chance for above-, near-, or below-normal temperatures and/or precipitation.

The <u>U.S. Seasonal Drought Outlook</u>, updated today and valid through January, predicts drought removal or improvement in portions of California, the Central and Southern Plains, the desert Southwest, and portions of

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Warm Winter Likely, continued from previous page

New York, Connecticut, Rhode Island and Massachusetts. Drought is likely to persist or intensify in portions of California, Nevada, Utah, Idaho, Oregon and Washington state. New drought development is likely in northeast Oregon, eastern Washington state, and small portions of Idaho and western Montana. This seasonal outlook does not project where and when snowstorms may hit or provide total seasonal snowfall accumulations. Snow forecasts are dependent upon the strength and track of winter storms, which are generally not predictable more than a week in advance.

Northern Grapes Project Receives \$2.6 Million USDA Grant

The Northern Grapes Project received an additional \$2.6 million in funding from the U.S. Department of Agriculture's Specialty Crops Research Initiative to complete the final two years of the multistate effort, which began in 2011.

The project focuses on growing extremely cold-hardy wine grape varieties that are new to both growers and consumers, creating a rapidly-expanding industry of small vineyard and winery enterprises. Dr. Tim Martinson, Senior Extension Associate at Cornell University, leads the project team, which includes research and Extension personnel from ten institutions in the Upper Midwest and Northeast.

"New producers are spread across twelve states, most without an established wine industry," said Martinson. "By working together, the Northern Grapes Project team provides more resources to producers than would be available if each state had its own effort."

The new varieties have growth habits and flavor profiles that are quite different from well-known varieties. So the project's researchers have been working to determine the best ways to grow them, turn them into flavorful wines, and market those wines in local and regional markets.

In the first three years of the project, team members invested heavily in field and laboratory trials, conducted consumer surveys and a baseline survey of the industry, and provided outreach programming to an aggregate audience of more than 7,000.

"The continued success of this project in obtaining funding is testament to the team's exceptional productivity and to how this project has impacted grape production in northern regions across the Northeast and upper Midwest," said Dr. Thomas Burr, Director of the New York State Agricultural Experiment Station.

"As a producer, having scientists involved is especially valuable to us as they are conducting rigorous tests to back up our hunches and our theories," said Dave Greenlee, a project advisory council member and co-owner of Tucker's Walk Vineyard in Garretson, S.D. Greenlee cites trials of various trellising systems in vineyards and sensory



Northern Grapes Project Director Tim Martinson speaks about the training system trials during a field day at Coyote Moon Vineyards in Clayton, NY. A variety of training systems are being evaluated in New York, Iowa, and Nebraska, in order to determine which training systems work best for the cold-hardy wine grape cultivars. In addition to hosting research trials, Coyote Moon Vineyards President Phil Randazzo serves on the Northern Grapes Project Advisory Council. *Photo courtesy of Chrislyn Particka, Cornell Univ.*

evaluations of wines using different yeast strains in the lab. "These save us time and help us improve our products," he points out.

The grant was funded by the USDA National Institute of Food and Agriculture's Specialty Crops Research Initiative, which supports multi-institution, interdisciplinary research on crops including fruits, vegetables, tree nuts, and ornamentals. The project includes personnel from Cornell University, the Connecticut Agricultural Experiment Station, Iowa State University, Michigan State University, North Dakota State University, South Dakota State University, the University of Minnesota, the University of Nebraska, the University of Vermont, and the University of Wisconsin.

For more information, visit the Northern Grapes Project website at <u>http://northerngrapesproject.org/</u>.



Viticulture, enology and marketing for cold-hardy grapes

Willsboro Cold-Hardy Grape Trial Harvest 2014

By Anna Wallis and Lindsey Pashow, CCE ENYCHP

The cold-hardy grape trial at the Willsboro Research Farm produced its fourth mature crop this season. The planting, established in 2007, consists of 24 grape varieties, predominantly releases from the Minnesota wine grape breeding program. The crop looked excellent and harvest went very smoothly this year.

Like much of the rest of the state, the milder summer conditions we experienced this season led to a delay in the maturity of the fruit. Slower accumulation of sugar and reduction in acidity translated to a later ideal harvest date. Luckily, cool, dry weather led to low pest pressure.

Harvest at Willsboro took place between September 10th and 27th. The harvest at this site was a bit on the early side—harvest date is ideally determined based on sugar and acidity measurements, but it is also dependent on factors including the availability of harvesters and weather conditions. Unfortunately, many of us has experienced this first hand.

Nonetheless, fruit was very close to target maturity at harvest. Sugar measurement (°Brix) data leading up to harvest is displayed in the table at right.

Just under 3.5 tons were harvested from the 300 vines at the planting. We were very grateful to have over 15 people participate in the harvest workshops. Of the 24 varieties harvested, six were transported to Cornell, Geneva where they will be used by researchers to create wine. The rest were taken home by workshop participants as a well-deserved reward for their hard work.





Table 1. Willsboro Brix measurementsleading to harvest

Variety	17-Sep	Target	Harvest Date
Aromella	16	17	9/20/2014
Baco	19	19	9/17/2014
Cayuga White	16	18	9/26/2014
Edelweiss	15	15	9/19/2014
ES 6-16-30	20	19	9/17/2014
Foch	19	20	9/19/2014
Frontenac	19	21	9/24/2014
Frontenac Gris	20	21	9/27/2014
GR-7	16	19	9/26/2014
La Crescent	17	22	9/27/2014
La Crosse	18	19	9/26/2014
Landot	17	18	9/24/2014
Leon Millot	NT	21	9/10/2014
Louise Swenson	17	19	9/21/2014
Marquette	22	23	9/24/2014
MN 1200	19	21	9/27/2014
Niagara	14	15	9/20/2014
Noiret	14	16	9/26/2014
Petite Amie	18	18	9/19/2014
Prairie Star	17	18	9/18/2014
Sabrevois	17	18	9/24/2014
St. Croix	18	19	9/20/2014
St. Pepin	19	20	9/27/2014
Vignoles	19	19	9/18/2014

2014 Cornell Agribusiness Strategic Marketing Conference

"New, Niche, and Non-Traditional Market Opportunities: Developing a successful and profitable relationship for all"

November 11-12, 2014 at The Inn on the Lake 770 S. Main St., Canandaigua, NY 14424

For full details on the conference schedule and topics, registration, lodging, the networking culinary dinner, and more go to <u>http://dyson.cornell.edu/outreach/strategic_marketing_conference.php</u>. This premier conference provides in-depth discussion on topics and issues that are critical for sellers of agricultural products.

Topics this year will cover changing/adding market channels, market/product diversification from both a wholesale and direct-consumer vantage point, highlighting such practices as season extension, extending into ethnic and export markets, CSA to wholesale markets, group purchasing organizations, farm-to-institution, and CSA rebate programs.

The conference is developed with a mind towards building grower and agency skills through session topics. Sessions will include specific keys to success from both growers as well as agency personnel, such as staff from GrowNYC FARMroots, Norwich Meadows Farm, and The Good Food Collective. The presenters are individuals who are actively working to develop local farm to table distribution in the urban and rural areas of the New York and New York City area.

To round out the conference there will be a session to present detailed information on cost identification with various market channels and activities. These costs will then be utilized in pricing models for price determination so that individuals entering new markets have a thorough and complete understanding of these market opportunities and how best to balance them in their business model.

The conference features:

- · Marketing insights to access ethnic markets
- Increasing marketing opportunities with non-traditional partners
- · Tips when adding new and diversified market channels to your selling mix
- Price determination tutorial and research guidance to successfully price products for a market

Exhibit Space: Limited exhibit space is available. Please let us know if you would like to bring materials for your company or organization. Contact Carol Thomson at 607-255-5464 or email <u>cmt8@cornell.edu</u>.

Networking Dinner at the New York Wine & Culinary Center: There will be an optional networking culinary demo dinner on Tuesday, Nov. 11 at 6pm in the Demonstration Theater at the NY Wine & Culinary Center (next door to the Inn on the Lake). The meal will consist of a three course Culinary Demo and an optional wine pairing. More information to follow.

For more information, contact Bob Weybright at 845-797-8878 or email rw74@cornell.edu.

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