



Finger Lakes Vineyard Update

Cold Temperatures Returning to the Finger Lakes This Week

Hans Walter-Peterson

Looking out your window, you wouldn't think that we're a couple of weeks into spring already. While some snow and cold isn't all that unusual at this time of the year in upstate New York, the fact that it was preceded by temperatures in the 70s only 48 hours earlier makes it feel totally out of place. The concerning aspect of this for grape growers, obviously, is that warm temperatures cause vines to deacclimate and prepare themselves for budbreak, potentially making them more vulnerable to damage from cold temperatures like those we're expecting for the next couple of nights.

Our most recent bud hardiness tests (and the last ones for the season) were run on samples collected last week from our commercial vineyard sites. The table and graphic below show the average LT_{50} values for each of the varieties that we are monitoring this year, along with the range of LT_{50} values for each of them. Detailed results for each variety collected at each site can be found at the project website, <http://grapesandwine.cals.cornell.edu/extension/bud-hardiness-data/>

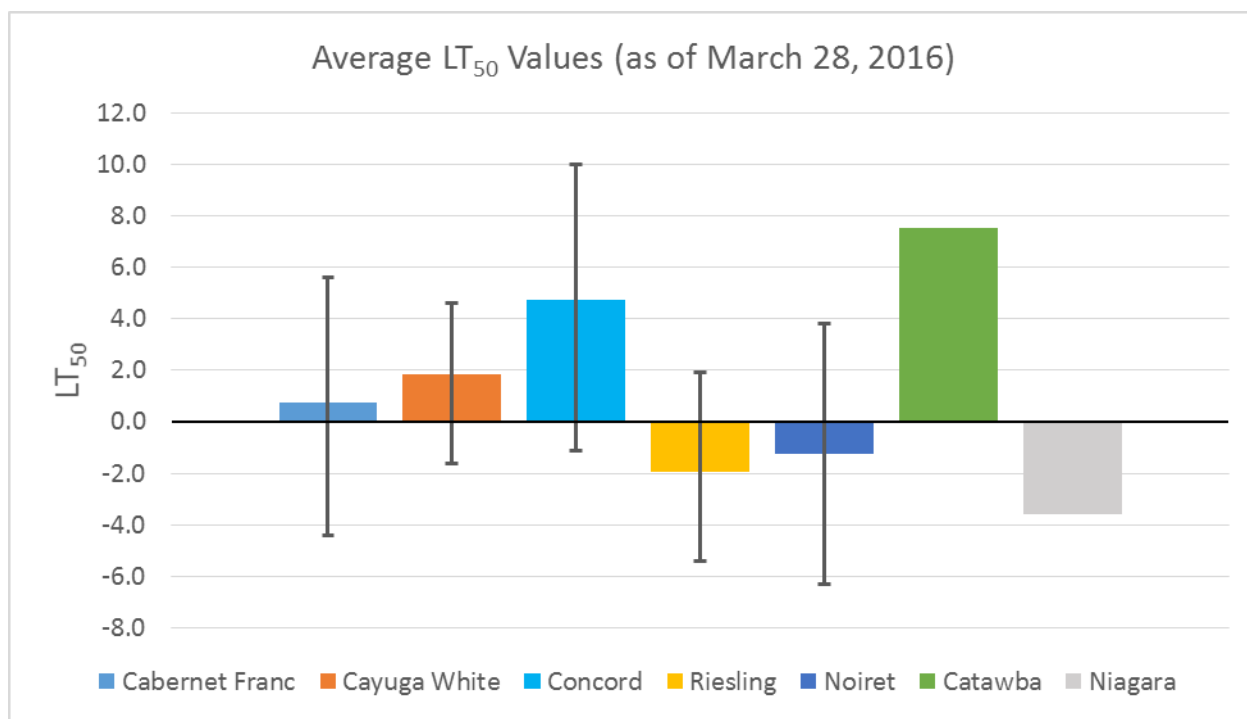
	Avg LT_{50} (°F)	# of sites	Lo LT_{50} (°F)	Hi LT_{50} (°F)
Cabernet Franc	0.8	6	-4.4	5.6
Cayuga White	1.9	5	-1.6	4.6
Concord	4.8	6	-1.1	10.0
Riesling	-1.9	8	-5.4	1.9
Noiret	-1.3	2	-6.3	3.8
Catawba	7.5	1	--	--
Niagara	-3.6	1	--	--

Overnight temperatures tonight and tomorrow night are forecast to be in the mid-teens in Geneva, which means they could very well get colder in some other parts of the region. According to the test results from last week, LT_{50} values are still below these forecasted low temperatures, but it is possible that it could get cold enough in some locations to cause some damage, particularly in varieties that have deacclimated more quickly, e.g., native varieties like Concord and those that are riparia-based including Marquette, Frontenac, and Baco Noir. How these kinds of temperatures will impact trunks, cordons and canes is more of an unknown, unfortunately, but hopefully the fact that it has taken a couple of days for this colder weather to settle in (instead of overnight like the infamous "Christmas Massacre") has given the vines time to adapt to the change.

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Average LT₅₀ values for 5 varieties from FLX commercial vineyards. Bars represent the range of LT₅₀ values for varieties with multiple sites. Catawba and Niagara data based on only one collection site.

Bud Injury Results

On a related note, Gillian Trimber and Bill Wilsey collected some extra samples from several of the sampling locations for the bud hardiness project in order to determine bud injury levels. The results are also included on the [Bud Hardiness Data](#) project page, but here are the numbers that they found last week:

Variety/Location	% Primary Bud
Riesling	
East Keuka	17.8
East Seneca	34.0
West Keuka	21.4
West Seneca	28.0
West Canandaigua	38.5
West Cayuga	39.0
Geneva	41.0
Cabernet Franc	
East Seneca	27.0
West Seneca	6.4
West Cayuga	27.0
Geneva	26.0

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Cayuga White	
East Seneca	33.0
West Keuka	7.3
West Cayuga	8.0
Concord	
East Seneca	3.0
West Keuka	5.1
West Seneca	3.1
West Canandaigua	6.3
Geneva	2.0
Catawba	
West Cayuga	5.0
Noiret	
Geneva	10.0

Each of these samples was based on the examination of 100 buds, taken from 10-12 vines in a block. As always, these numbers are just based on one set of samples from one particular block of vines. For the most part, these results are fairly consistent with what we have heard from growers, and somewhat better than the earlier sampling results of our own (we reported these in [our Vineyard Update a few weeks ago](#)) from the Teaching Vineyard. It is interesting to see two samples that differ fairly substantially in the amount of injury from the others of that variety – Cab Franc from West Seneca and Cayuga White from East Seneca. They may or may not be indicative of the actual injury that exists in those blocks – we'll have to wait and see what the actual injury level is at all of these sites once we get past budbreak.

Upcoming Events

Don't forget to check out the calendar on our website (<http://flgp.cce.cornell.edu/events.php>) for more information about these and other events relevant to the Finger Lakes grape industry.

Northern Grapes Project Results: Fungicide Sensitivity & Vine Nutrition of Cold-Hardy Cultivars (Webinar)

April 12, 2016 12:00 PM and 7:00 PM

Patricia McManus of the University of Wisconsin-Madison and Carl Rosen of the University of Minnesota will discuss results of their Northern Grapes Project research. Patty's presentation will summarize four years of field trials that focused on determining the sensitivity of popular cold-hardy cultivars to fungicides, including copper, sulfur, and difenoconazole. Carl's presentation will summarize three years of research on tissue analysis of cold hardy grapes grown in 16 locations spanning five states. Nutrient diagnostic criteria will be presented for petiole, blade, and whole leaves collected at bloom and veraison and relationships between soil properties/tissue nutrient concentrations and grape juice quality will be discussed.

Registration is required via the link below: https://cornell.qualtrics.com/jfe/form/SV_bsdhmqRd13JqYNT.

Registration will close at 8:00 AM (Eastern) on Friday, April 8th.

There is no charge for this webinar. If you cannot attend one of the live sessions, recordings of all webinars are posted on the Northern Grapes website (http://northerngrapesproject.org/?page_id=257) within one week of the webinar date.

Please email Chrislyn Particka (cap297@cornell.edu) with any questions.

Effective Vineyard Spraying

Wednesday, April 27 9:00 AM – 3:15 PM

Jordan Hall - NY State Ag Experiment Station

630 W North Street

Geneva, NY



Dr. Andrew Landers will present this day-long course on the design and proper use of sprayers and associated equipment. Topics will include sprayer design, selection of nozzles and droplet size for different jobs, sprayer calibration, sprayer airflow characteristics, effective sprayer management, and precision spraying. There will be 5.5 pesticide recertification credits available for attending this meeting. Further details are available on the FLGP website at <http://flgp.cce.cornell.edu/event.php?id=251>.

Registration cost is \$20 for FLGP enrollees, and \$35 for those who are not enrolled. **Registration cost at the door will be \$50 regardless of enrollment status, and the number of same-day registrations will be limited.** Costs include materials, lunch and all breaks.

Registration can be done either through our website at http://flgp.cce.cornell.edu/event_preregistration.php?event=251, or by calling Brittany Griffin at our office at 315-536-5134.

Additional Information



Become a fan of the [Finger Lakes Grape Program on Facebook](#), or follow us on [Twitter \(@cceflgp\)](#) as well as YouTube. Also check out our website, “The Grape Lakes – Viticulture in the Finger Lakes” at <http://flg.cce.cornell.edu>.

Got some grapes to sell? Looking to buy some equipment or bulk wine? List your ad on the [NY Grape & Wine Classifieds website](#) today!

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