

VERAISON TO HARVEST

Statewide Vineyard Crop Development Update #1



Cornell University
Cooperative Extension

August 27, 2010

Edited by Tim Martinson and Chris Gerling

About This Newsletter...

This marks the fourth year we've been publishing *Veraison to Harvest* – a joint effort of the Lake Erie, Finger Lakes, Hudson Valley, and Long Island grape extension programs and our statewide viticulture and enology extension programs. Our goal in doing so is to provide timely information from across New York to assist growers and winemakers to help them make the best possible decisions about harvest and winemaking issues. The heart of the newsletter is the grape maturity samples we collect from over 60 vineyards in four regions of New York. We decided to start a week early this year, in light of the extreme earliness of the harvest season. Our thanks to the **New York Wine and Grape Foundation**, the Kaplan Foundation, and Cornell's federal formula fund grants program, which are all providing funding for this effort. We'll publish weekly through the end of the harvest season.

—Tim Martinson & Chris Gerling, Co-editors

Around New York...

Statewide (*Tim Martinson*).

Fruit maturity samples from around New York (pp. 3-5) confirm that we are way ahead of our average growing season, and even farther ahead of the cool 2009 growing season. Last year's samples – taken a week earlier – were 4-6 Brix lower than this week's samples, and this year's acids are a whopping 6 to 15 grams lower than they were a year ago. Notably, samples from the Hudson Valley and Long Island are well-advanced from their central and western NY counterparts – indicating that what was a warm season in the Finger Lakes was even more extreme in Eastern NY. Although this is our first YAN (yeast assimilable nitrogen) sample, it looks like some varieties (notably late-maturing ones like Cabernet Franc, Riesling, and Traminette) are trending lower at this point than others such as Chardonnay and Cayuga White. We expect these numbers to change between now and harvest.

Long Island (*Alice Wise and Libby Tarleton*).

It seems each season brings something different in terms of both benefits and challenges. In 2010, Long Island has endured record or near record heat for every month starting in April. This accelerated vine phenology so that ripening is two weeks or more ahead of normal. Harvest of Chardonnay and Pinot Noir for sparkling wine started this week. This is possibly the first time in the history of the



Chardonnay and Zweigelt went through veraison in late July at the Long Island Horticultural Research Center in Riverhead, NY

Photo by Alice Wise

industry that grapes were harvested in August. Growers are very pleased with both yields and quality. In the research vineyard, the 30+ varieties are ripening at an unbelievable pace. We have a number of 3 yr old vines with crop, notably Albariño and Zweigelt. The Albariño has totally brown seeds with individual berries coming in at 20-22 Brix. Fruit has a spiciness to it that is unique and interesting. Zweigelt looks to be another early ripening red in the mode of Dornfelder - dark color, juicy berries, moderate tannins. Growers are now netting furiously as birds have finally discovered ripening fruit.

Finger Lakes (*Hans Walter-Peterson*)

It might be more appropriate for us to call this publication *Harvest to Harvest* this year, at least from the Finger Lakes' perspective. Early varieties like Leon Millot and Aurore were already being picked at the beginning of the week, with Elvira also starting to come off starting at the end of the week. If our sample results are close, I wouldn't be surprised to see some grapes picked for sparkling wine production within the next week or two.

Starting with a significantly earlier budbreak than normal, the Finger Lakes has generally been about 2 weeks ahead of average with regard to phenological development the entire season, and that trend is continuing at harvest. The region is almost 1 month ahead of the long-term average for heat accumulation (growing degree days), and almost 2 months ahead of where we were at this

time last year. If anybody wonders how significant vintage variation can be in the Finger Lakes, look no further than that. If September and October cooperate, 2010 could be an excellent year for us.

The warm weather, combined with high rainfall totals in many parts of the region, means that disease control has been more challenging in the vineyard this year. Fortunately, leaves and fruit appear to be very clean for the most part. The primary challenges for growers at this point in the season are controlling downy mildew infections on leaves, and botrytis and other bunch rot infections on the clusters, both of which appear to be under control in most vineyards. We are supposed to have warm, sunny weather over the next several days, so this should help to control further spread of infections for the time being.

Needless to say, fruit maturity is much further along compared to this time in 2009, both in terms of brix accumulation and acid reduction. All but two of the samples taken in the Finger Lakes this week have a pH above 3.0 already, and some TA levels are already dropping near levels where winemakers might start to consider picking soon, depending on the weather. This may be a year where winemakers might want to consider picking some white varieties based on acid content as much as brix and flavor development.

Lake Erie (*Tim Weigle*).

Sunshine, warm temperatures and timely rainfall describes the 2010-growing season across the Lake Erie region. Rebounding nicely from an early season frost event that once again hit a number of Concord vineyards, growing degree-day accumulations at CLEREL continue to be about 14 days ahead of average and the harvest schedule has been adjusted accordingly with some early varieties like Edelweiss already in the tank. Data collected by Kelly Link, Research Support Specialist at CLEREL indicates that the area was 8 days ahead of average at bud break which was recorded on May 5, 11 days ahead of average with a bloom date of June 4, and 10 days ahead at the Verasion date of August 14. Major juice processors are looking at the “ripe” Concord harvest to start around September 13. The 2010 growing season could pose problems for processors who typically take ‘green’ ConCORDs for the acid as the harvest timings seem to be running together already.

Early season estimates of crop size have risen consistently, especially in ConCORDs, as the growing conditions around bloom provided optimum conditions for berry set. Reports from growers across the region indicate that Niagara bunches are particularly large this year due to the number of berries each contain. The sunshine and warm temperatures has created the threat of at least a partial fourth generation of grape berry moth but has also resulted in very little disease

pressure across the belt and has growers of wine grape varieties expecting an outstanding vintage.

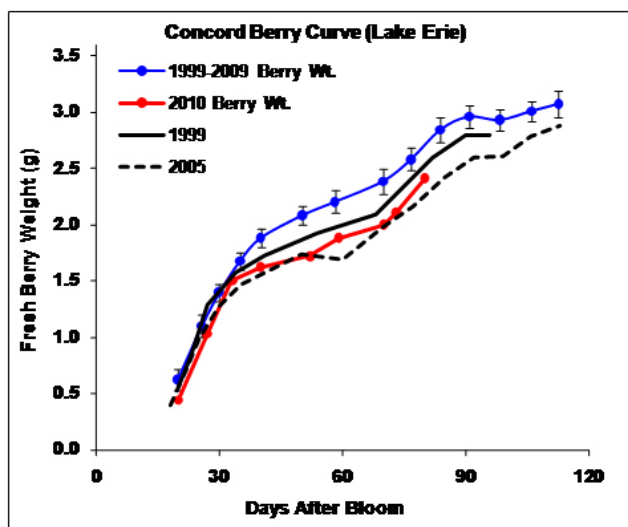
Hudson Valley (*Steven McKay & Steve Hoying*).

The season is shaping up to be quite favorable in the Hudson Valley. Ripening is occurring early, and it appears that the season will be “condensed”, or shorter than normal. All varieties are reported to be fully through veraison in Orange and Dutchess Counties, except for ‘Cabernet Franc’, which is at about 90%. Disease problems have been few this season, but recent rain has lowered brix readings by 0.5 to 1 point, and some growers have applied an additional *botrytis* spray. Forecasted warm dry weather should help to get ripening back on track. ‘Chardonnay’ and ‘Pinot Noir’ have readings of 19 brix now in Orange County, and are suitable for harvest to make sparkling wines. Seyval harvest will likely begin next week.

LAKE ERIE CONCORD RIPENING PROFILE *Terry Bates*

Cornell Lake Erie Research and Extension Laboratory

Concord berry weight is following a typical progression for a relatively warm and dry season. The 2010 curve is below the 11-year average but is very similar to 1999 and 2005 which also had similar growing seasons. Concord juice soluble solids on 8/23/2010 at the Cornell Lake Erie Research and Extension Laboratory averaged 12.1 Brix.



FRUIT MATURATION REPORT - 8/27/2010

Samples reported here were collected on **Monday, August 23, 2010**. Where appropriate, sample data from 2009, averaged over all sites is included. Tables from 2009 are archived at www.cals.cornell.edu/cals/grapesandwine/veraison-to-harvest/2009.cfm

For 2010, we are reporting not only berry weight, brix, titratable acidity and pH, but also yeast assimilable nitrogen (YAN), as part of a joint project with Anna Katharine Mansfield and Lailiang Cheng. Graduate student Mark Nisbit is running the YAN assays as part of his Ph D project, and Rebecca Nelson is completing the other analyses. Look for a complete description of the YAN prediction project in a future issue of *Veraison to Harvest*. - TEM

Cabernet Franc

Region	Harvest Date	Description	Ber. Wt. g.	% Brix	pH	TA g/L	YAN (ppm)
Finger Lakes	8/23/2010	W Seneca	1.38	16.5	3.42	8.7	43
	8/23/2010	E Seneca	1.34	13.8	3.13	13.6	15
	8/23/2010	W Cayuga					
	8/23/2010	E Seneca	1.43	13.8	3.23	12.9	29
	8/23/2010	W Cayuga	1.39	13.4	3.11	16.6	75
Hudson Valley	8/23/2010	HV Lab	1.35	16.7	3.43	8.4	94
Lake Erie	8/23/2010	Fredonia	1.38	15.7	3.23	12.4	34
Long Island	8/23/2010	N Fork	1.62	15.5	3.39	10.4	79
<i>Average</i>	<i>8/23/2010</i>		<i>1.41</i>	<i>15.1</i>	<i>3.28</i>	<i>11.8</i>	<i>53</i>
<i>'09 Average</i>	<i>8/31/2009</i>		<i>1.27</i>	<i>11.3</i>	<i>2.98</i>	<i>24.4</i>	

Cabernet Sauvignon

Region	Harvest Date	Description	Ber. Wt. g.	% Brix	pH	TA g/L	YAN (ppm)
Lake Erie	8/23/2010	Fredonia	1.24	16.9	3.22	13.9	126

Catawba

Region	Harvest Date	Description	Ber. Wt. g.	% Brix	pH	TA g/L	YAN (ppm)
Finger Lakes	8/23/2010	W Cayuga	2.02	9.8	2.94	28.0	147
<i>'09 Sample</i>	<i>8/31/2009</i>	<i>Cayuga Lake</i>	<i>2.34</i>	<i>7.0</i>	<i>2.88</i>	<i>36.6</i>	

Cayuga White

Region	Harvest Date	Description	Ber. Wt. g.	% Brix	pH	TA g/L	YAN (ppm)
Finger Lakes	8/23/2010	W Keuka	2.85	13.5	3.17	15.1	172
	8/23/2010	W Cayuga	2.85	16.0	3.43	9.1	284
<i>Average</i>	<i>8/23/2010</i>		<i>2.85</i>	<i>14.8</i>	<i>3.30</i>	<i>12.1</i>	<i>228</i>
<i>'09 Sample</i>	<i>8/31/2009</i>		<i>2.40</i>	<i>10.4</i>	<i>2.99</i>	<i>19.8</i>	

Chardonnay

Region	Harvest Date	Description	Ber. Wt. g.	% Brix	pH	TA g/L	YAN (ppm)
Finger Lakes	8/23/2010	W Seneca - Shoot Th	1.62	15.6	3.28	13.0	218
	8/23/2010	W Seneca - No Thin	1.52	14.8	3.25	13.8	194
	8/23/2010	W Cayuga	1.37	14.8	3.17	14.4	170
Hudson Valley	8/23/2010	HV Lab	1.31	20.5	3.64	6.9	214
Long Island	8/23/2010	N Fork	1.50	17.1	3.48	9.2	277
	8/23/2010	N Fork	1.46	18.2	3.54	7.6	178
<i>Average</i>	<i>8/23/2010</i>		<i>1.46</i>	<i>16.8</i>	<i>3.39</i>	<i>10.8</i>	<i>208</i>
<i>'09 Average</i>	<i>8/31/2009</i>		<i>1.43</i>	<i>12.2</i>	<i>3.08</i>	<i>19.4</i>	

Concord

Region	Harvest Date	Description	Ber. Wt. g.	% Brix	pH	TA g/L	YAN (ppm)
Finger Lakes	8/23/2010	W Keuka	2.59	9.8	3.13	18.3	150
<i>'09 Sample</i>	<i>8/31/2009</i>	<i>Cayuga Lake</i>	<i>2.81</i>	<i>7.5</i>	<i>2.84</i>	<i>26.7</i>	

Corot Noir

Region	Harvest Date	Description	Ber. Wt. g.	% Brix	pH	TA g/L	YAN (ppm)
Finger Lakes	8/23/2010	W Cayuga	2.11	13.5	3.27	12.9	135
<i>Average</i>	<i>8/31/2009</i>		<i>1.67</i>	<i>9.6</i>	<i>2.98</i>	<i>24.4</i>	

Delaware

Region	Harvest Date	Description	Ber. Wt. g.	% Brix	pH	TA g/L	YAN (ppm)
Lake Erie	8/23/2010	Portland Lab	1.43	15.9	3.28	13.5	143

Lemberger

Region	Harvest Date	Description	Ber. Wt. g.	% Brix	pH	TA g/L	YAN (ppm)
Finger Lakes	8/23/2010	W Seneca	1.86	17.5	3.18	12.0	61

Leon Millot

Region	Harvest Date	Description	Ber. Wt. g.	% Brix	pH	TA g/L	YAN (ppm)
Finger Lakes	8/23/2010	W Keuka - Shoot Thin	0.92	23	3.29	15.1	136
	8/23/2010	W Keuka - No Thin	0.86	22.8	3.28	14.2	76
<i>Average</i>	<i>8/23/2010</i>		<i>0.89</i>	<i>22.9</i>	<i>3.29</i>	<i>14.7</i>	<i>106</i>
<i>'09 Average</i>	<i>8/31/2009</i>		<i>0.83</i>	<i>17.6</i>	<i>3.05</i>	<i>25.9</i>	

Merlot

Region	Harvest Date	Description	Ber. Wt. g.	% Brix	pH	TA g/L	YAN (ppm)
Hudson Valley	8/23/2010	HV Lab	1.33	17.1	3.57	7.4	133
Long Island	8/23/2010	N Fork	1.66	18.2	3.48	8.4	118
	8/23/2010	N Fork	1.78	15.2	3.34	12.1	156
<i>Average</i>	<i>8/23/2010</i>		<i>1.59</i>	<i>16.8</i>	<i>3.46</i>	<i>9.3</i>	<i>136</i>
<i>'09 Average</i>	<i>8/31/2009</i>		<i>1.88</i>	<i>12.0</i>	<i>3.13</i>	<i>17.1</i>	

Noiret

Region	Harvest Date	Description	Ber. Wt. g.	% Brix	pH	TA g/L	YAN (ppm)
Finger Lakes	8/23/2010	W Seneca	1.73	11.5	3.12	17.1	101
	8/23/2010	W Seneca	1.45	14.7	3.16	13.5	160
Hudson Valley	8/23/2010	HV Lab	1.53	18.8	3.53	7.8	202
	8/23/2010	W HV	1.36	15.2	3.18	16.5	118
Lake Erie	8/23/2010	Fredonia	1.46	16	3.24	12.8	121
<i>Average</i>	<i>8/23/2010</i>		<i>1.51</i>	<i>15.2</i>	<i>3.25</i>	<i>13.5</i>	<i>140</i>
<i>'09 Average</i>	<i>8/31/2009</i>		<i>1.55</i>	<i>11.4</i>	<i>3.01</i>	<i>21.2</i>	

Pinot Noir

Region	Harvest Date	Description	Ber. Wt. g.	% Brix	pH	TA g/L	YAN (ppm)
Finger Lakes	8/23/2010	W Seneca	1.39	17.0	3.40	10.0	153
Hudson Valley	8/23/2010	HV Lab	1.54	19.8	3.64	7.7	187
	8/23/2010	Hudson Valley	1.26	17.0	3.42	10.1	166
<i>Average</i>	<i>8/23/2010</i>		<i>1.40</i>	<i>17.9</i>	<i>3.49</i>	<i>9.3</i>	<i>169</i>
<i>'09 Average</i>	<i>8/31/2009</i>		<i>1.77</i>	<i>14.6</i>	<i>3.16</i>	<i>13.4</i>	

Riesling

Region	Harvest Date	Description	Ber. Wt. g.	% Brix	pH	TA g/L	YAN (ppm)
Finger Lakes	8/23/2010	W Seneca - LR, sht thin	1.23	14.2	3.13	15.8	50
	8/23/2010	W Seneca - no LR, no th	1.05	13.7	3.07	17.8	11
	8/23/2010	E Seneca	1.28	14.0	3.09	19.3	102
	8/23/2010	E Seneca-shoot thin	1.35	14.3	3.10	17.6	63
	8/23/2010	E Seneca - no thin	1.30	13.9	3.08	18.1	80
	8/23/2010	W Cayuga	1.22	11.5	3.05	21.1	200
	8/23/2010	W Cayuga	1.49	12.6	3.10	19.2	201
Hudson Valley	8/23/2010	HV Lab	1.49	16.4	3.36	9.5	150
Lake Erie	8/23/2010	Fredonia	1.35	14.7	3.14	14.0	92
Long Island	8/23/2010	N Fork	1.40	16.4	3.30	11.1	130
<i>Average</i>	<i>8/23/2010</i>		<i>1.32</i>	<i>14.2</i>	<i>3.14</i>	<i>16.3</i>	<i>108</i>
<i>'09 Average</i>	<i>8/31/2009</i>		<i>1.14</i>	<i>8.3</i>	<i>2.96</i>	<i>31.5</i>	

Sauvignon Blanc

Region	Harvest Date	Description	Ber. Wt. g.	% Brix	pH	TA g/L	YAN (ppm)
Long Island	8/23/2010	N Fork	1.73	16.9	3.39	11.8	188
'09 Sample	8/31/2009	S Side North Fork	1.50	10.2	2.92	29.3	

Seval Blanc

Region	Harvest Date	Description	Ber. Wt. g.	% Brix	pH	TA g/L	YAN (ppm)
Finger Lakes	8/23/2010	W Cayuga - clus, sh th	1.93	18	3.37	10.9	160
	8/23/2010	W Cayuga - no clus, no th	1.85	21	3.38	9.8	148
Hudson Valley	8/23/2010	HV Lab	1.31	15.5	3.41	7.7	113
	8/23/2010	W HV	1.41	14.4	3.26	10.6	154
<i>Average</i>	<i>8/23/2010</i>		<i>1.63</i>	<i>17.2</i>	<i>3.36</i>	<i>9.7</i>	<i>144</i>
<i>'09 Average</i>	<i>8/31/2009</i>		<i>1.94</i>	<i>14.3</i>	<i>3.15</i>	<i>12.4</i>	

Traminette

Region	Harvest Date	Description	Ber. Wt. g.	% Brix	pH	TA g/L	YAN (ppm)
Finger Lakes	8/23/2010	W Keuka - Shoot Thin	1.59	11.6	2.97	22.0	99
	8/23/2010	W Keuka - No Thin	1.51	11.1	3.00	22.1	88
Hudson Valley	8/23/2010	HV Lab	1.68	17.0	3.34	8.3	80
	8/23/2010	W HV	1.42	13.5	3.23	12.9	55
Lake Erie	8/23/2010	Fredonia	1.56	15.9	3.16	13.1	41
<i>Average</i>	<i>8/23/2010</i>		<i>1.55</i>	<i>13.8</i>	<i>3.14</i>	<i>15.7</i>	<i>73</i>
<i>'09 Average</i>	<i>8/31/2009</i>		<i>1.35</i>	<i>5.9</i>	<i>2.94</i>	<i>33.0</i>	

Vignoles

Region	Harvest Date	Description	Ber. Wt. g.	% Brix	pH	TA g/L	YAN (ppm)
Finger Lakes	8/23/2010	W Keuka-VSP, Shoot thin	1.56	16	3.10	19.4	217
	8/23/2010	W Keuka-VSP, No Thin	1.58	15.4	3.16	17.2	182
	8/23/2010	W K high cordon, sht thin	1.68	18.1	3.19	17.2	208
	8/23/2010	W K-high cordon, no thin	1.48	17.6	3.24	14.7	216
<i>Average</i>	<i>8/23/2010</i>		<i>1.58</i>	<i>16.8</i>	<i>3.17</i>	<i>17.1</i>	<i>206</i>
<i>'09 Average</i>	<i>8/31/2009</i>		<i>1.07</i>	<i>12.2</i>	<i>2.97</i>	<i>24.4</i>	



This newsletter was made possible with support from the New York Wine and Grape Foundation, the J. M. Kaplan Fund, and USDA Federal Formula funding through the Cornell and New York State Agricultural Experiment Stations.

Veraison to Harvest is a joint publication of:

Cornell Enology Extension Program

Statewide Viticulture Extension Program

Long Island Grape Program

Finger Lakes Grape Program

Lake Erie Regional Grape Program

Hudson Valley Regional Fruit Program

Copyright 2010 © Cornell University



Cornell University
Cooperative Extension

The information, including any advice or recommendations, contained herein is based upon the research and experience of Cornell Cooperative Extension personnel. While this information constitutes the best judgement/opinion of such personnel at the time issued, neither Cornell Cooperative Extension nor any representative thereof makes any representation or warranty, express or implied, of any particular result or application of such information, or regarding any product. Users of any product are encouraged to read and follow product-labeling instructions and check with the manufacturer or supplier for updated information. Nothing contained in this information should be interpreted as an endorsement expressed or implied of any particular product.