Veraison to Harvest

Statewide Vineyard Crop Development Update #8

October 17, 2014

Cornell University Cooperative Extension

Edited by Tim Martinson and Chris Gerling

Around New York...

Statewide *(Tim Martinson)*

Our number of sentinel vineyards is shrinking, as more get harvested. The five Chardonnay blocks, one merlot, a couple of Riesling, Corot noir, and one Traminette block dropped out this week.

For the major varieties that are left, Cabernet Franc gained 0.7 °Brix, and acids dropped by 1.0 g/l. For the three Concord blocks, soluble solids were steady at 16.6 °Brix, no change in acids. Merlot (two Long Island blocks left) gained 1.2 °Brix, and lost 0.7 g/l TA. Riesling gained a modest 0.4 °Brix, with a 0.4 g/l drop in TA.

The weather is holding steady, without serious killing frosts in any of the major production areas (but it came close). However, leaves are senescing, and with temperatures close to 50 ° F in the daytime, prospects for a lot of movement in the numbers are low, although flavors could continue to develop. Next week will be our final sample of the season.

Long Island (*Alice Wise and Libby Tarleton*)

Harvest continued in Long Island vineyards this week. Chardonnay harvest came to an end with Chardonnay in the research vineyard picked Oct. 13 & 14. Fruit was able to hang longer to allow for fully ripe, nuanced flavors. Fruit was reasonably clean with the exception of spots where bees and wasps had substantially damaged fruit. Botrytis started up on damaged fruit. Blocks of Merlot, Syrah and Cabernet Franc all came in this week, destined for both rose and table wine. We berry sampled a research trial in a commercial Merlot block. Brix ranged from 22.5-23 and TA's averaged 5.5-5.8. Most businesses are still hanging reds. Given that fruit is fairly ripe, harvest of these blocks will start in the coming days.

Absent this season were large flocks of starlings and pesky finches. While a lack of bird damage means one less thing to worry about, bird populations have been smaller the last few seasons. The increased use of fine mesh side netting might be one factor. This type of netting is more expensive than traditional over the row net and requires more work to close up the top and bottom. But in high pressure blocks the effectiveness of this system pays for itself after a few seasons. It also discourages feeding from raccoons and opossums.

October 16. *Vineyards around the Finger Lakes are starting the gradual process of entering dormancy. Riesling (top) and Cabernet Franc (bottom) vineyards on scott henry training system on the east side of Seneca Lake.*

photos by Tim Martinson

Finger Lakes (*Hans Walter-Peterson*).

The Finger Lakes is well into the heart of the harvest season by now. Each year, there seems to be about a 10-14 day window of time when some of everything is being picked, and it seems like we're in the middle of that right now. There are still a little bit of earlier varieties like Chardonnay and Pinot being picked this week, and at the same time there is everything from Riesling to Corot noir to Concord to Cabernet Franc making their way to the crush pad. Riesling harvest, in particular, has picked up over the past

More senescing grapevines in the Finger Lakes. As canopies start shutting down, gains in maturity won't be coming from vines' photosynthesic.

Photo by Hans Walter-Peterson

week. Fruit chemistry results, especially in Riesling, are behaving as we would generally expect in a cooler year like this one. Brix levels have been hovering around 20º for the most part, and acidity remains a bit higher than the same time last year.

The second frost advisory of the harvest season was issued for the Finger Lakes this past Sunday morning. A few of our weather stations recorded temperatures below the freezing mark that day, including Branchport (30.5°F), Dundee (29.9°F), Ithaca Orchards (30.0°), and Lodi-Standing Stone (31.3°). Driving around a few of these areas this week, it looks like some locations got cold enough to cause leaves to start to drop, or at least abscise to the point where gusty winds could take them off. Most canopies that are still supporting fruit on the vines are showing a fair bit of senescence at this stage as well. In many cases, it's likely that any real changes in fruit chemistry will be due more to dehydration from extended hang time than to any significant photosynthetic capacity.

Concord harvest continues to surprise growers in the Finger Lakes with the amount of fruit that is being harvested this year. We have even been hearing about crops being slightly higher this year than 2013 from a few growers, which hardly seemed possibly given the heavy crop last year. Fortunately, despite the large size, processors are happy with the quality of the crop with little concern about meeting minimum sugar standards.

Lake Erie (*Luke Haggerty)*

We have continued to see wet conditions in the Lake Erie region with more rain in the forecast. We had a frost scare on October 12th where temperatures dipped down to 30°F in the Silver creek and Sheridan areas. The extended forecast is calling for light rain next week. Rain or shine, there are still a lot of Concords out there and growers are trying to bring in as many loads as the processors will let them deliver.

Next week we will harvest Riesling here at the Lake Erie Research and Extension Laboratory, the last of our wine grapes on site. Over the past week many of the vineyards transitioned from full green canopies to thin yellow canopies signaling the vines are beginning to shut down. As vines drop their leaves we get a good look at how the canes matured or hardened off. Most of the area's Concords have dark canes with long internodes leaving multiple options for pruners this coming winter.

Hudson Valley (*Jim O'Connell))*

Seasonal temperatures earlier this week gave way to a couple days of unseasonably warmer temperatures. Although we received less than ¼" of rainfall this week, it was enough to delay harvest on some mornings. Cooler more seasonal weather, along with more rain will follow for the weekend and into next week.

At the Hudson Valley Lab this week, we harvested Chelois and Noiret grapes. Cabernet sauvignon, Riesling, and Vidal blanc continue to hang and develop sugars and flavor. The story is similar for much of the Lower Hudson Valley. The harvest of early and mid-season varieties is over, now the wait is on for the late season varieties to mature.

2014 Lake Erie Concord Update:

Terry Bates

The final Lake Erie berry growth curve was posted in last week's issue. Thanks to Terry for compiling and posting this information from his research vineyards each week. - *TEM*

Harvest crew (L to R) Mike Colizzi, Steve Lerch, Pete Legrow, and Bill Wilsey

photo by Tim Martinson

Table 1. Yield, Cluster number and Cluster weight of Marquette and Frontenac at Clayton, NY in 2013 and 2014.

	2014				2013		
	Yield (lb/vine)	Clusters per vine	Cluster Wt (g)	No. Missing Vines	Yield (lb/vine)	Clusters per vine	Cluster Wt (g)
Marquette							
TWC	9.9	47	96	13	13.8	83.5	75
Umbrella	7.7	43	81	11	7.4	69.4	48
VSP	***	12	***	4	16.1	101.3	72
Frontenac							
TWC	1.8	13	63	0	14.8	64.8	104
Umbrella	1.1	8	62	0	12.9	57.2	102
VSP	0.4	4	45	0	15.9	64.4	112

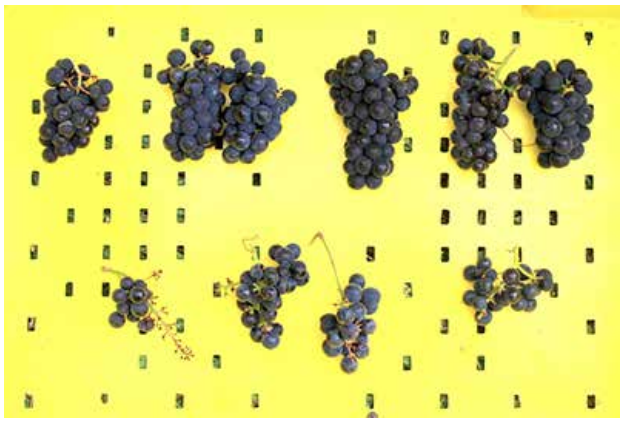
Marquette and Frontenac Plots Harvested at Clayton

Tim Martinson and Chrislyn Particka

October 9. We went up to Clayton, NY to harvest our training trials in Marquette and Frontenac. Last year it took a crew of 8 two full days. This year, six of us finished in a little over three hours. Last year's harvest was on September 27.

Preliminary results (Table 1). On vines without trunk injury (foliage and fruit green), yields were about 70% of (TWC) or equal (Umbrella) to 2013 yields. We were unable to harvest the VSP treatment, because turkeys harvested the grapes. However, many of the vines (13 of 24, TWC; 11 of 24; Umbrella) had suffered trunk injury and were collapsed.

Clusters were about 20% smaller in the TWC and Umbrella treatments than last year's clusters. The Frontenac, on the other hand, had very few clusters per vine (4 to 13), and low crop weight per vine. However, they didn't suffer trunk injury and vine collapse, as did the Marquette.



Left: Frontenac (l) and Marquette (r) clusters were smaller in 2014.

Above: On the Marquette VSP, turkeys harvested the grapes before we could.

Lower: Representative clusters from Top Wire Cordon (t) and the few VSP clusters (b) that the turkeys didn't get.

photo by Tim Martinson

Fruit Maturation Report - 10/14/2014

Samples reported here were collected on **Tuesday, October 14.** Where appropriate, sample data from 2013, averaged over all sites is included. Tables from 2013 are archived at http://grapesandwine.cals.cornell.edu/newsletters/veraison-harvest

We are again reporting berry weight, brix, titratable acidity and pH, and yeast assimilable nitrogen (YAN). Graduate students Alex Frederickson and Camila Martin Tahim and Ben Gavitt are running the fruit composition and YAN assays.

Cabernet Franc

Region	Harvest Date	Description	Ber. Wt. g.	% Brix	pH	TA g/L	YAN (ppm)
Finger Lakes	10/14/2014	E. Seneca	1.57	22.4	3.14	8.2	84
Finger Lakes	10/14/2014	W. Seneca	1.54	21.1	3.12	8.4	30
Finger Lakes	10/14/2014	Cayuga	1.68	22.1	3.36	6.2	59
Finger Lakes	10/14/2014	HARVESTED					
Finger Lakes	10/14/2014	Teaching Vyd	1.51	22.7	3.34	5.6	71
Hudson Valley	10/14/2014	HARVESTED					
Long Island	10/14/2014	LI-05	2.12	21.5	3.47	6.0	33
Long Island	10/14/2014	LI-07	1.57	19.5	3.23	7.7	26
Average	**10/14/2014**		**1.67**	**21.6**	**3.28**	**7.0**	**51**
Prev. Sample	10/7/2014		1.78	20.9	3.25	7.1	40
'13 Average	10/14/2013		1.62	21.3	3.36	6.2	95

Catawba

Region	Harvest Date	Description	Ber. Wt. g.	% Brix	pH	TA g/L	YAN (ppm)
Finger Lakes	10/14/2014	Keuka	2.95	17.6	2.83	16.8	116
Prev Sample	10/7/2014	Keuka	3.02	17.1	2.90	17.5	101
'13 Sample	10/14/2013	Keuka	2.33	18.1	3.00	11.1	60

Cayuga White

Region	Harvest Date	Description	Ber. Wt. g.	% Brix	pH	TA g/L	YAN (ppm)
Finger Lakes	9/30/2014	HARVESTED					
Finger Lakes	9/30/2014	HARVESTED					
Finger Lakes	9/30/2014	HARVESTED					
Final Sample							
Prev Sample	9/30/2014		2.86	18.7	3.03	10.2	143
'13 at Harvest	9/16/2013		2.82	18.5	3.05	9.0	170

Chardonnay

Region	Harvest Date	Description	Ber. Wt. g.	% Brix	pH	TA g/L	YAN (ppm)
Finger Lakes	10/14/2014	HARVESTED					
Finger Lakes	10/7/2014	HARVESTED					
Finger Lakes	10/7/2014	HARVESTED					
Finger Lakes	10/7/2014	HARVESTED					
Long Island	10/14/2014	HARVESTED					
Final Sample	**10/7/2014**		**1.86**	**20.3**	**3.20**	**8.4**	**87**
'13 at Harvest	9/30/2013		1.61	20.4	3.35	7.4	135

Concord

Region	Harvest Date	Description	Ber. Wt. g.	% Brix	pH	TA g/L	YAN (ppm)
Finger Lakes	10/14/2014	Keuka	3.70	16.6	3.13	10.1	178
Finger Lakes	10/14/2014	W. Canandaigua	3.59	16.4	3.21	9.6	189
Lake Erie	10/14/2014	Portland	3.54	16.3	3.25	8.1	241
Average	**10/14/2014**		**3.61**	**16.4**	**3.20**	**9.2**	**203**
Prev Sample	10/7/2014		3.64	16.7	3.24	8.73	163
'13 Sample	10/14/2013		3.05	17.2	3.33	6.7	207

Corot Noir

Region	Harvest Date	Description	Ber. Wt. g.	% Brix	pH	TA g/L	YAN (ppm)
Finger Lakes	10/7/2014	HARVESTED					
Final Sample	9/30/2014	Teaching Vyd	2.34	18.2	3.22	7.9	73

Gruner Veltliner

Region	Harvest Date	Description	Ber. Wt. g.	% Brix	pH	TA g/L	YAN (ppm)
Finger Lakes		HARVESTED					
Final Sample	9/16/2014	Teaching Vyd	1.63	18.0	3.20	6.8	139

Lemberger

Region	Harvest Date	Description	Ber. Wt. g.	% Brix	pH	TA g/L	YAN (ppm)
Finger Lakes	10/14/2014	Keuka	2.00	23.0	3.18	7.0	45
Finger Lakes	10/14/2014	HARVESTED					
Average	**10/14/2014**		**2.00**	**23.0**	**3.18**	**7.0**	**45**
Prev. Average	10/7/2014		1.92	22.5	3.11	7.8	26
'13 Sample	10/14/2013	Keuka	1.84	23.3	3.21	5.8	93

Malbec

Region	Harvest Date	Description	Ber. Wt. g.	% Brix	pH	TA g/L	YAN (ppm)
Long Island	10/14/2014	LI-06	2.77	22.0	3.49	5.4	52
Prev Sample	10/7/2014	LI-06	2.69	21.0	3.54	6.0	47
'13 Sample	10/14/2013	LI-06	2.43	22.7	3.68	6.1	176

Marquette

Region	Harvest Date	Description	Ber. Wt. g.	% Brix	pH	TA g/L	YAN (ppm)
Final Sample	9/2/2014	Teaching Vyd	1.09	22.7	2.98	12.9	

Merlot

Region	Harvest Date	Description	Ber. Wt. g.	% Brix	pH	TA g/L	YAN (ppm)
Hudson Valley	10/14/2014	HARVESTED					
Long Island	10/14/2014	LI-04	2.36	22.3	3.49	4.7	53
Long Island	10/14/2014	LI-08	1.64	20.7	3.38	5.3	39
Average	**10/14/2014**		**2.00**	**21.5**	**3.44**	**5.0**	**46**
Prev. Average	10/7/2014		2.03	20.3	3.55	5.7	66
'13 Average	10/14/2013		1.88	22.4	3.79	4.2	104

Niagara

Region	Harvest Date	Description	Ber. Wt. g.	% Brix	pH	TA g/L	YAN (ppm)
Lake Erie	9/30/2014	HARVESTED					
Final Sample	9/23/2014	Portland	4.40	15.1	3.21	6.6	172
'13 Final Sample	9/23/2013	Portland	4.01	14.8	3.28	6.8	335

Noiret

Region	Harvest Date	Description	Ber. Wt. g.	% Brix	pH	TA g/L	YAN (ppm)
Hudson Valley	10/14/2014	HV Lab	1.93	19.7	3.35	6.7	124
Lake Erie	10/14/2014	Fredonia	1.99	16.7	3.27	9.3	253
Average	**10/14/2014**		**1.96**	**18.2**	**3.31**	**8.0**	**188**
Prev Sample	**10/7/2014**		**2.03**	**19.3**	**3.31**	**9.3**	**142**
'13 Sample	10/14/2013	HVL	1.56	18.2	3.51	7.0	271

Pinot Noir

Region	Harvest Date	Description	Ber. Wt. g.	% Brix	pH	TA g/L	YAN (ppm)
Finger Lakes	9/30/2014	HARVESTED					
Prev Sample	9/23/2014	E. Seneca	1.39	20.5	3.12	8.9	88
'13 at Harvest	9/23/2013	E. Seneca	1.58	20.6	3.13	8.0	94

Riesling

Region	Harvest Date	Description	Ber. Wt. g.	% Brix	pH	TA g/L	YAN (ppm)
Finger Lakes	10/14/2014	E. Seneca	1.61	20.2	3.03	10.0	72
Finger Lakes	10/14/2014	E. Seneca	1.78	19.5	3.05	9.1	74
Finger Lakes	10/14/2014	W. Seneca	1.35	20.0	3.03	10.7	69
Finger Lakes	10/14/2014	HARVESTED					
Finger Lakes	10/14/2014	CL 90 Cayuga	1.71	19.7	3.15	9.3	109
Finger Lakes	10/14/2014	Keuka	1.40	19.5	3.07	9.1	73
Finger Lakes	10/14/2014	HARVESTED					
Finger Lakes	10/14/2014	W. Seneca	1.80	19.1	3.06	10.3	92
Finger Lakes	10/14/2014	W. Canandaigua	1.70	18.8	3.04	11.4	131
Finger Lakes	10/14/2014	Teaching Vyd	1.46	18.4	3.06	8.4	74
Hudson Valley	10/14/2014	HV Lab	1.89	18.4	3.30	5.9	93
Lake Erie	10/14/2014	Portland	1.70	18.9	3.18	8.7	148
Long Island	10/14/2014	HARVESTED					
Average	**10/14/2014**		**1.64**	**19.3**	**3.10**	**9.3**	**93**
Prev Sample	10/7/2014		1.78	18.9	3.09	9.7	88
'13 Sample	10/14/2013		1.59	17.8	3.17	8.0	141

Sauvignon Blanc

Region	Harvest Date	Description	Ber. Wt. g.	% Brix	pH	TA g/L	YAN (ppm)
Long Island		HARVESTED					
Final Sample	9/16/2014	LI-02	1.44	19.5	3.16	7.5	63
'13 at Harvest	9/9/2013	LI-02	1.23	22.1	3.23	8.1	141

Seyval Blanc

Region	Harvest Date	Description	Ber. Wt. g.	% Brix	pH	TA g/L	YAN (ppm)
Final Sample	9/9/2014	HARVESTED	1.82	18.2	3.04	9.0	148
'13 at Harvest	9/9/2013	Cayuga	1.77	19.9	3.22	6.4	126

Traminette

Region	Harvest Date	Description	Ber. Wt. g.	% Brix	pH	TA g/L	YAN (ppm)
Finger Lakes	10/14/2014	Keuka	2.04	20.4	2.98	10.7	148
Hudson Valley	10/14/2014	HARVESTED					
Lake Erie	10/14/2014	Portland	1.90	23.1	3.16	9.0	224
Average	**10/14/2014**		**1.97**	**21.8**	**3.07**	**9.8**	**186**
Prev Sample	10/7/2014		2.13	21.1	3.15	9.2	145
'13 Sample	10/14/2013	Keuka	1.94	23.2	3.01	9.2	121

Vidal Blanc

Region	Harvest Date	Description	Ber. Wt. g.	% Brix	pH	TA g/L	YAN (ppm)
Finger Lakes	10/14/2014	Teaching Vyd	2.05	24.1	3.28	8.7	94
Prev Sample	10/7/2014	Teaching Vyd	2.15	22.8	3.27	8.5	85

Vignoles

Region	Harvest Date	Description	Ber. Wt. g.	% Brix	pH	TA g/L	YAN (ppm)
Finger Lakes	10/7/2014	HARVESTED					
Finger Lakes	10/7/2014	HARVESTED					
Final Sample	9/30/2014		1.88	22.6	2.97	16.1	207
'13 at Harvest	9/30/2013	W. Seneca	1.67	23.9	3.16	12.9	179

Zweigelt

Region	Harvest Date	Description	Ber. Wt. g.	% Brix	pH	TA g/L	YAN (ppm)
Final Sample	9/16/2014	Teaching Vyd	1.82	17.0	3.17	7.3	149

This newsletter was made possible with support from the New York Wine and Grape Foundation, the J. M. Kaplan Fund, and the New York State Agricultural Experiment Station Director's Endowment.

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

Eastern New York Regional Horticulture Program