

# VERAISON TO HARVEST

Statewide Vineyard Crop Development Update #4

September 28, 2007



Cornell University  
Cooperative Extension

## Around New York...

### STATEWIDE - *TIM MARTINSON*

Harvest is in full swing, and despite rain over the past few days, weather trends look stable and favorable for continued ripening, with little additional rain and cooler (but not freezing) temperatures. If we continue to get more heat and sunshine through October, late varieties (and particularly Bordeaux reds) should have excellent ripeness, perhaps akin to the 2001 vintage. With little disease pressure to date, growers should not be forced into early harvest for the most part.

Our samples this week gained 1-1.7 °Brix, and titratable acidity (TA) dropped by 0.4 to 1.3 g/L. With the Riesling and Cab Franc (for which there are '06 numbers for comparison), sugars are well above last year's numbers, and acids are only about 1 g/l lower than last year - that is, they are moving into range, but not excessively low. With cooler weather forecast for next week, we should see the changes in these numbers slow somewhat in coming weeks. Remember - even if your numbers are in 'harvesting range', be sure to taste the fruit for presence of ripe flavors and absence of 'green', unripe flavors.

-TEM

### FINGER LAKES-*HANS WALTER PETERSON*

Harvest activity has really picked up in the region over the past week. Major juice and bulk wine processors started harvesting Concords, early Catawbas and ripe Elviras at the end of last week and this week. Much of the region's Cayuga White and Seyval Blanc crops were brought in this week as well. This week also saw many wineries start to harvest some /vinifera /varieties in earnest, particularly Pinot Gris, Pinot Noir, Gewurztraminer and Chardonnay. Later season varieties, such as Riesling, Cabernet Franc and Lemberger will probably be left to hang for another couple of weeks, although we have heard that some early blocks of Cabernet Franc and Merlot might be harvested at the end of this week. // While TA readings are still a bit low in relation to Brix levels in many cases, winemakers and processors are quite happy with the overall quality of



Table grape grower Bruce Giles, whose vineyard is located in Niagara County, removes bird netting from his seedless grapes. Photo by Tim Weigle

the fruit that they are bringing in.

Canopies and fruit quality in most areas of the Finger Lakes appear to be very good, thanks in large part to the 2.5" of rain that has fallen over most of the region in September. In a few localized areas, however, a combination of low rainfall and above average temperatures this season, along with shallow soils in some spots, are resulting in drought stress that has been severe enough to have a significant impact on vine and leaf function. In addition to impacts on fruit quality and productivity in these vineyards this year, stress to this extent also raises concerns about the vines' level of cold hardiness going into the winter.

### LONG ISLAND - *ALICE WISE*

The unprecedented warm dry weather continued this week on Long Island. Growing degree day accumulations in 07 (2948 as of Sept. 23) are lower than 05 (3102) and similar to 06 (2942). However, with the relatively cool nights this month, we are likely accumulating more heat during the day compared to 06. Only two days of rain in September: 0.9" on Sept. 11 and 0.5" on Sept. 15. Though some variation from farm to farm, blocks of Pinot Gris, Sauvignon Blanc and some Chardonnay were harvested this week. The bulk of the Chardonnay harvest will start next week and the week after. Growers report whites have high sugars and acids that balance nicely with intense flavors. There is great hope for this vintage for both whites and reds, particularly if the weather continues to be favorable.

**LAKE ERIE AND NIAGARA ESCARPMENT- TIM WEIGLE**

Approximately two inches of rainfall across both areas in the past week brought welcome relief to water stressed vineyards. Record high temperatures earlier in the week were followed by a cold front and thunderstorms moving through both areas, bringing relief to water stressed vineyards in the way of cooler temperatures. Over the past week both areas have received approximately two-inches of rainfall, almost half the average totals for the month of September.

Wine grape harvest is fully underway. Pinot noir harvest has started in the Niagara Escarpment and Traminette and Noiret were harvested from the wine block at the Fredonia Vineyard Lab. This harvest season has been excellent so far for wine grape varieties with no problems with any of the components of quality being reported. Niagara harvest for juice wrapped up at the end of last week for the major processors in the Lake Erie region with what many stated was an excellent quality crop. Niagara harvest was followed almost immediately with the first load of Concord grapes destined for juice and wine at the major processors. As one processor put it, the harvest is currently 'sweeter and smaller' as vineyards with lower crop sizes are having little difficulty producing Brix levels well above the minimum processor requirements. However, vineyards with higher/excessive crop loads, particularly those that have been minimally pruned, show poor weed management, and/or are on sites which have accentuated the water stress of the season, are showing smaller than average berry size, and are having difficulty with sugar accumulation. Overall, the 2007 harvest season continues to be 'above average' in terms of the ability to produce a quality grape crop for all varieties.

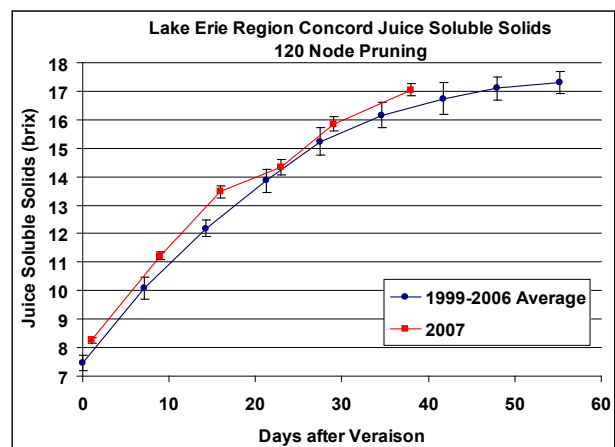
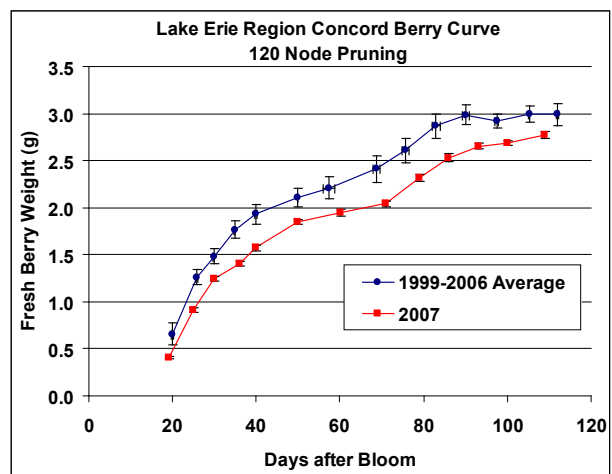
**HUDSON VALLEY - STEVE MCKAY AND STEVE HOY-ING**

The past week's unusually warm weather without rainfall has hastened an already early harvest as grapes continue to advance in maturity. Berry size and acidity has fallen while soluble solids and pH has risen. Harvest will be completed in many Hudson Valley blocks of Chardonnay and white hybrids by this weekend. The red varieties continue to advance nicely in maturity toward an expected early harvest.

**CONCORD RIPENING PROFILE AT FREDONIA - SEPTEMBER 28**

*Terry Bates, Cornell Vineyard Laboratory*

Terry Bates and the Vineyard Laboratory crew had a busy week of harvest this past week. Here is the Concord Berry Growth Curve from the 120 fixed-node treatment in a block at the new Portland laboratory. Results from this week continue to show leveling-off in berry weight, along with a steady increase in juice soluble solids, which added 1° Brix this week, and are around 17. Small berries, ripe crop. Concord harvest is in full swing.



## DROUGHT STRESS MEANS SOME POTENTIAL FOR ATA IN 2007

*Timothy E. Martinson, Ben Gavitt  
Adapted from material by T. Henick-Kling  
Additional comments from Ramon Mira de Orduña and  
Gavin Sacks*

In much of NY and the Eastern US, it's been a very dry year. In Geneva, July and August showed 1.2 and 1.4 in measurable precipitation, well below the average 3 in. monthly - and about half of what the southern part of the Finger Lakes got during those months. Heavy rainfall on September 9, and again last night (Sept 26) has eased the drought.

This has made for clean, disease-free fruit, but also raises the possibility of developing Atypical Aging (ATA) in wines this year. Many vineyards have had visible signs of drought stress this summer - resulting from that mid-July through end of August and into September drought period. I've seen vineyards with modest growth, yellowing basal leaves, and drought-related leaf burns. Along with an average to good-sized crop, this signifies a sizable dose of crop and drought-related vine stress in the 5-7 weeks around veraison in unirrigated vineyards, conditions which often lead to ATA off-flavors in white wines.

**ATA flavors.** Wines with ATA potential may taste fine after fermentation and before bottling, but after a varying amount of time (6 mo to 2 yr) in the bottle may develop flavors described as: damp dishrag, furniture varnish, and 'linden blossom' (or acacia). Moreover, the wines lose varietal characters and aromas. My own personal touchpoint for wines showing ATA is that they taste 'flat', and often there are waxy flavors and aromas. Intensity of this defect ranges from barely noticeable to severe. Please note that this isn't a peculiar malady limited to New York or the Finger Lakes. It was first described in Germany and Austria, and has been noted in wines from Washington, OR, and California as well as the northeast.

**Causes.** Exact causes and chemistry behind ATA are not well understood. But the symptoms are particularly correlated to droughty years, and



*Drought-stress has affected parts of the Finger Lakes, including this block of Riesling. Photo by H. Walter Peterson.*

drought-related stress. They are also more prevalent in fruit that is harvested before full ripeness. In some years (like last year), sugars and acids may not be changing much, but flavors will continue to develop in late-maturing grapes such as Riesling. You are much less likely to get strong ATA flavors if the berry and flavor development is complete.

In an experiment we conducted in 2001-2003, irrigation reduced and delayed appearance of ATA-like flavors in wines in our two drought years (2001 and 2002). In those years, we also measured leaf photosynthesis and water potential weekly from several weeks before and several weeks after veraison. What we found was a 5-7 week period around and after veraison when leaves were so waterstressed that photosynthesis was essentially shut down in the middle of the day. This translated to a 4 degree brix difference in sugars at harvest, compared to irrigated vines without water stress.

The question I would ask as a grower (or winery) is this: Can I really afford to have vines with leaves not functioning for 5-7 weeks around veraison? This season has provided moderate water stress after bloom, resulting in smaller berry size and less shoot growth. This is good for reds. But the severe water stress later in the season does not contribute to increased wine quality. Irrigation (and other ways of managing water relations), in my opinion, will be increasingly important in the future.

*Continued on Page 7*

## FRUIT MATURATION REPORT

Samples reported were collected on **Monday, September 24**. The next samples will be collected on **Monday, Oct 1**. Where appropriate, sample data from 2006, averaged over all sites (mostly Finger Lakes), is included. Fruit maturation data from 2006 is posted at: September 25: <http://www.nysaes.cornell.edu/fst/faculty/henick/pdf/Ripening%20Progress%2006R5.pdf>

### *Cabernet Franc*

Location	Collection	Sample ID	Location	Berry Wt g	% Brix	pH	g/L TA	g/L Tartaric Acid	g/L Malic Acid	g/L Acetic Acid
Finger Lakes	09/24/07	FL-7-CF	Cayuga Lake W	1.61	19.3	3.17	9.7	5.3	3.5	0.12
Finger Lakes	09/24/07	FL-8-CF	Seneca Lake E	1.40	18.5	3.18	9.1	5.3	3.2	0.05
Finger Lakes	09/24/07	FL-9-CF	Seneca Lake W	1.65	18.9	3.12	9.4	5.3	2.9	0.11
Finger Lakes	09/24/07	FL-10-CF	Seneca Lake W	1.53	18.8	3.06	9.8	4.9	3.5	0.11
Finger Lakes	09/24/07	FL-11-CF	Seneca Lake W	1.31	18.7	3.10	9.4	5.7	2.6	0.16
Finger Lakes	09/24/07	FL-12-CF	Seneca Lake W	1.07	18.4	3.41	7.5	5.0	2.5	0.04
Hudson Valley	09/24/07	HV-CF-2	E of Hudson River	1.72	18.8	3.17	10.4	4.9	4.1	0.06
Hudson Valley	09/24/07	HV-CF-3	W of Hudson River	1.16	20.2	3.21	9.1	4.9	3.1	0.09
Lake Erie	09/24/07	LE-CF-9	Fredonia Vin Lab	na	21.6	3.23	8.9	4.7	2.7	0.22
Long Island	09/24/07	LI-CF-4	Aquebogue LI	1.66	19.4	3.40	8.7	3.7	4.4	0.11
Long Island	09/24/07	LI-CF-7	Aquebogue LI	1.74	21.3	3.25	9.7	4.8	3.7	0.15
Average				1.49	19.4	3.21	9.2	5.0	3.3	0.11
9/17 Average	09/17/07			1.48	17.7	3.10	10.1	5.1	3.8	0.08
9/10 Ave	9/10/07			1.38	16.8	3.07	11.3	5.8	4.4	0.04
8/27 Ave	8/27/07			1.11	11.7	2.73	23.6	8.6	11.4	0.1
<b>'06 Average</b>	<b>9/25/06</b>	<b>FL</b>	<b>Finger Lakes</b>	1.66	17.8	3.13	11.0	4.4	5.8	0.10

### *Riesling*

Location	Collection	Sample ID	Location	Berry Wt g	% Brix	pH	g/L TA	g/L Tartaric Acid	g/L Malic Acid	g/L Acetic Acid
Finger Lakes	09/24/07	FL-1-R-239	Cayuga Lake W	1.16	18.1	2.95	10.8	6.5	2.8	0.03
Finger Lakes	09/24/07	FL-2-R-90	Cayuga Lake W	0.94	18.5	3.02	10.7	6.4	2.9	0.06
Finger Lakes	09/24/07	FL-3-R-90	Seneca Lake E	1.49	19.7	2.99	11.4	6.3	3.5	0.11
Finger Lakes	09/24/07	FL-4-R-239	Seneca Lake E	1.48	19.2	2.99	11.6	6.2	3.9	0.07
Finger Lakes	09/24/07	FL-5-R-239	Seneca Lake E	1.29	18.8	2.96	11.1	6.5	3.1	0.05
Finger Lakes	09/24/07	FL-6-R-90	Seneca Lake E	1.44	18.0	2.94	11.9	6.6	3.9	0.00
Hudson Valley	09/24/07	HV-R-4	E of Hudson River	1.94	21.4	3.16	11.4	5.7	4.1	0.18
Lake Erie	09/24/07	High pH	Fredonia Vin Lab	na	17.9	2.92	11.6	6.9	2.9	0.09
Lake Erie	09/24/07	Low pH	Fredonia Vin Lab	na	19.0	2.92	11.4	6.7	2.6	0.15
Long Island	09/24/07	LI-R-3	Aquebogue LI	1.45	16.6	3.07	11.4	6.2	4.1	0.00
Long Island	09/24/07	LI-R-6	Aquebogue LI	1.57	17.7	3.06	11.1	6.3	3.7	0.00
<b>Average 09/24/07</b>				<b>1.42</b>	<b>18.6</b>	<b>3.00</b>	<b>11.3</b>	<b>6.4</b>	<b>3.4</b>	<b>0.07</b>
9/17 Average	09/17/07			1.36	17.5	2.94	12.3	6.6	4.2	0.03
9/10 Average	9/10/07			1.37	16.7	2.93	13.1	7.0	4.7	0.02
8/27 Average	8/27/07			1.14	12.4	2.73	23.4	9.3	11.0	0.07
<b>06 Average</b>	<b>9/25/06</b>		<b>Finger Lakes</b>	<b>1.71</b>	<b>17.2</b>	<b>2.93</b>	<b>12.7</b>	<b>4.9</b>	<b>6.0</b>	<b>0.18</b>

Lemberger

Location	Collection	Sample ID	Location	Berry Wt g	% Brix	pH	g/L TA	g/L Tartaric Acid	g/L Malic Acid	g/L Acetic Acid
Finger Lakes	09/24/07	Lemberger	FL-13-Lem	1.95	19.8	3.06	10.5	5.8	3.5	0.09
Finger Lakes	09/24/07	Lemberger	FL-14-Lem	1.49	21.1	2.99	9.8	6.4	2.0	0.28
<b>Average</b>	<b>9/24/07</b>			<b>1.72</b>	<b>20.5</b>	<b>3.03</b>	<b>10.2</b>	<b>6.1</b>	<b>2.8</b>	<b>0.19</b>
9/17 Average	9/17/07			1.80	19.2	2.94	10.6	6.1	3.1	0.12
9/10 Average	09/10/07			1.67	18.2	2.95	11.1	6.4	3.2	0.13
8/27 Average	8/27/07			1.50	14.9	2.79	16.8	7.8	6.7	0.12
<b>06 Average</b>	<b>9/25/06</b>			<b>2.38</b>	<b>18.4</b>	<b>3.10</b>	<b>9.2</b>	<b>4.2</b>	<b>3.8</b>	<b>0.16</b>

Merlot

Location	Collection	Sample ID	Location	Berry Wt g	% Brix	pH	g/L TA	g/L Tartaric Acid	g/L Malic Acid	g/L Acetic Acid
Hudson Valley	09/24/07	HV-M-4	E of Hudson River	1.64	19.3	3.28	9.6	5.3	3.7	0.07
Long Island	09/24/07	LI-M-1	Cutchogue LI	1.67	21.6	3.60	6.7	3.5	3.2	0.21
Long Island	09/24/07	LI-M-2	Cutchogue LI	1.62	20.2	3.31	8.7	4.8	3.1	0.14
Long Island	09/24/07	LI-M-5	Aquebogue LI	1.87	21.4	3.30	8.5	4.8	2.9	0.17
Long Island	09/24/07	LI-M-8	LIHRC Riverhead	1.91	22.0	3.38	8.4	4.8	3.0	0.24
<b>Average</b>	<b>09/24/07</b>			<b>1.74</b>	<b>20.9</b>	<b>3.37</b>	<b>8.4</b>	<b>4.6</b>	<b>3.2</b>	<b>0.17</b>
9/17Average	09/17/07			1.71	20.0	3.33	8.6	4.7	3.6	0.12
9/10 Average	09/10/07			1.68	19.3	3.27	9.5	4.9	4.0	0.10
8/27 Average	8/27/07			1.55	14.2	2.89	16.3	6.7	7.6	0.06

Chardonnay

Location	Collection	Sample ID	Location	Berry Wt g	% Brix	pH	g/L TA	g/L Tartaric Acid	g/L Malic Acid	g/L Acetic Acid
Hudson Valley	09/24/07	HV-C-2	E of Hudson River	1.53	20.8	3.15	10.4	4.9	4.4	0.08
Hudson Valley	09/24/07	HV-C-3	W of Hudson River	1.47	21.4	3.25	9.1	4.4	3.7	0.10
Long Island	09/24/07	LI-CH-9	LIHRC Riverhead	1.77	21.6	3.35	9.9	4.6	4.6	0.18
<b>Average</b>	<b>09/24/07</b>			<b>1.59</b>	<b>21.3</b>	<b>3.25</b>	<b>9.8</b>	<b>4.6</b>	<b>4.2</b>	<b>0.12</b>
9/17Average	9/17/07			1.56	20.3	3.18	10.5	5.0	4.8	0.10
9/10 Average	09/10/07			1.59	19.8	3.18	10.7	5.0	4.9	0.08
8/27 Average	08/27/07			1.35	14.8	2.94	15.4	6.3	7.3	0.07

Cabernet Sauvignon

Location	Collection	Sample ID	Location	Berry Wt g	% Brix	pH	g/L TA	g/L Tartaric Acid	g/L Malic Acid	g/L Acetic Acid
Lake Erie	09/24/07	High pH	Fredonia Vin Lab	na	20.6	3.13	12.0	5.7	4.4	0.2
Lake Erie	09/24/07	Low pH	Fredonia Vin Lab	na	20.4	3.10	12.2	6.0	4.6	0.1
<b>Average</b>	<b>09/24/07</b>			<b>no data</b>	<b>20.5</b>	<b>3.1</b>	<b>12.1</b>	<b>5.9</b>	<b>4.5</b>	<b>0.2</b>
9/17 Average	09/17/07			1.28	19.4	3.04	13.4	6.5	6.0	0.02
9/10 Average	09/10/07			1.26	18.6	3.03	14.1	6.8	6.1	0.02
8/27 Average	08/27/07			1.07	15.6	2.75	22.0	8.6	10.5	0.02

Noiret

Location	Collection	Sample ID	Location	Berry Wt g	% Brix	pH	g/L TA	g/L Tartaric Acid	g/L Malic Acid	g/L Acetic Acid
Finger Lakes	09/24/07	Leaf Rem/Sh	Keuka Lake W	1.87	17.9	3.24	11.3	5.9	5.1	0.01
Finger Lakes	09/24/07	No leaf Rem	Keuka Lake W	1.82	17.7	3.23	11.0	5.8	4.9	0.01
Hudson Valley	09/24/07	HV-N-3	W of Hudson River	1.61	18.9	3.16	8.7	4.8	2.6	0.07
Lake Erie	09/24/07	High pH	Fredonia Vin Lab	na	19.0	3.03	9.7	5.1	2.6	0.10
Lake Erie	09/24/07	Low pH	Fredonia Vin Lab	na	19.2	3.04	9.7	4.9	2.7	0.12
<b>Average</b>	<b>09/24/07</b>			<b>1.8</b>	<b>18.5</b>	<b>3.14</b>	<b>10.1</b>	<b>5.3</b>	<b>3.6</b>	<b>0.06</b>
9/17 Average	9/17/07			1.62	18.0	3.06	11.0	5.7	4.3	0.03
9/10 Average	09/10/07			1.64	17.5	3.08	11.5	5.9	4.7	0.02
8/27 Average	08/27/07			1.44	14.6	2.87	17.9	7.6	8.1	0.01

Traminette

Location	Collection	Sample ID	Location	Berry Wt g	% Brix	pH	g/L TA	g/L Tartaric Acid	g/L Malic Acid	g/L Acetic Acid
Finger Lakes	09/24/07	Shaded	Keuka Lake W	1.86	19.2	2.96	12.1	5.8	4.5	0.15
Finger Lakes	09/24/07	Exposed	Keuka Lake W	1.71	20.3	2.97	10.9	5.9	3.1	0.19
Hudson Valley	09/24/07	HV-T-1	W of Hudson River	1.36	22.1	3.04	9.3	4.9	2.3	0.20
Lake Erie	09/24/07	High pH	Fredonia Vin Lab	na	21.3	2.95	8.2	4.2	1.6	0.20
Lake Erie	09/24/07	Low pH	Fredonia Vin Lab	na	21.9	2.96	8.8	4.5	1.6	0.25
<b>Average</b>	<b>09/24/07</b>			<b>1.64</b>	<b>21.0</b>	<b>2.98</b>	<b>9.9</b>	<b>5.1</b>	<b>2.6</b>	<b>0.20</b>
9/17 Average	9/17/07			1.55	18.8	2.90	11.4	5.6	3.9	0.12
9/10 Average	09/10/07			1.67	17.6	2.90	12.1	6.0	4.3	0.11
8/27 Average	08/27/07			1.34	11.5	2.67	23.8	8.9	11.2	0.15

Marechal Foch

Location	Collection	Sample ID	Location	Berry Wt g	% Brix	pH	g/L TA	g/L Tartaric Acid	g/L Malic Acid	g/L Acetic Acid
<b>Harvested following 9/17 Sample Date.</b>										
<b>Average</b>	<b>9/17/07</b>			<b>0.98</b>	<b>23.3</b>	<b>3.25</b>	<b>10.8</b>	<b>5.1</b>	<b>4.3</b>	<b>0.09</b>
9/10 Ave	09/10/07			0.99	22.8	3.27	10.9	5.2	4.3	0.11
8/27 Ave				0.94	18.2	3.04	14.0	5.8	6.3	0.09

Thanks to the following persons who collected samples and data:

*John Hudelson and Steve Hoying*, Hudson Valley Laboratory, Highland

*Libby Tarleton and Alice Wise*, CCE of Suffolk Co. and Long Island Horticultural Research and Extension Center

*William Wilsey and Hans Walter-Peterson*, Finger Lakes Grape Program

*Kelly Link, Paula Joy, and Madonna Struzynski*, Lake Erie Vineyard Laboratory

*Continued from page 3*

**Managing ATA:** Three ways to avoid or at least delay appearance of ATA in your wines are 1) harvest your crop when it is ripe, not before it is, 2) use irrigation in dry years to avoid vine water stress (already discussed), and 3) test and treat wines with ascorbic acid.

**Adding Ascorbic acid to wines:** Thomas Henick-Kling provided guidance for winemakers in testing wines for ATA, and also adding ascorbic acid at 100 ppm to wines at bottling to prevent or delay appearance of the off flavors. Here is the original communication Thomas sent out:

#### ATA TEST

TESTING A WINE FOR ITS POTENTIAL TO DEVELOP  
ATYPICAL AGING DEFECT

*Thomas Henick-Kling (reprinted from 2003 Enology  
notes)*

Divide wine that has been properly stabilized with SO<sub>2</sub> into two aliquots (100 mL or more). To one part add 150 mg/L ascorbic acid. Add nothing to the other part. Fill into glass bottles, avoid large headspace, and seal well. Place into oven at 40°C for 12 hours, or better 2 days. Let wines cool and compare the flavor. If both wines (with and without ascorbic acid) taste the same then the wine likely will not develop ATA. If the wine without the ascorbic acid added has changed its flavor then it is likely to develop ATA soon.

[information from: Staatliche Fachschule fuer  
Gartenbau und Weinbau Veitshoechheim, Germany]

When adding ascorbic acid to new wines please ensure that the wine is clear and has been racked off the yeast lees. The wine should be SO<sub>2</sub> stable (i.e. able to hold free SO<sub>2</sub> in successive tests).

**What's the downside of Ascorbic acid?** I've asked several winemakers and a few enologists about the 'downside' of adding ascorbic acid to wines. My thought was this: Instead of testing for potential ATA and using that information to decide whether or not to add ascorbic acid to wines, *why not add it to all the wines potentially at risk?*

I was told that at concentrations of 100-150 ppm, ascorbic acid should not affect flavor or other characteristics of the wine. My take is that if you have vineyards with moderate to severe drought stress, the prudent thing to do would be to treat those wines with ascorbic acid.

**From Gavin Sacks** (Assistant Professor of Enology, NYSAES): Ascorbic acid generates hydrogen peroxide (H<sub>2</sub>O<sub>2</sub>) upon reaction with oxygen. There needs to be sufficient free SO<sub>2</sub> to sponge up the hydrogen peroxide, or else ascorbic acid will act promote oxidation of the wine.

**From Ramon Mira de Orduña** (Associate Professor of Enology, NYSAES): Please remember two aspects that should be specifically taken into account before ascorbic acid is added to any wine as a preventive measure

1. The free SO<sub>2</sub> levels have always to be sufficient (see above)
2. SO<sub>2</sub> determination by the Ripper method will provide false positive (i.e. too high) readings when ascorbic acid is present in the wine. Alternate methods should be used. These include the 'modified Ripper' with a formaldehyde 'blank', and the 'Aspiration' (Aeration-oxidation) method (see references below for more information)
3. If you require precise SO<sub>2</sub> determinations after ascorbic acid analysis, please contact Ben Gavitt at the NYS Wine analytical laboratory at [bkg1@cornell.edu](mailto:bkg1@cornell.edu) or 315-787-2263 for SO<sub>2</sub> determination by Flow Injection Analysis, which does not suffer from interference by ascorbic acid.

For more detailed information on ascorbic acid:

Gavin recommends an article entitled *New Findings regarding Ascorbic Acid in Wine*, posted at: <http://www.wynboer.co.za/recentarticles/200607acid.php3>

Ben Gavitt recommends *Techniques for chemical analysis and quality monitoring during winemaking*, published by Patrick Iland Wine Promotions (Campbelltown, Australia) as a reference for alternate SO<sub>2</sub> tests described above.

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NEW YORK STATE WINE CENSUS:  
WINE DONATIONS REQUESTED  
*Gavin Sacks and Ramon Mira de Orduña*  
*Dept of Food Science and Technology*

Two Enology faculty at Cornell University (Ramon Mira de Orduna and Gavin Sacks) have recently obtained funding through the New York Grape Foundation's Total Quality Focus program to carry out the first comprehensive survey of a trace flavor compounds in New York wines. They wish to collect current commercial wines from wineries across New York in order to measure key wine parameters and aroma constituents linked to wine quality. Such information is conspicuously absent from the literature, and makes interpretation of results from ongoing projects challenging. Parameters to be measured will go beyond those typically measured in a wine analysis lab, and will include compounds associated with specific winemaking procedures and grape quality .

Drs. Sacks and Mira de Orduna kindly request the donation of commercial wines to this project. Any number of wines may be donated. All vintages, varieties, and price points are of interest. The project is not limited to grape wines: fruit wines and meads are also acceptable. They are particularly interested in wines produced from New York state grapes, especially region-specific "signature varieties" of NYS, (e.g. Merlot, Riesling, Cabernet Franc, Cayuga White, Traminette), and signature wines of each winery, regardless of price point

The identity of wines submitted will be kept anonymous.

If you are interested in donating wines, please contact Gavin Sacks (gls9@cornell.edu), or go to the project website at [www.nysaes.cornell.edu/fst/qualitywine/](http://www.nysaes.cornell.edu/fst/qualitywine/)



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*Lake Erie Regional Grape Program*

*Hudson Valley Regional Fruit Program*

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NATIONAL GRAPE COOPERATIVE RECEIVES  
RECORD NIAGARA CROP

In yesterday's *Harvest Update*, a weekly publication for National Grape Cooperative members, editor **Charlene Ryder** reported that Welch's/National Grape took in over 70,125 tons of Niagara nationwide, six percent above the previous record of 66,120 tons received in 2005. It is 49% above the six year corporate average.

Pinot Noir



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