

Veraison to Harvest

Statewide Vineyard Crop Development Update #3 September 15, 2023 Edited by Chris Gerling

AROUND NEW YORK...

I don't know how this one ends. On the one hand, it feels like the season has turned, and we've reached "good fall." In case that's too technical, that means a real difference between the daily high and low, blue skies and sunny days, crisp, clear nights and humidity lower than 1000%. But is it too late? In many parts of the state, especially at the northern and western edges, we have some serious ground to make up. We may be in for some drama, or action, but hopefully not horror or the grosser types of comedy. While I don't know what kind of movie this is, I think I know where we are in it.

If this were a sports movie, the underdog misfits have finally started to gel and the coach is starting to feel that familiar glow that pulled him/her back into the game, despite enduring (insert tragic injury/ life choice). If it were a rom com, the couple has just had The Big Fight, but as they each go through daily tasks alone, they can't help but think back to all the great times they had before they found out one was about to take a job in London. In the thriller, the detective is paying for coffee when the realization suddenly strikes that the suspect had to be lying about being at the gym when the murder took place. In the Fast & Furious Franchise, they just decided to launch a car out of a helicopter out of a plane out of a space shuttle. The people in the Hallmark movie have voted to hold a barn dance fundraiser to save Jed's Christmas Tree farm. But will they make it in time?

We know how the movies turn out. The team wins the game while redeeming the coach, the troubled player and perhaps the parent/child of the troubled player. One member of the rom com couple is going to show up at the airport and talk the other out of expanding skills and horizons so they can make out in the rain instead. As the gym-avoiding suspect makes the next move, the detective is lying in wait. The car explodes after re-entering atmosphere, but Vin Diesel jumped half a second earlier and was holding his breath, so no worries. The barn dance fundraiser only makes \$7.35, because a barn dance



Photo by Jennifer Phillips-Russo

is a terrible idea for a fundraiser, but it turns out the old recluse who lives in the big house at the top of the hill showed up, caught the holiday spirit and decided to invite everyone to a party for which she will need 20 trees at \$1,000 per tree. We've seen these films before.

What's next for New York? I don't know if 2023 is a re-make, a sequel, or something entirely different. There have been elements that are new and scenes that feel eerily familiar. This is not 2022, but it's not really 2021 either. The other part of this is how unbelievably local the weather has felt this year. I



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know there is always a tension between trying to craft a state-wide narrative while each vineyard is experiencing slightly different conditions. But this year feels more extreme. From frost damage to floods, the situation can be worlds apart while the vines are just rows apart. I was talking to a winemaker about rainfall, and he was saying how different his experience had been, and I can see his house from here. Granted, the vineyard in question is 20 miles away, but if you're looking at Lake Champlain, or Erie, or the Long Island Sound right now, your mileage definitely varies, and not just from Geneva but from your own neighbors as well. Stay tuned.

Fruit Composition Report (pp. 6-9)

A winemaker came into the lab Tuesday to drop off samples, and he was pretty excited, or possibly shook, by some of the changes in the grapes over the past ten days. Calling out one Veraison to Sample in particular, he said "can you believe that Sauvignon Blanc TA drop between week one and two?!"

I must admit I was gratified to hear that. We have been working to add the week to week comparisons, stretching and formatting tables so that you can easily observe just what he had noticed. I had continued my work long into Monday night, missing the football game to be able to send you this data as soon as possible. (By the way, how was that game? I assume Aaron Rodgers was unbelievable, but the Jets came up just short of the mighty Buffalo Bills. Yeah, that's how it must have gone.) The point is that we sent it out Monday night and by Tuesday morning there was a winemaker in the lab with juice samples. This is exactly what you hope will happen when you share information with the world. So it was with the aforementioned sense of humble gratification, the satisfaction of a job well done, and possibly just a hint of institutional pride that I crafted my response. By the look on his face, I could tell my words had inspired him to even greater levels of harvest passion. Indeed, as he walked out the door, he was practically shaking. This is how it goes in September.

After the winemaker had left, I turned to Hans, Pam, and Molly to bask in the appreciation and spread more inspiration. I could tell that they had also been moved by the exchange. "See, this is why we do this," I said. "Yes," they agreed, "but he didn't seem that happy when you blurted "Geez, I hope that wasn't a typo!"" Inspiration comes from many places. It was not a typo, for the record. Also not typos (to the best of my knowledge): major TA (titratable acidity) drops in Cab Franc, Chardonnay, Lemberger, Marquette and more. Some Pinot Noir and Marquette is already off the board. Soluble solids (%Brix) still trail last year in most cases, but not all. The Hudson Valley has some eyepopping YAN values and pH levels that stand out for the time of season, or at least this season, whatever this season might be. It's 2023, and all bets are off.



Photo b

Photo by Jennifer Phillips-Russo

Finger Lakes (Hans Walter-Peterson)

While harvest started in the Finger Lakes a few weeks ago, it feels like this week things are really starting to ramp up. Lots of work has been happening on crush pads to wash equipment, make last minute repairs, and set up crushers, conveyors, tanks, forklifts, and harvest interns to make sure things go as smoothly as possible - at least before the inevitable breakdown of that one thing that didn't make the checklist before the fruit started to arrive.

Most blocks of early varieties like Elvira, Baco

noir, and Marquette have been harvested by now. At the Teaching Vineyard, our Cayuga White and Regent were harvested this week. Pinot noir for sparkling wine production, and also some still wine, was the primary vinifera variety that has been coming in this week.

Last week's stretch of warm temperatures (80+ degrees from September 2 - 7, including 91 on September 6) had a few impacts in the vineyards. Acidity levels dropped pretty significantly between last week and this week in almost all of our samples. Titratable acidity was anywhere from 12.5 – 29% lower and pH levels were up 4.1 - 6.5% this week, depending on variety. Brix values increased more in some varieties than others. Our Cayuga White and Pinot noir samples hardly budged since last week, while Concord and Lemberger rose by about 8% and Cabernet Franc was up 11% in that same period. It didn't catch us up to where we were at this time last year, but 2022 was a relatively early ripening season.

Another impact that last week's warm stretch had was the development of what appears to be sunburn on exposed berries. While it appears in several different cultivars, it seems to be far more common in Riesling than others. The berries often look like they are developing sour rot due to the browning of the skins, but there are no signs of fruit flies or the alluring aroma of vinegar that would normally be associated with it. There is some research that suggests that different grape varieties have varying levels of susceptibility to sunburn, but these results haven't always been consistent. On an anecdotal level, I have noticed that other white fruited varieties like Chardonnay have much less of this kind of damage than a nearby Riesling block. Take that for whatever it's worth. We are planning to do some follow-up work on this to see if we can learn anything more about what's happening or what growers and winemakers can expect. Ideally, these damaged berries just collapse and dry up without becoming sites for new cluster rot infections to begin, which appeared to be happening in a couple of cases. Anna Katharine Mansfield and I are going to pull together some more information about sunburn and its impacts that will be included in next week's Veraison to Harvest newsletter.

The forecast for the next 7-10 days looks very positive as of right now, with very little rain in the forecast, if any. That can only bode well for this next stage of harvest in the Finger Lakes.



Riesling cluster with what appears to be symptoms of sunburn on the sun exposed side of the cluster (above). The unexposed side of the cluster shows none of the symptoms on the other side (below).

Photos by Hans Walter-Peterson



Long Island (Alice Wise)

Periodic brief but heavy rain seems to be the norm lately. Fortunately, this unsettled pattern seems to be over for now. Hurricane Lee is veering east of most of New England. The East End of Long Island is expecting some gusty winds (up to 40 mph) and perhaps a shower. Vineyards can handle this, no problem. Hopefully our New England colleagues get through the storm with minimal impacts.

The first blocks of white wine varieties such as Pinot Gris headed to the crush pad. The bulk of the white variety harvest will take place in the coming weeks. Initial impressions are good fruit quality with acids on the low side, not a surprise given the heat of the summer. White fruit in the LIHREC vineyard has taken on that translucence that sometimes happens when harvest is near.

As far as picking in the LIHREC vineyard, Fleurtai was picked early in the week and Soreli at the end of the week. These hybrids, both Tocai Friulano crosses, are quite different. Fleurtai ripened more quickly, so much so that yellow jackets were beginning to have a party. According to the literature, Fleurtai has fruit and spicy aromas and notes of white flowers, pears and almonds (https://www.vivairauscedo.com/en/productsheet/fleurtai/). Soreli has more tropical notes, pineapple and passion fruit (https://www.vivairauscedo.com/en/product-sheet/soreli/). One reason for the interest in these hybrids is that their parent, Tocai Friulano, produces nice fruit but is very low yielding. Two tons/acre in the LI-HREC vineyard is on the high side of yields. Both hybrids are doing well on VSP, though require a bit more shoot positioning than most vinifera. Productivity (5 yo vines) thus far appears good, cluster thinning has been necessary. In the past, some hybrids, Marquette for example, lost productivity when grown on VSP. As for vinifera, Dornfelder, which has Lemberger in its lineage, was also picked. Clusters were huge, berries were huge. Maybe 20% of clusters had a touch of sour rot. Being on the end of the row does not help the sour rot situation as bird and yellow jacket pressure is elevated there. Both had been helping themselves through the fine mesh side nets. Even with these nets, there can be some damage particularly on clusters that are flush against the net. We try to address this by preferentially thinning fruit that protrudes from the cluster zone.



Dornfelder on Long Island September 12th. Photo by Amanda Gardner

Hudson/Champlain (Jeremy Schuster)

Harvest has begun. In the Hudson Valley, Pinot noir has started to come in, with ^obrix being about right for sparkling wine production. I suspect there to be a 2-3 week pause in the harvest with blocks marked for still wine production needing additional ripening before harvest in the Hudson Valley. Vineyards in the Capital District are expected to begin their harvest this upcoming weekend. I've heard of some scattered reports of vineyards experiencing feeding damage, with isolated feeding pressure being observed at the Hudson Valley Research Lab as well.

By the numbers, The Champlain Valley reached 2225 GDDs with no measurable precipitation in the last week. The Capital District achieved 2300 GDDs while receiving an additional inch of precipitation. During the last week, parts of the Hudson Valley reached 26 inches of rain during this growing season. The Hudson Valley has accumulated 2537 GDDs.

Looking ahead, Mother Nature seems to be giving the whole Eastern New York Region a chance to dry out and hopefully accumulate more total soluble solids without compromising fruit quality. At the risk of sounding like a broken record, I continue to encourage routine scouting for not only disease pressures and bunch rots but also feeding pressure, as grapes seem to be on the menu for both animals and birds. Furthermore, be on the lookout for spotted lanternflies and report any sightings to your local extension agent or fill out the <u>Spotted Lanternfly Tracking</u> <u>2023 Survey</u>.

This week's random fact of the week: The first lighthouse in the United States, called the

Boston Lighthouse, was built in 1716 on Little Brewster Island. The original lighthouse was destroyed during the Revolutionary War but was rebuilt in 1783 and still stands to this day.

Lake Erie (Jennifer Phillips-Russo)

This past week's weather, particularly the hot dry weather over the Labor Day weekend, has not progressed the way that we had hoped regarding sugar accumulation. With the larger berry size this year, the delay in Growing Degree Day accumulation, shorter days at this time in the season, and the precipitation/humidity we continue to experience, the sugar accumulation is slower than previous years. News released from wine processors this week indicates that some are wrapping up Elvira and moving into Concord production at the end of this week albeit receiving those from the Finger Lakes that experienced frost damage first. Unfortunately, the Lake Erie Region is experiencing lower numbers regarding Brix and juice grape processors are anticipating a late harvest date to allow for sugar accumulation with some not starting until October 2, 2023. Other varieties currently be-



Niiagara in Lake Erie

Photo by Jennifer Phillips-Russo

ing harvested around the belt include Seyval, Vignole, Aurore, and Catawba coming off of the vine.

Concord Berry Curve (Terry Bates)







Figure 2. Cornell Lake Erie Research and Extension Laboratory's Concord Brix



Bountiful harvest from the grape breeding program

Photo by Chris Gerling

Fruit Composition Report - 9/1/2023

Note: Berry weights are the total for 100 berries.Yeast Assimilable Nitrogen (YAN) will be measured every other week.

Cabernet Franc																
		9/11/23	9/5/23	9/12/22	9/11	9/5	'22	9/11	9/5	'22	9/11	9/5	'22	9/11	9/5	'22
Region	Description	Ber.Wt.g	Ber.Wt.g	Ber.Wt.g	% Brix	% Brix	% Brix	рН	рН	рН	TA g/L	TA g/L	TA g/L	YAN (ppm)	YAN (ppm)	YAN (ppm)
HV	Central HV	136.4	165.5		18.3	17.5		3.52	3.32		5.8	7.4		150	158	(ppiii)
FL	W. Seneca	136.5		122.6	15.8		18.0	2.9		3.04	13.1		8.7	56		23
FL	Cayuga	122.7	122.1	124.1	14.4	14.1	18.2	2.96	2.79	2.97	11.3	16.0	9.0	67	58	12
FL	Dresden	155.7	137.7	144.4	16.7	14.6	16.9	3.03	2.88	3.10	10.3	14.7	9.1	57	42	40
FL	Keuka	137.7	120.4	111.4	18.9	17.3	19.9	3.05	2.88	2.97	9.4	12.6	8.1	17	16	12
LE	Portland	170.1	122.4	144.4	14.6	11.9	17.4	2.95	2.71	3.08	12.6	19.6	10.2	33	69	76
LI	LI-05	157.2	139.2	16.2	11.6	9.3	16.0	2.99	2.68	2.97	15.1	24.4	11.9	163	104	87
LI	LI-11	188.1	199.4	212.4	17	15.6	19.6	3.42	3.16	3.48	7.9	11.5	5.4	106	103	103
Caba	mot Sour	anon														
Cape	met Sauv	0/11/22	0/5/22	0/42/22	0/11	0/5	(22	0/11	0/5	(22	0/11	0/5	(00	0/11	0/5	(00
Pegion	Description	Ber Wt a	Ber Wt a	Ber Wt a	9/11 % Briv	9/5 % Briv	% Briv	9/11 pH	9/5 pH	nH		9/5 TA g/l		9/11 VAN	9/5 VAN	
Region	Description	Dentwilig	Dentwittig	Denwitig	/0 DHX	70 DITX	70 DHX	pii	pii	pri	IA g/L	IA g/L	IA g/L	(ppm)	(ppm)	(ppm)
LE	Portland	152.9	126.4		14.6	10.5		2.99	2.84		14.5	21.3		154	206	
Cayuga White																
		9/11/23	9/5/23	9/12/22	9/11	9/5	'22	9/11	9/5	'22	9/11	9/5	'22	9/11	9/5	'22
Region	Description	Ber.Wt.g	Ber.Wt.g	Ber.Wt.g	% Brix	% Brix	% Brix	рН	рН	pH	TA g/L	TA g/L	TA g/L	YAN	YAN	YAN
FI	Keuka	287.6	292.6	274 7	15.1	15.6	17.0	2.87	2.8	2.97	12.8	13.7	10.2	(ppm) 100	(ppiii) 97	(ppiii) 229
FI	Cavuna	330.2	303.6	294.4	16.4	16.2	18.0	3.08	2.0	3.11	10.2	11.8	8.0	199	173	136
FL	Dresden	274.7	278.1	20111	17.8	17.4	10.0	3.12	2.97	0.111	7.9	9.8	0.0	89	88	100
	I															
Char	donnay															
		9/11/23	9/5/23	9/12/22	9/11	9/5	'22	9/11	9/5	'22	9/11	9/5	'22	9/11	9/5	'22
Region	Description	Ber.Wt.g	Ber.Wt.g	Ber.Wt.g	% Brix	% Brix	% Brix	pН	рН	pН	TA g/L	TA g/L	TA g/L	YAN	YAN	YAN
EI	Covilian	157.9	145.0	140.2	15.0	14.9	17.1	3.00	2.07	3 15	0.0	12.0	8.2	(ppm)	(ppm) 145	(ppm) 151
FI	W Seneca	158.8	140.9	140.2	16.2	14.0	20.0	3.09	2.97	2.97	9.9 10.0	12.9	9.0	145	145	45
FL	Dresden	175.0	160.3	137.8	19.4	18.6	21.1	3.16	3.03	3.07	7.2	9.1	6.5	34	34	21
HV	Central HV	145.3	102.4		17.3	18.7		3.76	3.48		6.2	7.7		356	309	
LE	Portland	166.1	172.6		15.6	12.5		3.15	2.89		11.3	20.9		246	215	
LI	LI-03	165.1	156.1	182.1	16.4	15.4	18.0	3.45	3.22	3.39	9.8	12.7	6.7	277	295	186
LI	LI-12	163.4	163.7		18.4	17.7		3.4	3.17		8.0	10.7		271	264	
Conc	ord															
		9/11/23	9/5/23	9/12/22	9/11	9/5	'22	9/11	9/5	'22	9/11	9/5	'22	9/11	9/5	'22
Region	Description	Ber.Wt.g	Ber.Wt.g	Ber.Wt.g	% Brix	% Brix	% Brix	рН	рН	рН	TA g/L	TA g/L	TA g/L	YAN	YAN (nnm)	YAN (mmm)
FI	Kouko													(ppiii)	(ppiii)	(ppiii)
FL	NHUKA	304.4	310.8	274 8	13.3	12.8	13.8	3 04	2 89	3 11	10.2	12.2	6.9	94	79	92
	Canandaiqua	304.4 309.7	310.8 326.1	274.8 327.0	13.3 14.5	12.8 12.9	13.8 14.9	3.04 3.03	2.89 2.81	3.11 3.10	10.2 10.9	12.2 14.1	6.9 7.5	94 152	79 129	92 118
LE	Canandaigua Portland	304.4 309.7 315.1	310.8 326.1 307.6	274.8 327.0 343.9	13.3 14.5 11.5	12.8 12.9 11.4	13.8 14.9 15.5	3.04 3.03 2.95	2.89 2.81 2.87	3.11 3.10 3.12	10.2 10.9 15.4	12.2 14.1 15.9	6.9 7.5 10.1	94 152 207	79 129 160	92 118 150
LE	Canandaigua Portland	304.4 309.7 315.1	310.8 326.1 307.6	274.8 327.0 343.9	13.3 14.5 11.5	12.8 12.9 11.4	13.8 14.9 15.5	3.04 3.03 2.95	2.89 2.81 2.87	3.11 3.10 3.12	10.2 10.9 15.4	12.2 14.1 15.9	6.9 7.5 10.1	94 152 207	79 129 160	92 118 150
LE	Canandaigua Portland	304.4 309.7 315.1	310.8 326.1 307.6	274.8 327.0 343.9	13.3 14.5 11.5	12.8 12.9 11.4	13.8 14.9 15.5	3.04 3.03 2.95	2.89 2.81 2.87	3.11 3.10 3.12	10.2 10.9 15.4	12.2 14.1 15.9	6.9 7.5 10.1	94 152 207	79 129 160	92 118 150
LE Front	Canandaigua Portland	304.4 309.7 315.1 9/11/23	310.8 326.1 307.6 9/5/23	274.8 327.0 343.9 9/12/22	13.3 14.5 11.5 9/11	12.8 12.9 11.4 9/5	13.8 14.9 15.5	3.04 3.03 2.95 9/11	2.89 2.81 2.87 9/5	3.11 3.10 3.12 '22	10.2 10.9 15.4 9/11	12.2 14.1 15.9 9/5	6.9 7.5 10.1	94 152 207 9/11	79 129 160 9/5	92 118 150
LE Front Region	Canandaigua Portland	304.4 309.7 315.1 9/11/23 Ber.Wt.g	310.8 326.1 307.6 9/5/23 Ber.Wt.g	274.8 327.0 343.9 9/12/22 Ber.Wt.g	13.3 14.5 11.5 9/11 % Brix	12.8 12.9 11.4 9/5 % Brix	13.8 14.9 15.5 '22 % Brix	3.04 3.03 2.95 9/11 pH	2.89 2.81 2.87 9/5 pH	3.11 3.10 3.12 '22 pH	10.2 10.9 15.4 9/11 TA g/L	12.2 14.1 15.9 9/5 TA g/L	6.9 7.5 10.1 '22 TA g/L	94 152 207 9/11 YAN	79 129 160 9/5 YAN	92 118 150 '22 YAN
LE Front Region	Canandaigua Portland	304.4 309.7 315.1 9/11/23 Ber.Wt.g	310.8 326.1 307.6 9/5/23 Ber.Wt.g	274.8 327.0 343.9 9/12/22 Ber.Wt.g	13.3 14.5 11.5 9/11 % Brix	12.8 12.9 11.4 9/5 % Brix	13.8 14.9 15.5 '22 % Brix	3.04 3.03 2.95 9/11 pH	2.89 2.81 2.87 9/5 pH	3.11 3.10 3.12 '22 pH	10.2 10.9 15.4 9/11 TA g/L	12.2 14.1 15.9 9/5 TA g/L	6.9 7.5 10.1 [•] 22 TA g/L	94 152 207 9/11 YAN (ppm)	79 129 160 9/5 YAN (ppm)	92 118 150 '22 YAN (ppm)
LE Front Region	Canandaigua Portland tenac Description	304.4 309.7 315.1 9/11/23 Ber.Wt.g	310.8 326.1 307.6 9/5/23 Ber.Wt.g	274.8 327.0 343.9 9/12/22 Ber.Wt.g 97.0	13.3 14.5 11.5 9/11 % Brix 20.2	12.8 12.9 11.4 9/5 % Brix 20.2	13.8 14.9 15.5 *22 % Brix 20.7	3.04 3.03 2.95 9/11 pH 3.2	2.89 2.81 2.87 9/5 pH 3.1	3.11 3.10 3.12 '22 pH 3.15	10.2 10.9 15.4 9/11 TA g/L 18.6	12.2 14.1 15.9 9/5 TA g/L 20.0	6.9 7.5 10.1 '22 TA g/L 13.0	94 152 207 9/11 YAN (ppm) 547	79 129 160 9/5 YAN (ppm) 483	92 118 150 '22 YAN (ppm) 286
LE Front Region HV LE	Canandaigua Portland Cenac Description Northeast HV Sheridan	304.4 309.7 315.1 9/11/23 Ber.Wt.g 147.5 125.9	310.8 326.1 307.6 9/5/23 Ber.Wt.g 148.0 118.1	274.8 327.0 343.9 9/12/22 Ber.Wt.g 97.0 116.9	13.3 14.5 11.5 9/11 % Brix 20.2 15.4	12.8 12.9 11.4 9/5 % Brix 20.2 14.6	13.8 14.9 15.5 *22 % Brix 20.7 2.9	3.04 3.03 2.95 9/11 pH 3.2 2.91	2.89 2.81 2.87 9/5 pH 3.1 2.85	3.11 3.10 3.12 '22 pH 3.15 3.06	10.2 10.9 15.4 9/11 TA g/L 18.6 22.3	12.2 14.1 15.9 9/5 TA g/L 20.0 24.5	6.9 7.5 10.1 ⁽²² TA g/L 13.0 18.3	94 152 207 9/11 YAN (ppm) 547 194	79 129 160 9/5 YAN (ppm) 483 199	92 118 150 '22 YAN (ppm) 286 370
LE Front Region HV LE	Canandaigua Portland Cenac Description Northeast HV Sheridan	304.4 309.7 315.1 9/11/23 Ber.Wt.g 147.5 125.9	310.8 326.1 307.6 9/5/23 Ber.Wt.g 148.0 118.1	274.8 327.0 343.9 9/12/22 Ber.Wt.g 97.0 116.9	13.3 14.5 11.5 9/11 % Brix 20.2 15.4	12.8 12.9 11.4 9/5 % Brix 20.2 14.6	13.8 14.9 15.5 *22 % Brix 20.7 2.9	3.04 3.03 2.95 9/11 pH 3.2 2.91	2.89 2.81 2.87 9/5 pH 3.1 2.85	3.11 3.10 3.12 *22 pH 3.15 3.06	10.2 10.9 15.4 9/11 TA g/L 18.6 22.3	12.2 14.1 15.9 9/5 TA g/L 20.0 24.5	6.9 7.5 10.1 '22 TA g/L 13.0 18.3	94 152 207 9/11 YAN (ppm) 547 194	79 129 160 9/5 YAN (ppm) 483 199	92 118 150 '22 YAN (ppm) 286 370
LE Front Region HV LE Gama	Canandaigua Portland Cenac Description Northeast HV Sheridan	304.4 309.7 315.1 9/11/23 Ber.Wt.g 147.5 125.9	310.8 326.1 307.6 9/5/23 Ber.Wt.g 148.0 118.1	274.8 327.0 343.9 9/12/22 Ber.Wt.g 97.0 116.9	13.3 14.5 11.5 9/11 % Brix 20.2 15.4	12.8 12.9 11.4 9/5 % Brix 20.2 14.6	13.8 14.9 15.5 *22 % Brix 20.7 2.9	3.04 3.03 2.95 9/11 pH 3.2 2.91	2.89 2.81 2.87 9/5 pH 3.1 2.85	3.11 3.10 3.12 '22 pH 3.15 3.06	10.2 10.9 15.4 9/11 TA g/L 18.6 22.3	12.2 14.1 15.9 9/5 TA g/L 20.0 24.5	6.9 7.5 10.1 '22 TA g/L 13.0 18.3	94 152 207 9/11 YAN (ppm) 547 194	79 129 160 9/5 YAN (ppm) 483 199	92 118 150 '22 YAN (ppm) 286 370
LE Front Region HV LE Gama	Canandaigua Portland Cenac Description Northeast HV Sheridan	304.4 309.7 315.1 9/11/23 Ber.Wt.g 147.5 125.9 9/11/23	310.8 326.1 307.6 9/5/23 Ber.Wt.g 148.0 118.1	274.8 327.0 343.9 9/12/22 Ber.Wt.g 97.0 116.9 9/12/22	13.3 14.5 11.5 9/11 % Brix 20.2 15.4	12.8 12.9 11.4 9/5 % Brix 20.2 14.6	13.8 14.9 15.5 *22 % Brix 20.7 2.9	3.04 3.03 2.95 9/11 pH 3.2 2.91	2.89 2.81 2.87 9/5 pH 3.1 2.85	3.11 3.10 3.12 '22 pH 3.15 3.06	10.2 10.9 15.4 9/11 TA g/L 18.6 22.3 9/11	12.2 14.1 15.9 9/5 TA g/L 20.0 24.5	6.9 7.5 10.1 '22 TA g/L 13.0 18.3	94 152 207 9/11 YAN (ppm) 547 194	79 129 160 9/5 YAN (ppm) 483 199 9/5	92 118 150 '22 YAN (ppm) 286 370
LE Front Region HV LE Gama Region	Canandaigua Portland itenac Description Northeast HV Sheridan ay Noir Description	304.4 309.7 315.1 9/11/23 Ber.Wt.g 9/11/23 Ber.Wt.g	310.8 326.1 307.6 9/5/23 Ber.Wt.g 148.0 118.1 9/5/23 Ber.Wt.g	274.8 327.0 343.9 9/12/22 Ber.Wt.g 9/12/22 Ber.Wt.g	13.3 14.5 11.5 9/11 % Brix 20.2 15.4 9/11 % Brix	12.8 12.9 11.4 9/5 % Brix 20.2 14.6 9/5 % Brix	13.8 14.9 15.5 *22 * Brix 20.7 2.9 *22 * Brix	3.04 3.03 2.95 9/11 pH 3.2 2.91 9/11 pH	2.89 2.81 2.87 9/5 pH 3.1 2.85 9/5 pH	3.11 3.10 3.12 9H 3.15 3.06 '22 pH	10.2 10.9 15.4 9/11 TA g/L 18.6 22.3 9/11 TA g/L	12.2 14.1 15.9 9/5 TA g/L 20.0 24.5 9/5 TA g/L	6.9 7.5 10.1 *22 TA g/L 13.0 18.3 *22 TA g/L	94 152 207 9/11 YAN (ppm) 547 194 9/11 YAN (ppm)	79 129 160 9/5 YAN (ppm) 483 199 9/5 YAN (ppm)	92 118 150 '22 YAN (ppm) '22 YAN (ppm)

Gewürztraminer																
I		9/11/23	9/5/23	9/12/22	9/11	9/5	'22	9/11	9/5	'22	9/11	9/5	'22	9/11	9/5	'22
Region	Description I	Ber.Wt.g	Ber.Wt.g	Ber.Wt.g	% Brix	% Brix	% Brix	рН	рН	рН	TA g/L	TA g/L	TA g/L	YAN (ppm)	YAN (ppm)	YAN (ppm)
LE	Portland	147.7	_	181.0	15.4		19.4	3.21		3.43	9.3		7.1	238	(PP)	191
1																
Itasca	,															
nusou	•	9/11/23	9/5/23	9/12/22	9/11	9/5	'22	9/11	9/5	'22	9/11	9/5	'22	9/11	9/5	'22
Region	Description	Ber.Wt.g E	Ber.Wt.g	Ber.Wt.g	% Brix	% Brix	% Brix	pH	pH	pH	TA g/L	TA g/L	TA g/L	YAN	YAN	YAN
-		-									-	-		(ppm)	(ppm)	(ppm)
ΗV	Capital District	156.7	147.2		21	20.7		3.23	3.08		13.4	15.2		344	294	
	.a Crescent															
La Cr	escent															
	_	9/11/23	9/5/23	9/12/22	9/11	9/5	'22	9/11	9/5	'22	9/11	9/5	'22	9/11	9/5	'22
Region	Description	Ber.Wt.g E	Ber.Wt.g	Ber.Wt.g	% Brix	% Brix	% Brix	рН	рН	рН	TA g/L	TA g/L	TA g/L	YAN (ppm)	YAN (ppm)	YAN (ppm)
HV	Capital District	156.4	144.2		18.8	17.4		3.08	2.97		16.3	19.2		266	290	
HV	Northwest HV	170.1	158.3	133.8	21.4	20.5	19.3	2.82	2.77	2.87	14.6	16.9	12.7	50	48	81
Lemb	Lemberger															
ĺ		9/11/23	9/5/23	9/12/22	9/11	9/5	'22	9/11	9/5	'22	9/11	9/5	'22	9/11	9/5	'22
Region	Description	Ber.Wt. E	Ber.Wt.g	Ber.Wt.g	% Brix	% Brix	% Brix	рН	рН	рН	TA g/L	TA g/L	TA g/L	YAN	YAN	YAN
-	Dreeden	g 200 7	100 F	100.0	10.0	10.1	20.2	2.42	2	2.01	0.0	10.5		(ppm)	(ppm)	(ppm)
	Wayne County	209.7	199.5	190.2	19.0	19.1	20.3	3.13	১ 2.91	3.01	0.0	10.5	0.U 8.Q	178	92	176
IF	Portland	207.8	155.5	220.5	14.3	14	17.5	3.12	2.01	0.00	10.0	10.2	0.5	186	202	170
NI	Niagara County	193.0	181.4		18.2	17.2		3.05	2.97		11.0	14.0		175	276	
1																
Louis	e Swensor	,														
Louis	e owensor	9/11/23	9/5/23	9/12/22	9/11	9/5	·22	9/11	9/5	·22	9/11	9/5	·22	9/11	9/5	·22
Region	Description	Ber.Wt. E	Ber.Wt.a	Ber.Wt.a	% Brix	% Brix	% Brix	рН	ΒHα	pH	TA q/L	TA q/L	TA q/L	YAN	YAN	YAN
		g								<u> </u>	3	5		(ppm)	(ppm)	(ppm)
HV	Capital District	383.3	350.7		17.6	16.2		3.36	3.24		8.0	9.1		170	182	
Malb	ec															
	1	9/11/23	9/5/23	9/12/22	9/11	9/5	'22	9/11	9/5	'22	9/11	9/5	'22	9/11	9/5	'22
Regior	Description	Ber.Wt.g	Ber.Wt.g	Ber.Wt.g	% Brix	% Brix	% Brix	рН	рН	рН	TA g/L	TA g/L	TA g/L	YAN (nnm)	YAN	YAN (nnm)
	Long Island	224.8	216.2	244.3	15.3	15.9	20.4	3.32	3.06	3 42	11.4	14 7	6.2	(ppm) 139	(ppm) 208	(ppm) 119
Marc	chal Foch															
Mare		9/11/23	9/5/23	9/12/22	9/11	9/5	·22	9/11	9/5	·22	9/11	9/5	·22	9/11	9/5	·22
Region	Description	Ber.Wt.	Ber.Wt.a	Ber.Wt.a	% Brix	% Brix	% Brix	ρΗ	Ha	рН	TA q/L	TA q/L	TA q/L	YAN	YAN	YAN
		g		 -	-			-		. · · ·	-			(ppm)	(ppm)	(ppm)
HV	Northeast H	/ 179.0	166.9	124.0	19.8	19.5	2.3	3.26	3.17	3.30	11.9	13.8	9.3	160	194	112
Marc	luette		_													
	-	9/11/23	9/5/23	9/12/22	9/11	9/5	·22	9/11	9/5	·22	9/11	9/5	'22	9/11	9/5	·22
Region	Description	Ber.Wt.g	J Ber.Wt	Ber.Wt.g	% Brix	% Brix	% Brix	рн	рн	рн	TA g/L	TA g/L	TA g/L	(ppm)	YAN (ppm)	(ppm)
FL	Dresden	HARVES	T 134.9	HARVEST		22.6			2.98			14.0			142	
FL	Keuka	149.7	145.8	132.3	21.5	21.7	21.2	2.99	2.89	3.02	14.8	17.2	12.0	200	260	113
HV	Northeast HV	191.6	179.8	144.7	20.3	20.3	21.3	3.18	3.1	3.27	14.8	15.7	9.8	436	418	198
HV	Northwest HV	167.6	188.0	186.2	20.9	20.6	22.1	2.92	2.85	2.92	15.6	17.7	13.0	187	234	213
LE	Portland	144.2		HARVEST	18.4			3.06			16.2			378		
Merl	ot	1														
		9/11/23	9/5/23	9/12/22	9/11	9/5	·22	9/11	9/5	·22	9/11	9/5	·22	9/11	9/5	·22
Regior	Description	Ber.Wt.g	J Ber.Wt	Ber.Wt.g	% Brix	% Brix	% Brix	рн	рН	рН	TA g/L	IA g/L	TA g/L	(ppm)	YAN (ppm)	(ppm)
LI	LI-04	198.8	188.6	95.5	16.3	15.5	19.7	3.54	3.28	3.58	7.1	9.6	4.5	114	117	96
LI	LI-10	164.2	152.2	172.4	15.7	16.6	20.4	3.48	3.29	3.47	7.9	9.1	5.6	110	173	91
Niag	ara															
		9/11/23	9/5/23	9/12/22	9/11	9/5	'22	9/11	9/5	'22	9/11	9/5	'22	9/11	9/5	'22
Regior	Description	Ber.Wt.g	Ber.Wt.g	Ber.Wt.g	% Brix	% Brix	% Brix	рН	рН	рН	TA g/L	TA g/L	TA g/L	YAN	YAN	YAN
1 F	Portland	402.7	418.8	368.6	11.8	11.8	14.9	3.02	29	3.07	10.4	10.9	7.8	(ppm) 116	(ppm) 109	(ppm) 96
	· or dorig			000.0	11.0	11.0	14.0	0.02	2.5	0.01	10.4	10.0	1.5	110	100	00

Pi	not	No	DİI

		9/11/23	9/5/23	9/12/22	9/11	9/5	'22	9/11	9/5	'22	9/11	9/5	'22	9/11	9/5	'22
Region	Description	Ber.Wt.g	Ber.Wt	Ber.Wt.g	% Brix	% Brix	% Brix	рН	pН	pН	TA g/L	TA g/L	TA g/L	YAN	YAN	YAN
		-	.g		-	-	-	-			-	-	-	(ppm)	(ppm)	(ppm)
FL	W. Cayuga	168.6	152.2	131.7	18.1	17.5	19.7	3.25	3.08	3.22	8.0	10.3	7.7	170	179	120
FL	E. Seneca	150.1		133.2	16.3		17.9	3.13		3.16	9.8		8.0	69	0	62
FL	Ontario	173.3	165.5	134.8	16.2	16	20.1	3.21	3.01	3.25	9.0	11.7	7.7	166	150	79
HV	Central HV	HARVES	T 163.2			16.7			3.53			8.4			266	
Riesling																
Riesi	ing															
		9/11/23	9/5/23	9/12/22	9/11	9/5	'22	9/11	9/5	'22	9/11	9/5	'22	9/11	9/5	·22
Region	Description	Ber.Wt	Ber.Wt.	Ber.Wt.g	% Brix	% Brix	% Brix	рН	рН	рН	TA g/L	TA g/L	TA g/L	YAN (ppm)	YAN (ppm)	YAN (ppm)
EI	Kouka	144.0	119.6	120.6	14.4	14.3	17.6	2.88	2 79	2.91	12.7	15.0	11.5	84	67	73
	W Sonoco	133.5	138.0	112.0	12.9	13.9	18.6	2.00	2.70	2.01	12.7	17.4	11.0	119	114	14
	VV. Serieca	142.0	130.0	112.5	15.0	14.0	10.0	2.91	2.70	2.04	12.0	17.4	10.4	04	114	20
	E. Selleca	143.0	135.5	110.0	15.4	14.9	17.0	2.9	2.0	2.07	11.5	17.0	10.4	04	139	20
FL	CL 90 Cayug	a 132.9	122.2	106.3	15.3	14.7	15.2	2.88	2.72	2.85	11.8	17.3	11.8	63	70	79
FL	W. Canandaig	ua 163.6	132.9	141.4	13.4	12.4	15.7	2.86	2.7	2.81	14.8	21.0	12.9	137	158	104
FL	Dresden	133.2	117.0	119.5	17.1	16.8	17.3	2.96	2.84	2.78	9.9	13.3	10.7	39	51	20
FL	Wayne Count	ty 131.4	111.3	136.2	12.9	10.9	17.5	2.89	2.71	3.03	13.6	19.4	8.9	167	162	170
HV	Central Hudso	on 143.4	130.5		16.3	16.6		3.43	3.26		6.2	9.9		167	150	
LE	Portland	161.8	151.0	152.0	11.2	9.9	16.3	3	2.84	3.05	14.8	19.2	10.8	221	212	155
Saperavi																
oupo		0/11/22	0/5/22	0/12/22	0/11	0/5	(22	0/11	0/5	(22	0/11	0/5	(22	0/11	0/5	(22
Denien	Description	5/11/25	5/5/25	5/12/22	9/ Duite	9/ D.	22 0/ Dain	3/11	3/3	- 22	5/11 TA =/1	5/5 TA #/	74 m/l	3/11	VAN	VAN
Region	Description	Ber.wt.g	Ber.wt.g	Ber.wt.g	% Brix	% Brix	% Brix	рн	рн	рн	TA g/L	TA g/L	TA g/L	(ppm)	(ppm)	(ppm)
NI	Niagara	229	219.5		13.6	13		2.88	2.87		19.2	22.4		193	255	
	5															
Sauv	Sauvignon Blanc															
		9/11/23	9/5/23	9/12/22	9/11	9/5	'22	9/11	9/5	'22	9/11	9/5	'22	9/11	9/5	'22
Region	Description	Ber.Wt.g	Ber.Wt.g	Ber.Wt.g	% Brix	% Brix	% Brix	pН	pН	pH	TA g/L	TA g/L	TA g/L	YAN	YAN	YAN
								-						(ppm)	(ppm)	(ppm)
LI	Long Island	151.2	139.1		20.1	18.9		3.49	3.21		6.6	9.6		230	200	
NI	Niagara	134.0	173.4		17.2	18.1		2.94	2.97		10.9	10.5		67	106	
Sevv	al Blanc															
00,1		0/11/23	9/5/23	0/12/22	0/11	9/5	(22	0/11	9/5	(22	0/11	9/5	(22	0/11	9/5	(22
Pagion	Description	Bor Wt a	Bor Wt a	Bor Wt a	% Briv	% Briv	% Priv	5/11	5/5	- <u></u>				VAN	VAN	VAN
Region	Description	Der.wi.g	Der.wil.g	Der.w.g	/0 DITA	/0 DITA		pri	рп	pri	TA g/L	TA g/L	TA g/L	(ppm)	(ppm)	(ppm)
LE	Portland	165.9	155.2	HARVEST	16.3	14.3		2.99	2.79		9.4	13.8		73	59	
<u>.</u>																
Siegt	ried															
		9/11/23	9/5/23	9/12/22	9/11	9/5	'22	9/11	9/5	'22	9/11	9/5	'22	9/11	9/5	'22
Region	Description	Ber.Wt.g	Ber.Wt.g	Ber.Wt.g	% Brix	% Brix	% Brix	рН	рН	pH	TA g/L	TA g/L	TA g/L	YAN	YAN	YAN
NII	Niegen	111.0	100.0		- 14.0	44.4	-	0.04	0.05	-	45.0	47.0	-	(ppm)	(ppm)	(ppm)
NI	Niagara	114.9	122.2		14.2	14.1		2.81	2.85		15.9	17.3		80	195	
St. C	roix															
	l	9/11/23	9/5/23	9/12/22	9/11	9/5	'22	9/11	9/5	'22	9/11	9/5	'22	9/11	9/5	'22
Region	Description	Ber.Wt.g	Ber.Wt.g	Ber.Wt.g	% Brix	% Brix	% Brix	рН	pН	рН	TA g/L	TA g/L	TA g/L	YAN	YAN	YAN
-		, in the second s	5											(ppm)	(ppm)	(ppm)
HV	Capital District	220.6	220.0		16.6	14.8		3.22	3.09		12.6	15.4		201	214	
Tram	inette															
iiaili	mene	0/46/00	0/5/00	0/40/00	0/44	0/5	(00	0/11	0/5	(00	0/11	0/5	(00	0/64	0/5	(20
P	December 1	9/11/23	9/5/23	9/12/22	9/11	9/5	.22	9/11	9/5	-22	9/11	9/5	-22	9/11	9/5	.22
Region	Description	Ber.Wt.g	⊳er.₩t.g	Ber.Wt.g	% Brix	% Brix	% Brix	рн	рн	рн	TA g/L	IA g/L	TA g/L	(ppm)	YAN (ppm)	(ppm)
LE	Portland	166.2	150.3	170.5	9.6	8.6	16.9	2,86	2.7	2,88	15.8	20.9	11.3	124	148	95

Vidal	Vidal Blanc																		
		9/11/23	9/5/23	9/12/22	9/11	9/5	'22	9/11	9/5	'22	9/11	9/5	'22	9/11	9/5	'22			
Region	Description	Ber.Wt.g	Ber.Wt.g	Ber.Wt.g	% Brix	% Brix	% Brix	рН	рН	рН	TA g/L	TA g/L	TA g/L	YAN (ppm)	YAN (ppm)	YAN (ppm)			
NI	Niagara	184.7	170.3		13.2	11.6		2.93	2.87]	14.1	14.5		207	166				
Vigno	Vignoles																		
		9/11/23	9/5/23	9/12/22	9/11	9/5	'22	9/11	9/5	'22	9/11	9/5	'22	9/11	9/5	'22			
Region	Description	Ber.Wt.g	Ber.Wt.g	Ber.Wt.g	% Brix	% Brix	% Brix	рН	рН	рН	TA g/L	TA g/L	TA g/L	YAN (ppm)	YAN (ppm)	YAN (ppm)			
FL	Keuka	168.2	157.6		17.9	17.8		2.86	2.71		16.9	21.1		132	128				
LE	Portland	191.9	165.5	172.9	14.9	14.3	20.8	2.91	2.89	3.01	18.8	24.4	12.8	380	382	233			

How many apple varieties exist? Why do we need so many? Come visit the USDA Apple, Grape, and Tart Cherry collections at Cornell AgriTech to find out!

The USDA Plant Genetic Resources Unit maintains thousands of unique trees and vines for conservation and research. On Saturday, September 16, 2023 we will host our annual tour at the McCarthy Farm, 2865 County Road 6 (Preemption Road), Geneva, NY, 14456 (across from St. Mary's Cemetery).

Learn about the value of crop diversity and enjoy a walking tour of the collections from 10:00 AM to 12:00 PM. Please arrive on time. No reservation needed.

Contact Ben Gutierrez at ben.gutierrez@usda.gov or 315.787.2439 for more information.



Figure by USDA

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



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