



WINE GRAPE INFORMATION FOR PENNSYLVANIA AND THE REGION From Penn State Cooperative Extension

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Rain is moving into the region again as I write this. We just can't seem to string together the sunny days necessary to push the vintage forward. The irony and hardship of cool, wet and uneven vintages is that they are more expensive to bring in, crops are usually reduced, fruit quality is often lower than in better vintages, and everything from the birds and disease to harvesting the grapes is more difficult. It's easy to get discouraged. I know because I had my share of these in Oregon. You simply have to work a lot harder to achieve even a modest wine. If you are depressed about our conditions, friends in Oregon tell me that they have not yet cleared veraison in Pinot Noir in this, an extreme La Nina year along the West Coast.

I think (hope) we are mostly through the whites with the exception of Vidal and late harvest wines. Grapes that I tasted that had fruit rots varied between very awful (sour rot and gray mold) to very complex and delicious (various stages of noble rot) and every conceivable condition in between. The best hope for us is to get a streak of Indian summer that can help push the ripeness of the reds although I don't really see that in the weather tea leaves but maybe we'll get enough sun vs. rain to move the fruit forward. It is a collaborative decision between wine maker and grape grower to decide when the game is up and the grapes must come in. It really boils down to balancing the condition of the fruit with its ripeness, and unfortunately choosing between the lesser of two evils when it comes to making a picking decision.

My previous message about the rain and fruit rots elicited a lot response. I trust our best empirical growers to find solutions to problems in their vineyards. What works for them may not have the weight of scientific rigor behind it, or work for in every vineyard but it's worth getting ideas into the marketplace for everyone to consider. When I consider the current state of affairs of our clusters I remember all the way back to May and the long, cool, wet bloom period that set us up for latent infections. This is a particularly insidious aspect of wine growing, that little biological time bombs can be planted in woody parts (e.g. crown gall) and clusters (e.g. botrytis), only to pop up when certainly environmental conditions are met. That's why I encourage growers to think ahead and anticipate the vintage. Of course, not even the most rational and cautious person could have predicted the storms we

have recently endured, but there was a likelihood that fruit rots would become a problem after veraison. In my many years as a grower and extension educator I have observed that the growers with the best sites and IPM programs fair the best in difficult vintages like this one, I guess that's no surprise.

I have had many novel ideas sent to me by creative and thoughtful growers and educators. Here are a few of them:

- I have more or less given up on trying to understand, much less predict, bird behavior. In Oregon, the wet years seemed to be the worst ones, yet here wet or dry they can appear (or not) with no rhyme or reason. The good grower who cares about his or her fruit does maximum bird protection every year before they arrive in the vineyard. Yet, a vineyard in York County that is always pounded by birds had no problems at all this year. Go figure. Maybe it's time to consult with a wildlife biologist about the birds but frankly I don't think it will help. This year growers who kept the birds away from their grapes have less sour rot and botrytis than those who did not. Looks like net spacers are a reality for us now.
- Yellow jackets and wasps are still a serious secondary pest on injured fruit. I visited Pinot Gris vineyards that I feared for the first time ever, I feared for my safety walking among the vines. I do not yet know of a good solution to this problem.
- With all the sour rot, vinegar/fruit flies are in abundance in affected vineyards. One grower claimed he had success slowing the progress of rot by spraying an insecticide to knock down the fruit flies. This is the first I have heard of this method and while it makes sense there are many cautions to consider when using insecticides near to harvest – the same you would consider with Multi-colored Asian Lady Beetle and Brown Marmorated Stink Bug. Where are the stink bugs?
- Hans Walter-Peterson, Cornell extension viticulturist in the Finger Lakes written an excellent pair of articles about berry splitting and botrytis control in his *Finger Lakes Update* (9/12 and 9/20).
- What is the threshold for botrytis in red wines? Talking with a wine maker in Virginia who works with French consultants the absolute limit is 5%. Wine makers report that sorting grapes is vastly improving wine quality. It's slow and expensive but can be a reputation saving practice.
- A grower in Ohio has used the fungicide Switch very effectively for botrytis and believes it has some efficacy on sour rot, he says it is better than Elevate or Scala but a very expensive material. He also has used copper to slow sour rot since it has bacteriacide properties. Another Ohio grower with a lot of Pinot Gris used Elevate with good results this season. Note: Ohio has had less rain than southeast Pennsylvania.
- An experienced grower in NE PA used 1% oxidate sprays on three consecutive days and was able to stop the progress of sour rot in his vineyard.
- On Long Island, experienced growers have sprayed fungicides up to and into large and lengthy storms with claims that it helps protect fruit integrity, especially red varieties that need more time on the vine.
- When a season like this develops, cool, wet and extended, leaf removal on both sides of the vine after veraison is a good idea to increase light and air circulation in the fruit zone, as well as spray penetration. The down side is opening the fruit to predation but in most cases it's worth the risk.
- Downy mildew came on fast after Irene so it's important to have a management strategy for grapes that need to hang for awhile. Targeted sprays to the tops of canopies is very effective. Side nets, instead of draped nets, lessens DM and helps control efforts. Leaves are important

for fruit and wood ripening, however at this late stage of the game, berry temperature trumps photosynthesis when it comes to wine quality.

- I have seen photos of a squeaky clean vineyard, including Chardonnay, in NE Connecticut where the grower is tank mixing Nutrol with Phostrol with his normal fungicide products to “boost” protection and has controlled powdery mildew and downy mildew all season.
- Research in Ontario (also Australia) has shown that potassium metabisulfite (KMS) is a good treatment for sour rot. However, KMS is not registered as a fungicide product for grapes in the U.S. Hopefully a chemical company will take a closer look at this treatment.
- A grower said that early netting and “hedging mercilessly” this season has helped to keep his grapes clean. This was a year when exposed fruit in July led to sunburn, but a thin canopy and open fruit zone later in the season was a real benefit.
- A grower used Pristine and phosphorous acid late in the season after weeks of a simmering sour rot and botrytis outbreak and says it stopped the infection in its tracks, even in wet weather, the problem dried up and has gone away in the Bordeaux red varieties.
- I am getting reports of berries with holes in them. We know that Spotted Wing Drosophila has arrived in Pennsylvania and we have a lot of suspicious but unconfirmed reports. I would ask growers to be aware of the symptoms and get back to me if you think SWD is in your vineyard. Traps are the surest way to know if you have them.
- Some questions asked that I could not answer: Do fruit flies spread sour rot? Would materials that seal berries like those used by cherry growers work for grapes? Do copper and-or calcium improve berry skin integrity and help to stave off rot infections? Why are we growing wine grapes in the Eastern U.S. anyway??

In a vintage like this, sorting grapes is an important part of increasing wine quality. If possible, remove diseased berries and parts of clusters prior to harvest, or train your pickers to remove as they harvest (very difficult to do), or sort at the main collection point for lugs or buckets coming out of the field to larger bins being delivered to the winery. Make sure the wine maker is aware of the condition of the fruit because if it needs sorting on the crush pad they will need labor and equipment to do the job.

We are totally into a winemaker’s vintage. Growers are doing what they can in the vintage but we all know it’s up to the wine makers to work their magic on suboptimal fruit. In international cool climate context, this is why the shrewd wine consumer buys winemakers, not vintages or vineyards. Do not ignore wine making technology such as reverse osmosis, enological tannins, rotary fermenters, etc. Also, wine processing practices, especially fermentation, can make a GI-normous difference in wine quality (in both directions, good and bad). I don’t pretend to understand all of these practices but wine makers should make sure they know what are the best options and always remember that if removing or concentrating are as likely to have a negative effect on a wine as a positive one. You absolutely must know how to use these tools properly.

Talking About the 2011 Vintage: We live in a doom and gloom culture but it doesn’t have to apply to wine. As professional in the wine industry, we can be frank among ourselves but let’s be judicious in our comments about the vintage to non-production people. I will speak honestly about my experience in Oregon where we knew a thing or two about damp harvests. In 1983 we had a good year and Parker and pals wrote us up and we thought we were wonderful. In 1984 we had the vintage from hell and we didn’t hesitate to talk about that either. Lo and behold, no one bought any Oregon wines. We learned as an industry that pronouncements about rain, hurricanes, birds, disease, unripe fruit, hardship, misery,

etc. did nothing to help the making or marketing of wines. It is very important to be honest, but also to be very careful how the quality of a vintage is presented to the public. The truth is, that no matter how difficult a vintage is, there will be winners and losers, and that some wineries will manage to produce excellent wines. When we talk about vintages like 2009 and 2011, words like challenging and difficult are descriptive enough but always followed very quickly with a positive and optimistic view of the potential of the wines. I used to believe that wine consumers should give a break to wine regions like ours, Bordeaux, Germany, etc. that experienced vintage variation. I have changed that opinion. In a global wine world, wine consumers expect, and deserve, a good wine in the bottle. That is their bottom line and therefore ours.

Penn State Enology Website: Denise Gardner has launched her [Penn State Cooperative Extension Enology](#) website. It took me 10 years to get a proper viticulture website together and she has done it in five months. And it will continue to get better. Wine makers around the region have another excellent resource to turn to. Denise has words to the wise about the impact of sour rot on wine quality, and the prognosis is not good. Volatile acidity is a tough problem in the cellar and all treatments appear to result in a lesser wine. Still, every wine maker should be aware of his or her options. See her articles about ***Sour Rot in the 2011 Vintage*** and Fermenting with Botrytis 101 in the SPOTLIGHT section of the [Pennsylvania Wine Grape Network](#).

The Big Storm: Denise's father sent this [NOAA storm map](#) of the weather in August/September. It's frightening but gives a BIG picture view of the areas in the East that took the brunt of Irene and Lee. SE PA was right in the bull's eye of the storm.

Tour of SW PA Vineyards and Wineries: I will be touring vineyards in Southwest Pennsylvania with Denise Gardner on Wednesday and Thursday, October 5 and 6. Local extension educators Lee Young and Miguel Saviroff have set up visits at (10/5): Christian W. Klay Winery, and (10/6): Glades Pike Winery, Dave Kreinbeck's vineyard, lunch at Jean Bonnet Tavern and an afternoon visit to Briar Valley Vineyard and Winery. We will be open to a discussion of all grape growing and wine making topics. It's a chance to talk about this vintage and look at the future of your wines. The event is free and no pre-registration is required. Please contact Lee Young at ljs32@psu.edu if you intend to participate. For a full schedule and more information including directions and winery websites go to the [SPOTLIGHT](#) section of PWGN.

Vineyard Available: Mature one acre vineyard in central Chester County. 600 vines including Riesling, Cabernet Franc, Pinot Gris, Lemberger, Gruner Veltliner. Also, small number of unique varieties (Marquette, Traminette) Site is well drained, southwest aspect. Available to any qualified interested party for lease and no cost, as time constraints prevent owners from maintaining a production level operation. All equipment onsite is available for use. This is an honest, heart-felt offer to established wineries or serious hobbyist to raise quality *vinifera* grapes. Direct inquiries to: Bruce and Mary Lee Colley, Valley Creek Vineyard, East Bradford, PA. Tel: 610-873-2557

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