



Thoughts on Sampling and Harvest Decisions

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Hamlet: To pick, or not to pick- that is the question:
Whether 'tis nobler in the mind to suffer
The storms and fungi of outrageous fortune
Or to take arms against a sea of hybrids
And by some crushing end them.

Pelonius: Quit whining and go get a sample.

-Excerpted from Hamlet II: Revenge of the Chiller Compressor

Berry sampling is the way that most of us get information about the relative ripeness of the grapes in question, and the eternal challenge is getting representative, consistent samples. We know that the numbers are not the whole story, but the numbers are a relatively objective measure that we can all talk about. Regular measurements (weekly or at some consistent interval) are also helpful as an indicator of how ripening is progressing. Here are a few tips for getting results that might mean something:

- Consistency is key. Try to have the same person using the same method at the same time of day. Maybe you're a little high or low compared to the "real" levels, but you stand a better chance of accurately reflecting the week-to-week changes.
- Morning, after dew is dry but before lots of hot sun, is generally thought to be a pretty good time (it's probably more important to be consistent than at any particular time, though). People generally use the high precision tool kit of gallon size sealable plastic bags and coolers with cold packs. Using sealable (zip top) bags becomes very important to the person who is squishing the samples by hand.
- Larger samples are better than smaller samples. We know that. But samples with larger berries are not better than samples with smaller berries, especially if the vineyard block doesn't skew that way. We want the largest sample that can be reasonably gathered in a representative way. Think hundreds as opposed to tens (or, heaven forbid, ones) of berries.
- Walk the vineyard. Skip the end rows and move around enough that the entire block is being represented. End rows and panels can be influenced by drifting sprays from other blocks, dust from nearby roads, leftover Chardonnay vines planted into the Cab Franc, etc. Also, the more time you spend in the rows, the better equipped you are to notice changes of any kind.

- Most people recommend sampling blind. The idea is not to look at the vine while picking the berries (or clusters). However, not looking should be combined with awareness of:
- Vine and cluster positioning. The position of the cluster on the vine and the berry in the cluster will influence the result. In the protocol given for the Veraison to Harvest project, samplers are asked to pick 3 berries top or mid-cluster for every tip berry. Mark Chien at Penn State prefers whole cluster sampling because now you've eliminated the cluster position problem.

As I said earlier, numbers are not the whole story. There are other considerations that will indicate that the berries are becoming mature. Visual cues like browner stems, looser, softer berries and the presence of birds and bees (they're not stupid) can complement regular tasting to determine maturity. When tasting, take note of the condition of the skins and how they break down, the color and texture of the seeds, etc. In a year like 2010 where we're seeing such advanced numbers so soon, it makes sense to pay special attention to pH and TA. Some varieties and styles may benefit from retaining acid (it can be added back if necessary, however). Above pH 3.5, microbial stability declines and the amount of free SO₂ required for adequate molecular protection increases.

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