



Timely Viticulture

- Dormant
- Pre-Bloom
- Bloom
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- **Pre-Harvest**
- Harvest
- Post Harvest
- Dormant

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"Timely Vit" is designed to give those in the Maryland grape industry a timely reminder on procedures or topics they should be considering in the vineyard.

Evaluating Grape Samples For Ripeness

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It is critical to properly monitor and assess the fruit characteristics and maturity to make the appropriate management, harvesting, and winemaking decisions to produce the best quality grapes and wine possible from each specific vintage. The last "Timely Viticulture" described how to take a proper sample that best represents the actual ripeness stage of the cultivar in that vineyard. The next step is set the priorities that will optimize fruit quality and give you the opportunity to make the best possible wine and then evaluate your sample based on that criteria.

- The critical principals here are that high quality wine is the confluence of fruit derived flavor and aroma components and for red grapes also the reduction of immature tannins and aromas.
- These do not necessarily correspond to "desired" sugar and acid ranges.
- The highest priority needs to be the quality and quantity of varietal aroma/flavor in the fruit.
 - Simply stated, to obtain a desired characteristic aroma or flavor in the wine, it must be present in the grapes at the time of harvest!
 - By regular, continuous sampling you will learn through experience the succession of aromas, flavors and textures that each cultivar goes through.
 - Depending on the degree of ripeness red grape characteristics can range from green and herbaceous to fruity to "jammy."
 - Therefore the individual sampling must be diligent to monitor for that aroma and/or flavor in the sample.
- The next highest priority, especially for red wines, is the texture of the grape tannins in skin and the seed.
 - The quality and quantity of the tannins determine the structure, body, astringency, bitterness, dryness, and color intensity of the wine. Mature tannins are critical to the production of quality red wines.
 - The degree of ripeness and polymerization of the tannins will determine the astringency and mouth feel of your wine.
 - * This can range from the undesirable, hard and course tannins of immature grapes, through to the desirable, "supple and silky" profile of mature grapes.

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- Procedure:
 - Select a few random grapes and place them in your mouth. DO NOT look at the cluster when you are choosing the grapes because you will tend to pick more ripened berries.
 - Without macerating the skins, gently press the juice out of the berries and assess the juice for sweetness (front of tongue) and acid (back sides of your tongue). With experience (and comparison against numbers from lab samples) you will be able to reasonably guesstimate the Brix and TA level of the grapes.
 - Next gently separate the seeds from the skins and “spit” into your hand. The color of the seeds gives you a clue to the level of ripeness. Green seeds are immature, green to tan and tan to brown seeds are maturing, and brown seeds are mature. Ripe seed tannins are desirable as they are less easily extracted and more supple on the palette.
 - Finally macerate the remaining skins and press them in your cheeks to assess the ripeness of the skin tannins. You will be able to “feel” the astringency (pucker) of the skins. The less intense the astringency the more ripe the grapes.
 - * A good way to practice is to first sample an early ripening grape cultivar such as Merlot and then immediately go to later cultivar such as Cabernet Franc and then Cabernet Sauvignon, and you will feel the difference in the acidity, astringency and ripeness.
- Of course, other factors must still be considered, such as the total acidity and pH
 - Generally you would like to harvest white grapes in the 3.2-3.4 pH range and reds in the 3.4-3.6 range, as long as the varietal character is appropriate as described above. Remember the enologist can do a good job adjusting acidity, but it is almost impossible to increase varietal character in the wine.
- Brix or sugar level is good to follow on a “relative” scale but levels can greatly vary from vintage to vintage.
 - In some years the grapes will be ripe and have great varietal character at 20 Brix and another year they may still not have ripe varietal character at 23 Brix.
- Disease/Rot - Monitor to see if the grapes are deteriorating do to fruit rots or berry softening.
- Look at the short and long range forecast.
 - If it looks good and the grapes have the ability to ripen further, then there may be a benefit to letting them hang a bit longer.
 - If the tropical storm is on the way.....
 - When grapes are close to optimal ripeness, it is more desirable to harvest before a significant rainfall than to wait until after the rain and allow them to build up the sugar again afterwards.

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