Portland Winemakers Club

July 2019

"Bill's Meanderings"

The early forecast for what a vineyard might yield is the fruit set. During and after bloom cold and rainy weather or aggressive vine management can cause a condition called shatter where the bloom or newly formed fruit can fall off losing the berries. Using my small backyard vineyard as a yardstick may not be totally accurate but I think it may be close. We have had a good fruit set and the berries are almost pea size and past the shatter stage. I will need to trim and probably drop excess fruit to help the rest of the crop ripen. I believe most of the vineyards in this area of the Willamette Valley are experiencing the same. In Bob's latest group buy list notice I see that all orders have been accepted showing that there is enough fruit to meet all the demands.

All this to say that it appears to be a year with a good yield and plentiful fruit for the winemaker.

Bill

Portland Winemakers Club

Scheduled Meetings

January 15, 2020 Crush Talk / Planning

January 18, 2020 Annual Gala – At Parrett Mountain Cellars

February 19, 2020 Bordeaux Tasting

March 18, 2020 Speaker: John Davidson, Walnut City

April 15, 2020 Barrel / Carboy Sample Tasting.

May 20, 2020 Speaker: ?

June, 17, 2020 Best practices; member demonstrations of tips & tricks

July 20 2019 Annual Picnic, home of Craig & Mindy Bush

July 27 2019 Tour?

August 21, 2019 All Whites Tasting

August 24, 2019 Tour

September 18, 2019 Other Reds Tasting

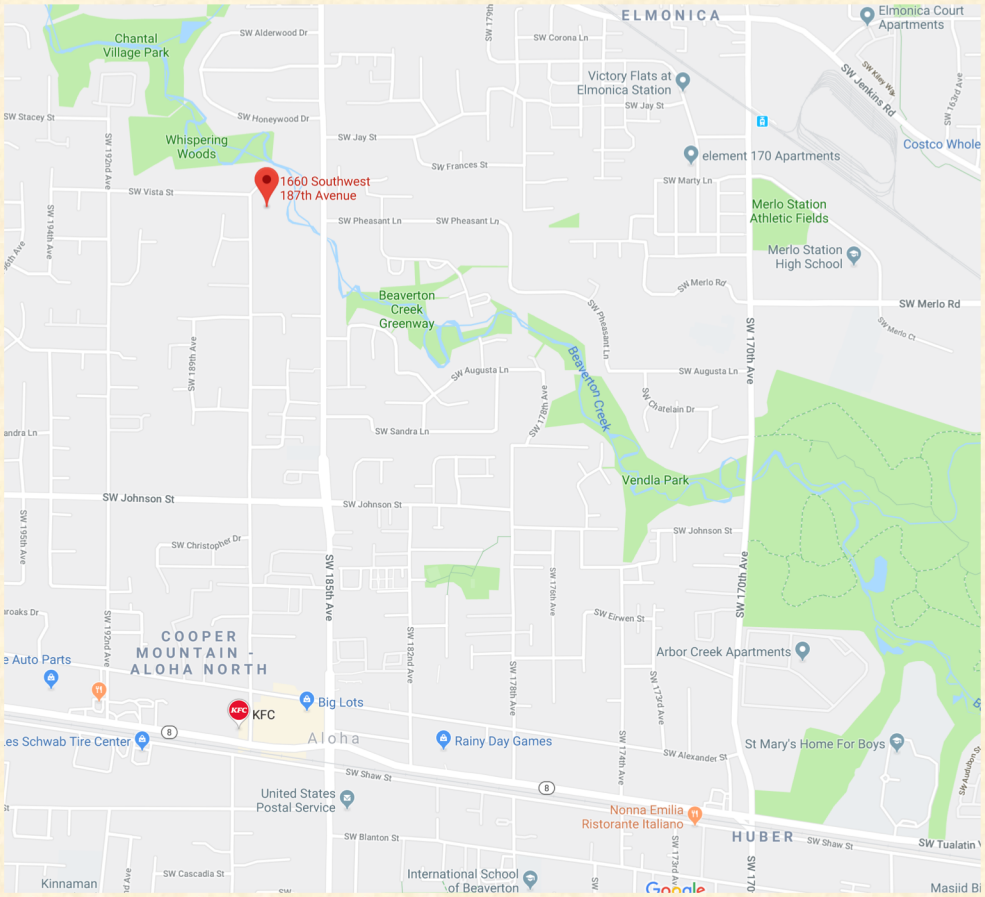
October 16, 2019 Pinot Noir Tasting

November 2019 Crush Talk

December 4, 2019 Planning, Tours, Speakers, Events, Elections

Note: There is no regular meeting in July. Please mark July 20th for our annual picnic to be held in the shade of Craig & Mindy Bush's large back yard. See the flyer on page 3. The address is 1660 SW 187th Avenue Beaverton, OR 97003. There is a $10 fee per person. Use the google map below for directions or use your smart phone.

Website: http://portlandwinemakersclub.com/



June Meeting Minutes

Present: 24

- We had new members present tonight: Rob & Debbie Marr and Andy & Marisa Mocny.
- Ken passed around a list of past club Presidents & Secretaries. Thanks for the additional names.
- Marilyn passed around a sign up sheet for main dishes for our July 20th picnic.

Bob Hatt will set up a wine sharing table at the picnic as raffle prizes. More details to follow.

- Paul Boyechko will collect State Fair amateur competition entries at the picnic and deliver them to Salem the next Friday.

If I heard correctly, our own Jon Kahrs will be one of five wine judges at the Fair.

- Tours: ??

The rest of the meeting was demonstrations & descriptions of some our member's best practices.

- Paul Boyechko demonstrated a home made, one case at a time, bottle washing & rinsing system he made using an inexpensive pump from Harbor Freight.
- Bill Brown demonstrated an inexpensive, simple, system utilizing very low pressure gas to transfer wine from one container to another.
- Jon Kahrs described the steps involved in producing you own sparkling wine using Methode Champenoise procedures.
- Michael Harvey described a punch down tool consisting of a clean toilet plunger with holes drill in the cup. Also his success using supplemental oak segments in his neutral barrels that he cut from old, scraped oak staves and then re-toasted in his oven.
- Ken Stinger described what he uses in addition to basic winemaking; only adds 20 ppm SO2 at crush; adds an enzyme at crush for color, aroma & juice yield; adds un-oaked chips prior to ferment to reduce vegetal taste and improve structure; uses cultured wild yeast (Torulaspora delbrueckii) for initial ferment down to 85% brix, then S. cerevisiae for remainder of ferment; uses Super-Kleer K.C. (Kieselsol & Chitosan) for white wine fining; instead of keeping top off wine in carboys & gallon jugs I now bottle top-off wine under cork as soon as malolactic is finished, eliminated spoilage.

Portland Winemakers Club

Food & Wine PICNIC

2019

JULY 20TH

1PM - UNTIL WE'RE DONE

at the home of

Craig & Mindy Bush

1660 SW 187th Ave

Beaverton 97003

$10 fee per person

Main proteins will be provided

Bring a side dish, salad or dessert to share, your own wine glass & lawn chair

Don't forget your handmade spirits!

The OREGON STATE FAIR

The Oregon State Fair amateur wine competition is rapidly approaching. Entry forms must be completed & payment made online at https://oregonstatefair.org/competitions/amateur-wine/ Paper or mailed entries will not be accepted. The cost is $10 and 2 bottles per entry.

Bring your entries with copies of the entry forms to the picnic on July 20th & Paul Boyechko has offered to deliver them to the fair office the next Friday (26th).

Yeast and Nutrition Q&A

JASON MABBETT

There are many different types of yeast. How do you know which one to select?

Yeast should be selected based on the grape variety and wine style you would like to create. However, there are other key factors to consider: The ethanol tolerance of the yeast strain should exceed the projected final ethanol titer of the fermentation. Nitrogen requirements should match the nutritional conditions of the juice. The temperature tolerance should be considered if uniform temperature control is a concern. Compatibility of the yeast strain with malolactic fermentation (MLF) is an important consideration if MLF is desired.

Production of specific aroma compounds is a consideration, but the ability to produce a spectrum of volatile characters is partially dependent upon composition of the juice. The aromas produced will vary, depending upon the levels of precursors present. The production and quantity of esters and thiols can also be favored through fermentation temperature profiling; this is most obvious and decisive in grapes such as Sauvignon Blanc.

There is no single "right" choice of yeast strain. In fact, for each grape variety there are many possible choices that will all make lovely wine. It is, however, important to understand the attributes of each yeast strain to ensure that you choose the one that will give the optimal fermentation profile and desired sensory characteristics you want.

How important is it to rehydrate yeast?

Extensive research shows that the yeast cell wall is very fragile during the first few minutes of rehydration. When a desiccated yeast cell rehydrates, its cell wall is swelling and the membrane is gaining back its elasticity. If rehydration is not properly carried out, the cell can leak important cellular compounds through the membrane, which is extremely permeable at the time of rehydration. As a consequence, the yeast will lose viability, and the subsequent populations will have reduced capability to undertake grape juice fermentation. Arguably the most important information yeast manufacturers provide is instructions for the correct preparation of active dry wine yeast, which is essential for optimum performance.

Can you add too much or too little yeast? Will it ruin the flavor/taste?

The amount of the inoculum influences the lag phase (the initial growth rate before rapid, exponential growth) and general fermentation speed, as well as, potentially, the flavor of the finished wine.

A small inoculum will result in a longer lag phase and more risk of contamination as the inoculated strain seeks to dominate other yeast that may be present (even after SO2 additions). While these strains can add aroma and complexity to a wine, they can also negatively influence a wine's aroma. For example, some strains of *Kloeckera apiculata* can potentially produce up to 25 times the amount of acetic acid typically produced by *S. cerevisiae*. In addition, these native strains can also lead to longer fermentation times or, in some cases, to stuck fermentations possibly due to the production of acetic acid, octanoic and decanoic acids, or "killer" factors. Conversely, too much yeast can speed up fermentation and can lead to early yeast autolysis (yeast death) and hence a yeasty/bread-like flavor added to the wine.

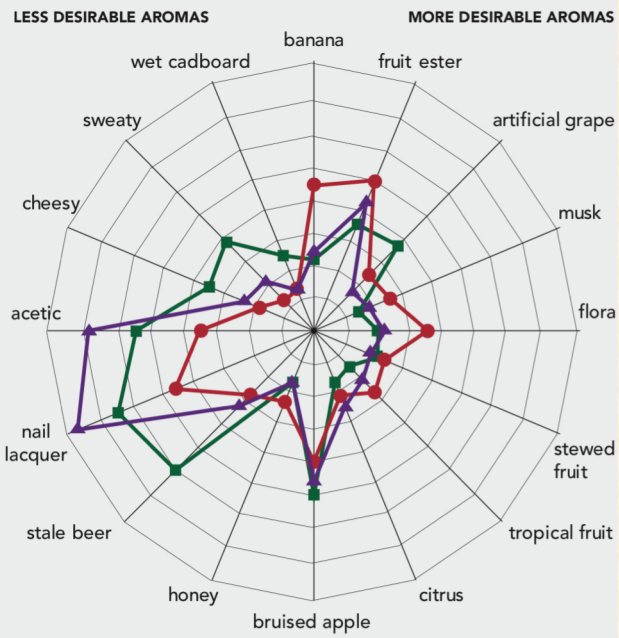
How do different nitrogen sources influence yeast fermentation performance and/or sensory characteristics?

Nitrogen comes in two forms: inorganic nitrogen, such as ammonium salts (DAP) that are added during alcoholic fermentation, and organic nitrogen such as small peptides and free amino acids—all derived from added yeast (inactive or autolysate) and from the grape juice itself. When yeast cells are inactivated, part of the cell protein are hydrolyzed and become available as small peptides and amino acids that live yeast can assimilate during fermentation. Yeast autolysates contain more YAN than inactive yeast. Yeast benefit from a mix of different nitrogen sources; the use of both organic and inorganic nitrogen is important for optimal growth and performance.

The inorganic form of nitrogen is more readily consumed by yeast, and it can be easily absorbed by yeast cells during the growth phase and even as the alcohol concentration rises during primary fermentation. Amino acids, on the other hand, require energy expenditure in order to be brought into the cell through transport proteins located on the cell membrane.

Nitrogen compounds are necessary for complete and clean-smelling ferments. Yeast assimilable nitrogen (YAN) can strongly influence production of some of the volatile metabolites, especially the acetate and ethyl esters, which are

FIGURE 3: Effect of nitrogen addition on wine aroma



Descriptive sensory analysis of Chardonnay wines made by fermentation, with *Saccharomyces cerevisiae* AWRI 796, of a grape juice containing 160 mg N/L (GREEN SQUARE) or 320 (RED DOT) or 480 mg N/L (BLUE TRIANGLE) made by supplementation with ammonium

known to be positive to wine aroma when in balance. For example, in Chardonnay, the flavor and style of wine is dramatically modulated by the initial YAN concentration of the grape juice. Please see the work done by **Bell and Henscke**: *https://onlinelibrary.wiley.com/toc/17550238/11/3*.

Why do some fermentation nutrients have vitamins and trace elements included and how do they assist yeast performance?

Biotin (Vitamin B7)	Increases viable yeast population and fermentation rate.
Magnesium	Magnesium prolongs exponential growth, resulting in increased yeast cell mass. The addition of magnesium also reduces the decline in fermentative activity as it is a critical cofactor in many stress-related transcription factors. Ultimately this results in stress-related proteins being produced, thus protecting the yeast cell and allowing it to ferment more easily.
Niacin (Vitamin B3)	Same as Biotin.
Nicotinamide (Vitamin B3)	Involved in the synthesis of nicotinamide adenine dinucleotide (NAD+), a co-enzyme that is important in maintaining the redox balance of the cell and the process of ethanol fermentation itself.
Pantothenic Acid (Vitamin B5)	Involved in the synthesis of sulfur-amino acids, such as cysteine and methionine, through the sulfate reduction sequence (SRS) pathway, which assists to reduce H2S and volatile acidity production. Also used in the yeast production process to reduce cell wall adhesion and remove clumpiness.
Pyridoxine hydrochloride (Vitamin B6)	Involved in the synthesis of sulfur-amino acids, such as cysteine and methionine, through the SRS pathway.
Thiamine (Vitamin B1)	Increases yeast biomass and speed of fermentation.
Zinc	Zinc is a co-factor for numerous important biosynthetic and metabolic enzymes including, significantly, various glycolytic enzymes and alcohol dehydrogenase. In addition, it plays critical regulatory roles through the action of Zn finger DNA binding proteins and affects yeast-yeast flocculation. Zinc is also known to modulate yeast stress responses, mainly due to its role as a co-factor for the antioxidant enzyme superoxide dismutase.

When should the nutrient be added?

Yeast metabolize nutrients at different times throughout fermentation. Adding nutrients at the most optimal time can enhance yeast performance. As fermentation progresses and the ethanol level rises, yeast becomes less and less able to assimilate nutrients. Ethanol is inhibitory to key cell wall transporters; and if components are added after inhibition, the substrates will not be taken into the cell.

The most effective time to add key nutrients is once the *Saccharomyces* population has become dominant, generally 24 to 48 hours after the rehydrated yeast inoculum has been added. Generally, manufacturers recommend adding complex nutrients one-third of the way through fermentation in terms of sugar consumption. Inactivated yeast can be added throughout fermentation for various purposes: early additions can be beneficial for detoxification of the grape juice to make it easier for the rehydrated yeast to perform, and late additions can contribute to mouthfeel in the wine.

The goal is to keep yeast healthy and vital, so adding nutrients during the exponential phase before nutrition becomes limiting is preferred. Few nutrients are toxic; but if nutrients are added too early, nutrients could precipitate out or be adsorbed with other organic material in the must.

Can you add too much nutrient? What happens if excessive nutrients are added?

Overfeeding of fermentations can be as problematic as underfeeding as very rapid fermentation rates are likely to lead to overheating of the fermentation and loss of volatile aroma compounds. Adding excess nitrogen may lead to microbiological problems as it becomes fodder for spoilage organisms, such as *Brettanomyces*, *Acetobacter* and Lactic acid bacteria from the *Lactobacillus* and *Pediococcus* genera.

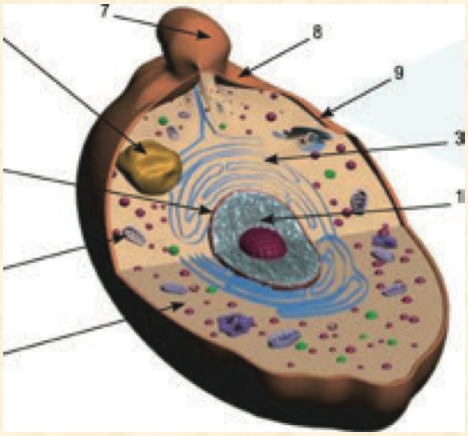
Can yeast nutrients be added for bacteria (MLF)? Why or why not?

Malolactic bacteria cannot utilize inorganic nitrogen sources. Bacteria cannot store nor synthesize all essential amino acids, so complex nutrients must be supplemented.

Newly fermented wine can often be deficient or void of nutrients due to yeast utilization. Nutritional depletion can cause sluggish or even stalled malolactic fermentations. Due to the complex nutritional requirements of malolactic bacteria and the relatively harsh medium for growth, minimizing nutritional stress is important. In addition to amino acids and peptides, which are the most influential nitrogen sources required for malolactic growth, B-complex vitamins and trace minerals are especially important.

Fructophilic Yeasts Consequences of Yeast Strain Selections

Jason Mabbett



Internal organization and compartments of a yeast cell

1- Nucleus
2 – Vacuole
3 – Endoplasmic Reticulum
daughter cell
4 – Nuclear Membrane

Membrane

5 – Mitochondria
6 – Fermentation
7 – Budding

8 – Cell Division
9 – Cell

HISTORICALLY, THERE HAVE BEEN many causes attributed to stuck and sluggish ferments. These include such vineyard and viticultural factors (high-harvest Brix, nutrient deficiencies, fungal degradation and agricultural residues, including pesticides, fungicides and herbicides), cellar management (incorrect strain selection, incorrect rehydration procedures, incorrect fermentation temperatures, over-clarification of the must and yeast assimilable nitrogen [YAN] levels), inhibitory substances (ethanol, acetic acid, mid-chain fatty acids and sulfites) and physical factors (pH and temperature extremes).

As wine researchers and yeast manufacturers have achieved greater understanding of wine fermentations, some of the above-mentioned issues have largely become redundant. The decrease attributed to these causative factors has seen a concomitant rise in one particular factor which is now viewed as being the predominant issue associated with stuck and sluggish fermentations: the ratio of glucose to fructose. 6 Anecdotal evidence suggests that in more than 90 percent of the cases (and some even characterize the incidence rate as much higher, about 95 percent)4 where there is a stuck or sluggish fermentation, the glucose:- fructose ratio is less than 1.0. That this should be the case is not surprising.

Saccharomyces cerevisiae is generally a glucophilic yeast, meaning it preferentially consumes glucose as opposed to other sugars. Many people believe that the use of a *Saccharomyces bayanus* strain will help avoid these problems; however, this is incorrect. Basically, the old taxonomy of yeast was based on their ability to mate. When geneticists started finding multiple pieces of DNA sequences that arose from the *Saccharomyces* sensstricto group, they realized that this was not the best method. With the advent of DNA sequencing, a more accurate methodology could be used. This has shown that many yeast species/strains are a mix of multiple strains with one or two dominant parents.

During this process it was revealed that those strains being used in the wine industry, which were commonly referred to as "Bayanus," were not actually *Saccharomyces bayanus* but instead *Saccharomyces cerevisiae* and are mainly from the "Prise de Mousse" family. 7,8,10 Some yeast manufacturers and resellers still label these yeasts as *Saccharomyces bayanus*, which is incorrect. Reinforcing this was the apparent discovery of some true *Saccharomyces bayanus* strains isolated from Patagonia (from non-inoculated fermentation processes).5 However, after sequencing, these have been reclassified as *Saccharomyces eubayanus*. The defining characteristics of these strains are that they are generally cold-tolerant and not fructophilic. In actuality there are very few *Saccharomyces eubayanus* strains have been isolated so far, and even fewer are commercially available.

During fermentations, glucose is, more often than not, consumed at a higher rate than fructose (the other predominant sugar in wine fermentations). As a consequence, the proportion of fructose increases as the fermentation progresses. When fructose becomes the predominant sugar at the end of fermentation this often leads to sluggish or stuck fermentations. It is important to recognize, however, that *Saccharomyces cerevisiae* yeast strains (the majority used in winemaking) consume certain types of sugar to varying degrees. Some are glucophilic and others fructophilic, and in between exists a continuum. In order to understand why this is important it is necessary to understand the genesis of this problem, the consequences and how this issue may be addressed.

Why is This Occurring?

In part, this may be attributable to an increase in alcohol levels and the desire to produce more fruit-forward wines. As many critics and consumers have noted, table wines used to have significantly lower alcohol levels than they currently do. Wines with 14% to 14.5% ABV are commonly produced today. It is also not uncommon to see wines with more than 15% ABV. But why is this? Leaving aside any debates concerning global warming and the implications of this, two related reasons stand out: the first being related to commercial imperatives and the second is viticultural.

In the last 30 years, key wine critics/reviewers have "pushed" red wines, in particular, towards a certain style where wines have higher levels of ripe fruit and softer tannins (ignoring the influence of oak). This wine style has often received higher scores and higher critical acclaim from influential reviewers, which has subsequently increased sales. Partly as a consequence of this, the distinction between sugar and physiological ripeness has become increasingly important.

In warmer climates, physiological ripeness commonly trails sugar ripeness. Generally speaking, physiological ripeness is regarded as being more detrimental to wine quality than sugar ripeness. To this end, the notion of "hang time" has become more important—leading to physiological ripeness and, by implication, the wine style likely to garner critical acclaim. To fully understand the implications of this it is important to take a step back to Viticulture 101—in particular, the growth phases of the grapevine.

Three Growth Phases of the Grapevine

In phase one, berry size is set, the berries are green and the respiration rate is fast. Photosynthesis is sufficient to support the berry's nutritional demands. Acid concentration is high, and sugar concentration is low and constant. In this phase, the glucose to fructose ratio is greater than 1.0. In phase two, the berry growth tempo declines, and acids reach their highest levels. Sugars, especially glucose, begin to accumulate. This phase ends with the onset of *véraison*. Phase three sees an increase in the berry mass and volume. The glucose:fructose ratio is now in equilibrium.

Importantly, however, the longer the grapes remain on the grapevine the more fructose accumulates proportionately. The consequences of this process and extended "hang time" are pronounced, not only from a wine quality standpoint but also the possible implications: stuck and sluggish fermentations. Bearing in mind that fructose is approximately twice as sweet as glucose, any fructose that is unconsumed can detrimentally affect wine quality due to the fact that wines may be perceived sweeter than they actually are. Additionally, the residual fructose also means a lower ethanol yield and a higher risk of microbial spoilage. In part, these consequences can be mitigated somewhat by using fructophilic yeast strains that have a higher capacity to consume fructose.

The capacity of certain yeast strains to preferentially consume a certain type of sugar is something that is by no means new. In 1932 **Edward Romer Dawson** published a paper: "The Selective Fermentation of Glucose and Fructose by Yeast." However, two important conclusions he arrived at were that the selectivity exhibited by any particular yeast is not constant and this is dependent on cultural conditions to which the yeast has been subjected to during growth. It is not hard to see, therefore, how researchers such as **Linda Bisson** (**University of California, Davis**) have pointed out that the high residual concentration of fructose may be a symptom rather than a cause of a stuck or sluggish fermentation.

But why is this?

Yeast performance is determined partly by genotype, or genetic makeup, which is species- and strain-dependent. Wine yeast strains differ in terms of fermentation kinetics, nitrogen requirements, ethanol tolerance, temperature tolerance and also glucose:fructose consumption (to name but a few defining characteristics). These strain differences are more pronounced in stressful conditions, suggesting differences in adaption to the environment. To this end, researchers have found that with respect to the consumption of glucose and fructose, nitrogen supplementation helps strongly stimulate fructose utilization and that, under high ethanol conditions, fructose utilization is inhibited more than glucose utilization. Thus the use of a fructophilic yeast strain will not necessarily ensure a problem-free fermentation in and of itself. It will certainly reduce the likelihood, but it is by no means a "silver bullet."

To further reduce the likelihood of a stuck or sluggish ferment that is a consequence of the imbalance in the glucose: fructose ratio, the differences between grape varieties have to be taken into account (you are more likely to have problems with Chardonnay than Chenin Blanc, for example). Vintage also has to be taken into account. In warm, dry vintages there is, generally, a lower glucose:fructose ratio. Yeast strain selection should, in part, be based on composition of the sugars in the must. The use of a fructophilic yeast strain is recommended where there is a higher amount of fructose than glucose when the glucose:fructose ratio is less than 1.0. Probably most important, where there is more fructose than glucose, significant attention should be paid to other additional risk factors, such as insufficient YAN and high potential final alcohol.

Fermentation problems usually arise due to the presence and impact of more than one stress factor. Some research has shown that a high starting YAN might stimulate fructose consumption preferentially, thus suggesting that analysis of the initial YAN level is necessary. When the must was supplemented with nitrogen, strains consumed between circa 6 percent and 9 percent more glucose and between circa 13 percent and 17 percent more fructose. Moreover, supplementation of diammonium phosphate at a late stage of fermentation also enhanced fructose consumption. Furthermore, researchers have noted that multiple factors (some of which are unavoidable— for example, increasing levels of ethanol) generally have a synergistic effect on each other. This suggests that while the ability to preferentially consume fructose is important, other attributes of fructophilic yeast strains may be just as important: low nitrogen demands and alcohol tolerance for example. Ultimately the one thing a winemaker can most easily control is the selection of the yeast strain to be utilized in the fermentation, taking into account not only whether it is fructophilic but also other attributes of the strain.

In the interim, yeast manufacturers and researchers will continue to assist by attaining a better understanding of the wine microorganism physiology and the impact on its environment. Additionally, through selective breeding, hybridization, adaptive evolution and investigation of other yeast species that might be better suited to the fermentation of fructose, we may be able to arrest issues related to stuck and sluggish fermentations.

Take Away

Where the ratio of glucose:fructose is less than 1.0, winemakers should consider the use of fructophilic yeast strains to ensure less likelihood of a stuck or sluggish ferment. All yeast manufacturers and resellers have fructophilic strains, and their technical sales representatives will be able to point winemakers in the right direction.

However, when the glucose:fructose ratio is less than 1.0, the use of a fructophilic yeast strain will not necessarily ensure a successful fermentation all the time. Fermentation management is fundamental.

Attention has to be paid to other risk factors, such as proper yeast rehydration, YAN level, fermentation temperature and high potential final alcohol, in order to ensure a successful fermentation.

What will tomorrows consumers be looking for when they buy wine? To start with, they will probably be more interested in how the grapes have been grown.

Do you know your organic from your biodynamic? Category definitions

Organic: broadly speaking, organic wine is wine produced from grapes that have been grown organically, often without the use of pesticides or other synthetic materials, and where the winemaking methods employed adhere to the rules and regulations of an organic certifying body. Precise definitions vary from market to market.

Biodynamic wine: an extended version of organic wine, first developed by Rudolph Steiner in the 1920s, stimulating health of the vine through homeopathic means so to avoid disease. Organic principles apply, as so some additional practices such as following the lunar calendar.

Natural wine: farmed organically and made without adding or removing anything in the cellar (or use of processing aids, heavy manipulation etc). Creates a 'living wine'.

Orange and skin contact wine: white wines made in the same way as red wine, in that skins are not removed and left to ferment, often resulting in an orange hue.

Vegan wine: made without interaction from animal products (conventional wines may use fining agents such as isinglass and casein).

Sustainably-produced wine: generally considered to be produced in an environmentally-free manner (such as at a carbon-neutral winery or water and energy efficiency) or using grapes which have been grown with minimum chemical input and an effort to maintain the quality of the land. But there is no consistent definition.

Environmentally-friendly wine: no definition or certification, but centers around the concept of 'green' products.

Fairtrade wine: products certified by Fairtrade International, an organisation that promotes products that meet social, economic and environmental standards set by the foundation, including protection of workers' rights and environment.

Sulphite-free wine: The legal definition for sulphite-free wine under both EU and USA law is a wine containing no more than 10 parts per million total sulphites and 5 parts per million free sulphites. Wine with an excess of 10mg/l must state it "contains sulphites" on the label. All wines contain some level of sulphites, as sulphur is a natural by-product from the fermentation process.

Preservative-free wine: typically refers to no added sulphites

California Vineyard Buyers Flock to Compelling Northwest Alternatives

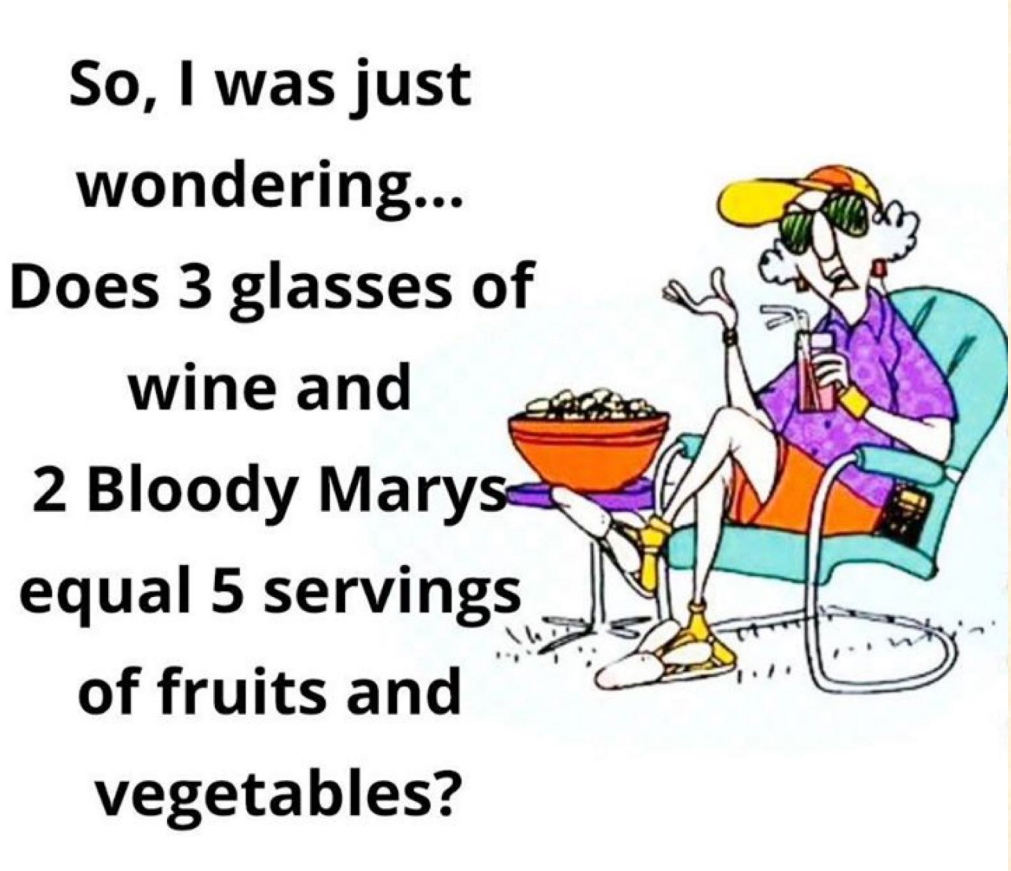
“The growth and interest in Oregon and Washington are largely driven by Napa and Sonoma becoming less and less affordable,” said Eric McLaughlin, CEO and managing partner at the Northwest’s leading mergers and acquisitions firm, Metis.

“We’re definitely seeing more interest in properties in Oregon and Washington from operators that are either currently investing in California, or previously would’ve looked to invest in California, for various reasons. Part of the influx to Oregon and Washington is getting priced out of the ultra-premium areas [in California]. Part of the movement north is environmental or regulatory,” McLaughlin said.

The increase in vineyard transactions has led some of the preferred AVAs in the two states to be price-prohibitive. For instance, noted McLaughlin, “The Dundee Hills AVA is experiencing a price premium and a price insulation that is unparalleled by the other regions’ nested AVAs within Oregon. It’s not that Dundee Hills is inherently superior from a viticultural standpoint. Rather, it’s people want to be in close proximity to established players at the high end of the market.”

Ironically, added McLaughlin, the oversupply in both Oregon and Washington is causing a softening of price, which is slowing demand for vineyard acquisition. “The vineyard acquisitions we see happening are those driven by the prime vine- yards, which have either a proven or a high-end theoretical ability to produce very high-end wine. Those will continue to go for a premium,” he said. “The other activities that we’ll see are purchases of properties in distress, where the buyers are going to be opportunistic about buying C- and B-quality vineyards at a bargain.”

While the rush to premium property in Oregon has been generated by the growing consumer demand for Pinot Noir, it’s Cabernet that drives the pursuit for vineyards in Washington, the latter centered around the life-style-rich, Walla Walla and the rich-soil Red Mountain. McLaughlin noted that “consumer sales of Oregon wines continue to outpace the industry in general, and Washington is slightly outpacing the median in the industry.” This phenomenon is occurring despite an overall wine industry sales growth rate that has flattened.



Portland Winemakers Club
Leadership Team – 2019

President: **Bill Brown** bbgoldieguy@gmail.com
- Establish leadership team
- Assure that objectives for the year are met
- Set up agenda and run meetings

Treasurer: **Barb Thomson** bt.grapevine@frontier.com
- Collect dues and fees, update membership list with secretary
- Pay bills

Secretary: **Ken Stinger** kbstinger@frontier.com
- Communicate regularly about club activities and issues
- Monthly newsletter
- Keep updated list of members, name tags and other data

Chair of Education/Speakers: **Barb Stinger** kbstinger@frontier.com
- Arrange for speakers & educational content for our meetings

Chair for Tastings: **Paul Sowray & Barb Stinger** davids1898@aol.com
- Conduct club tastings kbstinger@frontier.com
- Review and improve club tasting procedures

Chair of Winery/Vineyard Tours: **Damon Lopez.** dlopez5011@yahoo.com
- Select wineries, vineyards etc. to visit
- Arrange tours
- Cover logistics (food and money)

Chair of Group Purchases: **Bob Hatt** bobhatt2000@yahoo.com
- Makes the arrangements to purchase, collect, and distribute
- Grape purchases
- Supplies – These should be passed to the President for distribution

Chair of Competitions: **Paul Boyechko** labmanpaul@hotmail.com
- Encourage club participation in all amateur competitions available. Make information known through Newsletter, e-mail and Facebook.

Chairs for Social Events **: Marilyn Brown & Mindy Bush** brown.marilynjean@gmail.com
* Gala / Picnic / parties mindybush@hotmail.com

Web Design Editor: **Alice Bonham** alice@alicedesigns.org