

**Portland
Winemakers
Club**



Portland Winemakers Club

August 2016

Monthly Rant

Scheduled Meetings

January 9, 2016

Annual Gala – Archer Winery; 4-9 PM

January 20, 2016

Crush Talk / Planning

February 17, 2016

Bordeaux Tasting

March 16, 2016

Speaker: Curtis Patience on distilling Brandy & Grappa.

April 20, 2016

Barrel / Carboy Sample Tasting

April 23, 2016

Tour: Patricia Green Cellars

May 18, 2016

Faults & Flaws

June 15, 2016

Speaker: Tom Feller, winemaker from Artisanal Wine Cellars.

June 26, 2016

Portland Winemakers Club at FH Steinbarts.

July 16, 2016

Annual Picnic (no meeting)

August 17, 2016

All Whites Tasting

September 21, 2016

Other Reds Tasting

October 19, 2016

Pinot Noir Tasting

November 2016

No Meeting

December 7, 2016

Planning, Tours, Speakers, Events, Elections



At a recent ETS seminar I went to along with Ken Stinger, the speaker talked about a study they had just completed on so-called native yeasts in the winemaking process. 6 wineries participated in a multi-year study: Ken Wright Cellars, Beaux Frères, Bethel Heights Vineyard, Cristom Vineyards, Penner Ash Wine Cellars and NW Wine Co. They experimented with allowing native yeast (those present in the vineyard) to run the fermentation on their own fruit as well as fruit from other vineyards in the study, and also ran the same with inoculations of commercial cultured yeasts as controls. Their results were quite a surprise to everyone involved. In most cases, in the non-inoculated batches the native yeast was only barely present in the must at the end of primary, and even if it had started out as the dominant strain its population dropped off steeply by mid-fermentation, presumably contributing only marginally to the resulting wine's character. In many cases the commercial yeast inoculations became the dominant and final strains, but curiously not always. The real shocker was that a large number of the musts showed the dominant yeast present to be a previously used (but discontinued) commercial yeast. This means that formerly used yeast had contaminated the winery to the extent that no matter what strain was in the must initially, it still took over and was the major determinate in both the fermentation behavior and the taste of the resulting wine.

This appears to be the first time anyone has bothered to investigate this phenomenon, and the results were only discovered by doing stringent tests using careful controls followed by sophisticated DNA analysis at ETS. Afterwards I asked the speaker if it is likely that most winemakers who boast about using native yeast are essentially unable to know what exactly is going on in their tanks unless they do similar tests, hinting that all of this posturing about the superiority of this approach, and how it makes their wines better, could basically be a bunch of BS. His answer? A smile and a nod.---- Phil



Misc. Information

• Here's another reason to love red wine. A Dutch study, "Population-level analysis of gut microbiome variation" claims that drinking red wine promotes diversified and beneficial intestinal bacteria and leads thus to better overall health.

• Neighbors and environmentalists are furious with California's Justin Vineyards for recently cutting down thousands of old oak trees to enable an expansion of their Paso Robles vineyards. The act stirred up so much controversy that local authorities were forced to halt the project pending an investigation. In the end, Justin issued a statement saying they were "ashamed and sorry" for their actions and would donate the 380-acre parcel on which the felled oaks once sat, while additionally planting 5,000 new oak trees across their properties.

• It's been another early start for Napa in 2016, with the first grapes picked for sparkling wines in the past few days, said Napa Valley Vintners.

• In Washington, winemakers crush about 9,000 tons of Pinot Gris a year, making it the No. 3 grape after Riesling and Chardonnay. In Oregon, it's the top white grape by far. More than three times as much Pinot Gris is being made than Chardonnay.

• Today, Chateau Ste. Michelle is the single largest producer of Riesling in the world, making more of it than any other winery anywhere — including Germany.

At 2,110 acres, more than 50 percent of Red Mountain is covered in vines. This makes it the most densely planted AVA in the Pacific Northwest.

Note: The next regular meeting will be Wednesday, August 17th at 7:00 PM at Oak Knoll Winery.

August agenda: "All Whites Tasting". This will be a blind tasting and critique of member made white wines including white varietals, rose, sparkling, fruit wines & mead and anything remotely resembling a white wine.

1.) Snacks: This will be a potluck; bring a small snack to share.

2.) . Everyone needs to sign a new waiver. If you didn't pay your dues at the Gala or picnic please remember to pay your 2016 dues at this meeting.

3.) Bring two wine glasses for the blind tasting of member wines.

4.) The regular club meeting will begin at 7 pm and end by 9 pm. If you can, get there a little early to help set up. Please help put away chairs and tables at the end of the meeting.

Website: <http://portlandwinemakersclub.com/>

No Meeting Minutes

HOW DO DESSERT WINES GET SO SWEET?

Emily Bell April 11, 2016

Ever wonder how dessert wines become sweet? It's easy to imagine a bunch of winemakers just opening up big vats and pouring in some granulated sugar. (That is, after all, what makes bran flakes palatable for all those prepubescent years.) And while some liquors have shown evidence of actually having sugar added, dessert wines become sweet by a variety of processes.

They also become expensive by a variety of processes. The reason that most dessert wines come in half, or 375 mL bottles, is because the basic concept is dehydration—meaning you get less juice per grape, and it takes a lot more to fill a bottle. But considering what goes into most dessert wine (especially extremely careful timing of harvest), you'll tend to find a consistency of quality, if also a consistency of price. And don't let the "sweetness" factor scare you off. Highly aromatic and high acid grapes tend to go into dessert wines to create balance with the sweetness, not to mention concentrated complexity. And then there's Noble Rot, which just makes everything delightfully funky.

Fortification

As far as sweet wines go, this is a pretty simple one to tackle. Take port. Like any other wine, port is fermented by allowing yeasts to feast on sugar and convert it to alcohol. However, where wines like a Cabernet do this to the point of a much dryer wine, the fermentation of port is actually stopped—like, brought to a screeching halt, by the addition of a neutral spirit. This is called fortification. (Thus, fortified wines.) Fortification has two important effects: it ups the alcohol content of the wine—which is why we sip port in those tiny adorable cups—and it stops fermentation, meaning there will be leftover sugar. And that's what makes port sweet.

Noble Rot

Even if you haven't had the pleasure of drinking a wine affected by Noble Rot—the fancier name for *Botrytis cinerea*—you've probably heard of it. It's actually just a mold that basically raisins the grapes, drying them up and concentrating their sugars. Not that it only intensifies sweetness; by dehydrating the grapes, Noble Rot also concentrates the flavors, yielding richly aromatic, intense, low-yield dessert wines like Sauternes, Tokaji Azu (from Hungary), and Spätlese Riesling.

Ice Wine

By this point you're seeing the pattern—it's all about reducing the amount of water in the harvested grape. And the ice wine process is a really cool way of doing that. Also, yes, a freezing one. The idea is leaving the grapes (typically high aromatic, decently acidic grapes) on the vine into the winter. By picking them at just the right time—and that's a seriously important decision on the vintners' part—enough of the water is still frozen, so when you press, you get concentrated sweetness and aromatics.

Late Harvest

Like the ice wine process, but less extreme, this is simply when harvest (again, of a particular and often richly flavored grape) is delayed, allowing the grape to shrivel somewhat and concentrate sugars and aromatics. So basically all ice wine is technically (and super) "late harvest," though not all late harvest wine is ice wine. Riesling (again, Spätlese, which actually means "late harvest") is a common late harvest wine, as are Semillon and Sauvignon Blanc.

Portland Winemakers Club annual picnic

The PWC held it's annual picnic on Saturday, July 16 at Oak Knoll Winery. Member wines were better than ever and the food delicious and abundant.

Thanks go out to Bridget Lopez for making sure all details were taken care of and for providing clever table center pieces and delicious grape cluster decorated cup cakes and other desert goodies.

Below are some photos from the event. Treasurer Barb Thomson submitted the following report:

Attendees: 26 (25 adults, 1 child) Picnic fees collected: \$110.00 (fees waived for 3 adults and 1 child) Picnic expenses: \$59.79 Paid out for protein: \$136.24





Editor: (See Phil's Rant on page one) PWC members Ken Stinger, Phil Bard & Jon Kahrs attended a ETS seminar in Newburg presented by Dr. Rich Decenzo of ETS Labs. He presented the results of VTNR, DNA analysis of yeast species present in the must of both non-inoculated & inoculated ferments. Fermentations from six Oregon wineries & six Oregon vineyards were tested. They attempted to answer the following questions:

- Is it possible to have a fermentation driven by indigenous *Saccharomyces cerevisiae* yeast?
- Do indigenous *Saccharomyces cerevisiae* strains from the vineyard persist through the fermentation?
- Are vineyard yeast strains the same vintage to vintage?
- What happens with non-inoculated fermentations in wineries that have used commercial *Saccharomyces cerevisiae* yeast in the past or currently?

The following short article is a summary of those tests.

Can Vineyard or Inoculated Yeasts Overcome Those in a Winery?

Contrary to widespread belief, the answer is probably not.

Paul Franson

FOR YEARS, WINEMAKERS AND academics have sparred on which yeast strains dominate fermentation when no cultured yeast is added.

A new trial suggests that “feral” strains of cultivated yeasts in your winery likely complete fermentation even if “wild” yeasts from a vineyard are present at the beginning of fermentation.

More surprisingly, the “feral” yeasts usually win out even if you inoculate with cultured yeast. That suggests that winemakers should choose the first yeast they use carefully, for it may dominate the fermentation in all future wines. The trials, which were disclosed at *Wine Business Monthly's* Innovation + Quality (IQ) conference in March at Charles Krug Winery in St. Helena, came out of the curiosity of Oregon's Cellar Crawlers group of winemakers, who share information about their efforts and what they learn. “Intellectual camaraderie is one of the best things in our industry,” noted Dan Goldfield of Dutton-Goldfield Winery, one of the members of Cellar Crawl.

Three winemakers who participated in these trials were on the panel at IQ with Goldfield: Ken Wright of Ken Wright Cellars, Grant Coulter of Beaux Frères and Ben Casteel of Bethel Heights Vineyard. Cristom Vineyards, Penner Ash Wine Cellars and NW Wine Co. also participated in the trials, and Jeff Maccario of ETS Laboratories, who conducted the DNA tests on the yeasts, was also on the panel.

The participants hoped to learn whether it is possible to have a fermentation driven by indigenous *Saccharomyces cerevisiae* yeast and whether indigenous *Saccharomyces cerevisiae* strains from the vineyard persist through the fermentation.

They also wondered whether vineyard yeast strains are the same vintage to vintage and what happens with non-inoculated fermentations in wineries that have used commercial *Saccharomyces cerevisiae* yeast in the past or currently.

It would have been very time-consuming for all six wineries to perform trials from all six vineyards and have them tested, so grapes from three vineyards went to three wineries, and grapes from the other three vineyards went to the other three wineries.

The vineyards were Savoya, Bethel Heights, Gran Moraine, Eileen, Lillies and Hyland.

Each winemaker made the trial wines in open-top bins without inoculation and the yeast strains present in the must were sent directly to ETS Laboratories for testing before (i.e., from the vineyard), in the middle (at 10 percent Brix)

The first question was whether indigenous *Saccharomyces cerevisiae* strains from a vineyard persist through fermentation.

Results differed at different sites. For example, 10 strains of indigenous *Saccharomyces cerevisiae* yeast were found at mid-fermentation in the Eileen Vineyard grapes at Cristom and seven at the end. But only three were the same.

In general, no vineyard strains were found in most of the completed fermentations from grapes at four vineyards, though two strains from Eileen Vineyard at NW Winery represented 25 percent of the yeast at the end, and one strain from Savoya Vineyard fermented at Bethel Heights was present at the end of the fermentation.

Yeast strains from Lillies and Hyland vineyards were found at the end of their fermentations, however.

Another concern was whether vineyard strains persist from vintage to vintage. In 2014, 29 *Saccharomyces cerevisiae*



strains were identified in three of the five vineyard cluster micro-fermentations. In 2015, 32 *Saccharomyces cerevisiae* strains were identified in six of the six vineyard cluster micro-fermentations.

One strain of *Saccharomyces cerevisiae* was observed in the Hyland cluster micro-fermentation in both vintages, but differences were observed in non-*Saccharomyces cerevisiae* yeast populations between the vintages. So some persisted but not others.

What happens with non-inoculated fermentations in wineries that have used commercial *Saccharomyces cerevisiae* active dry yeast? In three wineries, Lalvin Endoferm Syrah (presumably used previously or simultaneously on other batches) accounted for all the yeast at the end of fermentation.

And finally, can inoculation with chosen yeast overcome feral yeasts in a winery? Apparently not always. In general, the majority of fermentation is driven by the winery strain, not that from the vineyard.

Greg Casteel also noted that there was a big difference among the wines initially; but after 15 months in barrel, they tasted much the same, no matter what yeast.

Ken Wright mentioned that they have put their lees in their vineyards to try to encourage desirable yeasts, but none show up in testing. The trials gave no insight into what yeasts would dominate in a new winery away from other wineries if no yeast were ever added. ETS's Maccario said that he knows of one new winery in Napa Valley that tried to keep all yeasts out to let vineyard strains develop. "They did take off, but it was slow at first," he said.

Wright commented, "If you have a new winery, wash down the walls with the yeast you love. What gets established has so much impact!" He added that it could be a yeast from your vineyard.

Casteel concluded, "For me, any good experiment raises more questions than answers." The winemakers would like to have the trials repeated elsewhere, however.

'Upside down' fermenter by Radoux

Tonnellerie Radoux reports its new "upside down fermenter" designed to create a "full and gentle extraction of color and tannins" produced promising results in winemaking trials in France. The oak fermenter combines the advantages of the cone and inverted cone-shaped casks in one fermentation tank. The trials at wineries in France produced wines the supplier described as exhibiting complex aromas and flavors as well as "perfect overall harmony" with "aromatic complexity, strength and fullness on the palate" and "elegant and velvety tannins." During fermentation, the tank is turned to break up and wet the cap.



What Is Phylloxera, Which Has Destroyed Countless Vineyards Throughout the World?

By Daniel Pambianchi

Phylloxera is a family of sap-sucking aphids that includes the grapevine-devastating root louse *Daktulosphaira vitifoliae* which is simply referred to as *phylloxera* in viticulture. (It is still often classified by its old scientific names *Phylloxera vastatrix* or *Phylloxera vitifoliae*.) Specifically, it attacks the rootstock to cut off the flow of water and nutrients to the vine.

Phylloxera is native to North America. It is believed to have been introduced into Europe and the Old World winemaking regions in the late 1860s to supplement the needs of growing vineyards and wineries, but spawned a worldwide epidemic, ruthlessly ravaging vineyards from France down to Australia. In France alone, more than 2.5 million hectares (6 million acres) of vines were uprooted. This was on the heels of the ravages of powdery mildew, the leaf disease also known as *Oidium* caused by *Uncinula necator* fungus, in the 1850s. (The fungus spreads to grape clusters and causes secondary rot and off-odors described as moldy, earthy and mushroom-like.)

North American grapevines, such as *Vitis labrusca*, were spared because these had developed natural resistance to phylloxera, however, *Vitis vinifera* grapevines-used throughout Europe in making world-class wines such as Chardonnay and Cabernet Sauvignon-had not. Interestingly, Chile's *vinifera*--planted vineyards were spared; it is not known why but it is suspected that the louse could not traverse the Andes Mountains from the east because it could not survive high altitudes nor cross the Pacific Ocean from the west.

The cause of the problem was not immediately apparent and was often misdiagnosed. Much research was undertaken to identify root causes (ok, the pun was intended) but this took very long. In the meantime, the louse spread across continents, continuing to inflict damage at a dizzying pace.

Many proposed remedies failed, and failed miserably. There was a glimmer of hope when Baron Paul Thénard, son of French chemist Baron Louis-Jacques Thénard (1777-1857) of hydrogen peroxide fame, applied carbon disulfide, a strong, poisonous and foul-smelling insecticide around the affected vines. The chemical was fairly effective against phylloxera, but it had two shortcomings in addition to being a very expensive treatment making it unsuitable as a long-term solution. First of all, carbon disulfide is very volatile and therefore was required to be applied in large doses. Secondly, it had to be applied annually which weakened vines and in cases of prolonged applications killed vines altogether.

Other chemical warfare was proposed such as potassium xanthate and potassium sulfocarbonate to overcome the first shortcoming of carbon disulfide but again, these treatments were simply too expensive. There was also an attempt to use a very dilute solution of Sarin, an organophosphorus compound chemically known as *methylphosphonofluoridic acid 1-methylethyl ester*. The solution was applied to the soil around the vine trunk, and although it proved very effective, its use was considered too toxic and dangerous as an ongoing remedy. Sarin is a highly toxic nerve gas once used, for example, as a chemical warfare agent and in the 1995 Tokyo subway attack.

Vineyardists had become desperate, and desperate times called for desperate measures. Some resorted to voodoo-like solutions such as burying toads under the vines to dispel the evil forces but to no avail.

A couple of long-term solutions were finally identified. One solution recommended by Gustave Foëx (1844-1906) Director of the École d'agriculture de Montpellier involved breeding European *V. vinifera* cultivars with native North American species, however, these "French" hybrid varieties did not produce the same style and quality of wine that the Old World had become accustomed to with *V. vinifera* varieties. The second solution, now standard practice across the world in planting and replanting vineyards, developed by British-born American entomologist Charles Valentine Riley (1843-1895) and French botanist Jules-Émile Planchon (1823-1888) in the late 1870s, involved grafting *V. vinifera* vines onto very specific North American rootstocks such as *V. riparia*; the result is a *vinifera*-yielding vine on a phylloxera-resistant rootstock.

Today, phylloxera is not as a serious threat, except in those vineyards and winemaking regions that persist on planting ungrafted *vinifera* grapevines and which have not been attacked yet or those vineyards that had been replanted with vines grafted onto still-vulnerable North American rootstocks as evidenced by the phylloxera strike in California in the late 1980s. Specifically, in Napa and Sonoma counties, vineyards were replanted in the 1960s using a rootstock known as A×R1, or Aramon Rupestris #1, a cross between Aramon, a *V. vinifera* cultivar, and Rupestris, an American *V. rupestris* grape species but which have not developed total immunity to phylloxera.

Modern vineyards now have a wide selection of rootstocks known to be highly resistant to phylloxera and which can be adapted to the specific environmental conditions. One example is SO4 or Selection Oppenheim #4, a cross between two native North American species, *V. berlandieri* and *V. riparia* cultivars, known to perform well in cool-climate regions, particularly in wet soils.

Considering the cost of ripping vines out and replanting a vineyard, the fact that vines only produce wine-worthy grapes after five years on average, and with its associated revenue losses, it is surprising that history has not been a deterrent to these vineyardists.

Has Pinot Noir Peaked?

Should we now pursue Gamay Noir?

Matt Kramer June 21, 2016

Anyone who plays the stock market—or even just observes it from the sidelines—knows that timing is everything. Even Apple Inc., the world's most valuable company, is no longer the stock-market darling it once was, never mind its still-massive earnings.

Why the bloom-off-the-rose gloom? It's all about the future, a "what will you do for me tomorrow?" skepticism about whether the fabled tech titan can continue to innovate. By all accounts Apple is stalled by flat sales of its major profit-maker, the iPhone. That item continues to mint money, to be sure, but it's not the future.

It's no different with wine, if not quite as speedily or disruptively so. Right now we're seeing eye-popping prices being paid by the biggest wine companies for wine brands—with no vineyards attached, mind you—that specialize in big, juicy, unsubtle red wine blends with what might be called "future scalability."

Can anyone doubt that wildly popular brands such as Meiomi, The Prisoner or Orin Swift can be made more popular yet with the marketing muscle and winemaking savvy of Constellation Brands (which bought Meiomi and The Prisoner) or Gallo (which purchased Orin Swift)? I sure wouldn't bet against them.

But what of less commercially driven wines, ones powered less by brand and more by land? What, particularly, of America's newest wine darling, Pinot Noir? No grape variety in recent years has experienced so meteoric a rise. Pinot Noir has managed the market magic of dramatically increasing production while still maintaining—even increasing—sky-high retail prices.

Has Pinot Noir peaked? No one can say for sure, of course. But if I were to put down a bet, I would say, "yes," with the inevitable caveats. One such caveat is that we're probably at the peak of selling this much Pinot Noir at the prices currently being asked.

Sooner or later, every wine category gets commodified. It happened with Cabernet Sauvignon and Chardonnay. And I would submit that it's now about to occur with Pinot Noir. (Some might say that, with the likes of Meiomi, it's already occurred.)

As everyone knows, you can play with statistics to support any position you like. (Ask any stock analyst.) But let's look at the broadest-brushstroke numbers about supply.

As of 2015, California has 44,027 acres of Pinot Noir planted, 90 percent of which is currently bearing fruit. Not all of that Pinot Noir is going into still wine; some of it is sluiced into sparkling wine.

Oregon, meanwhile, has 17,146 acres of Pinot Noir, also 90 percent of which is bearing. The great majority of Oregon's Pinot Noir is made into still wine.

Together, the two states have 61,173 acres of Pinot Noir in the ground. Is that a lot? Well, in comparison, the most widely planted fine-wine grape varieties in California are Chardonnay, with 96,820 acres planted, and Cabernet Sauvignon with 89,698 acres.

After those two leaders you've got a big drop-off, with another two grape varieties representing a distant second rank: Zinfandel (47,827 acres) and Merlot (44,460 acres).

The scale then drops again by more than half, to a third rank comprising three grapes: Syrah at 18,476 acres planted; Sauvignon Blanc at 15,185 acres and—this may surprise you—Pinot Gris at 15,009 acres planted.

Now, you can interpret these figures in a variety of ways, but I think that on the face of it we can all agree on one thing: At a combined 61,173 acres of Pinot Noir in California and Oregon, there's an awful lot of Pinot Noir sloshing around.

My guess is that Pinot Noir, at its current price points, is now saturated. It's that old supply and demand thing.

So what happens now? Understandably, producers are loath to lower prices. Compared with Cabernet and Chardonnay, yields for Pinot Noir—anything good, anyway—are substantially lower.

Lower yields necessarily translate to higher prices, regardless of grape variety. In Oregon, for example, the average yield per acre for Pinot Noir was 2.38 tons in 2013, and 2.95 tons per acre in 2014. (Cabernet and Chardonnay are easily good for twice that yield without a huge loss of varietal quality.)



Pinot Noir is now the iPhone of fine wine. It likely has reached market saturation and very likely cannot significantly grow sales, at least at the prices being asked now.

So what next?

I think the answer to that question is Gamay Noir. It's in the same Burgundian mode as Pinot Noir. (Technically, the Beaujolais zone, which is all about Gamay Noir, has always been part of the larger Burgundy region.)

Gamay Noir not only shares a similar name (good halo effect there), but also shares similar taste characteristics to Pinot Noir, such as soft, limited tannins, berry fruitiness, easy drinkability and, at its very best, a capacity to age and transform into something distinctively fine.

Worth noting is that we're currently seeing, at long last, an upswing in both the reputation and price of the best Beaujolais wines, which are the 10 districts collectively known as *cru* Beaujolais. And this rise in price and stature is only just beginning.

Not least, Gamay Noir can deliver high quality at significantly higher yields than Pinot Noir (yield is where the money is). Gamay neither needs nor rewards the use of expensive new small oak barrels. Not least, it's out the winery door as much as a year earlier than Pinot Noir, which means, of course, faster cash flow and profits.

So everyone is now racing to Gamay Noir, right? Hardly.

Consider this: In 2003 there were just 273 acres of "Gamay" planted in California. A dozen years later, in 2015, that figure surged to all of 304 acres—and that includes grapes such as Valdiguié, a red variety that has nothing to do with the true Gamay Noir but which historically was sold as "Napa Gamay." (The name has been banned by law since 1999.)

Oregon, for its part, is comparably disinterested. So little Gamay Noir is produced in Oregon that its acreage is not even officially tabulated. Yet the few Oregon-grown Gamays that are produced, such as those from WillaKenzie Estate and Brick House, among several others, are exceptionally fine.

If Pinot Noir has indeed peaked—a debatable point, I acknowledge—I ask you: Why not Gamay Noir as the lower-priced Next Big Thing?

Great Gewurztraminer from Grapes

Thomas J. Miller

Why make a wine you can't even pronounce? If you've ever tasted a Gewürztraminer, you already know the answer. At its finest, this most distinctive white wine has an exotic, spicy flavor with hints of ginger and cinnamon. It is full-bodied, dry and slightly fruity.

Gewürztraminer grapes are as unique as the wine. The origin of the fruit, as well as the name — it means "spicy" in German and is pronounced guh-VERTZ-truh-meener — is the Alsace region of southwestern Germany. The berries are small and often a pretty pink color, depending on how ripe they are. The clusters grow tight to the main vine, making them difficult to pick by hand. Alsace winemakers are renowned for coaxing a spicy characteristic from this native varietal.

On this side of the Atlantic, the grape is mostly grown in California and New York, since it does best in regions with warm days and cool nights. Afternoon sun builds the fruity characteristics in the grape, while the chill of evening helps stabilize the flavor compounds.

From finding the uncommon grapes to fermenting the delicate wine, making Gewürz is no simple task. To guide home winemakers through the process, we turned to Linda Trotta of the Gundlach Bundschu Winery.

Located in the southern end of the Sonoma Valley in California, Gundlach Bundschu was established in 1858. Today, the winery bottles 18 different wines (including Merlot, Cabernet Sauvignon and Zinfandel) and grows 11 different varietals.

Trotta has been the company's winemaker for the last decade. She holds an Enology degree from the University of California at Davis and worked at the St. Francis and Sebastiani wineries before taking charge of wine production at Gundlach Bundschu.

Why did we call Trotta? Because Gundlach makes a truly superior Gewürztraminer. Their dry, spicy wine won gold medals last year at the California State Fair and the San Diego National Wine Competition. The wine also has been praised in the pages of the Seattle Times, the Dallas Morning News, the San Francisco Chronicle and American Way (the in-flight magazine for American Airlines), among other publications.

Trotta says there are two main schools of thought on Gewürztraminer production in the United States. In Gundlach Bundschu's region, winemakers attempt to capture the spicy component of the grape. Farther north, in the Anderson Valley of California, Trotta says the wines are more floral. "Both are excellent examples of the style," she says, "though the spicy flavor is my favorite part of Gewürztraminer. Ultimately, the final characteristics of the wine will depend on the microclimate where the grapes are grown."

Pick Your Grape

Before getting started, home winemakers should brace themselves for a particular challenge: procuring the fresh fruit. According to Trotta, Gewürztraminer production is extremely limited in the United States. "It's totally market driven," she explains. "This simply isn't a very lucrative wine to make."

She cautions that it will be tough to find someone who grows Gewürztraminer. If you do, she doubts they will have any extra grapes to sell. But it's worth a shot.

To get started, scour wine books, check out a local farmer's market, surf the Internet, or prowl your local wine store and compile a list of wineries that produce Gewürztraminer. Then try calling and beg for some grapes. Nicely.

Proper handling of Gewürztraminer grapes is very important. Pick them in the morning when the grapes are cool, and keep them cool throughout the entire process, from picking to bottling. Warmth does two things: It makes the grapes lose their fruity characteristic and it enhances the bitter qualities.

Get Crushed

Since stems are a source of horrible bitterness, you should now de-stem your grapes. Do your best to keep the grapes intact.

Next move on to the crush. Whether you go with the old-fashioned foot stomping or a high-tech bladder press, avoid over pressing your grapes. The best way to do this is to taste the run-off often. As soon as you taste bitterness, stop pressing. If you'd like to extract the remaining bitter juice, use a different container and ferment this separately from the primary batch.

Trotta stresses that cool temperatures are very important at this stage. This keeps the fruit characteristics of Gewürztraminer intact while preventing any indigenous yeast from starting to ferment. To achieve the right temperatures, Trotta sends the juice to a cold tank and chills it to 40° F.

During this phase, any solids that make it through the press separate from the clear juice. The juice is then racked off these dropped-out solids and sent to the fermenter.

Meanwhile, the solids are filtered. Any juice that results from this process is fermented separately. This product usually is bitter. In this case, Trotta will not use it in the finished wine. If the resulting wine turns out OK, she blends it into the larger batch.

Pitching the Yeast

Trotta uses Prisse de Mousse yeast to ferment her Gewürztraminer, but suggests this probably isn't the best strain for home winemakers. "This is a very vigorous yeast," she says. "It's a hard one to stop. It will go until the wine is very dry and leave hardly a trace of residual sugar."

For home winemakers, she recommends Epernay, a user-friendly yeast that enhances the fruity qualities of wines. Another choice might be Champagne yeast. Regardless, the right yeast should leave behind about 0.5% residual sugar.

Fermentation Temps

Because this is a white wine, there is no need to punch skins down during fermentation (they were removed after the press). Concentrate instead on keeping the fermenting juice cool — Trotta shoots for levels between 50° and 55° F. On average, fermentation will last 10 days at these temperatures. If it goes faster, that's a good way to determine that fermentation temperatures may have been too high. If it's longer, your yeast is sluggish. Be sure the temperature hasn't dropped below 50° F.

Trotta says traditionalists often ferment Gewürztraminer in "neutral" oak casks. These casks have seen several years of continual use; previous wines have already absorbed the wood's flavor and none is left for the fermenting Gewürz. Still, the neutral barrel will build up the body, add depth to the finished wine and take some of the bite out of the fruit.

Managing the Sugar

Keep a careful eye on your residual sugars throughout fermentation. If you do not have yeast that flocculates on its own, you will want to arrest the process between 0° and -1° Brix. Trotta employs the following steps to do this: First, she rapidly chills the solution's temperature to 32° F. This knocks out the yeast. Second, she centrifuges to extract the yeast from the solution. Finally, she adds sulfur dioxide at 50 ppm to kill any remaining yeast.

Recognizing that these tactics are the distant dream of most home winemakers, finding the right kind of yeast is your best way to manage residual sugar. Should this prove impossible for some reason, steps one and three can probably be useful in the home. An old refrigerator can be used to chill carboys. You might also try placing the fermenter in a metal tub and covering it with ice. You'll need lots of ice for this to be effective.

Besides killing yeast, sulfur dioxide also prevents oxidation and bacterial growth. For this reason, learning to use SO₂ is one of the most important skills for a home winemaker. A good rule of thumb for most wines is to add about one teaspoon of SO₂ (or 50 mg/L) to stop fermentation, then one teaspoon every time you rack. This poses one problem, however: You could easily over-add the SO₂, which might overwhelm the delicate, fruity qualities of your Gewürztraminer. For this reason, it's best to add one teaspoon to stop fermentation, but only 1/4 teaspoon at each racking if you discover a hint of oxidation. If the wine is fine, don't add any at all.

Neutral Aging

Because Gewürztraminer emphasizes fruit, Trotta says you should not age the wine on oak. "This will make it taste like a Chardonnay," she says. Stick with glass carboys, and keep them filled to the top. This helps prevent oxidation, which can occur if your wine comes in contact with air after fermentation. Instead of topping up with water, which might thin the wine, use a mellow white wine like Chablis or Sauvignon Blanc.

In preparation for bottling, Trotta adds bentonite fining. "This is a volcanic clay that reduces hazing in the finished wine," she says. Bentonite is the closest thing to an all-purpose fining agent. Try adding about 2 teaspoons to 2 cups of boiling water. Let the solution cool, then mix into 5 gallons of wine.

Next, she cold-stabilizes the wine by chilling it to 32° F. During this step, Trotta continually tests the wine for tartrate crystals — that glass-like sediment that you sometimes find in a bottle of wine. "Our customers don't like that," laughs Trotta. "Even though the crystals are completely harmless, people act like we're trying to kill them if they see the crystals in our wine. So we hold temperatures down until there is absolutely no sign of crystals."

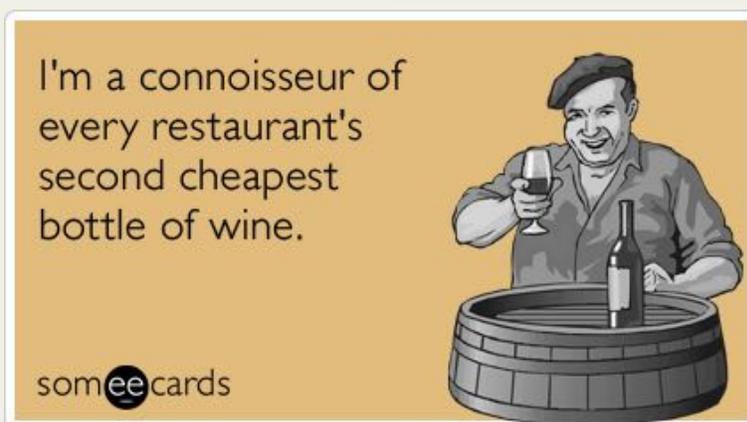
To test for crystals, Trotta takes a sample from the main batch and holds it at 32° F. If crystals form, which usually happens within five days, the wine needs to cold-stabilize longer. She repeats the testing and observation until no crystals form, all the while holding the main batch at freezing.

From Start to Finish

Gundlach Bundschu picks their Gewürztraminer grapes in September and bottles in mid-December. Typically, the wine is drinkable by early spring. Trotta says home winemakers will need about six months before their wine is ready to drink.

A good, mature Gewürztraminer pairs well with spicy cuisine. Among Trotta's favorite recommendations are Thai, Cajun and Mexican food.

In closing, Trotta shares these words of wisdom: "I imagine it is tough to make Gewürztraminer at home unless you have a really great cooling system. When you're dealing with these grapes, cool temperatures are really key." Good luck and good Gewürztraminer!



Portland Winemakers Club

Leadership Team - 2016

- President: **Phil Bard** phil@philbard.com
- Set agenda for the year
- 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: **Bridget Lopez** Bfosterpacific@gmail.com

- Arrange speakers for our meetings

Chair for Tastings: **Jon Kahrs & Barb Stinger** jekahrs@aol.com kbstinger@frontier.com

- Conduct club tastings
- Review and improve club tasting procedures

Chair of Winery/Vineyard Tours: **Bill Brown** bbgoldieguy@gmail.com

- Select wineries 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: **Don Robinson** don.robinson.pdx@gmail.com

- Encourage club participation in all amateur competitions available. Make information known through Newsletter, a-mail and Facebook

Chairs for Social Events: **Bridget Lopez** Bfosterpacific@gmail.com

- Awards Gala / Holliday parties

• Web Content Editor: **Alice Bonham** alice@alicedesigns.org Web Host: **Phil Bard**