What is Natural Wine?

Written by Jori Jayne Emde

You've heard the term. You've seen it advertised. Yet, you find yourself wondering, what is natural wine and isn't it just another name for organic wine? Natural wine is not the same as organic wine. To understand the differences, let me first explain what natural wine is because there is not a hard line definition for natural wine.

The term "natural wine" evolved from a collection of practices shared by a growing number of winemakers to define their wines as being as true to the grape, the land, and the farmer and represent the terroir (native soil) where it was made. This means the grapes are farmed organically (which includes biodynamic or other chemical free farming practices), and that the wine is produced without chemicals in the vineyard and cellar. No additives or processing aids are used. There is minimal intervention during the fermentation phase or in the cellar at bottling, and fermentation is started naturally via native yeasts. Natural wines are often unfiltered, or minimally filtered, and respect both humans and nature. They are bottled alive, meaning the microbial rich community in each bottle remains intact.

Unfortunately, grapes are some of the most heavily sprayed produce on the planet. They are consistently on the <u>Environmental Working Organization</u> "dirty dozen" list. When wine is made, the juice is pressed from the grapes and depending on the style, the skins can macerate with the juice for days to months. If those skins were sprayed with chemicals in the fields, those chemicals are definitely leaching into the juice during pressing and maceration. Currently (in the USA in particular) there is zero regulation for conventional grape growing, minimal regulation for producing wine from those grapes, and zero regulation for transparency for how the wine was made and what is really in the bottle. Beyond chemicals and growth stimulators used to grow grapes, there are currently 95 chemical compounds allowed to be used in winemaking -- organic or not. Some of these compounds include animal parts, such as egg whites/egg shells, isinglass (a gelatin made from dried fish bladders), bovine liver, pepsins derived from porcupine or bovine stomachs, and pasteurized milk products (just to name a few). Does this sound outrageous and unbelievable? This Information is actually public domain, and a detailed list with parts per million allowed can be found on the <u>Cornell Law School</u> website.

Jenny & Francois is one of the leading importers of natural wines in the USA, and they state the following about what a natural wine is: "For a wine to be considered natural by us, it must also be vinified as naturally as possible. This means that after it has been cultivated organically or biodynamically, there must be a minimum use of additives and technological manipulations. Examples of additives include sugar, acidifiers, and powdered tannins. Manipulations can include the use of spinning cones to remove alcohol, micro-oxygenation to accelerate aging, and the use of laboratory cultivated yeast. *The key aspects of what we consider to be a natural wine are: • No synthetic molecules in the vines • Plowing or other solutions to avoid chemical herbicides • Use of indigenous yeast • Handpicked grapes • Low to no filtering • Low to no sulfites • Wine Making that respects the grapes: no pumping or rough handling of the grapes, no micro-oxygenation • No chaptalization. This style of winemaking for us represents an excellent way to express a sense of place, of terroir. We do not eschew modernity, but we favor techniques that help to express the natural terroir rather than new-fangled modern ones that tend to homogenize wine styles and erase individuality."

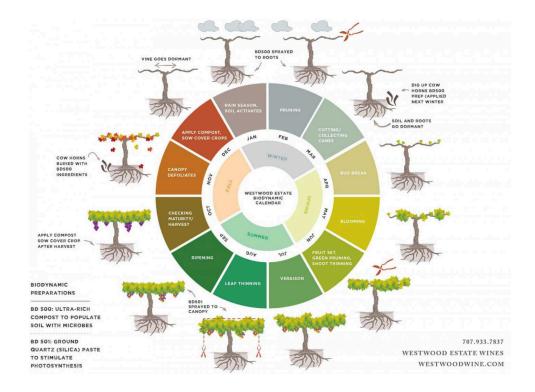
What is the difference between Organic and Biodynamic Wines, and aren't they both "Natural"?

Broadly speaking, organic and biodynamic wines are considered natural. It can get really convoluted here as organically grown grapes means the grapes were grown organically, but the wine isn't necessarily organic, as adulteration can happen to the organic grapes once harvested in the cellar, and if that's the case then they fall out of the "natural" category.

A natural wine producer does everything they can to produce the wines with as little intervention as possible, but some of these wines require a small dose of sulfur to make the long journey from their farm to other countries.

Biodynamic wines are from organic farms with specific and strict farming practices that fully utilize the ecosystem of the entire farm, rather than just organic growing practices. A biodynamic farm generally has livestock, orchards, brambles, bees, and they work with limited-to-no engine run machinery and everything is grown without chemicals. The farm rotates through a calendar based on the seasons, and often the moon cycles. In theory, biodynamic is more of a religious practice with mother nature being the deity than just a farming practice. Similar to organic wines, even a biodynamic wine can fall out of the "natural" category because both types are allowed up to 100 parts per million of added sulfites.

Below is a wonderful visual of a biodynamic calendar from <u>Westwood Wine</u> with the vine cycle for review:



There are "Certified Organic", "Demeter" or other biodynamic standards and certifications in every wine region, but despite using those practices, many producers avoid getting those certifications because it's expensive and the bureaucratic regulations change often, requiring refiling and paying each time. Most farmers don't have enough money to keep up with filing changes and fees, let alone the fees to apply in the first place. Have you ever seen the term "farmed with organic methods"? This means the farm practices organic methods, but is not certified.

A wine made with organic grapes vs an organic wine is totally different. If a wine states "made with organic grapes", this most commonly means that the organic practices stopped in the fields and non-organic methods were used in the cellar at bottling. A wine that states it is an "organic wine" generally means it was farmed and bottled using organic methods. All of this just requires taking a moment to read between the marketing lines. I used to work at Whole Foods in the late 90's and there was a huge sign over the prepared foods that read "fresh food prepared daily". As a consumer, one naturally would assume that meant all the food in the prepared foods case was made that day, yet most of it was many days old. The marketing catch is that it's not a lie, fresh food was prepared everyday in some capacity for something in the store, just not the food on display in the case being sold that day. It taught me a lot about the misleading marketing tactics for sales, especially in the food, beverage + wellness industry.

What Are Sulfites?

Sulfites are a chemical compound of sulfur dioxide (SO2) which is made up of sulfur and oxygen. It occurs naturally, but can also be produced in a lab. It is often used to preserve foods and beverages by acting as a preservative and antimicrobial. There is no empirical evidence that sulfites are the cause of histamine reactions some people experience when they drink wine. There is evidence that sulfites can cause allergic reactions and the most common symptom is headache. The USDA recognizes the reaction some people may have and they state that 10ppm and under is not enough to cause a reaction. In conventional wines, there are often many more chemicals added to the wine, during grape growth as well as at bottling in the cellar, that can cause adverse reactions, this could be because the microbial makeup in the wine is interacting with your microbiome! Drinking a living beverage like a natural wine is introducing a whole new mix of microbes into your system, and some of those microbes may jive with you, and some may not.

By winemaking legal standards, wines that contain more than 10 parts per million sulfite must be labeled with the words "contains sulfites." Grapes produce sulfites naturally while ripening on the vine and the parts per million surpasses 10 parts per million, therefore every bottle of wine must state "contains sulfites". There are also caps to how much sulfite a wine can contain, but the regulations vary by region and country. In the EU, wine is allowed to contain up to 210 ppm sulfites. In the U.S. the upper limit is an insane 350 ppm.

Most factory wines (wines made in warehouses from mass farmed / commercial grapes) have the highest level of SO2. This is because the concept is to make an alcoholic beverage with profits in mind only. There is no ethos to their madness. It's just a money making beverage. Therefore, they make the wines completely shelf stable. Since sulfites are antimicrobial and a preservative, these wines are totally dead, so much so you can't even turn them to vinegar (I've tried!). These wines can handle being subjected to temperature variations, sit

on a store shelf for years in direct sunlight, travel the world around and no matter what, when it's opened it will taste the same. Every single bottle will taste the exact same every time you buy it.

Natural wines naturally contain sulfur as I outline above, but most natural wine producers choose to not add any extra sulfur. They rely on native grapes that naturally produce more tannin rich compounds that are natural preservatives. A lot of natural wine producers have started putting "no added sulfites" on their wine labels which helps to know if there is more added to the bottle than what naturally occurs. There is murky water around the regulations and lack of transparency regarding sulfur dioxide and other chemicals in wines, and since every bottle states "contains sulfites", it makes it very challenging to know how much. Buying a natural wine is the best way to guarantee that the wine has little-to-no sulfur added beyond what is naturally occurring, and it is chemical free.

There are many food and beverage items in our daily diets that contain sulfites and the FDA recently passed a law requiring any consumable products that have 10 ppm or more of sulfites to list it on the package. There is such a lack of transparency of what other ingredients within that product are made of, it creates a pretty convoluted level of regulation. For example, soft drinks, such as Coke and Pepsi, use caramel coloring agents. Those agents contain ammonia-sulfite to create the brown color that doesn't alter or oxidize when exposed to oxygen. The ppm is lower than 10, but not by much and Coke doesn't mention it contains sulfites. Same with canned foods, dried fruits, cooked frozen shrimp (that's what keeps those shrimp perfectly pink - it may also be food coloring, but food coloring contains sulfites), artificial crab, food coloring, shelf stable dairy/dairy alternative products, etc. The list really goes on and on and a quick Google search on your end can take you down a rabbit hole quickly. One thing I will add to this is that if you go down the Google search rabbit hole, you'll see vinegar and sauerkraut on every list. Those lists are referring to store bought jarred commodity items, like Nathan's sauerkraut that is full of additives, or Roland vinegar that is also full of additives. Making your own sauerkraut/vinegar will not have sulfites in them!

So, if there is minimal regulation, and organic or biodynamic wine can technically not be "natural", then how do you know what a natural wine is?

There is no direct answer for this question, unfortunately. Spending time learning about what natural wines are, doing a little research into the wines you already know and wines you're interested in, and asking questions around the winemaking standards and practices are the best steps at the current moment.

Some other tips are:

1.) Start with buying organic wine or biodynamic wine that are available where you buy wine. I feel it is safe to start here and hope that if a grower is going through all the trouble to be organic and pay the fees to claim so, they are also going through all the steps to minimize how they treat their wines in the cellar. These wines will still be safer than any conventional wines even if they do have added sulfites--hands down!!

2.) Look on the back of the wine label and see who the Importer is and visit their website and see if they have any information about the wine and farming practices. Sites like <u>Critical Mass Selections</u> state immediately that

they are a natural wine importer and their mission statement, like the one from Jenny & Francois above, outline their standards for the wines they bring in.

Alternatively, you can search the wine producer's page for the information. Let's use this Swick Syrah label for an example. Nowhere on the label does it state that it's organic or natural. No keywords are listed anywhere. But, if you go to the <u>ABOUT</u> page on their website, it states right away that their wines are organically farmed and vinified without any conventional additives. If a producer's site doesn't state anywhere as to how the grapes are grown or what the ethos of the producer of the vineyard is, assume the wine is conventional.



3.) Become a member of a natural wine club where unique bottles and information about the producers are included with each delivery. This can broaden your palate and understanding while guaranteeing you're getting the quality and the clean wines you want. Some good natural wine clubs are: <u>Rock Juice</u>, <u>Mysa Natural Wine</u>, <u>Natural Action</u>, <u>Primal Wine Club</u>, <u>Thirst Merchants</u>.

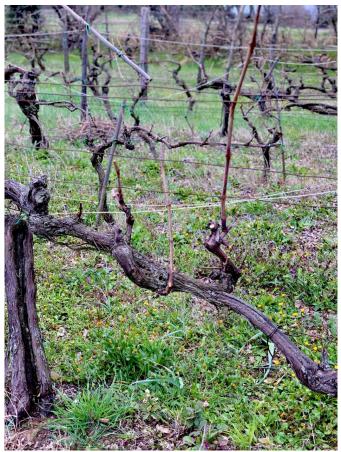
4.) Check out these podcasts!

5.) Join the <u>Raisin Natural Wine</u> app community and find information, resources, restaurants and bars, as well as events around the world that focus on natural wine.

6.) Go to natural wine festivals such as the one that was started by my husband, Zak Pelaccio, and is now run by Lila Holland called <u>Peripheral Natural Wine Festival</u>, or <u>Wild World</u>, or <u>Raw Wine</u> (which is global now). At those events, you can taste amazing natural wine and even meet the producers and importers!

7.) Look for diversity in the fields. You can do this while visiting a winery/vineyard, or on the websites and social accounts of wineries you're interested in. A vineyard full of diverse growth between the vines is a wonderful visual assurance that chemicals aren't being sprayed. This isn't important just for ensuring chemicals aren't leaching into your wine, it is also important for diverse soil that is naturally balanced by wild and native growing plants that naturally adjust the nitrogen levels in the soil, as well as many other beneficial compounds essential to a healthy wine. This isn't a rule of thumb though, as some natural wine producers have vineyards in sandy/loamy soil and many weeds and plants don't grow between the vines, or some producers choose to keep it plowed between their vines, but if you do notice it, it's quite beautiful.

In the picture below, you can see golden dandelion, calendula and purple henbit blooming in the spring between the vines:



Is Natural Wine Better for You?

An easy Yes!