



Bader Beer  
& Wine Supply

711 Grand Blvd., Vancouver, WA.98661

360-750-1551 1-800-596-3610

[baderbrewing.com](http://baderbrewing.com) [steve@baderbrewing.com](mailto:steve@baderbrewing.com)

## Troubleshooting Fruit Wines

By Steve Bader, Bader Beer & Wine Supply

Making fruit wines can be challenging, since every year the growing season is different, and every fruit is different. Here are the common problems winemakers have with fruit wines, and some solutions to help you ferment some excellent fruit based wines.

### Most common Fermentation Problems:

#### **#1) Acid level not balanced (too low)**

If your wine has not started fermenting, is fermenting slowly, or has stopped fermenting and the wine is too sweet the most common problem is that the acid level in the wine is too low. Correcting the acid level normally causes the wine to finish fermenting. Acid levels are best tested with an Acid test kit, which uses 2 liquids to do a titration test to determine the acid level of the wine. Acid levels of .60 to .95 at the beginning of fermentation normally ferment completely. Acid levels drop during fermentation, and our experience is that once the acid level hits .55 the yeast slows dramatically, and acid levels of .50 or lower do not ferment at all. By re-adjusting the acid levels up to .60 or higher by adding acid blend normally causes the yeast to restart and then finish fermenting.

The best plan is to test each individual batch of wine you make, since the ratio of fruit to water will be slightly different for each batch, along with the fruit being slightly different in acidity, even on fruit picked the same day from the same field. One end of the field can get more sun, more water, more wind, and have different characteristics in the fruit. Fruit picked from the same tree a few days apart can also be different in sugar and acidity, so take nothing for granted. Don't be intimidated, we will do the test for free here at the store if you bring us a one cup sample of your wine.

#### **#2) Temperatures too low or too high.**

All yeast varieties ferment faster at warmer temperatures, and slower at cooler temperatures. As fermentation temperatures drop, fermentation slows. Every yeast variety has different temperatures that they are comfortable with, and different temperature that they go dormant and stop fermenting. Generally fermentation temperatures that are under 60° will stop almost every wine yeast. So in the fall and winter you need to verify that your wine is at a temperature of 65° to 80° during fermentation.

Temperatures of over 85° can actually kill the yeast pretty quickly as the heat can spike due to the fact that the yeast creates heat during fermentation and continue to rise until it kills off the yeast.

**Rehydrating** yeast is a frequent problem. While the yeast manufacturers often suggest adding the yeast to warm water, if you do not measure the temperature of the water, but guess and add the yeast to water that is over 100°, you can kill the yeast before it has a chance to be put in your wine. New research has found that simply sprinkling the yeast on top of the wine (that is between 65° and 80°) is the best method, and causes fewer problems.

#### **#3) Too much Sulfite**

Adding Potassium (meta)bisulfite to your wine at the beginning of fermentation is the most common way of sanitizing your wine (must) at the beginning of the fermentation. The problem that sometimes arises is that the package instructions are not followed correctly and far too much sulfite is added to the wine. Some instructions call for you to make a liquid solution to add to the wine, but if you misinterpret the

instructions and just add the dry powder to the wine, it is a dosage 20 times more than recommended. When this happens the sulfite actually makes the color of the wine much lighter, and the wine then has a strong sulfite smell. The only way to get this wine to ferment is to splash the wine back and forth from one fermenter to another to drive off the sulfites. This may take 20 or more transfers to drop the sulfite level sufficiently.

#### **#4) Use fresh ingredients**

You made sure to pick the best, freshest fruit to make your wine. Then you used the leftover yeast, yeast nutrient, sulfites, potassium sorbate, pectic enzyme and acid blend from last year. These items all have a shelf life of less than a year. Be sure to buy only what you need this year, and to replace them next year.

#### **Most common Flavor Problems:**

##### **#1) Wine is too bitter or tart**

Customers that bring us wine that they think has gone "bad" is often fine, it is just very dry, and the bitterness of the fruit stands out. Wine that does not quite taste the way you want, is often simply a wine that has fermented all the sugar, and is lacking the sweetness that the winemaker is after. Typically most fruit wines are best with some sweetness, and your wine may simply need to have some sugar added to sweeten the wine (of course after you have added potassium bisulfite and potassium sorbate to stabilize the wine). Add some Wine Conditioner or sugar, taste for sweetness, and add more Wine Conditioner or sugar if you want a sweeter wine. Remember, you cannot take the sweetness away, so add a small amount multiple times and you will be rewarded.

##### **#2) Too much alcohol!**

*Yes, you can have too much alcohol in your wine!* In Prohibition times, a typical home winemakers goal was to make wine with as much alcohol as possible (about 20%), but they did not care how the wine tasted. If you are following Grandpa's wine recipe, it may be calling for too much sugar, and making a wine that tastes "hot" from the high alcohol content. Alcohol above about 12% covers up the great fruit flavors that you are after from the fruit that you picked. We suggest using less sugar, measuring with a hydrometer, and making a fruit wine in the 10% alcohol range (a starting sugar content of about 1.075 to 1.085).

##### **#3) Wine is carbonated or fizzy**

Often winemakers are in a hurry, and they bottle the wine too soon, while it still has carbonation in suspension. Or they sweeten the wine without stabilizing with potassium bisulfite and potassium sorbate, and then the yeast starts re-fermenting the wine in the bottle. Wine bottled in the winter and left in the garage often warms up in the spring, and the yeast starts re-fermenting due to warmer temperatures. Now you have carbonated wine, and with too much carbonation come self-popping corks and a big mess.

##### **#4) Wine is cloudy**

You have this wonderful tasting blueberry wine, but the wine has never cleared, and is quite cloudy. Normally in fruit wines you would add pectic enzyme to the wine to help the wine clear. New customers often do not add pectic enzyme because they do not know its purpose. But you do need it! Just make sure it is fresh and you should have nice, clear wine.

##### **#5) Wine tastes bad**

Sometimes the wine has gone bad before you even get it in the bottle. Poor sanitation, poor quality fruit, old ingredients, etc. can cause these flavors. Bring in a sample and we will help you determine what went wrong.