Concord Grape Wine

Concord grape wine is one of the most popular wines made by amateurs. The vine is easy to grow and is found in many backyards. It is also the grape used in the wildly successful “Mogen David” style wine that served as communion wine and as a sweet wine for what ails you in years past. The wine is not difficult to make but the recipe has a few variables that can be controlled.

The most important part of making Concord wine is to have fully ripe grapes. A ripe concord has lost all of its red highlights. It is fully purple, tasty, and just asking to be made into wine.

<table>
<thead>
<tr>
<th>Fruit</th>
<th>Weight</th>
<th>Water</th>
<th>Sugar</th>
<th>Acid Blend</th>
<th>Tannin</th>
<th>Yeast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concord</td>
<td>6 lb.</td>
<td>5 pints</td>
<td>1 ½ lb.</td>
<td>2 tsp</td>
<td>½ tsp</td>
<td>Lalvin 1116</td>
</tr>
<tr>
<td>Concord</td>
<td>9 lb.</td>
<td>4 pints</td>
<td>1 lb.</td>
<td>1 tsp</td>
<td>¼ tsp</td>
<td>Lalvin 1122</td>
</tr>
<tr>
<td>Concord</td>
<td>12 lb.</td>
<td>2 pints</td>
<td>¾ lb.</td>
<td>-----</td>
<td>------</td>
<td>Lalvin C-212</td>
</tr>
</tbody>
</table>

The Above recipes should also include:
- **Pectic Enzyme**, a clarifier,
- **Campden Tablets**, wild yeast inhibitor
- **Yeast Nutrient**, fertilizer for yeast
- **Montrachet** wine yeast may be used in place of the above yeasts. It is commonly used as an all-purpose yeast.

Before you get started: You will notice the 3 recipes call for different amounts of Concord grapes/gallon wine. Fewer grapes will result in a lighter color and milder flavor. More grapes will result in a heavier wine, though not necessarily sweeter. We don’t go above 12 lbs. of grapes/gallon because the acid level of the wine will then be too high. In the above recipes some of the other ingredients vary along with the change in grape quantities because the grapes will contribute differing amounts of juice, sugar, acids and tannins. Some of the other ingredients, such as the pectic enzyme, Campden Tablets, and Nutrient do not vary with the amounts of grapes used.

**Equipment Needed**
- **Primary Fermentor**, usually of food-grade plastic (the least expensive), crocks in absolutely perfect condition, or stainless steel. You should select one that is at least 3-4 gallons larger than the amount of wine you plan to make.
- **Secondary Fermentor**, glass is most often used-gallon jugs, or glass carboys in 3 gal, 5 gal, 6 ½, or 15-gallon size.
- **Nylon Straining Bag** This is useful for crushing the grapes initially and for pressing out the grapes when small quantities are used. For larger amounts grape crushers and presses are available.
- **Fermentation Lock and stopper**. The fermentation lock, or airlock, is filled halfway with water and allows the Co2 gas to escape but prevents air/oxygen from entering the fermentor and causing problems-mold, vinegar, oxidation-all the bad things that can happen to you during the winemaking process.
- **Hydrometer** This handy and simple device allows you to measure the sugar content of the grapes, and adjust the sugar, if needed, to produce the amount of alcohol you want in the wine. You need to use the hydrometer initially before fermentation begins in order to know what the alcohol content of your wine will be. Once fermentation begins you have lost an accurate reading of the alcohol and can only make a guess at it.
- **Acid Testing Kit** This kit enables you to accurately determine what the acid content of your wine will be rather than relying on the acid blend called for in the recipe. A wine low in acid will be bland, one high in acid with be too acidic to the taste.

**Directions**
1. Crush the fruit into your **primary fermentor**. This can be done by hand, in a nylon bag, or with a fruit crusher. You do not have to wash it unless it has fallen on the ground or is particularly dirty. Add pectic enzyme and then take at least 90% of the
stems out of the fruit. This can be done quickly by hand, with 40 lbs. of fruit taking about 5 minutes. Add the water your recipe calls for. Allow to sit 1 hour.

2. Add crushed Campden Tablets at the rate of 1/3rd-1 tablet/gallon of wine or Sodium (Potassium) Metabisulfite powder, at the careful rate of 1/16th tsp to 1/8th teaspoon/gallon of wine. The tablets and Sulfite powder are the same chemical.

3. Add sugar according to recipe or adjust with a hydrometer to Specific Gravity of 1.090 for dry wines, or 1.120 for sweet. (We recommend following the directions for a sweeter wine below rather than raising the gravity to as high as 1.120, unless you want a wine of higher alcohol).

4. Wait 4-8 hours and add the pectic enzyme and nutrient. Cover your primary fermenter with plastic wrap, or the lid.

5. 4 hours later add your re-hydrated dry wine yeast or add a prepared liquid yeast starter. We vary the yeasts in the above recipe to include 3 of the most popular yeasts for grape wines. Your wine should begin fermenting, as evidenced by foam or the cake of grape skins, which is pushed to the surface, within 8-24 hours.

6. Stir twice daily with a sterilized spoon or paddle. This mixes the must and helps extract the color from the grape skins. When wine has been fermenting 4-5 days, or when the Specific Gravity (S.G.) has fallen to 1.030, or when the skin cake is not longer solid atop the wine, you may press the wine out. This can be conveniently done with a nylon pressing bag or wine press. Pour or syphon the wine into your glass (preferred) secondary fermentor filling it so it remains about an inch below the bottom of your rubber stopper and attach the airlock and rubber stopper. The wine should not touch the stopper. Important: From this time until the wine is bottled the Secondary Fermentor must always be kept full to the top. You never want air sitting atop the wine for any extended period. How do you keep it topped up? Here are some of your choices: Add water if the wine can stand the dilution of flavor and alcohol and still taste good, add glass marbles or stainless ball bearings to take up space, use a smaller glass container (a frequent choice), make more wine to add to it, or blend another wine that will be similar in flavor. Some winemakers make enough extra wine, so they have some to add to the main secondary fermentor when volume is lost during rackings.

7. Fermentation should cease in 3-8 weeks. This will vary for many reasons. Wine should be racked (syphoned leaving behind the sediment) 3 weeks after placing it into the Secondary, and then again twice at monthly intervals after fermentation has stopped. Add 1/3rd – ½ Campden Tablet/gallon at these last two racking, but not at bottling. This helps prevent oxidation and mold growth. To prevent oxidation of the wine avoid splashing during racking.

8. Wine may be bottled when clear. It is preferable to not fine or filter wine if possible. Use of pectic enzyme initially and proper racking of wine usually results in clear wine. Ascorbic Acid (antioxidant) may be added at bottling for white wines.

9. Grape wines can have their acid levels lowered by chilling the wine at 40-50F for one month prior to bottling. The wine should then be racked from the crystalline cream of tartar deposit.

10. Wine may be sweetened, if too dry, by adding ½ tsp of Sorbitstak-K (stabilizer)/gallon of wine and adding sugar syrup (2 parts sugar to 1 part water) to taste. If your wine is too lightly flavored, we carry 4 oz. natural fruit extracts that may be added at bottling time.

11. Wine is not aged till ready. Average: 3-6 months for whites; 6-12 months for reds. Drink when you enjoy it.

Comments: We recommend you make a yeast starter ahead of time. Directions on most yeast packets. Also, it is a good idea to add a small amount of nutrients for many wine grapes, to ensure complete fermentation.