

Fruit Wine Basics

This guide will take you through the basics of making 1 gallon fruit wine.

REQUIRED EQUIPMENT

- 2 Gallon Plastic Primary Fermenter
- 1 Gallon Glass Secondary Fermenter
- Airlock with Stopper
- Hydrometer with Test Jar
- Thermometer*
- Straining bag
- Wine Thief/ Turkey Baster
- Spoon
- Siphon/Racking Cane with Tubing
- Sanitizer/Cleaner
 - B-Brite Cleaner/OneStep – Cleaner
 - StarSan/Iodophor – Sanitizer
- Bottles and Caps/Corks
- Bottling Wand

INGREDIENTS

- Fruit base 3-6lbs of fruit (consult the recipe example below)
- Cane Sugar or Dextrose (corn sugar)
- Yeast Nutrient
- 1 Gallon of Good clean spring water
- Wine Tannin*
- Acid Blend
- Pectin Enzyme
- Yeast – A good general purpose yeast is recommended.
 - 71B-1122, K1V-1116 – Best for fruit wines
 - D-47, EC-1118 – White wine yeast and champagne yeast are also good to use
- Campden Tablets (Potassium Metabisulfite)
- Potassium Sorbate (Needed if back sweetening)*

*Optional Product

CLEANING, SANITATION AND FRUIT PREPARATION

Prepping the Fruit for Fermentation

The amount of fruit will vary to yield 1 gallon of juice we recommend 3-6lbs of fruit for a 1 gallon recipe, the more fruit used the stronger the flavor and the less water and sugar will be needed.

Using the fruit you have grown in your yard one way to make fruit wines. You can also use frozen fruit from the grocery store or canned fruit purees. Any time you use fruit that is prepackaged or a canned puree, ensure that it has **NOT** been treated with chemical preservatives these will not ferment (Potassium Sorbate, Sodium Benzoate or any other sulfates).

If you are using fresh fruit from the garden or store it is advisable to freeze the fruit before using it. Freezing breaks down the fruit faster and allows for easier extraction of the juice. When using frozen fruit, give it 24hours to thaw and achieve room temperature (68°-72°F). If the fruit must is too cold the yeast will not ferment as intended.

Prepping the Equipment for Primary Fermentation

Anytime you are fermenting sanitation should be the most important step in the process. We are trying to grow good yeast and keep out the wild yeasts. Ensure that anything that comes in contact with your fruit is sanitized. Taking care of these steps first will help you produce fantastic wines. Always remember that you cannot sanitize what is not clean. Avoid abrasive scrubbers on the bucket or any chlorine cleaners these can damage the plastic or impart off flavors later on.

Clean and Sanitize – Follow instructions on cleaner and sanitizer for correct dosing rates.

- 2 Gallon Primary Fermenter
- Straining bag
- Airlock
- Spoon

PRIMARY FERMENTATION

Equipment/Ingredients Needed for Primary

In this example recipe we will be making a raspberry wine however almost any fruit can be substituted

- 2 Gallon Plastic Primary Fermenter
- Airlock with Stopper
- Hydrometer with Test Jar
- Thermometer
- Straining bag
- Wine Thief/ Turkey Baster
- Spoon
- Fruit Base 3-4lbs Red Raspberries
- Yeast Nutrient
- 1 Gallon of Good clean spring water
- Pectin Enzyme
- Acid Blend
- Campden Tablets (Potassium Metabisulfite)

Example Recipe

3-4lbs Whole Thawed Red Raspberries
2 Pounds White Granulated Sugar or enough until
1.090-1.095 specific gravity is reached.
Spring Water (Enough to top off to 1 gallon)
Wine Yeast 71B-1122

1tsp Yeast Nutrient
 $\frac{3}{4}$ tsp Acid Blend
 $\frac{1}{2}$ tsp Pectic Enzyme Powder
1 Campden tablet

Getting it Together

1. Place sanitized straining bag into sanitized fermenter.
2. Add thawed raspberries and juices to the straining bag.
3. Rough up the fruit by squeezing the bag to release any additional juice and sugars.
4. Add enough water to bring up to 1 gallon.
5. Add in sugar and stir until the sugar is fully dissolved.

NOTE: At this point taking a gravity reading is important. Ensure the specific gravity of the must is 1.090-1.095. If the sugars are still too low add additional sugar. Make note of the Specific gravity.

6. Remove the straining bag and set it aside in a sanitized bowl. This will make combining ingredients easier.
7. **Add the following:** Acid Blend, Pectic Enzyme, Yeast Nutrient, **Crush Campden Tablet and mix with a small amount of warm water to dissolve add mixture to primary fermenter and stir to combine.
8. Tie a knot in the straining bag and return to primary fermenter along with any juices.
9. Cover with the lid and airlock and wait 24 hours before continuing.
10. After 24 hours, uncover the fermenter give a final stir of the must ensuring the straining bag has been sufficiently submerged, sprinkle the yeast packet into the must.
11. Place the lid and airlock back on the bucket. Ensure that the airlock has water or sanitation solution in it.
12. Keep the fermenter in a cool dry location the fermentation temperature should be 68°-74°.
13. Primary fermentation should take 5-7days or until your specific gravity is 1.040.

SECONDARY FERMENTATION

1 week after primary fermentation we can move to secondary. This step will help the wine clarify while also getting it off of the dead yeast and sediment. Fermentation will continue during secondary, it is important that you start to reduce the head space in the fermenter, over exposure to oxygen will lead to spoilage.

Equipment Needed for Secondary Fermentation

- 1 Gallon Glass Secondary
- Airlock with Stopper
- Hydrometer with Test Jar
- Siphon/Racking Cane with Tubing
- Sanitizer/Cleaner

Cleaning and sanitizing are still very important in these later steps, when in doubt sanitize.

The next steps are referred to as "**racking**" this is the process of moving the wine out of one fermenter and into another. This can be repeated multiple times over the course of fermentation and post fermentation to aid in clarification.

SECONDARY FERMENTATION *CONTINUED*

Note for Racking Cane Users: Connect the tubing to your racking cane, the tubing should connect to the shorter curved end of the racking cane. Fill your racking cane and tubing with clean water or Sanitizer (if you are using StarSan). Place thumb over one end of the tubing and place the racking cane in the wine. Ensure the exit of the tubing is below the wine, when you release your thumb a siphon is created, run out the sanitizer and put your thumb back over the exit. Now move the tubing to the secondary fermenter and begin filling from the bottom up.

1. Remove the airlock and lid from your primary fermenter and set aside.
2. Carefully remove the fruit strainer bag and let it drip dry over the fermenter before setting aside.
3. Once the fruit bag is removed, raise the primary fermenter so it sits above the secondary, this will allow the siphon to transfer the wine from the primary fermenter to the secondary using gravity.
4. Place your racking cane or siphon in the wine, start the siphon and transfer the wine from the primary to the secondary fermenter. Try to keep splashing to a minimum, and rest the tubing on the bottom of the secondary fermenter.

NOTE: Avoid allowing the racking cane/siphon from touching the bottom of the primary as this will stir up the sediment on the bottom.

5. As the primary fermenter empties you will need to tilt it a bit to get the remaining wine. Do this carefully to not disturb the sediment. If you get some sediment in the secondary it is okay however it might take a few extra racks to clear completely.
6. Seal up the fermenter and let the wine continue to ferment for another week check the specific gravity should be below 1.000.
7. If the wine is below 1.000 you can move on to bench trials and doing flavor correction. If the wine is still cloudy you can rack again and let it continue to age until its clear.
8. If the wine is clear and you like the flavors you can move on to bottling.

BENCH TRIALS

Bench trials are used to adjust flavor profiles in a finished wine. An in-depth explanation on bench trials will not be explained here. The following can be used when experimenting with flavors in wines. Once you have achieved a flavor profile you like you may bottle or age the wine.

- **Wine Tannin** – Used to add a pleasant dry flavor to the wine.
- **Acid Blend** – This is a blend of Malic, Tartaric, and Citric acid. Used at the start of fermentation, but can be used later for corrections. If the acid levels are too low then a wine can taste flabby and bland.
- **Back Sweetening** – The method of adding sugars after fermentation. This can only be done if potassium sorbate has been added to the wine. To stabilize use ½ tsp Potassium Sorbate and 1 Campden tablet per gallon of must.

BOTTLING THE WINE

Equipment Needed for Bottling

- Siphon/Racking Cane with Tubing
 - Sanitizer/Cleaner
 - Bottles and Caps/Corks
 - Bottling Wand
1. Clean and sanitize all bottles and equipment. Corks should be soaked in sanitizer for 15mins before use.
 2. Securely fit the bottling wand on the tubing and connect the other end of tubing to the racking cane.
 3. Start a siphon just like you did in the racking process.
 4. Fill each bottle by depressing the bottling wand against the bottom of the bottle. Fill all the way to the top of the bottle opening. The bottling wand is spring loaded and will seal when not pressed, when the bottling wand is removed it will displace the correct volume of liquid.
 5. Cork or cap each bottle and set aside.

Note About Bottle Shock: Bottle shock is a temporary condition where flavors are muted or disjointed. Some wines are able to be consumed after a few days. Most wines benefit from bottle conditioning, this gives the wine time to mellow any harsh flavors and have the flavors meld together. It is recommended that most wines be aged for another month or longer.