



ON YOUR PURCHASE OF THE

# SUMMER HARVEST HARVEST WINEMAKING KIT

You are about to enter in the amazing world of home winemaking! Fruit wines, also commonly called "Country Wines," have been around for as long as people have been harvesting and storing fruits. Now it's your turn to see how you can turn some fresh fruit into a delicious wine in just a few easy steps!

# USING YOUR WINEMAKING EQUIPMENT KIT Understanding the Process

Wines, in general, are the fermented juice of a given fruit. The fruit is crushed, squeezed, milled, ground or stomped in order to release the juice from the flesh or pulp of the fruit. The juice is then transferred into a fermenting vessel, sometimes with the fruit's solids included, and yeast is added to the juice along with water, some sugar, and possibly additional ingredients.

Over the course of I-3 weeks, the yeast consumes the sugars present and converts them to alcohol-a process called fermentation. Once the fermentation is finished, the juice (now wine!) is separated from any solids and placed in an airtight container, giving it some time to mature and for any solids to settle out. After a period of I-3 months the wine is bottled and can either be drank immediately or laid down for further aging.

TYPICAL STEP-BY-STEP WINEMAKING PROCESS: Refer to the recipes in the included booklet for detailed steps specific to each style of wine.

### A note about sanitation

Wild yeasts and bacteria are usually the enemies of delicious wines. Wild yeasts have unpredictable flavors, and can interfere with our selected yeast's ability to finish fermentation. Bacteria that get into the wine can consume the alcohol and/or any residual sugars, turning the wine to vinegar or worse.

To combat these issues, sanitation is extremely important. At every stage of the winemaking process, anything that the wine will come into contact with (equipment and you!) needs to be sanitized to kill any wild yeast or bacteria present.

To prepare a sanitizing solution, mix 1½ tsp of StarSan into 1 gallon of water. Submerge or wipe down your equipment and wait 1 minute for complete sanitizing. Do not rinse afterwards: StarSan is a special formulation created for commercial breweries and wineries. It is designed to break down into harmless compounds once it comes into contact with your wine and will have no impact on your wine's flavor, aroma or safety.





# DAY 1

- Sanitize the 2 gallon fermenting bucket, bucket lid, rubber stopper, airlock, mesh bag, and a large mixing spoon from your kitchen.
- 2 Chop up the fruit, removing any pits, stones or cores, and place it in the mesh bag. Place the bag in the 2 gallon bucket. Crush or mash the fruit to extract the juice. A small fruit press or large potato masher can help extract the juice.
- Remove the mesh bag with the solids if called for by the recipe.
- Add the remaining ingredients to the 2 gallon bucket per the recipe you are following, except the yeast.
- Using a (sanitized!) turkey baster or similar, draw a sample out of the bucket and transfer it to your hydrometer jar, filling it to the brim. Hold the jar over the sink and gently drop the hydrometer ina little juice will overflow out.
- Read the hydrometer's Specific Gravity (SG) scale to determine the Starting Gravity of your juice. The target Starting Gravity is noted in the recipe. If your fruit is very under-ripe, your Gravity might be a lot lower than the recipe calls for. If so, add more sugar in 1/4 lb. increments until you are in the correct range.

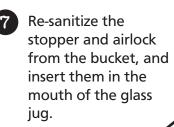
Once you are sure that the Starting Gravity is correct, add half of the yeast packet.

Place the lid on the bucket and the stopper in the lid's hole. Fill the airlock to the line with sanitizer, put its cap on and put it in the stopper.

Per your recipe of choice, allow the primary fermentation to progress for a few days to a week.

# DAY 3-5

- Sanitize the Auto-Siphon, 3/8" Tubing and 1 gallon glass jug.
- Remove the mesh bag from the bucket, allowing the juice and wine to drain completely.
- Place the fermenting bucket on the edge of a table or counter top and the 1 gallon glass jug on a chair in front of it.
- 4 Affix the tubing to curved side of the Auto Siphon. Place the other end of the tubing into the glass jug.
- Making sure the Auto Siphon is compressed all the way, place it in the bucket and hold the tip above any sediment at the bottom.
- Extend the Auto Siphon to draw wine into the chamber, then compress it to drive the wine up through the wand and down the tubing into the 1 gallon jug. Once the fluid is flowing, gravity will keep drawing it out of the bucket and into the jug. Try to make sure that the tip of the Auto Siphon stays above any sediment for the duration of the fluid transfer.



8 Place the jug somewhere out of direct sunlight to complete fermentation.



# 2-4 WEEKS LATER

After another 2-4 weeks, the wine should be finished with fermentation. You should see no activity in airlock, and a hydrometer sample should show a Specific Gravity of 1.000 or a little lower. At this point you can either transfer the wine off of the sediment and into another 1 gallon jug for additional settling and maturing; or you can bottle it.

Any clean, sanitized glass bottle can suffice, but for small batches like this we really like bottling in 12oz or 22oz beer bottles. They can withstand a little pressure and the crown caps make for an easy, secure closure. You can purchase bottles, caps and a capper from any local or online homebrew supply company.

Once the wine is bottled you can either lay it down for additional aging in a cool, dry place; or invite some friends over to sample your creation! Congratulations, you're a winemaker!



# Some notes on the recipes in the included book

Taking a moment to leaf through the included book of recipes, you'll note that most of the recipes involve adding some sugar, as well as acid and possibly some tannin to the fruit. You may be wondering about the nature and purpose of these additions.

## SUGAR & ACID

Any wine, be it from traditional wine grapes or fruits found in the countryside, is primarily made up of water (85-90%), alcohol (10-14%), and natural acids (0.5-1.0%). The rest is the aroma, flavor, body, and other compounds that either came from the fruit itself or from the yeast during fermentation. That is what gives the wine its unique sensory experience.

The amount of alcohol—and by extension the amount of sugar before fermentation—and acid are particularly important to the character of a finished wine. Insufficient alcohol makes a wine taste overly sweet and too juice-like, whereas too much alcohol makes a wine taste "hot" or overly alcoholic. Acid in a wine balances the flavor of alcohol, so too little acid has the same net effect as too much alcohol, while too much acid makes a wine taste very tart. For this reason, it's important to balance the amount of sugar and acid that are in the juice before fermentation, so that the amounts of alcohol and acid will be balanced in the finished wine.

The amounts of sugar and acid indicated in the recipe book are guidelines aimed at yielding the correct sugar/alcohol and acid balance in the wine, given the varying amounts of sugar and acid naturally present in different fruits and berries. Once you're comfortable with the rest of the winemaking process, consider experimenting with the sugar and acid values and adjusting future batches to suit your taste.

### ENZYME. TANNIN & YEAST

Many of the included recipes call for adding Pectic Enzyme to the fruit. This enzyme breaks down Pectin, a specific type of protein that is common in fruits. Pectin does not break down on its own during fermentation, and leads to cloudy or hazy wines. Adding the enzyme helps produce a clear finished product.

The tannins that are recommended in some recipes serve a dual purpose: First, they help give the wine some body and structure, just like the tannins in tea and red wine do. Second, they help prevent the wine from being damaged by exposure to oxygen (oxidation). This is particularly useful in wines that will be aged for longer than 6 months before bottling.

You can find generic "Grape Tannin" in most home winemaking shops. You can also use brand name tannins that are designed for use in commercial white wine production, which are available at select retailers and give excellent results in fruit wines.

Because of the recipe book's age, the recipes in it refer to just two types of yeast: "Wine Yeast" and "Champagne Yeast." While the recipes themselves are well crafted and easy to follow, today there are dozens of different strains of commercial quality "Wine Yeast" available to home winemakers.

We recommend that you start with a yeast strain called EC-1118. EC-1118 yeast is hardy, ferments quickly, and adds very little flavor/aroma of its own; instead allowing the fruit's flavors to come through. After a few batches, consider trying some of the other yeasts that are available from home winemaking suppliers—each strain has its own unique impact on the flavor and aroma of your wine!

Champagne is the actual name of a specific yeast strain, which is readily available. Champagne yeast is well suited to the main fermentation in some recipes, and ideal for use in secondary in-bottle fermentation aimed at creating a carbonated beverage.

## CAMPDEN TABLETS

Campden tablets are a pre-measured form of Sodium Metabisulfite, a preservative used in winemaking as well as many other foods. Sulfites scavenge oxygen out of the wine to keep it from spoiling, as well as inhibit wild yeasts and bacteria from surviving. While it is possible to make wine without the use of sulfites, Campden Tablets greatly increase the success rate, especially for beginners.

Although the amount of sulfite added in these homemade wines is extremely low, if you believe you have an allergy or sensitivity to sulfites please consult your doctor. If you choose to make wine without the addition of sulfites we recommend that you plan to bottle and drink it within 3 months.

