

Home wine making

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Home wine making has a bit of a naff reputation, television sitcom images from Reginald Perrin to the Good Life come to mind.

It would be nice to say that this reputation is entirely false, but like many stereotypes, the jokes thrive on an element of truth.

But properly done wine making is a very rewarding craft.
Introduction to home wine making

Home wine making can be divided into two categories.

Country wine making, using all manner of ingredients from elderberries to left over tea dregs. At its best the wines produced are wonderful, at their worst, the results can be virtually undrinkable.

Grape wine making, unless you are very fortunate and have your own vines, this type of wine making will be from a kit, and therefore on the whole the reason for doing it, will be economic. With drinkable wine in the UK rarely to be found below £2.50 at best, there are great savings to be made with home winemaking.

Regardless of which type of home wine making you want to try, you will need much the same basic equipment.

Home wine making equipment

Home wine making does not require a lot of expensive kit, but there are a few basics, and these are generally best bought from a home brew shop. It is worth making a basic point here on cleanliness. All wine making is prone to bacteriological infection, slight scratches in equipment can harbour bacteria. So be careful with false economies if buying second hand buckets and fermenters. Fermentation Bucket

First thing you will need is a bucket:

Even if you are making wine from a kit, it is often the case that you will get better results if the wine is allowed an initial aerobic fermentation in a bucket with a lid. This first fermentation will give the yeast the best opportunity to multiply.

After the initial fermentation the wine must be racked to a fermenter with an airlock. This is a good point to talk about quantity. There are two typical quantities of wine you can make. The Main Fermenter

The single gallon: ideal for experimental Country wine making, or for when you have limited ingredients to hand, or perhaps you love the craft so much that the time factor is not an issue. Single gallons are normally fermented in glass demijohns. A common place to get these cheaply is local charity shops.

Five gallons: Five gallons is common as it is about the maximum one person can practically lift. Making 5 gallons takes little longer (unless you are stripping elderberries) to make than a single gallon, and the results last almost twice as long! It may be a little unnerving wondering whether a 30 bottle batch will turn out okay. But the reality is that bigger batches are more reliable. Temperature variation is a problem in wine making and 5 gallons will always be less prone to this factor.

Whilst glass is always the preferred container for fermentation, in practical terms a plastic fermenter is what you will use.

On top of your fermenting vessel, you will need some form of airlock. This prevents the wine being contaminated, during the initial fast fermentation in a bucket with a loose fitting cover, the sheer volume of carbon dioxide generated covers the wine in a protective layer. But as the fermentation slows you need to keep the wine safe by using an airlock.

One important point to note is, that unless you are exclusively using wine kits, then you will almost certainly need to rack from one fermenter to another at some point, and so you are always going to need one spare fermenter.

The one pictured above, is about the cheapest available. Larger airlocks are nicer to look at and better to use. Since airlocks cost under £1 and last forever, there really is no point in being a cheapskate.

Hydrometer

A hydrometer is where it starts getting scientific, and I would be remiss if I didn't point out that many people brew perfectly good wines without one. A hydrometer measures the density of water, sugar increases density, alcohol decreases it. Thus you can measure at any point what is going on with your ferment. We will mention the hydrometer again later, but we have a separate article on the hydrometer here

The Log Book

Once you have started making a few batches of wine, remembering what time scale each is working on, and what to do next, is going to be difficult. I have a log book with a page each for each of my wines. This allows hydrometer readings to be logged, along with corrective actions, notes, dates of rackings and of course taste! Racking

From the initial bucket to the fermenter, from fermenter to fermenter - or finally into the bottles! - racking is something you will do a lot of. Racking is done by syphoning through plastic tubing available from your homebrew stockist.

You will see that you can get a tap, and also a tube with an inverted end that helps you avoid syphoning sediment. Both of these are pretty essential. You may find it handy to have a bigger bore tube and a manual pump as well, to achieve a quick racking of the wine, but the one above is better suited for the bottling phase. Corks and Stoppers

You will need corks or reusable plastic stoppers at the bottling phase. If you use corks then a simple hand corking device is used. Corks are cheap and most people think they make for a better presentation of the finished bottle. Keeping things sterile

Before we get on to the process of wine making, no primer on the subject would be complete without dire warnings of your wine turning to vinegar, if allowed to get within a yard of a bacteria. Ordinary kitchen standards of cleanliness are not enough and your homebrew shop will sell you many useful products to ensure that all your equipment is clean and sterile.

How true is all this? Well possibly the only way to find out for sure is to get sloppy enough to ruin a batch of wine! As such this subject runs mostly on hearsay. But keeping things sterile with boiling water and cambden tablets or other sterilising agents is not a hard chore. So why risk it?

Wine making from kits

Making wine from kits has variable popularity amongst the "downsizer.net" community, where on the whole we'd rather forage for berries than buy a commercial kit. But they do have a valuable role. Country wines generally take time to be ready, two years is far from unheard of!

Some wine kits promise to be ready in seven days! though 3-4 weeks is more realistic even with a "quick" kit.

Many people have expressed dissatisfaction with the quality of wine from kits. But this is largely because you get what you pay for. The grape is practically designed to make wine from. It has all the sugars, flavours, acid and nutrients to ferment into a wonderful result. Why then when you buy a cheap wine kit, does it say add sugar? The answer is quite obvious, economies have been made on the grape concentrate.

A good wine kit like those in the Beaverville range, requires no added sugar, but it does mean the wine will cost you somewhat over £1 a bottle. But the results you will get over time should match a £5 bottle of bought wine.

So if you want to enjoy the fruits of home brewing quickly and to help avoid those impatient urges to try your Country wines too early, then give a kit a chance.

Country Wine Making

This is the core of the matter for the downsizer, and hopefully in due course we will have at least a few sets of recipe instructions on our site.

But since a recipe archive is beyond the scope of this article, you will have to make to with some general

points. Ingredients

People can and do make wines out of practically anything, though with varying degrees of success. Fruit Wines

These are the most common, a good elderberry wine perhaps with a touch of blackberry can develop in to a superb vintage. But any non-poisonous fruit can be turned to wine with the addition of sufficient sugar, acid, and nutrient. Grain Wines

Rice wine is of course well known. Root Vegetables Other Vegetables Extracting the Flavour

Every one knows about treading grapes, and if you are to make most Country wines, with a few honourable exceptions like Birch Sap wine, you will probably use one of the following processes to extract flavour. Juice Extraction

Using a press or another form of juicer. Boiling

The fruit is crushed, boiled, and then strained to remove the solids, when the liquid has cooled, fermentation can be started. Fermenting on the pulp

The initial fermentation takes place on the crushed ingredients, which are strained off in the first racking. Fermentation

The whole point of the process to turn the sugar into alcohol, the miracle ingredient for this wonder process is yeast. The Yeast

Yeasts are everywhere, whilst one might wonder how mankind came to discover many things we take for granted, like sand becoming glass for example, it is easy to see how all cultures discovered alcohol, left to its own devices fruit and water will start to ferment.

The sheer inevitability of this process means that even now you will find recipes that require no yeast. Use such recipes at your peril, the type of yeast that is used has an effect on the flavour of wine and indeed you can buy yeasts like Tokay for specific flavours. A wild yeast however may impart a poor flavour and may not have the alcohol tolerance of a commercial yeast leaving your wine struck.

Some people do use baker's yeast, but I'd recommend a yeast designed for wine making. Laboratories have made tremendous advances in yeast, and a good wine yeast will result in much reduced fermentation times as well as a reliable result.

It is worth mentioning here alcohol tolerances which have also advanced over the years until it is now possible to find yeast such as alcotec, that can produce an incredible 20% by volume, in little more than a week. Yeast Nutrients

Like every living thing, yeasts need to feed to thrive, multiply and do the job we want them to. They need not just sugar, but nutrients, acid and vitamins. The grape is a wonderful thing, as it provides all these itself. But our Country wines often need a little help. Appropriate acid amounts perhaps in the form of lemon juice should be a part of any recipe, but they will not always mention adding nutrient and this should almost always be done. Yeast nutrient is available from your home brew stockist and you should follow the instructions on the packet.

Vitamin B1 is also recommended, and typical wine makers use 3mg Benerva tablets at the rate of 1 tablet a gallon for fruit wines, 2 for grain, leaf and vegetable wines, and 3 for flower wines. As you might expect this follows a pattern based on the amount of help the yeast is likely to need. With a flower wine the flavour is practically all the ingredients are supplying and the yeast will need all the help it can get.

Fermenting your wine is divided into two stages, though in some circumstances you may skip the first stage. Temperature

Yeast can only live within a certain temperature range, above 100f (38c) and you will have dead yeast, the same below 60f (15c). Opinions may differ, but I aim to keep my fermenting wine between 20c-25c and I keep a thermometer at hand to check. Finding a suitable room in the house, especially in winter may be a problem, and home brew stores tend to sell assorted heaters to keep you up to the desired temperatures.

A hotter ferment will be faster, a colder one reputedly creates better wine. The aerobic fermentation

This is done in the fermenting bucket after you initially add the yeast, this environment allows the yeast to multiply quickly and will be a frothy fast fermentation, after this dies down somewhat and is no longer generating a protective blanket of carbon dioxide. The wine will need racking to a fermenter with an air lock. The Anaerobic fermentation

The secondary stage of fermentation, nicely punctuated, the sound of bubbling as the carbon dioxide forces its way through the airlock. This stage of the fermentation may take weeks or months, and the wine is left basically to its own

devices, checking periodically that the airlock is not running low on water. Some people will also stick a quarter of a camden tablet in the water for sterility especially with a long fermentation time.

For a high alcohol wine, sugar syrup may be added each time the fermentation slows. If you do this, then careful measurements with the hydrometer are very important. The end of fermentation/racking

When bubbles cease to pass through the airlock, fermentation has either stuck and if you think this might be the case we have some advice here, or the sugar has all turned to alcohol, or in the case of a sweet wine, the alcohol level has reached the point where the yeast has died.

Being a forum about downsizing people here have a bit of a bias against adding chemicals to wine, but I would recommend that if you have any doubts as to whether there is a chance of fermentation restarting, then add 1 camden tablet (crushed) per gallon. Better a little sulphite than an exploding bottle!

Now is the point to rack the wine and wait for it to clear. Your wine is at a delicate stage now and prone to its flavour suffering through oxidation. So when syphoning do it fairly gently and avoid dispersing the wine down the inside of the receiving vessel. When you have finished top the vessel up with a similar wine to eliminate air space.

You now need to move the wine to a cool place, and wait for it to clear. More racking and clearing

As the wine clears dead yeast will sediment out from the wine, leaving wine on dead yeast is not a great idea. Thus after the initial racking it is advisable to rack again after a month or two and repeat this until the wine is no longer throwing a sediment and has cleared. Wine making is for the patient and natural clearing times of a year are not unheard of.