

Vinegar Making Talk

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Has anyone here made vinegar before (on purpose!). I'm sure some of us may have made 'vinegar' in the past by mistake, when our wines didn't turn out as we intended them to.

I decided to try making vinegar, as it is to form part of my suite of home made products. Obviously I make wine and beer. I love cooking. Last year I tried olive preserving with great success (thanks to Ron and Antoinette) and I've done a cheese making course at Red Hill Cheese (which I thoroughly recommend). Vinegar making seemed a logical addition. Shame the salami making course was cancelled!

According to one source that I have used to compile this talk, vinegar means "sour wine" and is derived from the French language. A common cause of wine souring is contamination by 'vinegar fly' during the early part of the process when it is open to the air. However those of us who have been on the winery tours saw heavy attack by vinegar fly at some of the wineries with what appeared to be little affect on the wine (Stoniers for example had heaps of the flies buzzing around and they sel very expensive wine!)

At this stage I'd like to introduce two adopted members of my 'family' – "Mary" and "Joseph".



These two were named by my Granddaughter, the first time she saw them and the name stuck. Mary has been fed on beer and Joseph on wine.

Oh and by the way, do you know what happens if you get vinegar in your ears? You get pickled hearings!

Process

Vinegar is normally produced by the acetification of alcohol. Some cheaper commercial imitation vinegars are apparently produced by just colouring and flavouring diluted acetic acid.

Good quality vinegar starts with good quality wine (or cider or beer) placed in a suitable container (glass or porcelain - if you have one an old wine barrel also makes a great vinegar container. The safest way to ensure that you get good quality vinegar is to start the process by adding some 'mother of vinegar' to your base wine or beer. This can usually be purchased from winemaking supplies stores (eg Cellar plus or Costante) and contains the required acetobacteria (*Mycoderma aceti*). Relying on resident bacteria can produce somewhat varied results.

A sample of mother of vinegar was provided for the members to look at during the meeting and passed on to a member to start their own batch of vinegar

If you use wine you will first have to reduce the alcohol content to around 5-6% as the aceter bacteria does not like an environment with high alcohol. The mother of vinegar is then introduced to the diluted wine or other liquid. Your container should allow access to air but not nasties such as flies etc.

Over a period of weeks (dependent on ambient temperature and amount of alcohol present) a film of 'mother' will form on the top of the liquid in the container and may become quite thick. It can become heavy and fall to the bottom of the container, at which time it can be discarded or some of it passed on to a friend to start their own vinegar making process.

Additional wine, beer, or cider may be added every so often (4 weeks or so) and this keeps the culture alive, converting the alcohol to vinegar, preventing spoilage and improving the quality of the vinegar.

If unstabilised vinegar is left too long in the presence of air, it will be converted by bacteria to carbon dioxide and water – wasting all your efforts.

How Long?

So how long does it take till your vinegar is ready to stabilise?– don't ask me I'm still feeding mine! It is possible to do acid tests (not normally done for the home vinegar maker). I've heard that some people just taste from time to time to see how it tastes in terms of acid and flavour. One reference said that you can strain off the vinegar once the mother drops to the bottom of the container.

Stabilising or Preserving

Once the vinegar is to your liking you can stop it going off by either pasteurising or adding sulphite. If you are going to use the vinegar quickly you may get away without stabilising it – exercise care however

Pasteurising requires you to bring the vinegar to a certain temperature below boiling point and holding it there for a period of time. The higher the temperature shorter the time period. (eg 63°C for 30 minutes, 73°C for 20 seconds). One reference also

suggests that the addition of one tablespoon of 80-proof vodka per gallon assists in aging.

You can add 3 Campden tablets (15ml of 10% solution of SMS) per gallon of vinegar to preserve it instead of pasteurising.

Aging

Vinegar may have a strong sharp taste when first made, however aging vinegar can help mellow the flavour. Similar to wine, esters and other flavour enhancing volatiles can develop after some months when the vinegar is stored at a cool constant temperature. Again like wine suspended solids can fall out producing a clear, bright product.

A good storage container is an old wine barrel. To give a similar effect oak chips can be added to your storage glass or crockery container.

Do and don'ts

- Do sanitise your containers and utensils, cleanliness is important.
 - Do not re-use vinegar containers for wine (even glass containers I have been advised!)
 - Do pass on your vinegar 'mother' to friends
 - Do keep feeding your vinegar till the container will take no more – then syphon some off and keep going with the process on the remainder.
 - Do keep your vinegar at a 'comfortable' temperature.
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- Don't use poor quality wine or other starter ingredients, especially infected wine as it will reflect in the finished product.
 - Don't let the vinegar oxidise once it has finished the acetification process
 - Don't mix your vinegar and wine making equipment.
 - Don't forget to stabilise your vinegar if you want it to keep for a reasonable time period.

Some interesting information

- In Modena, Italy, you can visit a vinegar producing company (Malpighi), that has aged vinegars up to 50 years old or more. Price – for 25 year old vinegar \$50 for 200ml!
- Balsamic Vinegar can be used in savoury or sweet dishes where acidity is desirable. One vinegar is even recommended for use over icecream!
- Balsamic vinegar is good on strawberries and so is ground black pepper.
- Vinegar has been around for thousands of years, traces of it have been found in Egyptian urns dating back to around 3000 BC.
- Louis Pasteur showed in 1864, that vinegar results from a natural fermentation process.
- Examples of types of vinegar – white, malt, wine, Apple cider, Fruit, balsamic, rice, coconut, palm, raisin, date, beer, honey, East Asian black,

The information presented in this article was taken from a number of sources including internet sites. It is not intended to be a detailed reference, more an introduction to the topic of vinegar making, David Wood.