

AN INTRODUCTION TO WINEMAKING

and a selection of recipes to try

LEAFLET NO. 1 PRICE: ONE SHILLING

Making wine is not difficult

By C. J. J. BERRY

Nowadays there is a great boom in home winemaking, and this is understandable because thousands of people are discovering for themselves the pleasures of an exciting and absorbing hobby, with a really enjoyable "end product," to use a current T.V. idiom.

And making wine at home is *not* difficult, despite what some of the experts say. Most of the utensils can be found in any kitchen—a large saucepan or kettle for boiling (stainless steel, aluminium, or sound enamel ware, but not iron, brass or copper), a large crock or bowl (white, not lead, glaze) bottles and corks, and a wooden spoon.

Other items which will be found useful are glass 1-gallon bottles or jars, fermentation traps to keep the wine from contamination, a yard of rubber tubing for siphoning, a corking machine, a large plastic funnel for filtering (the larger the better) and, if you wish to go further into the "mysteries", a hydrometer to help calculate the strength of your wines.

Notice that your utensils, apart from the boiler and crock already mentioned, should be of glass, non-resinous wood (oak, ash or beech), plastic or white glaze pottery (lead glaze can lead to poisonous results).

CLEANLINESS

Everything must be kept scrupulously clean by the use of boiling water or baking in the oven, where possible, or by the use of a sterilizing solution which can be used to rinse out bottles and apparatus. This is easily made by dissolving six Campden tablets and 40z. citric acid in a pint of water. (Campden tablets are merely fruit preserving tablets.)

Any wine consists of: 1. Flavouring, 2. Water, 3. Sugar, 4. Yeast, and 5. (Hardest to obtain!) Time.

All that happens when yeast, a living plant, is put into a sugary solution, is that it feeds upon the sugar, converting it roughly half to alcohol and half to carbon dioxide, by weight, so that one finishes up with a pleasantly-flavoured alcoholic drink.

We extract the flavour from fruits and vegetables by boiling them, by soaking them in cold water, or by a combination of the two (i.e. pouring boiling water on them and leaving them to soak).

As regards sugar, one need only remember that 2lb. per gallon is required to produce a wine with sufficient alcohol to keep, $3\frac{1}{2}$ lb. will usually produce a strong wine, and more, up to 4lb., will produce a wine correspondingly sweeter, since the excess sugar will not be converted to alcohol.

There are many types of yeast. Some winemakers stick to baker's or brewer's yeast, but we would recommend either a good-quality wine yeast or a good granulated yeast. All will make wine, of varying quality, and usually the decision as to which type to use resolves itself into a matter of personal preference.

IN ALL THE FOLLOWING RECIPES USE ¿OZ. BAKER'S OR BREWER'S YEAST PER 1 GALLON OF LIQUOR, OR 1 LEVEL TEASPOONFUL OF A GOOD GRANULATED YEAST. WITH WINE YEASTS FULL INSTRUCTIONS ARE SUPPLIED.

Beware of "No yeast" recipes. No liquor will work without yeast; it means that you are relying upon the natural yeast in the fruit, or, if you have killed that by the use of boiling water or sulphite, on any "wild" yeast which happens to be in the air . . . and the gamble may not come off.

Yeast nutrient can be used to "boost" the action of the yeast and is particularly recommended in flower, mead and other wines where the liquor is likely to be deficient in certain trace minerals. One can obtain nutrient ready made up but most chemists will prepare it to this formula:

Tartaric acid, 80 grains; ammonium sulphate, 60 grains; magnesium sulphate, 8 grains; citric acid, 55 grains; potassium phosphate, 30 grains. This is for 1 gallon of mead or two gallons of wine.

The chief ingredient, it should be noted, is the citric acid, and if the nutrient is temporarily unobtainable, the juice of an ordinary lemon, or two or three short "squirts" from an artificial lemon, will be almost as beneficial.

The fermentation should be in two stages, the first vigorous one when the yeast is multiplying itself to the required level, and needs air for the process, and the secondary, quieter one, when it is converting sugar to alcohol, during which time air should be excluded; it is then that one should employ the modern device of a fermentation lock.

This will act as a barrier to the vinegar fly, and to the vinegar bacteria which are the winemaker's biggest enemies.

If they infect the wine it will turn to a peculiarly flavoured vinegar, fit only for the drain. In the early stages, therefore, the wine must also be kept closely covered.

Knowing all this, we can summarise the winemaking process thus:

- 1. Extract flavour from ingredients by boiling or soaking in bowl or crock.
- 2. Add sugar and yeast and ferment from 10 to 20 days in a closely-covered bowl in a warm place (65-75 deg.).
- 3. Strain off, put into fermentation bottle, and fit fermentation trap, filling to within an inch of bottom of cork. Temperature: about 60 deg. This fermentation will be much softer and will proceed for some weeks, but eventually all bubbling will cease.
- 4. "Rack," i.e. siphon, the cleared wine off the "lees", or yeast deposit at the bottom of the jar. This should be repeated about a month later, and usually a third racking after a further three weeks is beneficial. By now the temperature should have been reduced to 60 deg. and the wine should be quite stable, with no risk of explosions!
- Bottle when wine is about six months old and corked securely. Bottles are then stored, on their sides, preferably in a room of below 50 deg. temperature.

DO . . .

Keep things very clean.

Keep air away except during first few days, and even then keep brew closely covered.

Use fermentation trap for secondary fermentation.

Keep fermenting bottles full to within 1in. of bottom of cork.

Strain wine well initially or it will be hard to clarify.

Keep a book and jot down all you do, so that you can repeat it.

Use new corks.

DON'T . . .

Allow vinegar flies to get at brew.

Ferment in a metal vessel.

Put wine in old, damp bottles, or it may be infected.

Let sediment lie at bottom of bottle or it will impart a bad taste to the wine.

Rush a wine: give it time!

Forget to stir the "must" twice daily.

Use finings or filter unnecessarily; most wines will clear of their own accord, given time.

JANUARY

WHEAT WINE

1 pint wheat 1 orange
2lb. raisins 4lb. Demerara sugar
2 potatoes 1 gallon water
2 lemons Yeast

Put the wheat (crushed through a mincer), chopped raisins and chopped potatoes into a crock, together with the lemon rinds (no white pith), the fruit juice, and the sugar. Cover with boiling water and leave till cool, stirring at intervals. Add yeast and leave well covered in a warm place until vigorous fermentation has ceased. Strain into fermenting jar and fit trap, keep for about four months, and then siphon off into clean bottles. Leave at least six months before drinking. This is an excellent, full-bodied wine with a whiskyish flavour.

BARLEY WINE

1lb. barley3 lb. Demerara sugar1lb. raisins1 orange and 1 lemonlb. potatoes (old)Yeast. 1 gallon hot water

Put barley through mincer and then put it into a crock with the chopped raisins, scrubbed and chopped potatoes, fruit juice, fruit rinds (no white pith) and sugar. Pour over the hot (not necessarily boiling) water, and when cool add yeast. Leave to ferment (closely covered) in a warm place for three weeks, stirring daily. Then strain into fermenting jar and fit trap. Leave until wine clears and fermentation ceases, then siphon off into clean bottles and cork.

FEBRUARY

PARSNIP WINE

5lb. parsnips 1 gallon water 3lb. white sugar Yeast

Use well-frosted parsnips, scrub them well, cut out scabs but do not peel. Slice them and boil in the water until they are tender and can be pierced easily by a fork, but not until they are mushy, or the wine will not clear. Leave the lid off the saucepan during the boiling, and replace the water lost in cooking. Strain the liquid on to the sugar, stir until dissolved, allow to cool, and add yeast. Keep closely covered for a week, stirring daily, then strain into fermenting jar and fit airlock. Leave until wine clears (this sometimes takes a year or more) then siphon into clean bottles and cork.

MANGOLD WINE

4lb. mangolds 1 gallon water 3lb. sugar 1 oz. cream of tartar

Cut mangolds into pieces, boil well, strain off liquid, and measure. Add to each gallon the above amount of sugar and cream of tartar, stirring well in, put into fermenting jar, and fit air lock. Siphon off when clear into clean bottles.

ORANGE WINE

12 sweet oranges 1 gallon water 3½lb. preserving sugar Yeast

Peel six of the oranges thinly, avoiding the white pith like the plague (it imparts a most bitter taste to the wine). Pour a quart of boiling water on to the rind and allow to stand for 24 hours, then strain off the water into a bowl containing three quarts of water and the sugar. Cut all the oranges in half and squeeze the juice into the bowl, stir until the sugar is dissolved, and then add the yeast, and keep closely covered in a warm place, stirring daily. After four days strain into fermenting jar and fit air lock. Siphon it off the lees for the first time when it is really clear, and rebottle two or three months later.

MARCH

BIRCH SAP

1 gallon birch sap
2 lemons
3 lb, white sugar
(or quart of honey)
1 sweet orange
1 Seville orange

1 sweet orange 1 Seville 0 Seville

Obtain a wooden beer or wine barrel top, a piece of glass or plastic tubing, or even a piece of bamboo cane (with the pith removed). With a brace and bit of the same diameter bore a hole into the trunk of the tree just beyond the bark and insert the tap or tube, which should incline slightly downward to allow the sap to run easily. In March, when the sap is rising, it should be possible to draw off a gallon or so of liquor in two or three days. Plug the hole afterwards, firstly because you may use it again next year and secondly because if you do not the tree may die.

Peel the oranges and lemons (no white pith) and boil the peel in the sap for 20 minutes. Add enough water to restore the volume to the gallon, then pour into crock containing the sugar and chopped raisins. Stir until sugar is dissolved; when cool add the fruit juice and yeast. Cover the crock with a thick cloth and keep in a warm place until filte and yeast. Cover the crock with a thick cloth and keep in a warm place until fermentation has quietened. Then strain into fermenting jar and fit trap. Leave for about six months, then siphon off and bottle. Use strong bottles, tie down the corks, and store the bottles on their sides for at least another six months before sampling. During the last century this was a popular drink in Russia, and it was a great favourite with no less a person than the Prince

> RICE WINE (or SAKE)

3lb. rice 3lb. sugar 1lb. large raisins

1oz. yeast 1 gallon water A pinch of isinglass

Put the rice and sugar into a bowl, cover with warm water. Add the chopped raisins and dissolve the yeast in a little warm water and add. Sprinkle the isinglass over the top.

Stir often the first three days, then leave to ferment, keeping well covered. Leave nine days in all before straining and bottling. This produces a strong, sparkling wine which is inclined to be harsh at first but which improves greatly by being kept. A variation which may be preferred is to add a little citric acid to the basic ingredients (say three short squirts from an artificial lemon) and use a sherry yeast.

PINEAPPLE WINE

Six pineapples 3½lb. preserving sugar 1 artificial lemon Yeast

9pts. water "Top and bottom" the pineapples, slice them into a saucepan, and cover with three pints of water. Bring to boil and simmer for 15 minutes. Strain on to sugar in earthenware crock, and add remaining six pints of water, cold. Add three short "squirts" from artificial lemon. Stir well to dissolve sugar thoroughly, and leave to cool to blood heat. Add yeast.

Cover pan closely for a week in a warm place, giving a daily stir, and then transfer to fermenting jar and fit trap. Siphon off into clean bottles when wine clears. This is a delicious

light wine with a delightful bouquet.

APRIL

DANDELION WINE

2 quarts dandelion heads 1 gallon water 31b. preserving sugar 4 oranges Yeast Nutrient Yeast

Pick the flowers when the sun is on them and they are fully open. Use the whole head, (but no stem) and do not bother to pick off the individual petals, which is an exasperating and unnecessary chore. Pour the boiling water over the flowers and leave for two days. Boil the mixture for ten minutes with the orange peel (no white pith) and strain through muslin on to the sugar. When cool add the fruit juice, yeast, and yeast nutrient. Keep in a warm place, closely covered, for four days, then pour into fermenting jar and fit trap. Leave till it clears, then siphon off into clean bottles. This makes an excellent white table wine.

COWSLIP WINE

1 gallon cowslip flower heads Yeast 1 gallon cold water 3½lb. preserving sugar Yeast nutrient Pinch of isinglass

Use all the heads, but not the main stalks, and pour the water over the flowers. Leave to soak for 15 days, stirring daily, so that the flowers infuse thoroughly. Then squeeze the flowers out. Pour the liquid over the sugar, and add yeast nutrient, yeast, and a pinch of isinglass, and put in a warm place, closely covered, to ferment. After 14 days skim and place into fermenting bottle, and fit trap. Bottle finally when the wine clears. At a year old this is a strong, delicately-flavoured wine.

PRIMROSE WINE

The quantities and method are the same as for cowslip wine.

MAY

RHUBARB WINE

5lb. rhubarb stalks 3 lb. preserving sugar Yeast

1 gallon water Precipitated chalk Yeast nutrient Artificial lemon

Wipe the rhubarb clean, but do not peel, and chop into short lengths. Pour the boiling water over it, allow it to become cold, then strain off the liquor and add to it the juice pressed

from the stalks. To this add loz. of precipitated chalk and stir well in.

This may suffice, but if the juice still has an acid taste, add up to another loz. Then put in the sugar, stirring well until all is dissolved, add three short squirts from the artificial lemon, and put in the yeast. Put into fermenting vessel and fit airlock, keeping half a pint or so separately in a bottle plugged with cotton wool for "topping up" when the ferment quietens. Leave until the wine clears, then siphon off for the first time. If you wish to remove all colour add half a dozen clean, broken eggshells.

MAY (or Hawthorn Blossom) WINE

2 quarts hawthorn flowers 3½lb. white sugar

1 gallon water 2 lemons Yeast nutrient

Yeast Boil up the sugar and lemon rind (no white pith) in the water for 30 minutes, adding more water if necessary to retain the volume. Pour into a bowl and when cool add the yeast, the lemon juice, and the yeast nutrient. Leave for eight days, stirring daily, then strain through muslin into fermenting bottle and fit trap. Leave until it clears, then siphon off and bottle.

4lb. English honey 1 gallon water

Yeast Yeast nutrient

1 lemon, 1 orange Bring the honey in the water to the boil, and leave to cool in a bowl. Add the juice of the citrous fruit, the yeast nutrient, and the yeast, pour into a fermenting bottle and fit air lock. Mead sometimes takes rather long to ferment but when it is clear and fermentation has ceased siphon off into clean bottles and leave to mature.

JUNE

ELDERFLOWER WINE

1 pint elder flowers 3lb. preserving sugar 1 gallon water

2 lemons Yeast Yeast nutrient

The flowers should be gathered on a sunny day when in full bloom and the florets be cut or removed from the main green stalks. One needs enough to fill a pint jug, pressed down. Put the flowerlets into a crock, with the lemon rinds (no white pith) and the sugar and pour the boiling water on to them. Stir to dissolve the sugar, and leave until cool; then add the yeast, yeast nutrient, and lemon juice. Leave closely covered in a warm place for four days, then strain into fermenting jar and fit air lock. Leave until it clears and fermentation has ceased; then siphon off into clean bottles. A clean-tasting, appetising wine.

PARSLEY WINE

1lb. fresh parsley 3lb. sugar

Lump of ginger 2 lemons

5 quarts water

Yeast Well wash and boil parsley until tender, strain into an earthenware crock. Add sugar, ginger and sliced lemons. Stir well until the sugar is dissolved. When cooled to blood heat add yeast and leave closely covered for a fortnight, stirring daily. Then strain into fermenting jar and fit trap. Siphon off when wine has cleared and keep for at least a further six months.

BRAMBLE TIP

1 gallon bramble tips 1 gallon water 3lb. preserving sugar Yeast

Place the tips in a crock and cover them with boiling water. Leave this to stand overmight, then bring to the boil and simmer gently for a quarter of an hour. Strain through muslin on to the sugar, add the yeast when it has cooled, and keep closely covered in a warm place for ten days. Then pour into fermenting jar and fit trap. Leave until wine clears, then siphon off and bottle.

JULY

BLACK-CURRANT WINE

1 gallon black-currants 1 gallon boiling water

34lb. sugar to every gallon of juice

Yeast

Strip the currants, wash them very thoroughly, and put them in a large vessel. Bruise well to extract the juice, and pour on the boiling water—there should be sufficient to cover the ruit completely.

Leave it until the next day, then strain through a coarse cloth, pressing the currants well-Measure the juice, and add sugar in the above proportion. When the sugar is dissolved add yeast, and put the liquor into a clean jar or cask fitted with a fermentation lock and leave to ferment. When it stops working and has cleared siphon off into clean bottles and cork securely. Keep another nine months before bottling.

CHERRY WINE

6lb. black cherries 1 gallon water 4½lb. preserving sugar 10z. yeast

Crush the cherries (without breaking the stones) and then pour the boiling water over them. Leave to soak for 48 hours. Strain through two thicknesses of muslin. Bring the juice just to boiling point and pour it over the sugar. Stir until the sugar is dissolved. Allow to cool and then sprinkle the yeast on top and stir it in. Cover closely and ferment in a warm place for 14 days, then put into fermenting bottle and fit trap. Siphon off when finished and clear into clean bottles.

MARIGOLD WINE

1 quart marigold flowers
1 gallon water
1 gallon water
3 ½lb. sugar
1 lb. wheat
1 oz. yeast
Yeast nutrient

Put the flowers (no green stalk) and water into a crock, stir daily for 8 days, then strain. Pour the liquid on to the sugar and wheat, and stir until the former is dissolved. Sprinkle the yeast on top, add the yeast nutrient, and let it ferment, closely covered, in a warm place for 21 days. Then skim and bottle.

AUGUST

PLUM WINE

4lb. plums 4 cloves
1 lemon 20z. root ginger
3lb. sugar 1 gallon water
Yeast

Cut up the plums, removing the stones, and add to them the crushed ginger, also the cloves and sliced lemon. Bring the water to the boil and pour it over these ingredients, and stir. Cover and leave for three or four days, stirring twice daily. Strain through double muslin on to the sugar, stir to dissolve it, and add the yeast. Put into fermenting jar, and fit trap and leave to ferment to a finish in a warm place. When clear and finished siphon off into clean bottles and cork.

CARROT WHISKY

6lb. carrots 1lb. wheat 1 gallon water Yeast 4lb. sugar 2 lemons Tablespoon raisins 2 oranges

Wash the carrots well, but do not peel. Put into the water and bring to the boil, then simmer gently until the carrots are very tender. Use the carrots for food and strain off the water. Put into a bowl the sugar, sliced oranges and lemons, chopped raisins and wheat, and pour over them the hot liquid. Stir until the sugar is dissolved, then allow to cool. Sprinkle the yeast on top and leave to ferment for 15 days. Then skim, strain and bottle.

RED GOOSEBERRY WINE

4lb. gooseberries 1 gallon water 3lb. white sugar

Pick the ripe gooseberries on a dry day, choosing large and juicy fruits. Top and tail and mash well in a bowl with a mallet or wooden pulper. Pour on the cold water and allow to stand three days, stirring twice a day. Strain well through muslin and dissolve the sugar in the juice. Then put into fermenting jar and fit trap and leave until wine has cleared and fermented out. Then siphon off into clean bottles and cork.

SEPTEMBER

APPLE WINE

24lb. windfall apples 1 gallon water Preserving sugar Yeast

Cut the apples into small pieces, put into a bowl, and add the yeast and cold water. Leave for four or five days, stirring several times a day. Strain the juice, press out the residue from the fruit pulp and add this to the juice. To every gallon add 3lb. of white sugar. Put into cask or fermenting jar and fit trap. This is a truly delicious wine, and although apparently "heavy" on fruit is well worth making.

ELDERBERRY WINE

1 gallon elderberries 4lb. raisins 1 gallon water 3lb. sugar Yeast

Boil the berries in the water for 15 minutes. Strain through a muslin bag, stir in the sugar until dissolved, then pull the raisins apart and add to the liquid. Leave to cool to blood heat, then add the yeast and leave to ferment in a covered crock for five or six days. Then put into fermenting jar, fit trap, and ferment to completion, and when the wine has cleared siphon into bottles and cork.

BLACKBERRY WINE (an 1835 recipe)

"Take blackberries when they are fully ripe, bruise them, and put to every quart of berries a quart of water; mix them well and let them stand one night, then strain them through a sieve, and to every gallon of liquor add two pounds and a half of sugar. When your sugar is dissolved, put it into your cask, to every 20 gallons of which add a gill of finings, and the next day bung it up. In two months bottle it."

OCTOBER

CELERY WINE

To each pound of green or outside stalks of celery allow 1 quart of water and boil all until tender. Then strain the liquor off and allow 3lb. of Demerara sugar and ½oz. baker's yeast to each gallon put into the cask. Keep the cask well topped up until all the yeast has worked out, and close the bung lightly until the wine is quite still. Then close firmly, leave for a year, and bottle off.

ROWANBERRY WINE

1 gallon rowanberries

1lb. wheat

1 gallon water

1 tablespoonful raisins

3 lb. sugar

Yeast

Pour the water, boiling, over the rowanberries, and let them stand for five days, stirring daily. Then strain the liquid on to the sugar, chopped raisins and wheat, and stir well to dissolve the sugar. Add the yeast and stand in a warm place, closely covered, for 14 days, then strain into fermenting bottle, fit air lock, and leave until fermentation is finished and wine is clear, when it can be siphoned into clean bottles.

NOVEMBER

GINGER WINE

¿oz. essence ginger ¿oz. essence capsicum ¿oz. tartaric acid 20 drops essence lemon 3d. worth burnt sugar 3½lb. granulated sugar 9 pints water Yeast and nutrient

Buy all the ingredients in the left-hand column ready made up from your chemist. Put sugar in bowl and add boiling water; stir to dissolve sugar, then stir in other ingredients, except yeast. Stir frequently till cold. Strain into jars, add yeast, and fit traps. Bottle when clear and finished.

QUINCE WINE

2 doz. quinces 1 gallon water 2 lb. sugar 2 lemons Yeast

Peel the quinces thinly, then grate off the flesh. Put it in the water and boil for half an hour. Squeeze the liquor through two thicknesses of muslin on to the sugar, and add the juice of the lemons. When cool, add yeast, put into a fermenting bottle and fit air lock. This wine ferments for a very long time—often a year and more—and is therefore slow to mature.

DECEMBER

BEETROOT WINE

6lb. beetroot 1 gallon water 1 lemon 3½lb. sugar Yeast

Wash the beet, and cut them into slices, cooking gently in the water until tender, but not mushy. Strain on to the sugar and stir well to dissolve, then add the juice of 1 lemon. When cooled to blood heat add yeast and leave, closely covered, in a warm place for 24 hours. Then put into fermenting bottle, fit an air lock, and leave to ferment out. Bottle when clear and stable.

MAIZE WINE

1 pint maize 2lb. raisins 1 gallon water 2 lemons 1 orange

4lb. Demerara sugar Yeast. Yeast nutrient

Crush the maize in a mincer and put it into a crock with the chopped raisins, thinly peeled lemon rinds, fruit juice, sugar and yeast nutrient. Pour on the boiling water, stir to dissolve sugar, and leave till cool; then add yeast. Keep well covered in a warm place for three weeks, stirring daily, then strain into fermenting bottle and fit trap. Leave to ferment right out and clear, then bottle.

TEA WINE

4 pints tea (saved left-overs)
14lb, sugar
2 lemons

lib. raisins (large and chopped)
liteaspoonful granulated yeast

The key to this most useful, easy-to-make wine is—5 ozs. of sugar to every pint of tea, as you can see from the above.

Add the tea, which can be saved a little at a time until you have the required quantity, to the sugar and lemon juice and stir until dissolved. Pour into fermenting jar with yeast and chopped raisins, work out, and rack off when clear.

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THE AMATEUR WINEMAKER

published monthly

Subscription rate: 12/- for 12 issues. Write to:
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