INSTRUCTIONS FOR DISTILLED WATER & ESSENTIAL AND FRAGANT OILS

A. Water

One of the simplest methods to produce clear, pure water is by distillation. One great advantage is that $n_{\underline{o}}$. chemicals are used and the wafer tastes great.

a) Fill the still to within 50mm of the top and start heating.

NB: Because of the Spirits Unlimited stills unique construction it can be used over gas cooker elements or open fire without harm. Warm up time can also be reduced by using pre heated water. If using over an open flame, always have a metal plate between the flame and the still base.

b) When boiling commences (sea water and muddy waters will take longer to boil), fit the lid, position the condenser outlet over a collecting jar and start running cooling water through the condenser.

NB: The cooling water can be straight sea water or even dirty river water. The distilled water will not be contaminated as it is kept quite separate in a stainless steel tube.

c) When you have collected 75% of the original volume, stop distilling and discard the remaining water.

The water produced will be free of bacteria, viruses etc and all chemicals.

B Essential and Fragrant Oils

Most any aromatic vegetable material can be used to produce fragrant waters and oils. Most common are flowers, leaves and some woods.

Oil or fragrances can be most extracted by soaking (steeping) the material in water but the distillation of this water or of the material directly gives more concentrated oils.

Although commercial production frequently involves heat pressing and solvent extraction we suggest that only water be used for safety sake.

Typical plants used for oil extraction include the following:

Herbs	Flowers	Leaves	Fruit/Berries	Wood
Thyme	Rose	Eucalypt	Citrus Peel	Eucalypt
Mint	Lavender	Catnip		Macrocarpa
Rosemary	Citrus	Lemongrass		Sandalwood

in general the plant material is finely shredded (wood), mulched (peel) or crushed (flowers) and allowed to stand in water overnight and the watery mash distilled the next day. One third of the original water volume is collected and then further processed by redistilling (combined batches) or separation of the milky distillate by freezing or solvent extraction.

Mash Distillation Example

Take: 3kg Orange flowers 1.5kg Orange Peel 9 Litres water Crush flowers and peel and soak overnight. Distill and collect 4 litres.

Option

- a) Stand distillate in tall narrow necked bottles and gradually the orange oil will accumulate at the top.
- b) Add the four litres of distillate to another batch of mash and re-distill. This will give a double concentration of oil in the distillate.
- c) Thoroughly mix with a solvent (200m1 of propanol) and allow to stand and separate.
- d) Freeze distillate and filter off ice leaving the oil fraction.

Another option is to steam distil. (Most suitable for air dried leaves and woods).

Add 5 litres of water to the distilling pot and suspend a wire basket of fragrant material above the water. Boil the water and the steam will carry fragrances across to the condensing unit.

These recipes are based on methods used over 100 years ago and are just as practical today.

Needing more information?

Our book "Spirits Unlimited" is available at most brewing stores or direct from the publisher.

Copyright June 1998