31/07/2104

**Gilt Single Malt Scottish Gin method of production**

**Ingredients**

* Single Malt Barley (5%)
* Water ( 60%)
* Yeast (trace)
* Juniper (3%)
* Corriander (0.3%)
* Cardaman (0.3%)
* Lemon (0.3%)
* Cassia Bark (0.3%)
* Liquorice (0.1%)
* Orange (0.3%)
* Orris Root (trace)
* Angelica (trace)

**Production Method**

Production commences in a copper pot still that is filled with the wash (single malt barley mash fermented to 8 – 9 % alcohol). The heating takes place from the inside. Hot steam is lead through special formed pipes in the inside of the pot still. At a temperature of 78° C the alcohol (ethanol) starts to boil before the water does. The alcohol vapour rises inside the narrowing tube until it goes over the swan like neck at the top of the still. The vapour reaches the condensers in which it is cooled to liquid again.

The first pot still distils the wash to a clear and colourless liquid with an alcohol content of 20% to 25%. This liquid is called low wines. The low wines are then pumped to the second pot still, which is called low wines still or simply spirit still.

The distilling process described above begins again in the spirit still but the alcohol produced from this still is typically 65 -75 % alcohol.

The alcohol from the spirit still is then pumped into our bespoke Reflux copper pot still. This still is an externally heated copper pot still with a copper rectifying column.

The alcohol is charged into the pot of the still and reduced with water before the botanicals are added in carefully controlled amounts.  The still lid is then shut and locked.  (The alcohol has to be reduced in strength, as pure spirit would harden the skins of the botanicals and make the extraction of the oils more difficult). the complete charge is left for some hours, often overnight, to macerate.

The distillation starts with heat applied to the charge – in the case of our Gin, through a steam jacket encasing the bottom of the still. Initially the stillman will apply enough steam to make the alcohol boil.  As soon as the vaporised spirit starts to come over the top of the still, the pressure must be reduced, the valve perhaps being only just cracked; otherwise there is danger of entrainment – that is, the whole distillation coming over too soon.

The vapours pass through the swan neck at the top of the still to a water-cooled condenser . The initial part of the distillate, the “heads”, are impure and are run off into the feints vats until the gin is of the standard and quality required. The spirit passes through a spirit safe where the quality is monitored before going into holding vats. The “nose” of the distiller is critical at this stage of the process.

The pure gin will come over at varying levels to give a final strength of about 80%. When the strength coming over falls to below about 60% the impurities, terpenes and camphenes will start to come through so these “tails” are switched to the feints vats. The steam pressure is then raised again so that the whole distillate comes over, leaving just water and spent botanicals in the still.  The feints are re-distilled in a rectifying still that has a tall neck containing scrubbing plates, which remove the impurities so that the recovered pure alcohol can be used again to make gin.

This spirit is around 80 % abv in strength. We then reduce the strength to 40% abv by adding demineralised water. The gin is then bottled at 40% abv.

Ricky Christie

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