ECTD_002

TITLE: Mead

SOURCE: Wine and Food (49) 30 - 34

DATE: 1950

Reproduced with permission

© Eva Crane Trust

EVA CRANE

MEAD

For he on honey dew hath fed,
And drunk the milk of Paradise.

S. T. COLERIDGE: *Kubla Khan.*

MEAD is one of the oldest of all fermented drinks, and the number of languages which include the word indicates its wide distribution among ancient civilizations. In China, mead (*michiu* or honey-brew) was certainly made before historical times, and it is known to have been offered by countrymen

three thousand years ago to travellers and soldiers on the march. It probably never attained the importance of wines and spirits made from rice, although certain districts in the interior achieved an enviable reputation for a superfine 'honey-brew'.

It is reasonable to suppose that mead could be known only in regions where honey occurred naturally or where it was imported, and it is likely that it was first made where summer temperatures were high enough (80°–90° F.) to allow satisfactory fermentation. In European countries wine subsequently became economically more important than mead in districts where vines were cultivated, and elsewhere beer finally supplanted mead.

The domestic importance of mead did not end, however, until the introduction of the centrifugal honey extractor, in 1865. This extractor removes honey from the comb so efficiently that the empty comb is given back to the bees intact. Previously, honey was partially extracted by crushing the comb, but inevitably a large proportion was left behind, and it was the liquid obtained by adding water to this residue which was used for mead.

The fact that the economic importance of mead had declined before literary documents were written is unfortunate from the historical point of view. There are no known writings in Old Saxon which contain the word, although it is virtually certain that it existed, and it has been reconstructed to *mēdugebo*. In Beowulf (*c.* A.D. 800) there are various references to 'mead halls', and the great Irish banqueting hall of Tara was called the mead-circling house: *Tech Mid churada.*

Germanic mythology contains many references to mead, to which were attributed various magic properties, including the gift of immortality. In the Edda (*c.* 1240) there is a story telling how Odin obtained a drink of the magic mead by making love to Gunnloth, daughter of the giant Suttung to whose keeping the mead was entrusted. This draught of mead gave Odin the gift of tongues and poetry, which he inadvertently passed on to men by spilling some of the mead from his mouth on to the earth. Mead is frequently drunk in Valhalla, and gods and heroes drink enormous quantities: Thor is said to have drunk three tuns on one occasion! Bees which produce honey for the mead feed on a dew dropping from the world-tree Yggdrasill.

The belief that honey dropped from the sky on to plants was very widespread, and there are many references to it by

classical writers including Aristotle and Virgil Ransome[1] is of the opinion that this idea is linked with that of the dependence of immortality on some drink such as ambrosia; the word, dating back to the Indo-European period. The similarity of all the words for mead in the various languages derived from the Indo-European stem (Sanskrit *madhu*, Greek *methu* and Anglo-Saxon *medu*) certainly bears out this suggestion. The Chinese *michiu* has, however, only a fortuitous resemblance to these words. There are many references in ancient Greek writings to a time when 'wine was not yet known'[2] and when intoxication was produced by a honey drink.

In classical mythology it was a nymph Melissa who first discovered how to make mead, and bees were named after her (cf. also *Apis mellifica*, the Latin name for the honey bee). One of the titles of Zeus was Mellisaios, the bee-man; he was brought up by Melissa.

Both Greeks and Romans knew two honey drinks. One, hydromelum or aqua-mulsa, was probably mead as we know it. The other, melitites or vinum-mulsum (or mulsum) is alternatively given as wine mixed with mead, grape juice or wine boiled with honey and then fermented, or simply wine sweetened with honey. There were also other drinks containing honey used for various medicinal purposes.

Coming now to records in historical documents, Pythias, a contemporary of Alexander the Great, recorded in 339 B.C. that the people near Ems in Germany made a drink from honey and corn. By the time of King Alfred (*c.* A.D. 800) mead was so abundant that it was left for the poor, the nobles preferring mares' milk. In 1015 a fire at Meissen was extinguished with mead, water being scarcer. In 1460 the town of Eger in Bohemia had 13 mead breweries, producing a total of 384 barrels each year. By 1684, however, after the ravages of the Thirty Years' War, only one brewery remained.

Associations with bees and honey are responsible for many European place names, and at least one English name is derived from the word mead. It is that of the River Medway in Kent (*Meodowæze* or 'mead-bowl').

In some primitive parts of the world mead still retains the importance it has lost in more civilized countries. On the Gold Coast, for instance, it is produced widely and may be bought for about half a crown a gallon. It is a common drink and is even given to sick children.

[1] H. M. Ransome, *The Sacred Bee*, 1937. [2] Plato, *Sympos.*, 203.

Preparation of Mead

Mead can be made simply by mixing honey and water (about 4 lb. to the gallon) and allowing the mixture to ferment. There are, however, several reasons why this simple method is unsatisfactory. In the first place, although there are sufficient yeasts present in the air to start fermentation, these are not the most suitable for growth in a solution of honey. The mead should, therefore, be kept covered throughout its fermentation to exclude unwanted yeasts from the air. It is usual to add brewer's yeast instead, but it may be better still to add one of the yeasts used for wine-making, or a special yeast culture grown in a honey solution. We are at present carrying out experiments on these lines.

In the second place it is even more important to prevent bacterial growth: this produces acid and the result is vinegar instead of mead. There are two preventatives; one is complete sterilization both of the honey solution (by boiling for half an hour) and of all vessels, corks, etc., used. For this latter purpose steam should be passed into or through *all* vessels for, say, 15 minutes immediately before use; new corks should be used and these must be boiled in water in a covered vessel for 15–30 minutes. The other preventative which is widely used in wine-making to inhibit the growth of bacteria is the addition of 250 parts per million of sodium sulphite. (This is the operative substance in fruit-preserving tablets.) At this concentration there is no taste and the growth of yeast is not appreciably affected, but bacterial growth is very much retarded.

Thirdly, in order to increase the alcohol content of the mead, food must be provided for the yeast, i.e., nitrogen must be made available. The addition of $\frac{1}{4}$ oz. of ammonium phosphate per gallon of solution is satisfactory. There is virtually no protein in most honeys to provide nitrogen, but ling (heather) honey does contain 1 to 2%, which is precipitated when the solution is boiled. Most recipes state that this precipitate should be filtered off but it seems wasteful to do so, and I have not found it necessary.

The following method thus emerges. To one gallon of water add 4 lb. of honey, heather honey if possible. (If cappings are used the specific gravity of the solution should be adjusted to 1·12, and the solution filtered to remove the wax.) Boil the solution for half an hour, removing the scum, and meanwhile sterilize a glazed earthenware vessel (e.g., cask) by passing steam through it. Pour the honey solution into the cask and

cover immediately with a clean cloth which has been sterilized in boiling water.

When the solution is lukewarm (not above 100° F.) add two tablespoons of brewer's yeast previously mixed with a little of the solution. Add also $\frac{1}{16}$ oz. sodium sulphite and $\frac{1}{4}$ oz. ammonium phosphate, each dissolved separately in a small amount of lukewarm *boiled* water. Leave (covered with a sterilized cloth) at a temperature of 80° to 90° F. for three to seven days, until rapid fermentation has ceased.

After this, strain the liquid through several layers of (sterilized) muslin into another cask which must be completely *filled* by the solution. The subsequent slow fermentation does not need air, and if this is available the growth of bacteria will be encouraged and vinegar produced. This cask should be rather loosely corked and left in a cool place for six months.

The final process consists of clearing the mead. Decant or siphon the mead into vessels such as large glass sweet jars, being careful not to stir up the sediment, and add either isinglass or egg-white to precipitate the fine particles held in suspension, thus clearing the liquid. Bottle after a few days and if possible leave for another six months before using!