

GALE GATHERING — A COMPETITOR TO HOPS

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BACKGROUND

The Bavarian Reinheitsgebot of 1516 is widely known, especially as it restricts the raw materials used in brewing to water, barley and hops. Yeast is not mentioned, but since the fermentation process was first properly described by Pasteur in 1857, this is not surprising. What is less well known is that the motive behind the Reinheitsgebot was to prevent competition for wheat and rye, which were more suitable for baking, thus avoiding price competition.

With the Reinheitsgebot setting a ‘new’ standard for brewing, what of the ‘old’ ingredients? Mention has been made of wheat and rye, both of which have crept back into the brewers’ repertoire together with other traditional cereals such as spelt and emmer. Wheat beer, especially, has a large following. This article, however, looks at an alternative to hops: sweet gale or bog myrtle (*Myrica gale*).

GRUIT

Gruit is a term covering different herbal mixtures. Among other ingredients were: sweet gale (*Myrica gale*), mugwort (*Artemisia vulgaris*), yarrow (*Achillea millefolium*), heather (*Calluna vulgaris*), marsh Labrador tea (*Rhododendron tomentosum*), and, not surprisingly, hops. There were many additional ingredients to provide different flavours and effects. Some gruit mixtures could be narcotic, and even henbane (*Hyoscyamus niger*) and deadly nightshade (*Atropa belladonna*) were used. Some gruit ingredients, hops being a prime example, have been found to have preservative qualities.

Hops are first recorded as a brewing ingredient in the 13th century in Germany as a flavour replacement for, or ingredient in, gruit. The decline of gruit follows the use of hops in brewing, which we know began in the 11th century in south-eastern Europe and was complete by the 16th century in Britain. The



Sweet Gale (Myrica gale)

reason for this is debated, but it seems probable that there was a desire by local rulers to harmonise beer production, avoiding undesirable side effects from narcotic, psychotropic or aphrodisiac ingredients. Hops are innocuous, widely available and have the desired preservative effect on the beer.

The English word ‘ale’ originally referred to fermented beverages brewed with gruit, and the term ‘beer’ was introduced gradually from the 15th century when hops were introduced from the Netherlands replacing gruit. Today, ale is brewed with hops and generally refers to a top-fermented traditional British beer type.

GALE GATHERING IN DENMARK

In Denmark, gale (or ‘porse’ in Danish) has been traditionally used as a flavouring for schnapps, but also has a tradition in current beers. Thisted Bryghus in Northern Jutland has been producing beers flavoured with gale since 1983/1984. Since this time, gale has been gathered in the area of Thy, which forms the new national park. Gale thrives in acidic peat bogs, and the roots are rich with actinobacteria to fix nitrogen.

It should be noted that although the public are welcomed to the national park for recreational purposes, gathering gale for commercial use requires a license from the park warden.

Although it might be thought that gale could be classified as an organic ingredient, this is not the case. It does not appear on the official lists, and documentation of the cultivation is lacking.

The annual gale gathering takes place on five occasions in August during weeks 33, 34 and 35. It grows wild in one of the most scenic parts of Denmark.

A group of craft brewers and beer enthusiasts led by Peter Klemensen, Director of Thisted Bryghus, met on a showery August morning at Thisted Bryghus to brave the elements. After a drive of several kilometres, a gathering site was reached. →



Peter Klemensen (centre) instructing



Thy National Park



Sampling the product

There is more than one site suitable for gathering. The gale grows back quickly, so this is a renewable resource. The leaves are stripped off the branches by hand and collected in plastic containers.

The young shoots are easier to strip than the old branches, and care must be taken to avoid the inclusion of other plant leaves, which can appear similar at first sight.

The gale leaves are collected in suitable containers, in this case plastic buckets originally used for label glue. In order to obtain the best results, the active ingredients are extracted with alcohol at the point of collection.

Before immersion in the colourless spirit, the gale is packed into nylon nets to allow convenient handling.

As can be seen from the pictures, the colourless spirit rapidly acquires a green tinge which intensifies rapidly with time. From experience, a standard infusion can be made from four kilos of gale leaves to 20 litres of spirit. Up to 36 kilos have been collected in one gathering, but this was exceptional. The gathering here collected just over 18 kilos.

BREWING WITH GALE

Gale is known as an insect repellent rather than as a preservative for beer. It is thus common practice to use gale together with hops rather than as a complete substitute. Since gale is not a mainstream brewing material, there is no standard method of defining the quantities to be used. As can be expected, the use of gale is subject to trial brewing and the results judged organoleptically.

The gale infusion is normally added to the wort kettle during boiling together with the hops, thus concentrating the flavour and ensuring sterility. The exact quantities are, of course, based on the individual brewer's knowledge and depend on experience. Ratios of hops to gale can vary between 1:1 and 1:4 depending on the result to be achieved.

ACKNOWLEDGEMENTS

More information on gale and its history, including economic and religious aspects, can be found on Wikipedia. This also contains botanical information.

Special thanks must be given to Peter Klemensen of Thisted Bryghus, who organised an excellent day, and the craft brewers and beer enthusiasts who participated. New 'Gale Ales' are awaited with anticipation. ☺



Fresh harvest



Gale in net



New infusion



Infusion at 45 minutes



Infusion at 105 minutes

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