

Humulus lupulus

[Synonyms : *Humulus americanus*]

HOP (Dutch, English) is a deciduous, clockwise twining vine. Native to warm, northern temperate regions, it has greenish yellow catkins.

It is also known as Bine, *Chmel obyčajný* (Slovak), *Chmel otáčivý* (Czech), Common hop, *Espárrago de zarza* (Spanish), European hop, *Gewöhnlicher Hopfen* (German), *Hmel* (Russian), Hop bine, *Hopfen* (German), Hopvine, *Hopysen* (Welsh), *Houillon* (Channel Islander-Jersey Norman-French), *Houblon* (French), *Houblon grim pant* (French), *Humala* (Finnish), *Humle* (Swedish), *Lupolo* (Esperanto), *Luppolo* (Italian), *Lupulo* (Spanish), Northern hop, *Wahpe onapohye* (Dakota North American Indian), and *Wiunabihu* (Omaha and Ponca North American Indian); and in flower language is said to be a symbol of injustice, passion, and pride.

Pollination is achieved by the wind.

Essential oil can be extracted. (It is the female flower that contributes significantly to the characteristic bitter taste of beer in England.)

Warning – pollen and leaves can cause dermatitis. Hops should not be used to treat depressive illnesses because of their sedative effect. Harvesters can experience breathlessness, cardiac disturbance, fever or sweating.

Lupulus is thought by some to have come from *lupinus* (a generic name for ‘lupin’, *Lupinus*) because the ancient Egyptians used the seeds of the lupin to add a bitter flavour to beer. *Lupulus* was also the shop (or ‘commercial’ in today’s terminology) name for ‘hop’ used by the old herbalists. Other authorities point out that the hop was once known locally as ‘willow-wolf’ and this may explain the literal meaning of *lupulus* (small wolf) derived from Latin *lupus*.

The common name Hop is derived from an old English word *hoppan* or *hoppian*.

Hop was referred to by Pliny the Elder (23-79) as a ‘willow wolf’ in his manuscripts on natural history because of the way it twined around willows and other trees. He noted that for the Romans it was a popular garden plant and vegetable and that they ate the young Spring shoots like garden asparagus (*Asparagus officinalis*) and used the young tops as spring greens, but that the Germans, even then, added the hops to brews to preserve their ale.

Although the Romans cultivated hop gardens it was not until the 9th and 10th Centuries that most of Europe (France and Germany in particular) was using it for brewing and benefiting from this ie. the brew was clarified and the resulting beer could be kept longer than the ale made in the past. It is surmised that this innovation owed much to the monks who were knowledgeable about plants and ran the breweries that made the ale. Initially beer met opposition on the European Continent, notably from the bishops of Liège and Cologne, allegedly because of aphrodisiacal properties ascribed to the resulting brew. But the bishops may well have been protecting their own interests as they themselves were secretly selling flavoured ale. However on the European Continent at least opposition was basically overcome in the 14th Century. Charles the Wise or V (1338-1380) of France reduced tax on beer, and in 1409 the then Duke of Burgundy, John the Fearless (1371-1419) instituted the Order of the Hop. Beer brewing was taken even more seriously than that of ale and in the ensuing years inspectors were appointed to control quality and to fix

prices. For the brewer to be 'on the bench' lent legal status to his brew. The inspectors determined this quality quite literally. They would solemnly pour a small amount of the beer onto a bench, park their suitably clothed behinds on this and sit passing the time of day for an hour. If they stuck to the bench when they then tried to stand up, the beer passed muster.

Despite all of its advantages Britain doggedly resisted the trend on mainland Europe. The growth of hops in England was actually forbidden during the reign of Henry VI (1421-1471) in the 15th Century. Then in the 16th Century the Country petitioned Henry VIII (1491-1547) in the belief that the hop was 'a wicked weed that would spoil the taste of the drink and endanger the people', and continued to place reliance on plants such as ground-ivy (*Glechoma hederacea*) and alecost (*Tanacetum balsamita*) to make their traditional ale. Perhaps it should be mentioned that it was also thought at that time that hops encouraged depression. But pressure was growing. In the mid-16th Century the inevitable happened. The hop was introduced to England for *bier* (the German name) by wool merchants from Flanders. By 1572 it was being accepted as one of the essential plants in an English garden even though for brewing it was not until well into the following Century that it was being cultivated in sufficient quantities to support the 'ale' industry (as it was still called with unfaltering determination). A fitting culmination might be a rhyme, a slight variation of which is said to date from 1599, that can still be heard today.

Turkey, heresy, hops, and beer came into England all in one year.

But beer in Britain and that on the European Continent have always been two different things, as apparently the Romans before they left would have contended if asked about British ale, let alone any 'foreigner' today. One noticeable difference is simply in the way it has been served. Unlike beer on the European Continent which is served chilled, that in Britain has traditionally been drunk at room temperature.

In North America hops for brewing beer, particularly that in the United States, comes predominantly from California.

As with other crops the hop was associated with local sayings. One that is believed to hail from Herefordshire runs

Rain on Good Friday and Easter Day

A good crop of hops, but a bad one of hay.

Customs also grew up with the hop-pickers. Not the least of these in England was the practice of crowning a Queen of the Hops at the season's end. While the cultivated hops were growing visits to a hop field incurred a payment of 'foot money' to prevent loss of luck from the fields, and the pickers would keep a contorted hop branch as a good luck charm. Many homes kept a bunch of hops inside and this was replenished annually for good luck, and some said that a spray of hop blossom hung in the room where the family ate would bless the household with prosperity.

The stems were once a staple of basketry and wickerwork. Their fibre (which was arduous to extract) was used by the Swedes to manufacture a coarse, durable white cloth, and this fibre has also been used to make paper.

The leaves and flower heads provided the source of a brown dye, and still today hop ashes contribute significantly to the high quality of Bohemian glass.

In France and Belgium particularly the male hop plants provide a vegetable eaten like garden asparagus (*Asparagus officinalis*).

The first Governor of the Bank of England was Sir John Houblin and he adopted a coat of arms bearing three hop vines. It has been pointed out that he was a Huguenot and that a French word for hops is *houblon*.

It seems that it was only in more recent centuries that any medicinal qualities in hops came to be appreciated. Apparently Avicenna (980-1037), the Arab philosopher and physician, Paracelsus (1493-1541), the German alchemist, physician and philosopher, and Pietro Andrea Matthioli (1501-1577) the Venetian physician and botanist, were all conversant with its properties.

Hops were familiar to some of the North American Indian tribes who until they learnt of the European uses considered the plant only of medicinal value. The fruit were used by the Teton Sioux to treat fevers and intestinal disorders. Part of the root (three to four feet deep in the ground) was also highly valued by some tribes. This was not only chewed but also applied to wounds. Hop was used as a sedative by the Delaware, Meskwaki, Cherokee, Mohican and Shinnecock tribes, and the Delaware also used it as a stimulant. The Cherokee used it too for treating some female problems, urinary and kidney disorders and rheumatism. For some of the Chippewa tribe it was a remedy for fluid retention, and some of the Delaware Indians took it as a tonic. The Omaha Indians applied it to wounds, and the Round Valley Indian tribe put it on bruises. Then the Mohican and Delaware North American tribes both turned to hop for treating toothache and some ear problems. (In due time some tribes such as the Dakota, some of the Chippewa and some of the Algonkin used hop to make their bread.)

Today it is the female flowers that are used primarily for brewing beer. The oil can be used by the perfumery and cosmetics industries. It is also used by the food industry to flavour sauces, and by the tobacco industry in tobacco mixtures. The textile industry uses the hop fibre for making sacking and ropes.

Medicinally, hops have been recommended by herbalists to be taken internally for treating prostate disorders, insomnia, jaundice, indigestion, heart disease, neuralgia, nervous disorders, stomach and liver ailments, and as a poison antidote and an anaphrodisiac. Externally hops have been an ingredient in lotions applied for easing rheumatic pain, inflammation, bruises, boils and painful swellings. Hops have even been used as a hypnotic. By the 18th Century pillows filled with the fruiting heads were recommended for insomnia (a practice still maintained today) and it is said that George III (1738-1820), who ruled Britain from 1760, used such a pillow regularly.

It is the birthday flower for 7th April.