

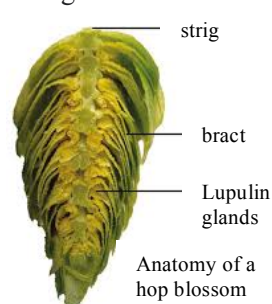
# Hop

The hop plant (*Humulus*) is a resinous, hairy, climbing perennial bine with heart-shaped leaves. (Note: hop is not a vine, vines send out tendrils from their vertical stems to grab a support, bines use the sharp hairs on their twisted stems to climb). In early recorded plant history, hop was described as a garden plant and vegetable, later on it became better known as the aromatic and bitter ingredient in beer.



The origin of the English name hop is uncertain, but may originate from the Norwegian word *hupp*, meaning ‘tassel’ or ‘tuft’ or from the Anglo-Saxon *hoppan* (to climb), referring to the plant’s growth habit. Some believe the name comes from *humus*, a common component in the soil the plant can grow in. Two different species are known, each differ slightly to each other by the range of habitat it can live in, its growth rate, and the amount of chemicals in the cones, botanically known as strobiles

*Humulus japonicus*: This species is native to China, Japan, known for its adaptable and aggressive growth. It is usually treated as an annual, grown as a decorative plant, or as an effective windbreak, it has very attractive golden foliage.



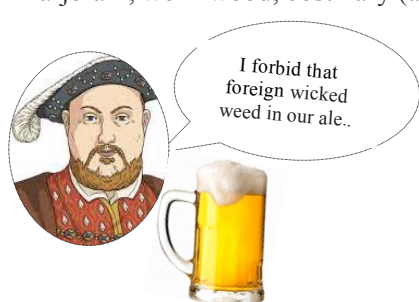
*Humulus lupulus*: this is the common hop most of us are familiar with, (*lupulus* as in wolf, so named for the voraciousness of the plant’s growth). Most, if not all commercial hops are *H. lupulus*, different varieties of this species are grown to emphasise different characteristics they have, usually in regard to the chemistry of the cones. Male and female flowers are borne on separate plants; the females produce the cone-shaped flowers which are used medicinally as well as for brewing beer. The flower resembles a pine cone containing aromatic resins, oils and alpha-acids which form a bitter flavour. These are found in the yellow lupulin glands and the ratios of each can differ, creating alternate flavours and aromas. Male flowers do not develop lupulin glands. Female cones are harvested in autumn when they have just turned amber-coloured and are covered with yellow dust. Much of the value of hops depends on the

abundance of this powdery substance which contains lupulin that gives hop its characteristic bitter taste.

Hops have long been grown by homemade beer enthusiasts as a main ingredient for home brewing, but they are also catching on as a perennial plant choice for the landscape as they grow fast and are perfect for fence lines, arbours, and trellises. Hops are grown from rhizomes, they can be grown from seed but it can be a tedious and difficult process. The plant is frost hardy and needs a lot of sun, at least 6 to 8 hours daily. To keep original crowns from becoming too large, it is a good idea to dig up and divide rhizomes every 3 to 5 years, this not only helps the plant’s overall health, but also keeping them from becoming invasive.

In Spring, soft new green shoots emerge, followed (if you have a female plant) by thick, sweet-smelling cones. You can eat the young shoots and leaves in salads and as a side vegetable, just steam them and serve them like asparagus. Hop shoots are a popular food in Europe especially in Belgium and the north of France. They have a sweet and aromatic flavour with a slight touch of bitterness. The digestive and sedative qualities of hop flowers were appreciated by herbalists as they contain a volatile oil and a bitter principle that have a soothing effect on the nervous system. A nightcap of fresh or dried hop flowers infusion, and a pillow stuffed of hop cones make a fine recipe to a deep, restorative sleep.

Hops were first used in beer making on the Continent in the early Middle Ages, particularly in Germany and Holland. However, in England at that time, most beer was brewed using a mixture of herbs and spices such as marjoram, wormwood, costmary (also known as cost ale) which give flavour to the brew and add some bitterness to



balance the sweetness of the malt. In the early fifteenth century, some Dutch beers, most made with hops, were imported into England, however, they were not popular, as the English tended to prefer their native beers. Those English beers were usually sweeter than beers made with hops. Apparently, to maintain its ‘purity’, Henry VIII banned the use of hops in the making of all English beers during his reign, he declared that hops were an aphrodisiac that would incite his subjects into lustful, sinful behaviour. There is a quotation credited to Henry VIII that says that hops are “a wicked and pernicious weed”. (He was not just ‘credited’ for discarding and beheading wives!). Hops remained illegal in English beer until Edward VI lifted the ban. Then British brewers began to make European

style beer with hops and recognized that hops’ two chemicals humulone and lupulone possess antibiotic properties which suppress bacterial while favouring brewer’s yeast to grow, this helps to enhance the taste as well as to preserve and extend the shelf life of beer.

Some people smoke dried hops, although hop belongs to the hemp family and is botanically related to marijuana, smoking hops doesn’t produce intoxication, and it’s interesting to note that the word ‘hop’ has acquired an additional meaning in American-English dictionary. Jazz musicians who smoke marijuana are called hop-heads and marijuana is said to make its users ‘hopped up’.

If you just assume only craft beer enthusiasts and hop smokers have a reason to plant hops in their home gardens, you might like to think again as the plant makes lovely ornamental vine (bine, to be botanically correct); apart from adding more interest to your landscape, it has the conversation value when you host a barbeque drinking party in your garden.