

what do they do?

In their original form, hops are green, cone-like flowers that grow on vines. They contribute three major characteristics to beer: bitterness, flavour and aroma. All hops have these three characteristics. Which ones show up in your beer depends on how long you boil the hops. Aroma is evident immediately, through about the first 10 minutes. After about 10 minutes into the boil, aroma is lost and hops start contributing flavour. Flavour drops off after about 30 minutes, which is about the time hop bitterness makes its appearance. By the end of a one-hour boil, hops are contributing maximum bitterness. See the diagram below.

MINUTES	HOP CONTRIBUTION
10	Aroma
10 —	Flavour
30 —	Bitterness
60 —	

While all hops work basically the same when boiled, they are not the same in other respects. Different varieties have different amounts of alpha acids (the component that contributes bitterness) and different kinds of oils, which contribute flavour and aroma. (There aren't different kinds of bitterness, just various degrees of it.)

Flavour and Aroma Hops (Finishing Hops)

Beyond their differing bitterness levels, hop varieties have distinctive aroma and flavour characteristics. Because aroma hops don't contribute significant bitterness (when boiled for such a short time), you don't have to worry about bitterness levels when using the one-quarter to one ounce called for in many five gallon recipes. Some noteworthy aroma and flavour characteristics of hops are:

- Herbal-spicy: Hallertauer, Saaz, Tettnanger
- Citrusy-floral: Cascade
- Unpleasant (so only use these for bitterness): Bullion, Brewer's Gold, Cluster
- Uniquely British (for pale ales, for example): Goldings, Fuggles

If you would like to find out more information about hops, feel free to ask the staff at DeFalco's all about them. You also should be aware that Don Hoag has put together some great charts in past Zymurgys (Vol. 11, No. 1 and Vol. 11, No. 5) that reveal which hops are used in many varieties of commercial porters and stouts.

Make Your Own Beer and Wine... At Home, Naturally!