



## Growing Your Own Hops

Growing hops at home is easy, fun, and very rewarding - especially if you brew your own beer. Hops grow on bines, which grow from a rhizome, which is a piece of root taken from a larger, mature plant. The rhizome is planted in the ground in the late spring and small, green shoots pop out of the ground a few weeks later. A hop bine can be very vigorous, growing up to 2' per week till the end of June, when growth slows down and the plant enters into flowering stage.

## When and How to Order Hop Rhizomes

Hop Rhizomes are available once per year, typically in March/April, after the farms dig up the rhizomes and ship them to suppliers. You can sign up for our e-mail newsletter to be alerted to when they are available for pre-sale. Our pre-sale starts in February and allows you to order the hop rhizomes in advance to make sure you can get the varieties you want. When they come into stock they will be automatically shipped to you. When you receive your hop rhizomes in the mail, keep them refrigerated (but not below freezing) and well ventilated until your soil is ready for planting.

## Where to Plant

Choose a Southern exposure if possible but an East or West exposure will do, just keep in mind the hop cones may not get as big. Hops prefer light-textured, well-drained soil with a pH of 6.0 - 8.0. If drainage is a problem, build mounds for planting. Plant mixed varieties at least 5' (feet) apart to prevent tangling. Identical varieties can be planted as close as 3' apart. You should also consider how you will support the bine when selecting a location.

## Supporting Your Hop Bines

Hops like to climb, so planting close to a fence, wall or post is a good idea. Many people connect a strong twine/string from a stake in the ground to a hook secured to their house, fence, etc. After the bine shoots pop out of the ground, and when they are about 1 foot in length, wrap them clockwise around your support string or pole. They will continue to grow up the string, occasionally needing your help in being wrapped. In the first year, when growth is not too vigorous, you can even use a long 8' stake.

## How to Plant

Rhizomes can be planted vertically or horizontally. If the rhizome is already starting to bud, plant in a position so the buds are pointed upward. In either position cover the rhizome with approximately 1" of dirt.

## Watering & Fertilizing Your Hops

First year hops have a minimal root system, therefore the soil should not be allowed to remain dry for long. Mulching the soil will work wonders in conserving moisture as well as controlling weeds. However the soil does need to occasionally dry out as continual over watering can cause the rhizomes to rot. The good balance is to soak them, allow the ground to dry, then immediately water again. Using a timer can make this very easy. Add small additions of a generic fertilizer during the growing season to assist your plant. However, note that adding a lot of fertilizer (nitrogen in particular) will result in a robust plant but the cones will have a lower alpha acid content.



## When to Harvest

Once you begin to see hop cones forming, resist the urge to pick them because the hops will not be ready for harvesting till late August or September. As the harvest approaches, a good test of readiness is to squeeze the cone in your finger: if the cone is damp, very green, and stays compressed after you squeeze they are not yet ready. As the hop cone becomes ripe they will start to dry out. When you compress them between your fingers they will expand back to their original shape. You will also see yellow powder in the hop cone. This lupulin will make your hands sticky and is a good indicator that you are getting close. As the hop cone ripens the aromatics of the hops also become much more pronounced.

## Harvesting Your Home Grown Hops

When you make the decision to harvest your hops, cut the twine/string at the top and lay the bines down on the ground. As the bine dries, the sap will go back down into the rootstock for winter storage. After cutting down the bine you can then pick off the hop cones and prepare to dry them.

## Drying Home Grown Hops

You can dry your hops by using a food dehydrator. The hops will need to dry for several hours. You will know they are done when you open up a cone and it is dry on the inside. If the hops feel papery and petals break off easily from the stem, the hops are ready. If you don't have access to a food dehydrator, you can dry them in an oven slowly at a very low temperature. You can also pick the cones and set them outside to dry on a screen, out of direct sunlight. Air circulation and time are the two essentials for successfully drying hops.

However you dry them, try not to over dry the hops to the point where the petals and stem shatter in your hand when you open up the cone. You also do not want them to dry to the point that they turn brown. After drying, place your hops in an airtight container, and store in the freezer or refrigerator.

## Using Your Hops

Of course you won't know the exact alpha acid content of your hops. We suggest to primarily use them for aroma and flavor additions and use a store bought, alpha acid rated hop for bittering. If you do want to use for bittering we suggest that you first research the general alpha acid range of the hops you grew. Use that number to determine how much to use and after tasting adjust quantities with your next brew.

## Growing Your Hops — Year 2

After the first year, the earliest shoots coming up from the ground should be pruned off. The second set of shoots that comes up is the sturdier second growth. After you have chosen 3-4 main bines from the second growth, all subsequent bines should be pruned from around the base of the hop plant so that all the energy can go into the main bines you selected.

