

# Five considerations before ever planting your first hop

Beginning a hop yard is a really exciting venture! Growing your own hops puts you in the heart of the brewing process, as the aromatic qualities of hops are a major component of what distinguishes one beer from another. When the decision to start a hop yard has been made, growers are often understandably eager to get their hops in the ground. Here we highlight five critical factors to consider before your first growing season that will be sure to get your yard on the right path to success. More detailed information on these items, and more can be found in the 2017 Cornell Integrated Hops Production Guide, as well as other publications through your state's hop extension team.

## Site selection and establishment

A hop yard is a permanent structure, so the decisions you make in selecting a site will last the lifetime of the hop yard. Understanding the soil type will indicate how well it retains nutrients and drains water. Most Land Grant universities have a soil analysis lab that can provide nutrient levels on your soil, and soil maps are available through the USDA National Cooperative Soil Survey. It is important to also find out about the previous crops grown on the land and the chemicals that the grower used on those crops. Ideally a site would be left uncultivated the season prior to establishment. A site's proximity to an irrigation source should also be identified.

## Varietal Selection

Clearly, the primary factor in varietal selection is based on the brewing characteristics of the hop, which guides brewer demand and market value. However, there are other factors that will profoundly impact how you manage a given variety. Varieties vary in their inherent vigor, which impacts the starting yield potential for your yard. Generally the higher alpha acids varieties, used in bittering for brewing, also yield more cones per plant. A variety's susceptibility to major plant diseases, such as powdery mildew and downy mildew, will guide how intense your season long spray program must be, and the potential for yield loss and quality defects in certain seasons.

## Weed Management Strategy

If unmanaged, weeds can rapidly take over a hop yard, competing with your hop plants for sunlight and nutrients. Their presence often creates a microclimate ripe for some diseases to move in on your hop plants. Strategies regarding cover cropping and weed management should be laid out well before your first season, often including pre-emergent herbicide sprays the

previous fall. Strong first year growth of hop is crucial for establishing a strong root system. The presence of some sort of mid-row cover crop can help outcompete unwanted weeds and prevent soil erosion from season to season.

## How will you harvest and dry your hop cones?

Hops are ready for harvest at around 20-26% dry matter, variety dependent. Harvested hop cones should be on the drying kiln within 12 hours at the latest. Most hop operations are drying at temperatures of 125-135F for upwards of 8 to 12 hours, with a target moisture level of 8-10 percent. There is very little room for error when executing the harvest and drying process. Depending on the size of your yard, sharing harvest and drying machinery between growers may be a good strategy, but must be planned out in advance since most harvests fall into the same late August - early September window.

## Where are you going to sell your hops?

In most cases, having some form of a contract with breweries or other hop merchants before harvest is a standard practice. Hop prices fluctuate widely from year to year, and varietal demands from brewers can rapidly change. In the past few years there have been instances where a given variety was planted in surplus, leaving a handful of growers unable to sell their product. A contract gives the grower some piece of mind by reducing the risk of not being able to sell a crop.

Authors: Bill Weldon, David Gent and David Gadoury – November 2017