

Marijuana Cultivation Methodology

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Abstract

The process of growing marijuana from seed to harvest, the tools needed to perform each step along the way. The fundamentals of cannabis cultivation are overviewed along with the jobs done to produce ready-for-market marijuana buds.

1 LED Grow Lights

LED lights for horticulture are used as an affordable alternative to traditional HPS (High Pressure Sodium) and MH (Metal Halide) grow lights. The rate

of efficiency in LED grow lights gives a strong photosynthesis ability to plants grown under LEDs.

The best LED grow lights sold only vary by price and spectrum. For cannabis cultivation, the recommended spectrum for growing marijuana is similar to the spectrum used by other plants - specifically red and blue lights, the highest ranges in the PAR spectrum. Recent design changes in LED grow light technology include the additional UV light spectrum.

Yields under LED lights are good. Marijuana growers report no change in resin output, yield or flavor when compared to other HID bulb options. However, selecting a powerful enough LED grow light for the indoor grow room is essential to securing the high yields of marijuana buds that cultivators desire.

2 The Indoor Grow Tent

Grow tents for marijuana are used by indoor growers to cultivate plants in a safe, discreet location. The compactness of a mylar grow tent aids in keeping a stealthy appearance when grown indoors.

In recent years, cannabis growing in indoor grow tents has increased across the nation. The easy of obtaining a low-price grow tent, along with the simplicity of using a grow tent has played a significant part in the widespread adoption of mylar grow tents.

Grow tents vary in size, some being only 4 ft. in height while other grow tent sizes are 8 ft. or higher. The dimensions of the indoor space where the marijuana is grown must be taken into account and will assist in choosing the right grow tent for weed.

3 Marijuana Fertilizer

Marijuana fertilizer is the nutrients used by cannabis during its growth cycles. The 3 major nutrients, NPK play a major role in the health and vigor of cannabis plants grown indoors and outdoors. NPK stands for Nitrogen, Phosphorus and Potassium. These three elements are essential for growing many crops (including marijuana), which is why they are deemed the major nutrients.

Fertilization of marijuana is performed in different ratios according to the growth stage the plant is in. During the beginning of growth, cultivators apply a small amount of fertilizer to aid seedlings and clones. Later, when the

plants have established a better rooting, they are fed a diet of high nitrogen fertilizer.

The bloom phase or flowering cycle is when marijuana plants use the most nutrients. High amounts of Phosphorus and Potassium are used to build the thick, dank resinous flower buds that form into the dense marijuana buds that stoners across the nation enjoy.

4 Hydroponic Cultivation

The hydroponic setup is used to grow marijuana indoors hydroponically, which provides an ideal climate for marijuana plants to grow. Hydroponically-grow cannabis is renowned around the globe for being some of the highest quality marijuana available on the market.

Building a hydroponic setup is done by engineering and sourcing the materials, which typically include a means to contain and circulate the water. Due to the plants being grown in pure water, circulation is needed to keep the water from becoming anaerobic.

A number of setups are available for hydroponic garden design. The DWC and RDWC hydroponic setups are among the most popular ways to grow cannabis indoors. Liquid hydroponic nutrients are mixed into the reservoir to feed plants. The EC levels are checked and maintained daily.

5 Marijuana Harvest

In primary cultivation regions, the marijuana plants have completely finished their flowering cycle, they are ready to harvest. The marijuana cultivator goes out to their plants and chops each one down to bring inside. The limbs are then snipped off using pruning shears and hung on string or wire lines in the air for drying.

During harvest a process called trimming is done to prepare the marijuana buds for sale. The leaves and stems are cut off the plant using bud trimming scissors and the buds further manicured until the desired appearance is acquired.

The bud trimming scissors used for trimming are most often the spring type with soft handle grips. Newer designs such as the curved blade bud trimming scissors are also gaining frequent adoption due to the ease of trimming inside of the bud.

6 Scales for Weed

The weed scale is a weighing device used for weighing out marijuana buds. The weed scale can be digital or manual, however the most popular scales for weed are by far digital.

The weight of weed must be taken into consideration when using a weed scale. An eighth of weed is 3.5 grams, while a quarter of weed weighs 7 grams. A half ounce of weed weighs 14 grams and a full ounce of bud is 28 grams. The exact weight varies in between circles, where dealers often add a bit more to the bag.

A dub sack and a dime bag are other slang terms used to weigh weed. A dub sack varies by area, but most often the term is defined as a \$20 bag of weed, while a dime bag is a \$10 bag of weed.

7 Bud Trimming Machines

The bud trimmer is a machine used to automatically trim marijuana buds. Bud trimming machines are popular on the U.S.'s West Coast, where large-scale marijuana farms take advantage of bud trimmers to process the large yields of buds their farms produce. An essential tool for many legal cannabis farms in the U.S., a bud trimmer is typically expensive to purchase however recent designs have shown more affordable options.

The most basic type of bud trimmer is a bowl trimmer. These bud trimming machines are operated manually, by turning the handle on the top of the device. This spins the rubber fingers which push the buds into the blade cutting zones.

More advanced bud trimming machines are electric. Handheld bud trimmers exist which offer a plug and play solution to weed trimming. The more expensive bud trimmers are fully automatic large machines that can process a high amount of buds per minute.

8 Bubble Hash Production

Bubble hash bags are used to make bubble hash from marijuana buds, leaves or kief. Bubble hash production employs the use of water, ice and agitation to accomplish an extraction technique that yields the famous sticky, hashy, "bubble hash". THC contents of bubble hash vary with the content used to make the hash.

Popular for centuries in Asia and the Middle East, hashish has a long history as being a potent source of cannabinoids. Traditional methods of hash production include rubbing (the charas method), however with bubble hash a different approach is taken. By using cold water and ice, the THC molecules are knocked off the bud and fall into the water. The bubble hash bag filters catch the essential cannabinoids and collect it to produce bubble hash.

Bubble hash can be smoked in a bong, joint, or any other way that marijuana is typically smoked. The consistency of bubble hash may dry over time, so storing the bubble hash in a dark location is essential for long-term preservation.

9 The Rosin Press

The rosin press is made to produce rosin from marijuana buds, a sticky and highly-potent extract that relies on heat and pressure techniques to make it. Rosin is considered a clean extract, as there are no solvents used in making rosin, simply heat and pressure.

The way a rosin press works is the heated plates are pressed together with enough force to extract the resin and cannabinoids from the marijuana buds. By applying more force to the press, the yield of rosin is also increased. High THC extracts of rosin are produced in facilities across the nation that make use of this new extraction technique.

Rosin presses vary in design. The simplest rosin press can be made from a hair straightener, while the next step up uses a quick clamp to squeeze heated plates together. The professional grade rosin press machines are hydraulic, pneumatic, manual and electric models that can be rigged at home.

10 Conclusion

The methodology of marijuana cultivation includes a range of techniques used to accomplish different outcomes, depending on the needs, planning or fortune of the cannabis cultivator. By employing the right tools and implementations, marijuana bud yields can be increased, flavor enhanced and resin content perhaps as well. Ultimately, the proper techniques used to grow marijuana from seed-to-harvest may lead to success.