

# Green Buddha Patient Co-op



## Guide to Growing Your Own Medicine

### **2015 Green Buddha Grow Guide**

We encourage all medical cannabis patients in Washington State to fully actualize their rights and grow some medicine. In addition, we believe that by growing your own you can best insure that your product is pesticides free and grown in an organic fashion. For the majority of patients, they find additional benefits from being engaged in the production of their medicine and interacting with this beautiful plant. Most realize a fiscal benefit too, often with the first crop. Grow your own medicine!

## **The Basics**

Here at Green Buddha we have a lot of patients frequently asking us "How can I cultivate my own medicine?" There for I have started to compile a little bit of the basics for patients who are just beginning to learn about growing their own medicine. Then we will briefly discuss growing, pruning and the bane of bugs.

### **First is a list of items that are a must to have to start a grow**

- Space – indoor, greenhouse, outdoor (Ventilation)
- Genetics
- Lights
- Soil
- Water/Nutrients/Supplements
- Pots/containers
- Testing equipment: Thermometer/Hydrometer/Ph.

### **Space: Indoor/Greenhouse/Outdoor & Ventilation**

You can grow excellent cannabis in indoor, outdoor or in greenhouses. Nonetheless we in the Pacific Northwest can find it challenging to grow good cannabis in a pure outdoor environment. Cannabis usually requires less than 12 hours of day of light in order to elicit flowering. If cannabis is grown with 14 hours of light a day it might never flower. In Seattle, outdoor grown cannabis doesn't start flowering until early or mid-August. Yet by mid-September there often isn't enough light or heat to sustain the plant which needs another month before the flower would be ready.

Greenhouses offer an excellent alternative. One can grow one crop a year and save the medicine for use during the year. There are legal issues (effective July 1, 2016) with doing so, unless your use is fairly small. Greenhouses are incredibly cost-effective when compared to growing indoors and can produce as excellent a product as indoor grows. Harder to hide the smell though, and legally patients are required to hide the smell of their medical cannabis grows.

Indoor productive has the disadvantage of being most ecologically unfriendly and most expensive way to grow. Nonetheless one has the greatest control over the environment and so can produce the very finest of product. Obviously this can be the safest mode of production from prying eyes. When growing indoors one has greater issues with ventilation and air quality control.

Ventilation becomes an issue with indoor grows. For the best results one wants a constant supply of fresh air entered into the space. If the air is swapped out four times an hour that will do. Most new growers tend to seal off the grow space interfering with the plant's ability to grow. If the room gets too humid, consider using a dehumidifier so your medicine does not mold and rot.

### **Genetics: Cuttings/Seeds**

Most patients grow from clones or cuttings. Currently in Washington State it is fairly easy to get clones – being sold on Craigslist and any number of venues. These markets would

appear to have more conflict with the law some July 1, 2016 but clones and cuttings should still be available. Patients often become very attached to specific clones which provide the best medicine, and clones obtained from established grower patients are often considered the best. Clones have a number of advantages over seeds from legal to having to deal with male plants (only female plants produce the worthy medicine). One disadvantage with obtaining clones is despite what the person passing you the clone tells you – the plant has bugs and must be treated and kept separate from another plants until the elimination of those bugs can be absolutely verified (a month or more).

Seeds have the advantage of not coming with bugs, but they are usually obtained through the US mail and that's federal offense. Nonetheless seeds can be easily bought online. Seeds can be sold as normal seeds (50% generally each male and female), or as feminized seeds (only females), or as auto-flower seeds which do not require the less than 12 hours of light a day in order to flower. Obviously these auto-flower seeds can be useful for us here in the Pacific Northwest but the Green Buddha experience has been that while they deliver as promised – product X number of days after you sprout the seed, the genetics are inferior to normal seeds. Normal seeds have to sexed, meaning removing the male plants which takes time and trouble. In addition, good growers will actually clone only those seeds which produced the most effective medicine, and so when one obtains clones from an experienced patient grower, generally one gets high quality genetics.



### **Lights: Florescent/LED/HPS**

If your space is outdoors or a greenhouse than you may only need lights for your babies. Young small cannabis plants like fluorescent lights are the best. Hang the lights within two inches of the soil and after the plants appear above the ground, continue to keep the lights within two inches of the plants. Once the small clone has been established – roots have developed – then one can switch to using LEDs for the vegetative phase of cannabis production. The lights are kept on for twenty hours a day, so the grow vegetative and in theory no flowers are produced.

For cannabis flowering excellent results can now be obtained with LED lights, which have a much lower ecological footprint than do HPS lights. The LED equipment is much costlier.

LEDs produce far less heat. Nonetheless Green Buddha knows a number of patients who utilize the heat from their closed HPS systems, by venting the hot air into their living space.

Gro-lux and plant bulbs are an expensive way to produce cannabis. Avoid them.

## Soil

Soil vs hydroponics. While hydroponics can have larger yields and offer the geek grower great enjoyment, new growers find the medium unforgiving and has a much higher rate of failure, higher expenses. Organic styled hydroponics is quite difficult. Therefore, hands down Green Buddha recommends soil. Most patients will buy commercial *organic* soil which generally works fine. Be aware that soil is almost devoid of nutrients and so one will have to purchase and use *organic* fertilizers. The soil should drain well and have a ph. between 6.5 and 7.5 since marijuana does not do well in acidic soil.



There is another alternative for the more hands on patient grower, which produces the very best of results in both quality and quantity – using “live organic” soil. The principle is that you “pack” the soil with all the nutrients the plant would need during its life cycle and then allow the soil to “cook” for a month before using. Packed soil would burn plants if not cooked. If this interests you download the guides “Subcool Super Soil” and “Soma Organic Soil” on the Green Buddha website. Without a doubt this produces the finest quality cannabis.

## **Watering/Nutrients**

What you produce will only be as good as what you put into it. You want to use clean water. Tap water contains chlorine which is harmful to plants. Tap water can be used but, you should let it sit out for 24 hours to let the chlorine and other minerals (not good for your plant) to air out. When to water your plants is a more difficult task to teach through the written medium. Sprouts want to be kept moist at all times for the first week or two. As they develop roots you will want to let the soil dry out some before replenishing. The best way to determine if a mature plant needs watering is by learning the weight of the pots with the plants. To do this, water your plants till you get 30% runoff, then "feel" how heavy the pot/container is, then as days pass & you notice that it might be time to water, "feel" how light the pot/container is, if it is as light as when you 1st planted & filled pot/container its time to water. In general you'll need to water about every couple of days, but this also depends on the medium, & growing environment, & other factors. Skilled gardeners will be quicker to learn than total beginners. One can also utilize a moisture meter.

Green Buddha recommends that your very first crop of medical cannabis be produced without additional nutrients, so one gets an idea of the plant before adding fertilizers into the mix. Green Buddha believes that the primary mistake all new growers make is over fertilizing resulting in small yields of poor quality product. So plants need to have the just the right nutrients available and must not be over fertilized. Over fertilization burns plants causing them to lock up and not take additional nutrients in. Often this happens halfway through the plant cycle which interferes with terpene production. This is why organically grown cannabis smells so good. Live soils which are fully loaded – with earthworm castings - provide all the nutrients needed during the plant's normal cycle, minimizing the need for more additional fertilizers.

For the vegetation cycle you want a Vegetation/all purpose fertilizer with a N-P-K no higher than 6-2-4. You want the NPK values to be equal or close to equal, & in vegetation you want the N & K levels higher or equal to P. In the flowering cycle you want a Bloom/Flowering fertilizer with a N-P-K value no higher than 5-15-10, where the N values is always lower than P & K. If you are using "live" soils then your fertilizing needs will be lower because the soil contains more of the nutrients that the plant would use during its life cycle. These "fertilizer teas" also better insure the plant does not lock up. Fertilizers also tend to move soil ph. More acidic and that sometimes needs to be compensated for.

Foliant sprays of fertilizer can also be used very successfully. As plants mature taking nutrients in through the roots becomes more difficult. Foliant sprays are directly absorbed through the leaves.

## **Pots/containers**

The rule of thumb is 1 gallon pot per foot of plant, eg: 2ft tall plant = 2 gallon pot. It is recommended to start your seeds/plants in small pots or containers and transplant once or twice to a bigger pot as the plants grow. Starting in small pots and working up as the plant grows allows the roots to fill up the pot/container and use up all the soils nutrients & space will help prevent voids in the soil, & bigger root

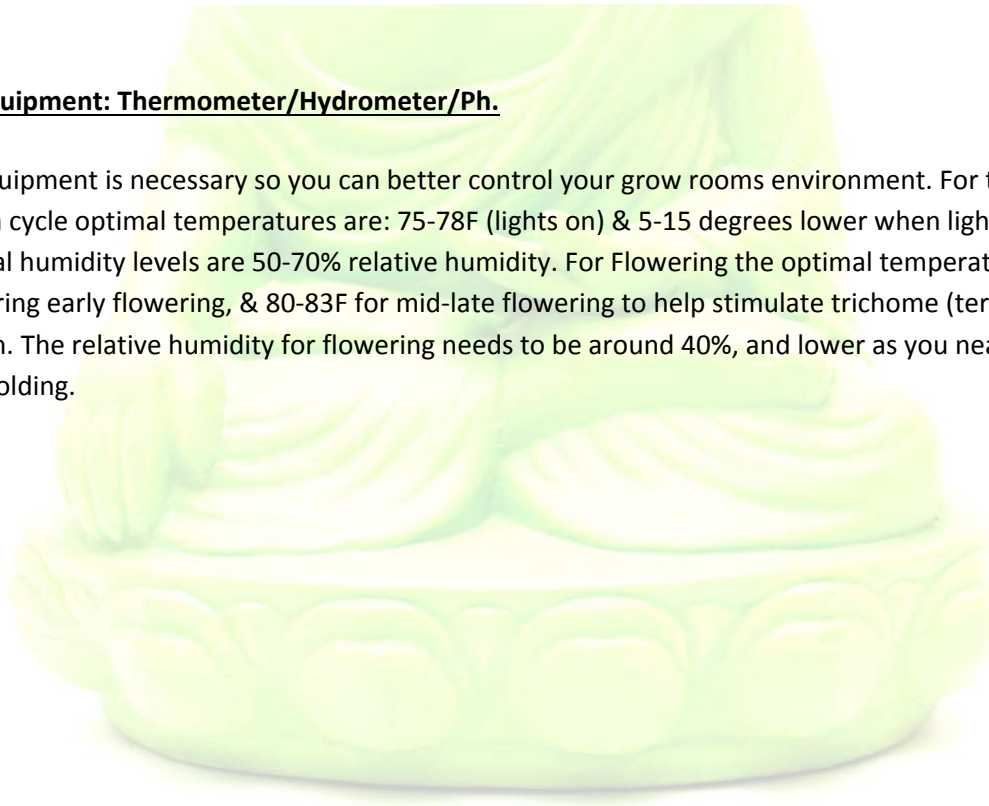


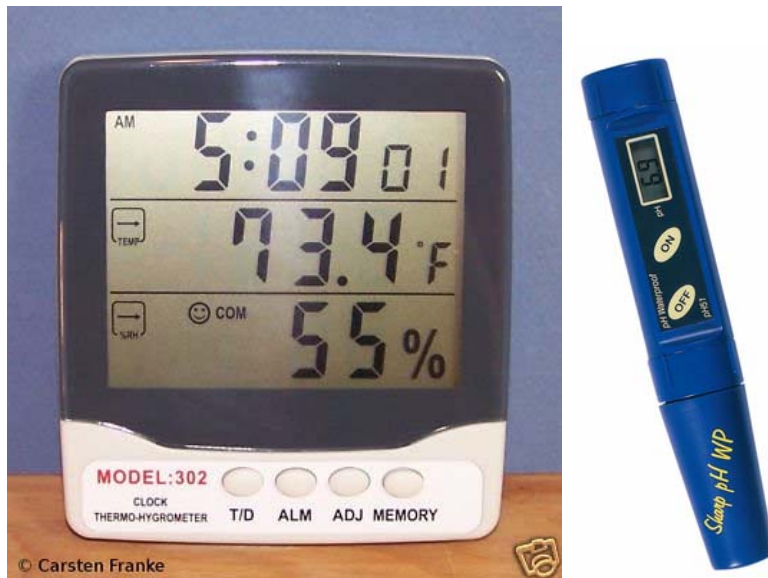
ball mass equals bigger yields. Keep in mind that once a plant is put into flower they can double or triple in size, so keep that in mind when doing your final transplant. Five gallon pots seem to work really well for smaller indoor patient grows. They are also not so heavy that patients cannot easily move them while working.



#### **Testing Equipment: Thermometer/Hydrometer/Ph.**

Testing equipment is necessary so you can better control your grow rooms environment. For the vegetation cycle optimal temperatures are: 75-78F (lights on) & 5-15 degrees lower when lights off, and the optimal humidity levels are 50-70% relative humidity. For Flowering the optimal temperatures are 75-78F during early flowering, & 80-83F for mid-late flowering to help stimulate trichome (terpene) production. The relative humidity for flowering needs to be around 40%, and lower as you near harvest to avoid molding.





Ph. testing equipment is a must have item if you want to grow nice healthy plants. There are several different kinds of ph testing kits out there, but if plan to continue to grow you need to invest in a digital ph. meter. Meters can run between 15\$ to several 100\$.

### **Next step: Growing, Pruning and Bugs**

Try and get into a regular rhythm with your garden, which will feel wonderful to both you and your plants. Look carefully at your plants every day, turning over the leaves to examine them. A magnifier can be very useful in this regard. This way you will become familiar with what your plant looks like when healthy – thus better able to detect when something is wrong.

Outdoor and green house plants may not have to be pruned. But indoor growers will almost immediately have to prune. Some *cannabis sativas* without pruning would grow too tall for an indoor space. Pruning can also increase yield when done professionally. The more you read and experiment the better you will become at such. The stems of cannabis can also be damaged, pressed between the fingers and where this happens the plant actually enhances thus obtaining bigger buds. Use a razor blade or clean clippers to prune. Wherever one prunes a top, two more branches will appear. In this way a nice candelabra shape for indoor plants can be achieved resulting in maximum yields. Pruning also encourages the branches underneath to grow faster than they normally would without the top having been cut. Experiment.

Bugs – the bane of every cannabis cultivator. Almost all new growers get them within a crop or two. Green Buddha believes that the best way to deal with cannabis destroying insects is not to introduce them into an indoor garden. With greenhouses and outdoor grows you will have no choice and there will be some bugs but they are usually less an issue than in indoor monocrop grows. If you are growing indoor, practice good pot growing home hygiene. Do not walk into your garden with the shoes that you use to walk outside. In fact, go shoe free indoors. Do not wear the same clothes you trimmed your

hedges with to also work your indoor grow. Do not allow your pets in the space. Regularly clean the space – with bleach in between crops. Do not introduce new plants into a clean garden without first isolating the new plant for a month to make sure it is not infected with insects, molds, etc.

If or when one gets bugs, often spider mites, treat them with insecticidal soaps, not harsh chemical compounds and pesticides. If the bugs are on your flowering plants it may be best to destroy them. Infested plants are useless. If on your babies and you use insecticidal soaps generally the final flowers produced months later will be free of residue. Take the use of pesticides and chemicals in your garden seriously. If you can grow without introducing these products your medicine will be healthy for you and will have produced in a fashion healthy for the planet.

