

Marijuana

Cannabis Growing Guide Part 1

The joys of a herb garden at home version 3

Overview

There are few things in life as good as your own herb, grown by yourself at home out in the garden and indoors in pots... Oregano, Dill, Basil, Sage and other herbs are all easy to grow. Mint will take over the whole yard if you let it. Fresh mint and cilantro are incredible in salads and oriental dishes. But it all comes down to a truly motivational herb that is your friend and mine, a great healer and teacher to those that know it well.

Most people think of gardens as a seasonal, yearly project, but it's actually less time consuming and more rewarding to keep the garden going year round. If one were to attempt to grow year round, indoor gardening techniques will be needed at least during winter to keep the garden producing. You will have herb fresh at all times, there is no worry of mass storage thru the winter and spring, it requires less space, and once established, requires only minimal attention every week to keep it producing at optimal levels.

The best part of being a gardener is it connects you to the earth. It connects you with nature, and is spiritually enriching. Try giving your plants energy by beaming good thoughts and energy at them every time you visit them. I find this helps me as much as it helps them; my plants seem to respond to it favourably.

Genetics and the plant

It's very important to start with good genetics. You should attempt to find seeds from local gardeners that are acclimated and bred for local climate and best floral characteristics. Potency, aroma, fast growth, early maturation, resistance to fungus and pests. All of these factors are considered by the seasoned gardener and you will benefit enormously by finding a friend to get you started on the journey that never ends...

Attempt to find an Indica/Sativa hybrid if possible, as this will have the best high and good characteristics for indoor growth as well. Indica plants have a heavy, stony high that is tiresome, and Sativas' are hard to grow indoors due to high light requirements, and late flowering traits, so a hybrid can be bred that will have the energetic, cerebral high of the Sativa and the early maturation tendencies of the Indica plant.

The Indica plant is easily recognized by its extremely broad leaves that are very rounded on the sides. The Sativa has very narrow, finger-like leaves. A hybrid will have qualities of both and have leaves that are a cross of these two types, thinner than an Indica, but much broader than a Sativa. It is possible to recognize a good hybrid by the leaves once you know what to look for.

Look for seeds that are dark brown or light grey. Some may have dark lines inset into these colours, like tiger stripes. White, small seeds are immature and should not be planted.

Indoors & Outdoors - Constant Harvest Strategy

One of the best solutions to energy verses output for most home gardeners is to use outdoor light for flowering and use continuous light indoors for germination and vegetative growth. This will take advantage of the natural light/dark cycle and cut your energy use in half compared to the same operation indoors. A small greenhouse can be built of Filon fibreglass or PVC sheets that is innocuous and looks much like a storage shed or tool shed so it's not likely to raise suspicions.

In fact, a large shed of metal or plywood can be modified with a luminous roof of PVC, glass, fiberglass or plastic sheet, and some strains that do not require a great deal of light will grow well. Such a shed will discourage fly-by sightings and keep your business your own! It also allows you to keep out rats and gophers, keeps out the neighbour kids, and can be easily locked up. It will also give you an opportunity to actually plant in the ground if you desire, and this is the best way to avoid root-bound plants (if your not using hydroponics), and get bigger harvests.

In winter, indoor space is used to start new seedlings or cuttings to be placed outside in the spring, using natural sunlight to ripen the plants. This routine will provide at least 3 outdoor/greenhouse harvests per year. If more space is available to constantly be starting indoors and flowering 2nd harvest plants outdoors, harvests are possible every 60 days in many areas, with a small indoor harvest in the winter as a possibility as well.

The basic strategy of year round production is to understand the plant has two growth cycles. At germination the plant enters into a vegetative state and will be able to use all the continuous light you can give it. This means there is no dark cycle required. The plant will photosynthesis constantly and grow faster than it would outdoors with long evenings. Photosynthesis stops during dark periods and the plant uses sugars produced to build during the evening. This is not a requirement and the plant will grow faster at this stage with continuous photosynthesis (constant light).

Once the plant is 12-18" tall, weather permitting, it can be forced to start flowering by placing it outside in the spring or fall. (For Summer outdoor flowering, the night must be artificially lengthened in the greenhouse to force the plants to flower. See FLOWERING chapter.)

Moving the plants to 10-13 hour light periods (moving it outside) with uninterrupted darkness (no bright lights nearby) will force the plant to flower. It will ripen and be 2-3' when ready to harvest. When a plant is moved from continuous indoor light to a 10-13 hour day outside, it will start to flower in anticipation of oncoming winter. Vegetative starts moved outside March 1st, will be ripe by May 1. Vegetative starts moved outside on May 1 will be ripe by July 1. Starts moved outside Sept 1 are picked by Nov. 1st. In winter, operations are moved indoors and a crop is planted for seed in anticipation of planting outdoors the next summer, or just for some extra winter stash.

Keep in mind that the man is looking for plants in the Sept./Oct./Nov. time-frame, and may never notice plants placed outside to flower in April. Be smart; make your big harvest in May, not October!

Planting Indoors

A small indoor space should be found that can be used to germinate seeds; these vegetative starts are placed outside to mature in the spring after last freezes are over. The space can be a closet, a section of a bedroom, a basement area, an attic or unused bathroom. Some people devote entire bedrooms to growing.

The space must be light leak proofed, so that no suspicious light is seen from outside the house. This could invite fuzz or rip-offs.

The space should be vented. Opening the door of a closet can be enough ventilation if the space is not lit by big lights that generate a lot of heat. Separate exhaust and incoming air vents are best. One at the top of the room to exhaust air into the attic or out the roof, and one to bring in air from an outside wall or under-floor crawl space. Use fans from old computer cabinets, available from electronic liquidators for \$5 each. Dimmer switches can be used to regulate the speed/noise of the fans. Use silicon to secure the fans to 4-6" PVC pipe pushed thru a round hole cut in the floor and ceilings. Use lots of silicon to damp the fans vibrations, so that the walls do not resonate to the fans' oscillations.

Line the walls with aluminium foil, dull side out to diffuse the light and prevent hot-spots, or paint the walls bright white to reflect light. Aluminised Mylar, 1 mil thick is best. (\$20 for 25 feet of a 4' wide roll.) Mirrors are not good to use, since the glass eats light!

Line the floor with plastic in case of water spills, etc. Set up a voltage interrupt socket and be sure the electrical wiring will handle the lamps you're going to use. Always place ballasts for HID lamps on a shelf, so they are above floor level, in case of water spills. Spacers place on the floor under ballast will work too.

A shelf above the main grow area can be used to clone cuttings and germinate seedlings. It will allow you to double the area of your grow space and is an invaluable storage area for plant food, spray bottles and other gardening supplies. This area stays very warm, and no germination warming pad will be needed, so this arrangement saves you \$.

Hang a light proof curtain to separate this shelf from the main area when used for flowering. This will allow constant lights on the shelf and dark periods in the main grow area. Velcro can be used to keep the curtain in place and ties can be used to roll it up when tending the garden. Black vinyl with white backing works best.

Now you need light. A couple of shop lights will be fine if you just want to start plants inside and then take them outside to grow in a small greenhouse. They can be purchased with bulbs for about \$10 each or without bulbs for around \$8. Try to find them on sale. Use one Cool White and one Warm Light type bulb in each to get the best light spectrum possible for plant growth. Do not use expensive Grow Lux type bulbs, as they do not put out as much light, and therefore do not work as well in most situations (go figure). If Cool White is all you can find, or afford, use them. They work fine, and are by far the cheapest. (About \$1-2 each.)

Shelf Growing

Shelf gardening with fluorescents may be the trend of the future, since the materials are so inexpensive, and easy to obtain. Fluorescent lamps are great for shelf gardening. In this system, many shelves can be placed, one above the other, and fluorescent lamps are used on each shelf. Some shelves have 24 hour lighting; some have 12 hour lighting (for flowering). Two areas are best, perhaps with one other devoted to cloning and germination of seed.

Shelf gardening assumes your going to keep all plants 3' or shorter at maturity, so all shelves are 3-4 feet apart. Less light is necessary when you have plants that are this short and forced to mature early.

One drawback to a shelf garden like this is that it is very time consuming to adjust the lamp height every day, and it is harder to take a vacation for even a week with no tending of the garden. This applies mostly to the vegetative stage, when plants are growing as much as an inch per day. Lamps on the flowering shelves are not adjusted nearly as often.

Normally, the lamps should be kept within 2 inches of the tops of the plants, with the plants arranged such that they get progressively taller as the end of the lamps go up, so that all plants are within this 2" range. This is an ideal however, and if you do go on vacation, adjusts the lamps so that you're sure the plants will not be able to grow up to the lamps within that length of time. If enough fluorescents are used to completely saturate the shelf with light, the spacing issue will not create spindly plants. They will merely grow a little slower if the lamps are not very close to them.

An alternative is to use fluorescent lamps for cloning; germination and early seedling growth on the top shelf of a closet, then switch over to HPS for heavy vegetative growth and/or flowering in the main closet area.

Position the HPS such that it won't need adjustment, at the top most possible point in the closet or room. Most HPS installations will not require lamp height adjustment. Just attach the lamp to the underside of shelf or ceiling as high as possible, and if you want to get a few plants closer to it, put them on a temporary shelf, box or table to get them closer to the lamp.

A shelf is all that is necessary with this type of set-up, preferably at least 18" wide, up to about 24" maximum. This area must be painted a very bright white, or covered with aluminium foil, dull side out to reflect light back to the plants. (Dull side out prevents hot-spots; diffuses light better.) Paint the shelf white too. Or, use aluminised Mylar, a space blanket, or any silvery surface material. Do not use mirrors, as the glass soaks up light.

Hang shop lamps from chains and make sure you can adjust them with hooks or some other type of mechanism so they can be kept as close to the plants as possible at all times (1-2"). If the lamps are too far from the plants, the plants could grow long, spindly stems trying to reach the lamp, and will not produce as much bud at maturity. This is due to inter node length being much longer. This is the length of stem between each set of leaves. If it is shorter, there can be more inter nodes, thus more branches, thus a plant that provides more buds in less space at harvest time.

Shelf gardening is sometimes referred to as Sea of Green, because many plants are grown close together, creating a green canopy of tops that are grown and matured quickly, and the next crop is started and growing concurrently in a separate area of continuous light. Clones are raised in a constant light shelf, until they start to grow well vegetatively, and then placed on a 12 hour per day shelf to flower.