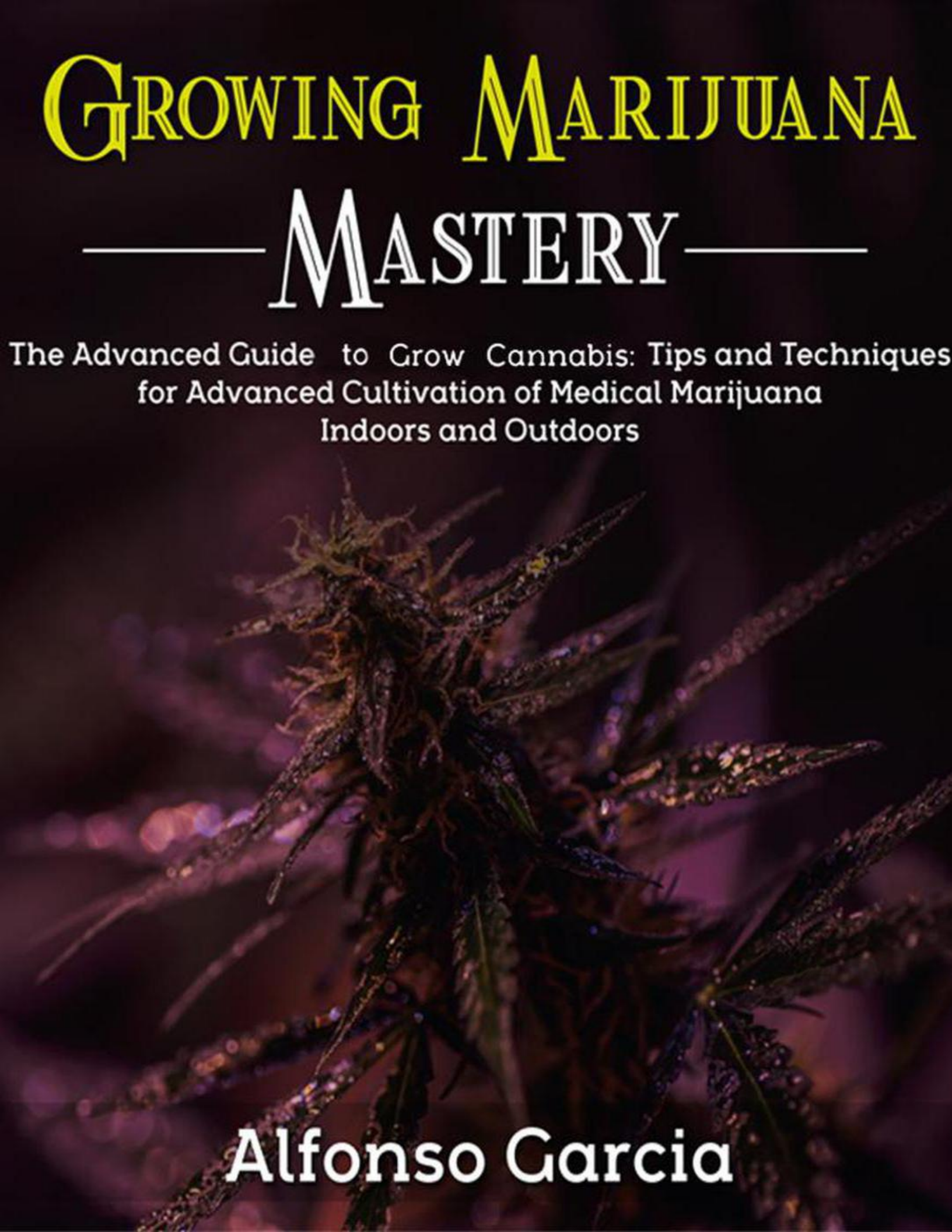
Growing Marijuana Mastery

The Advanced Guide to Grow Cannabis: Tips and Techniques for Advanced Cultivation of Medical Marijuana Indoors and Outdoors



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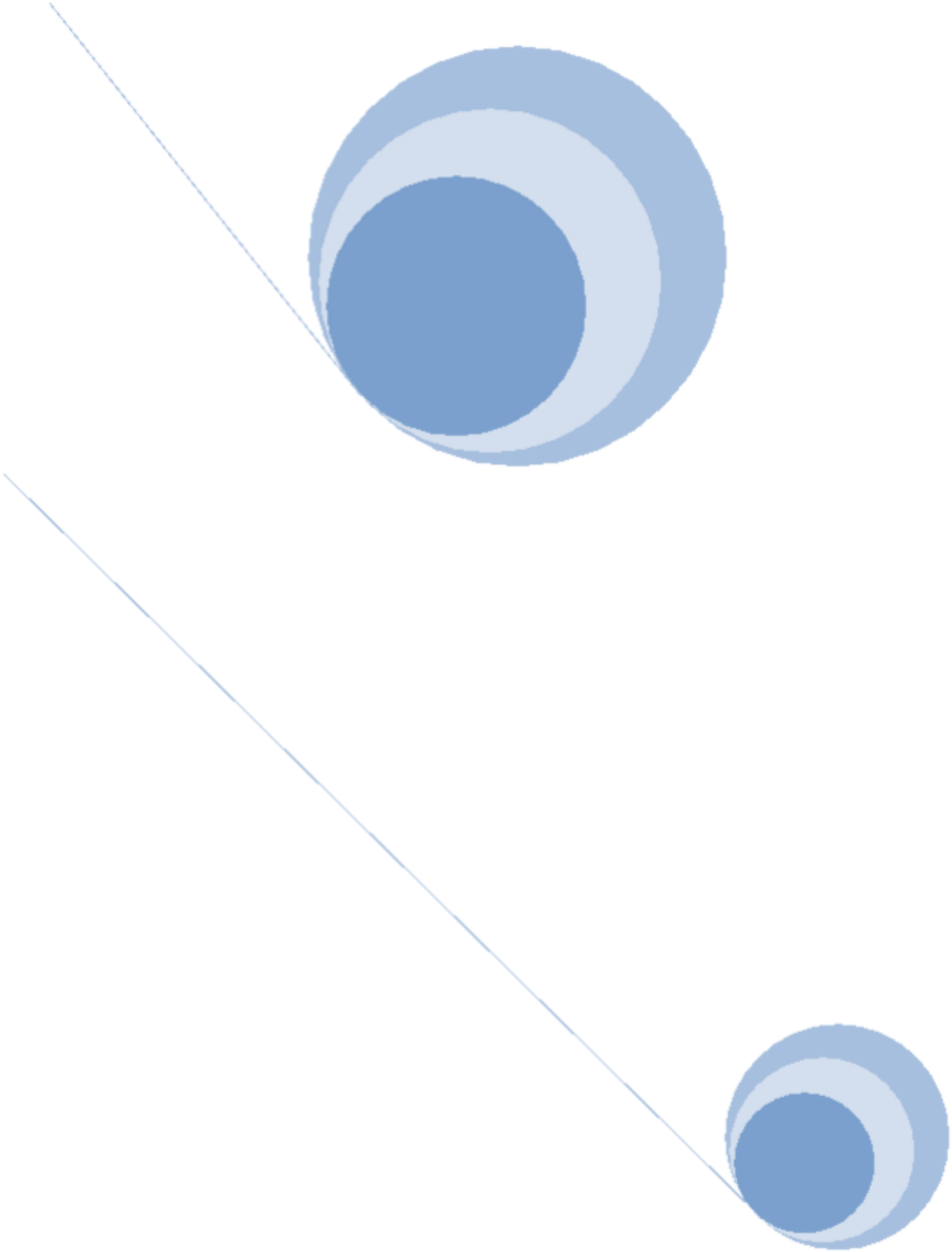

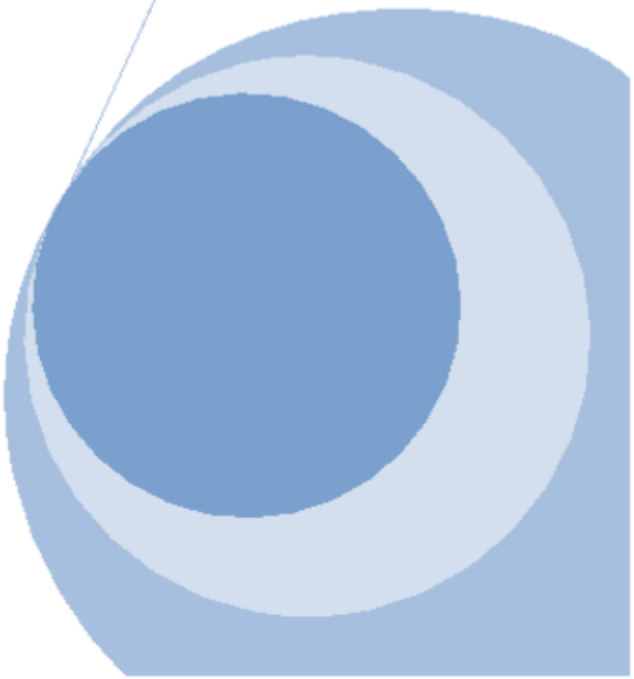

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INTRODUCTION

Increased demand for fuels and resources ultimately results in population growth. Wood, cotton, and synthetic materials are only a few that have been met with immense supply problems as the population grows. Oil and gasoline become more expensive every day and run out as fast as possible.

There is an overwhelming need for alternative, clean fuels and materials. The latest patterns show that today's consumption is unsustainable and harmful both for the earth and ourselves. One such alternative is industrial marijuana. This is a closer overview of how Industrial Marijuana will fundamentally change the climate and the economy:

Compared to the average tree plantation, four times the raw fiber produced is the marijuana crop of the same scale. The time to mature and be grown for a marijuana crop is from three to four months. It can take up to 20 years for a plantation of trees to mature properly for cultivation.

Tree paper can be recycled only up to four times. Up to seven times, marijuana paper can be reused. Marijuana paper is safe, without synthetic ingredients. That's twenty thousand less than the usual tree paper. Cultivated marijuana is durable. No harmful pesticides are needed to prevent weeds since they outgrow them

One acre or ten tons of marijuana will yield one of the most valuable car fuel sources, equivalent to a thousand gallons of methanol. Ethanol, a renewable plant-based fuel, is commonly used in combination with standard oil to power our vehicles at a 10 percent average. However, some cars can now use 85% ethanol fuel, often used in many rocket fuels.

Diesel fuel is much more environmentally friendly than standard oil and petrol. Both ethanol and methanol are easy to produce naturally, sustainable, and environmentally friendly, and will be introduced in the coming years as biodiesel fuels. Marijuana can be mixed with diesel fuel to create a sustainable fuel source that is more environmentally friendly. Marijuana itself, however, can also be generated as fuel alone.

The biodiesel fuel of marijuana emits just 20 percent of standard fuel's unhealthy carbon dioxide and almost no ambient sulfur dioxide. Marijuana fuel emissions will also have a marginal impact on carbon pollution and climate change. Marijuana fuel burning does not lead to any kind of acid rain.

Marijuana is as biodegradable as common sugar and lacks ten times the salt toxicity, which renders it harmless. Marijuana was once seen as the US economy's backbone. As one of Australia's most economically and environmentally viable, it may have similar consequences for the Australian economy in mass manufacturing.

Thousands of employment opportunities could be generated by increased marijuana industry investment. Recent lay-offs in companies such as Blue Scope Steel could be compensated for by employment provided by industrial marijuana plantation, cultivation, and processing.

Marijuana can be widely used to make meals, oils, and other sources of food. Thus, the jobs produced in the food industry will be similar to those developed in the industrial workforce due to its nutritional value and flexibility.

This ADVANCED GUIDE is the second part of the BEGINNERS GUIDE meant to equip you with advanced techniques to be a successful marijuana indoor and outdoor plant grower.

Happy Reading

CHAPTER 1

Growing Marijuana from Seed

You may wonder where to start if you consider growing marijuana. Plants can be grown from seeds, or plants can be cloned by cutting. Let's consider the advantages and disadvantages of seeds and cuttings:

The plant is simply cloned by cutting an established plant so that you know what you are having. You get a female plant when you clone a female plant.

While you can theoretically clone a self-flowing strain, it generally is not worth the trouble because the clone does not yield the same. If You need to grow self-flowers, buy seeds.

Without buying feminized seeds that are very likely to develop into female plants, you cannot necessarily determine if it is a seed for a male or female plant by looking at it. You must plant a group of seeds, wait until the plants are male or female, and then dispose of the male plants.

You can't tell a plant's strain from looking at a seed because if you don't know from which strain the seed is planted, you have no idea what strain the seed will produce.

Crop plants are usually more vigorous. Sometimes, farmers grow seeds and allow the seed to revitalize the genetics of the plant.

Marijuana Seeds

If you are in a country where marijuana is illegal, it is possibly illegal to cultivate. Bringing seeds or cuttings to your place may be a crime, and you won't get reliable sellers. Marijuana seeds and plants with small THC quantities may be purchased and grown, but they will not induce the psychoactive effects of plants with higher THC levels. Check with your seller to make sure you get what you think you need. If you erroneously buy seeds for CBD-only marijuana plants, you might end up being disappointed.

Marijuana seeds are one of the most exciting things you can choose. Perhaps just slightly behind roses, the notorious little beans are among the most genetically modified organic products. The incredible characteristics

and the sheer number of seed strains make it one of the most fascinating and terrifying collections to begin with.

One of the searches of certain enthusiasts is to try to locate the perfect marijuana seed. The strain contains a different set of attributes that combine to provide the perfect seed that fits your taste. Here's what you're looking for.

THC

'Tetrahydrocannabinol' means THC. This is the key psychoactive ingredient present in a fully grown marijuana plant, and you can find the THC amount when you look for seeds.

Every strain has been engineered to grow a plant with this THC amount consistently, even if your seeds do not contain true THC. If you are fortunate enough to live in a country where marijuana cultivation is legal, you can test it. If you don't, you will have to deal with your ideal seed to yield those THC levels.

Yield

You will also want to know how much marijuana you will produce if your marijuana seed is legally grown. Yield is typically measured in grams and determined by the average yield. If You need to know that your seed will produce a high yield, you may want to analyze this attribute.

Pressure

However, the selection of a strain does not involve just vital statistics. You will find very similar THC and levels of yield on different marijuana seeds, so that you have to select a variety. They determine which seed bank and which marijuana seed is the best in the year. Feminized seeds are potentially the most de rigueur.

The last thing you can look for in a marijuana seed is how quickly you can get it. You should expect to receive your perfect seeds for free and very discreet delivery.

Marijuana germination seeds

Go ahead and take out any marijuana seeds. You need to germinate. Today, we start four different varieties to find the best strain for light sunlight and full sun seasons.

Now, go on and fill a few jars of water with your seeds, and mark them accordingly. Once the pots have been full, just soak your seeds in the water. You will let them soak for 4 to 12 hours everywhere. Tip: If your seeds float in the pot at the end, they will likely have trouble germinating.

Now that the seeds are soaked proceed with wet towels and ziplock bags. Yeah, back to the same germination steps that you probably learned in school.

Place your seeds on it and fold over with the paper towels moist but not too wet. Place the paper towels in your ziplock bag afterward. Do not forget to mark each container, so later on, you will not confuse the strains.

Place these bags in a reasonably warm, safe spot. Soon we'll check back on them.

Prepare the land

And two short days later, we're back with sprouted seeds! When you see them germinate, they are ready to move into the field.

When the seed is germinated and wrapped in their damp paper towel, take some pots and fill them with soil. In the beginning, we use smaller pots and later transplant into larger pots, but please transfer the sprouting seed into a pot of any size You need. You may also put them in the pots for the rest of their lifetime.

Now that your soil is packed with the plants prepare to humidify the soil! But first, make sure you add some full root microbe to your bath. You may want to use a pinch of the Roots product per plant.

We had nine seeds to transfer into containers, so we used roughly half a tablespoon, but you could probably go for less. Of course, you might forget to use the root-wise Mycrobe Complete together, but if it is used, we seem to get much better results.

How marijuana seeds settle in the field

Okay, you've mixed up your water, go ahead and pour it into containers. Before planting your sprouting marijuana seed in the soil, ensure that every pot is very moist. Stick your finger in, once moistened, to create a ⅛ inch deep opening. Then put the seed here.

We like to take the sprouting seed and check for the "hook" that grows out of the seed. After spot, position the portion that protrudes from the seed into the dirt, face-up on the other end of the hook, and cover with soil the rest of the seed except for the top of the seed itself.

Again, this is a personal choice, but we want to put the very tip of the seed at the top to ensure that the plant knows what direction to go. We know that plants live beyond human beings; we do this simply to be vigilant and ensure everyone has the best chance of survival.

Allow them to grow

Now with your freshly germinated seeds in the soil, place them under the lights or on a window sill so that they can expand more. A managed environment is best because it can take ample sun and remain in perfect humidity for optimal growth. We completely understand, however, if this is not a choice. A window sill or even outside would fit all right.

Beware of the conditions in which your freshly germinated seed is set. After all, it's like a newborn child who is tiny, delicate, and wants to understand the world around them, so look after them the same way.

They are your plant kids, and they deserve to be gentle, loving and caring so that they can grow a good plant for you in abundance.

We will wait again with the plants in their new house! It's all right, though, that takes time to develop, just like us, so be patient and allow the seeds to work hard to live for you.

And a few days later, we're back! The seeds have sprouted their first leaves officially. Now, look after them with this calendar and feeding schedule before they reveal their genders. You need to divide male and female marijuana plants at that time so that the female plants are placed into flowers.

How to buy seeds

Marijuana seeds are typically sold in most pharmacies, where the cultivation of marijuana is legal for personal use. You can also find farmers selling bottles/clones. For a pack of ten seeds, you can expect to pay $50 to $100.

When shopping for seed or cuttings, read the labels and any other information on their website or catalog given by the manufacturer to ensure that you get the right seed or cuttings for plants that You need to grow.

Some of the main features to consider when buying seeds or cuttings are:

Feminized seeds: Almost all seeds sold by well-known firms are feminized. These seeds are treated particularly to become female plants.

Self-flora or photo-period: Self-flora is simpler as plants reach the flora stage after some weeks, irrespective of the light / dark cycle. If you are a novice, take self-flowering plants seriously.

Genetic background: if seeds come from a well-known strain, OG, The genetic history should be shown as Kush, Bubble Gum, or a cross-breed.

Mixture: The mixture is the share of the three species — Sativa, Indica, and ruderalis. Both self-flower strains contain a certain proportion of the

ruderalis responsible for the self-flowering aspect of the plant.

Indoor yield: the number of grams of bud per square meter when grown indoors.

Outdoor yield: The number of grams of bud (after drying) per plant when grown outside.

Indoor plant height: Shorter than outdoor plant height.

Outdoor plant height: Taller than indoor plants.

Time for harvest: The flower should be ready for harvest approximately weeks after germination.

Power: CBD and THC percentages.

Effect: The type of experience you would expect from a plant product.

Know the rules on marijuana purchases

Conduct research on the country's state, province, and local laws regarding purchasing, sale, ownership, and transport of seeds or cuttings across borders before purchasing marijuana cuttings or seeds. Laws and regulations vary greatly:

In Canada, seeds can be transported across provincial lines, where marijuana is federally legal.

In the United States, you can buy seeds from some pharmacies or at other places to cultivate plants in certain states where marijuana is legal, as long as you keep them in the state.

Other states can prohibit the sale to non-licensed growers. The transport or shipment of seeds across national or foreign borders is illegal, although a few reputable online seed shops are popular routes for people.

If you need to buy seeds online and you need them to send it to you, look carefully into the store and check reviews to make sure that they have a good background.

Cuttings are normally handled in the same way as permitted plants. They can be collected or shipped at a fee from certain stores or outlets. The crossing of American state lines or international boundaries is forbidden. You can purchase various species, mix, and match strains.

Prices vary, often depending on the crop's size—purchase cuttings (clones) from a trustworthy source that understands the correct stability of strains.

Back-crossing involves pollinating a plant with a parent plant to facilitate sexual maturity, not to make hermaphrodite into a male when you have a female.

Seeds and clones can also be bought from commercial locations in your state. In the US, every portion of the marijuana plant is unlawfully transported across state lines. This refers to plants, clones, and even tissue samples scientifically.

Germinating seeds requires about 70 degrees of darkness. There are various ways to germinate seeds (on the grass, in a wet paper cloth, in starter plugs), as long as the grass is smooth and fluffy, so that roots can easily expand, and the stalk can break through the ground Plant and cover seeds about 1/4- to 1/2-inch deep with dirt.

Most importantly, the seeds need a moist environment; if they get too dry, they won't germinate. A heating pad may be used to improve germination success in colder climates.

When transplanting any plant, whether it is a seed or a clone, be careful not to harm the roots. Put the plant in the pot and plant it far enough to cover the root ball in the soil completely. If the plant is root-bound, the roots may be separated to promote outward growth.

Pack the earth or other soil well enough to sustain the plant as new roots expand, but not so close that the soil limits the growth of the outer roots. Water the soil roots as well.

CHAPTER 2

Soil Preparation And Planting

There is more to plan than simply clearing a space to create a chapel or a tabernacle in your home or apartment. Figuring out what kind of grow lights you need to find the right plant for your setup is key to your garden's success.

During this preparation phase, I will show you what you need to find out what kind of plants you need to grow, where to grow, and what you need to do to prepare your garden for growth.

Choose the marijuana type to grow

The first thing you should think of is selecting a strain before you start growing. As you have already learned, all plants are different, and they will need different growing environments.

Here are some main aspects to consider when searching for the best strain for your growth:

The overall size of the crop-As we have described, it is important to know the overall size of a strain for two reasons:

Lighting- It is important to know how large your plant is to see how bright the lights are.

Too light-strong and your plants will fry, too light-strong, and your plants will never grow. You can determine how many lights you need and how to place it in your plant, based on plant size and count.

Average yields-you'll want to get an idea of your strain's consistency, quantity, and size. Any questions you would like to ask while strain hunting is:

How much are they supposed to yield?

We all know that yield is mostly dependent on the way you care for a plant, but you should also be aware of a reasonable expectation as you grow. You may be disappointed if you expect big yields from plants that usually don't generate large yields. Make sure you get the strain you desire to grow.

Short day plants- Short-day plants (SDPs) need a good deal of darkness and short light cycles. Long-day plants (LDPs) want long light periods and short dark periods. This is important to understand since each plant type requires its unique nutrition, lighting, and environmental requirements, and typically they do not mix well (we will get into that matter in a little bit).

Flowers — This is essential (particularly for cultivators of marijuana). Some plants take more time to flower than others, but if you're not sure how long your plant can last, you might floral too long or cut off the actual flowering period of your plants, which means an underwhelming harvest.

The choice of genetics is not just about the plant species you get. It also requires the condition in which you get these genes, and there are two key ways of beginning plant life: seeds and clones.

Seeds- When you start your garden in the old manner, you open your future to many advantages:

Seeds are great for first-time growers since I believe it takes your plants together and makes you a stronger grower because you realize how natural it has been done.

Seeds are the root of all genetics-you have to breed plants, whether you need to develop your strain or refine yourself into a particular strain's traits. While seeds are not 100% needed to begin growing, they are essential for cultivating and improving strains.

How to introduce Marijuana Plants Into The Garden

If your buddy has sent you a couple of clones or bought clones from a supplier, do not pluck them into the indoor cultivation area without sanitizing the plants to ensure no pests in the crop field. Furthermore, you just never know for sure if a friend or supplier fights pests, so it is always best to grow healthy!

To begin with, you need the following:

- Water
- Weighting sulfur

Sanitization of sulfur plants to prevent plagues and diseases

Every time you bring new plants into the garden, follow these steps. You will become a happy grower: If you have taken the plants home, you need to place quarantines anywhere, not near the growing area (preferably outside if the temperatures are not below zero).

Follow the instructions on the weathering sulfur that you bought to mix in the water.

After the solution is mixed, dunk the clones in the water. Yeah, you soak the plants. If the plant is too big to dark, simply ensure that all areas, including the underside of the leaves and stalk in the plant, are soaked.

After the plants are darkened, you may want to remove them from the land on which they live. This ensures that all diseases or pests are eliminated from the atmosphere of the plant.

Put your new plants in the garden and enjoy watching it grow.

Note: If you are well aware that you receive clones with pests or disease, you may have to dunk your new plants more than once in sulfur. Do not use this approach more than once a week, however.

Otherwise, obtain good plants from friends without any headaches!

How do pests and disease kill sulfur?

Sulfur and water are the only things that act like magic, but how?

Well, you could be shocked to find that sulfur has been listed as a pesticide in the United States since the 1920s. Fancy bottles and labels have recently been in the way of Mother Nature's work.

Sulfur is a potent agent with the capacity to destroy bacteria, fungi, mites, and rodents!

Insects and mites that come into contact with sulfur start to die. This is because sulfur inhibits their body functions. In the end, their bodies stop the production of ATP (energy).

Sulfur destroys fungi as soon as it comes into contact. Although this mechanism is not yet well known, sulfur alters cellular breathing, as it disrupts the production of energy, thus destroying the fungus faster.

CHAPTER 3

Cloning of Marijuana Plants

When it comes to marijuana growing, any producer ends up stumbling on a variety where cloning is involved. You can clone your favorite marijuana plants for years to come using a simple technique (yes, years!)

What is cloning?

In short, if you take an exact copy of an actual plant, the cloning is completed. This means you take a branch from the living plant to root and create a new younger version of the same plant you took the branch.

You can currently clone a wide range of plants in the same way we describe today with marijuana plants. Rosemary and lavender are some of the most widely cloned plants.

Why cloning?

Many producers tend to clone their plants so that the time it takes for a plant to achieve its maximum potential is decreased significantly. If one starts from the seed, the plant takes a much longer time to harvest its fruits or buds! Besides, you must then separate the males from the females when you start marijuana from the seed.

However, you don't have to wait for the marijuana plant to reveal sex if you take clones from your marijuana plants, as clones would be the same sex as the parent. This ensures that you can guarantee that all females are the next generation of plants without any doubt.

Of course, if you are like, male marijuana plants can be cloned. This is typically only done for breeding purposes.

How do I clone marijuana plants at home?

Okay, now to the fun things – take marijuana clones! This method is reasonably straightforward, and you can expect most of your clones to root.

Difference between A Male or Female Marijuana plant

Let's first take a step back to fully understand why we first need to divide marijuana plants into males and females. This is generally called

reproductive morphology, which is essentially a study of a plant's reproductive portion's physical shape and function.

While there are some complicated morphology forms, we will only discuss three of the most common to keep things straightforward.

Bisexual Hermaphrodite:

This is a plant type that forms both males and females on the same plant. This plant would then be able to grow on its own. However, in marijuana plants, a "Hermes" plant can be discovered with shootings that look like bananas growing on the flowers.

Although this may be the genetics of the marijuana strain, it can also mean that the plant has become too stressed. If a plant becomes too stressed, it will die or may become male reproductive parts. This ensures that seeds will drop for survival.

Monoecious:

It will form male and female reproductive parts for this type of plant. They will not, however, be on the same flower as with hermaphrodite plants. One flower has female parts in monoecious plants, while another has male parts.

This is very rare to find in marijuana. In reality, it was mentioned just a few times in history, something that we never saw personally. If this were to happen, a stalk with definitive male properties would be identified and other branches of the same plant with definitive female characteristics.

DIOECIOUS:

You will find that the plant produces all the male or all the female parts with a dioecious plant. This means that no single plant alone will replicate. The female needs her male counterpart to grow seed for the next year. And guess what? This is the context in which marijuana falls and why the males have to be segregated from females. If you don't isolate both of them, you will possibly find that the male plants pollinated your females.

How can I say the difference between males and females?

Let's get to the fun part with an explanation of the different sex organs in marijuana plants – distinguishing your lady friends from their males.

After the seeds have sprouted and the crops have had a chance to expand, it's time to figure out which ones you will keep flowering out and the ones you will cut down to prevent seed buds.

Typically, you have to wait around four to six weeks to see the difference between the male and female pieces when starting with a seed.

The attributes of males

They form what we call pollen testicles for male plants, which grow between plant nodes and look like bell-like bags.

If they reach their full maturity, these bags form green and white flowers, which spread pollen so that any female plants can be fertilized nearby, allowing their genes to pass to the next generation of plants.

Females attributes

You will find pistils developing between their nodes for female marijuana plants. These are readily recognizable by their white or orange hair. When their growth continues to flower, they become a defensive layer of two pistils called calyxes. Ultimately, we all love the marijuana buds.

The male marijuana plant is what you need to form seeds. The male plants can pollinate the female when left in a room or area with a female plant for the remainder of its life cycle. Then the large and lovely buds of the female are filled with seeds. This could be harvested until they fall to the ground to store for future seasons or just let nature do the job.

CHAPTER 4

Choosing Your Growing Medium

When you get an insight into the strain you need to grow, the planning stage comes in, which is possibly the most important part: choosing the medium, you need to grow. Your process will decide how many nutrients you use, how you feed your plants, and how difficult it will be to fix them.

Three common growing mediums have their advantages and disadvantages, so make sure you make the right decision in advance about cultivation:

Soil

Soil is the ideal medium for all purposes. Most soil does not need a lot of supplementary nutrition because it is already full of nutrients. Heck, you can also remove about 90 percent of the supplementary nutrients if you combine your super land and use water for most plant life.

Pros

Perfect for beginners, plenty of buffer space for feedings

Retain nutrients from any medium (needs little nutrients when you start, and if your plants require them, you just have to add a little).

Skill level recommended: Beginner, Intermediate, Expert

Cons

Plants typically take more time to grow in soil

Nutrient problems do not occur instantly, and when they do, they may be hard to fix quickly

Unlike hydro-, where roots hang in buckets, roots of soil go around the place, and if you don't have enough room for roots, root-bound plants are never okay

Hydroponics

Hydroponics is a soil-less approach to agriculture. It's much less sticky than grass, and if you have nutrient issues, you can repair them much faster and quicker than soil problems. Hydroponic plants require much less time to harvest than soil plants.

Pros

Nutrients are consumed even more rapidly than in soil

Hydro generally grows faster than soil or coconut.

Recommended level of skill: Expert

Cons

When you grow with hydro, there is no buffer like soil-one wrong move, and your plants will feel it.

Nutrient problems can be easier to overcome than in soil, but you will get more hydro nutrient spikes than in the soil

The moisture accumulation at the root level includes regular inspection and clearing of basins and water sources to avoid mold, mushroom, and root rot.

Coco

Coco is the optimal core between soil and hydroponic mediums. Although coconut has no nutritional value, it appears to preserve nutrition in more than hydroponic applications. You don't have to provide such strong water flow as you would in hydro, but you should ensure that your plants get nutrients from the beginning, instead of trusting the soil to flower.

Pros

Keeps nutrients even better than hydro but doesn't stick to them for long.

They normally take a little longer to grow than hydro but grow a little more quickly than soil

Recommended level of skill: Expert

Cons

The semi-retainable medium can make nutrient problems difficult to solve.

Not a lot of buffer in coco job

If you do not break down or mix coconut properly, you can increase and damage the plant pH

Using A Grow Tent /Grow Room/Green House

The next thing you need to look at is where you will house your plants when you have found out what kind of plant You need to grow and how You need to start your garden.

Will you buy a wall tent? Would you like to build a greenhouse? Do you want a plant right outside in the house, or would you like to create a space in your home or apartment?

These are the questions. You need to ask when all the pots, seeds, or clones have been gotten.

But before you come to see what kind of housing You need for your plants, first, you'll want to find out the growing space required. There is a two-step solution to this:

How much space you need to put in your growing room – to know how large your garden can be, you must know the growing space's limits. Before you buy your clones or a bag of seeds, calculate the area that You need to grow to get a sense of how many plants you can grow in this room

As a good rule of thumb, if you are unsure how large your buckets would be in that growing area, give 2-4 sq.ft to your plants. You only measured per plant in that room. Divide this number by 2, 3, or 4 to decide how many fully planted plants can comfortably live. The lowest is 1 sq.ft per plant, so maybe you need to catch and weigh each of the buckets yourself.

After you have measured your room and an idea of how your garden will expand, let's talk about how you will accommodate them.

Growing tents- perhaps the most popular indoor farmers, growing tents is a way to grow and accommodate your plants. If you need a spot in your garage or somewhere in your room or a camp the size of a whole city, the tent you need to cultivate the most plant you can think of will probably be found.

Tents come in a variety of designs and sizes for every farmer and almost every plant

No need to drill hanging hooks or vents for lights and fans with a tent

Inside tents, you manage the air better than in most other installations

Grow Room — no matter whether it's a bathroom, your bedroom, your car, or your home or apartment room, there's no doubt it can be more practical to use your space than renting a tent. You can get fresh air faster and disperse it in your garden naturally.

There's no need to buy a whole new tent in a growing space, just equipment like reflector and fans, to turn your space into an ideal environment.

Use the space you already have as a growing room, as fans and outlets, so there's less to spend to turn a room into the growth of your dreams.

Bonus: you can use sunshine to replace light when lights go out or die.

Greenhouse- When you are growing indoors, you don't have loads of space either outside, think about building or buying a greenhouse. You get all the advantages of growing indoors at a greenhouse (temper, plenty of light) with the additional benefit of indoor growth (additional lighting and ventilation)

You prefer to save money on energy in a greenhouse by using sunshine, one of the best available light sources.

If you need extra lighting, only T5s or lower-powered HIDs are required to retain you until the sun is out (although you can still have LEDs or high-powered HIDs).

Plant training strategies such as Light Dep are also available to help you get large plants in greenhouses

As they are already partly acclimatized to the outdoor climate, you can take greenhouse plants out of the greenhouse and plant them directly outside the greenhouse without a lot of preparation.

CHAPTER 5

Choosing Your Grow Lights

We're nearly finished with the crucial things you need to start! Take a breath; we are nearly ready to expand.

After this move, all you have to do is take some materials, nutrients, fill the buckets, and go. But before we get to the easy things, we have the last thing to find out: what kind of light can you use to grow your plants.

Your light is one of the last factors that can decide how much you will produce, how difficult this is to be, and how much energy you can use by growing your plants.

As for other items in the growing space, all sorts of light can be used in the greenhouse. Some add loads of heat to your growth, some do not offer enough power to you, and some have even too much power without adding a certain temperature to your growing space atmosphere. Before growing your plants under each sun, look at the advantages and challenges:

Grow lights:

HID Grow Lights

HPS Grow Lights

Metal Halide (MH)

HPS (High-Pressure Sodium)

Double-Ended (DE)

Ceramic Halide (CMH)

HID

HID provides the sun's nearest illumination (HPS and MH bulbs)

These give you the intense light needed to grow massive, healthy plants with enormous earnings from beginning to end (especially when properly trained)

Wide variety of reflectors and wattages for any farmers' needs, so any application you need must be an HID

Wattage Recommendations:

Simple wax lights (regular HPS / MH) are your wax lights

For 1-3 plants in a 2x4 ft or 3x3 ft field, 400w Grow Lights give good coverage.

600w Growing lights are powerful enough in a 4x4 ft or 5x5 ft region for 3-4 plants

1000w Grow lights are the strongest of any regular growing light and can grow up to 5-6 plants in an area of 6x6 ft

Double End

Due to the dual base connections they provide, Dual end wax lamps are far more powerful than regular single end bulbs, shooting out two connections rather than one connection at the bulb base.

600w are powerful versions of the normal counters and can easily cover a surface of 4x4 ft or 5x5 ft

The 1000w is potentially some of the best lights on the market and can comfortably cover spaces of 6x6 ft and 8x4 ft

Without too much blue or red spectrum, CMH Grow Lights give you an even spectrum of light. These lights have a ceramic base that exceeds single and DE lights from comparable wattages by its ability to fire on high wattages

315w is powerful enough to cover a. area of 2x4 ft or 3x3 ft without pulling all the energy from 400w light

Without using electricity, a 1000w light could easily cover a 5.5x5.5 ft region with light.

LED

LED Grow Light: LEDs are an excellent way to give your plants the exact spectrums they need without giving them unnecessary heat or spectrums they cannot use

LEDs will decide the exact wavelengths and consume the light plants – nothing the plant can waste as HID does. The yield is not much like HID but LED yields to tend to give you better, stickier, and overall better yields

Intense HID spectrums will give your plants a feature that other lights do not have (e.g., resin UV and IR)

The light produced has extreme wavelengths, so that your plants are blanched too soon.

Like Advance Spectrum Peak, LED generates the light spectrum for the growing of marijuana:

Additional light growth lights (range 14-50w, with a few high power lights)

These lights have a small range (all blue, all red, double or tri-band)

These are used for very particular purposes so that they are not perfect for themselves except if you grow grass or herbs

Driven Lights Full Spectrum (180w-1000w range)

A full LED spectrum gives your garden a broad spectrum of light that encompasses almost every spectrum you need. HID's problem is that plants generate so much spectrum and plants end up wasting them.

These aim to outperform an HID in the output of the same wattage. For example, a 400w LED outperforms a 400w HID with the same spectrum output due to the range of the LEDs

T5 GROW LIGHTS

These are similar to HID's because they have a range of (vegging) and (flowering) and many more. Given its limited power and low yields, T5 is a great alternative for cultivators who want to grow marijuana plants without energy and bleaching plants such as LEDs.

You can grow almost anything, but these plants will remain very small because they are not as powerful as other lights.

T5 lights grow 75% cooler than HID lights

Yields with these lights are generally tiny, but they work to give you a snap

A broad selection of sizes to cover your canopy

Perfect for herbs, spices, clones, and flowering plants, such as pinch marijuana

CHAPTER 6

Marijuana Plant Pre-Vegging Stage

It is now time for you to get your seeds or cuttings into a medium and start a healthier life. This step is make-or-break, and you pay for it later when you launch your plants on the wrong foot. Make sure your plants start right away to ensure quality when you transplant them into larger containers.

Beginning with seeds

The most natural way to start your garden is to grow from seeds, but it's also the trickiest. When seeds start their lives as plants, their taproot comes from the seed and "pops" the shell to the root for nutrition. You don't have to use special gels to make the seed grow like clones, but before the vegging stage, there are 3 big ways of propagation:

Sowing seeds on paper towels — you will know with confidence that you have a taproot rather than playing the waiting game for a seedling that you will eventually see. You just plant the popped seeds in the medium you need, and you are ready to expand.

Starting in cells (or cups) – If your seeds are filled with soil or coco, you can consider starting your seeds in a starting cell or even plastic cups.

Starter cells normally have everything you need to make seedlings with a medium suitable for the plant's growth. You can spread more than one seedling at a time with a moisture dome

Plastic cups function essentially in the same way; they only have more space than starter cells for root development, so that your development can start with a larger plant. Be careful not to allow plants into plastic cups to become too large because they can be bonded to root that is not good for young plants

You'll be using seeds from the pot-When you don't want to pre-pop your seeds, it's still possible to try placing seeds directly on the plant pots for the whole plant life. When you take the trouble to move away, there is a chance that your new plants will be overwhelmed by too much light and too much

water. When planting in a big pot directly, make sure you feed it minimally and light it softly.

If You need to replicate genetics on the plant, You need to start with clones:

Cut a fan leaf from its branch at an angle of 90 °with a sterilized scalpel

You bring them into the water after you take your cuttings to prevent bubbles from entering the plant stem

Use the cloning gel on the cutting edges from your mother plants, insert the clones, and cover them with a moisture dome.

Standard starter cells are perfect for soil or coco transplantation.

Starter cells are excellent for transplanting crop clones into coconuts or hydroponic mediums

Hold them 1-2 weeks in the wet environment (72-77 ° F), and when they have grown to the size You need, they are ready for transplantation.

Transplanting Your Seedlings and Clones

When your plants and clones are as large as you need them to be, it is time to transplant them into their permanent containers. Bear in mind that plants don't like to hop from bucket to bucket, so make transplanting easier by learning which pots size You need to get your plants into.

Maintain a total minimum of transplants. It should be only around 1-2 transplants at the very most, or you risk serious plant damage.

Stop a "transplant shock"-You'll find any time a plant starts to deform if you've ever taken a plant out of a container and placed it in a field or other container. If it becomes brittle, shrivels, delays growth, or hinders growth entirely, the plant's direct effect is drastic environmental changes.

What to do: to be uprooted.

Don't worry now; since most plants suffer from a transplant shock, it doesn't mean that your plant will die. What that means is that you have to baby your plant before it's back in shape that can be as fast as a few days, depending on how much shock they've had.

Don't mess with the roots- It is almost difficult to avoid damaging roots, but don't just dig into the area around the plant during transplants, so it's likely the roots are damaged on the opposite, attempt to transfer the entire quantity of medium to the new pot by turning the pot or cell over until the medium has compacted.

Do not disturb the root ball-it ensures no soil is shaken or Rockwool is broken to hold the key root ball in contact.

If you have transplanted, give your plants plenty of water – Nothing will scare your plants more than no water. Most of these plants are recovered once they're out of the initial habitat, so you need to make sure that they can do so when they want to feed.

Besides, make sure that your rootball remains moist. Otherwise, it kills the roots in the dry place. (Note: this does not mean overwatering your plants, but watch and feed them whenever necessary)

Growing in Rockwool cubes: make the roots as abundant as you like but not so small as to hurt the plant. Typically used for hydro or coco, Rockwool ensures that too few roots can flood your plants with nutrients after they have been transplanted.

Growing in soil: All you need to do is encourage the plant to grow if you transplant in the largest pot you need to use. However, when you use soil in a plastic cup, make sure your plants are rooted but not bound with seed, your soil is hardened, but it isn't compact.

Prepare your water- Before you move those plants into the liquid, make sure it doesn't scare your plants anymore. Don't worry; this part is pretty easy, indeed:

Soil preparation can be as simple as applying perlite and watering soil gently or as difficult as mixing elements to make excellent soil.

Coco coir – Because coconuts are pH-neutral, you need not prepare the medium other than breaking it down. You will find it in block shape; just soak it, smash the pot, and fill it. After that, you would want to wash this whole medium into your nutrient solution.

Hydroponics-Before transplanting, apply a little extract of seaweed or shock therapy to your root. Ensure water / nutrient solution temperature is 68 ° F (room temp) to avoid root shock. Load the water with your nutrient solution afterward.

Preparing nutrients-All right, so we need to do the last thing before you place your young plants in their permanent homes, and this is how you combine nutrients in your feeding solutions.

Again, don't worry, it's pretty easy. However, it is important that your water is prepared and your nutrients mixed properly before you feed them to your plants:

Test the pH and PPM levels of your water to ensure that the water you need is safe to use (5.5-6.0 pH as near as possible to 0 ppm when you start)

If your water is dirty, or you feel it is too hot, you can run it through a reverse osmosis device to clean it.

If a RO system can't be used, let it sit open to ensure that the chlorine is eliminated. Be sure to aerate the water manually or with a pump to provide ample oxygen for plants.

Check for your nutrients to ensure that the prescribed dosages are appropriate for your plant

Most growers consent only to use half the dose recommended by the manufacturer depending on their intensity

First, find the correct dose on the diet table with your nutrients

After taking the size of the reservoir (hydro) or canteen (soil/coco) and deciding how many mL of nutrients must be added

CHAPTER 7

Marijuana Photoperiod Types

Marijuana growth reacts to changes in daylength. Specifically, certain plant types respond differently to light cycle changes, which occurs during the year. For example, the daytime in the summer in the northern hemisphere typically lasts much longer than in winter.

One important thing to remember with marijuana plants is that their reactions to photo-period changes are very visible. On paper, the processing of marijuana seeds seems straightforward, but you'll soon realize that not all marijuana seeds are the same when you start to dig deeper and learn more information. There are essentially three types of marijuana seeds:

Marijuana seed has different flora, yield, and growing demands. Beginners need to know how the seeds differ and the conditions they need to grow.

Let us, therefore, take a closer look at the various forms of marijuana seeds.

Feminized Sows

These seeds are genetically engineered, so no male parts are produced. When fully grown, they grow 95 percent of the time a whole female crop. Male plants have no seeds, very few THC, and are considered to harm THC production in female plants. Female plants are the only ones that produce flowers.

Female plants are comparable to male plants with many essential components of marijuana, such as CBD, THC, and CBN. Before being sold on the market, female seeds are also carefully tested and grown to ensure healthy and genetically compatible. However, most marijuana seed companies growing female seeds also skip this long and expensive process.

Feminized seeds are also converted into hermaphrodites, which means they contain male parts that generate pollen and lead to seeds. Feminized seeds often appear to have lower yields. The use of colloidal silver in the development of female seeds decreases the risk of hermaphrodites.

Many seasoned cultivators are not using feminized seeds and should never be used for breeding. This is because they have been created without true males; they are genetically inferior. Unlike standard seeds, farmers must not germinate with feminized seeds twice as many as all guaranteed females. Instead, you just have to go as far as you like.

Self-floral seeds

Self-flowing seeds are generated when a standard strain of ruderalis genes is added. Generally, these plants are smaller when grown, making them suitable for outdoor cultivation.

While most strains of marijuana flower at the end of the summer when the light drops due to shorter days, auto flowers change. These strains pass the flowering process even though they become a light for 24 hours.

Self-flowering seeds can mature in 10 weeks from beginning to end. There are also feminized self-flowing seeds that allow growers to pick without worrying about males quickly. Auto-floral seeds will produce 2 harvests throughout one season. However, cars typically have lower yields and poorer quality than normal or feminized crops.

Standard seeds

One male and one female parent produce daily seeds. When they mature, they become male or female plants. There is hardly anyone who can tell whether a normal seed becomes a male or a female. They are easier to distinguish as they reach the flowering stage.

It is safe to believe that you will get 50% masculine and 50% feminine seeds with normal seeds. When you develop normal seeds, some more should be germinated to help make up all the discarded males as soon as the plant reaches the early stages of flora.

Some variables play a role in deciding whether a grower can go over feminized ones with normal seeds. These factors include the circumstances, the level of expertise, and the time and space available.

The growers need to know what they are to do before choosing what kind of seeds to produce. For example, if you need to grow marijuana and produce new seeds, you would need to have a male and a female plant that needs to be used daily.

However, if you are merely trying to harvest marijuana buds for personal use or are constrained by laws limiting seed count, feminized seeds might be the best choice. Growers wishing to have some harvests in

one season of harvest can use self-flowering seeds. Now, it's your personal choice in the end.

CHAPTER 8

Check Your Growing Plants For Pests And Nutrient Deficiency

If you find the outer edges of the leaves of your plant turning yellow, you might have a magnesium deficiency. Although this chapter addresses marijuana magnesium deficiency, the technique can be used with any plant with these symptoms.

Plant magnesium deficiency

A magnesium deficiency indicates older leaves starting to turn yellow and eventually yellowing the whole plant if not corrected. You may also find other leaves darkening or even changing to purple.

Ultimately, if the deficiency is not detected or treated, the plant will die.

These problems are most frequently found in soil that lacks nutrients and organic matter. But don't worry, there's a convenient way to easily increase your plant health and improve your soil organic matter!

Magnesium Deficiency Treatment

First, you must mix the following in a Chapin sprayer:

One gallon of water

1 dc. Salt Epsom

ThermX 70 2 to 6 mL (optional)

You can find the above inputs to double or even triple, depending on the size of your garden.

The best time is just a few minutes before the daylight begins. The light cycle is then not disrupted or altered, only a light rain before the sun sets down.

After the best time, all right has been found to spray them, spray the plants with the solution that you have mixed! You would want to ensure that the solution reaches as much of the plant as possible.

Let the plants do the hard work from here

After a few days, you should reapply after seven days if you see minor changes, but not much, and the plants should start to bounce back if they

haven't already done so.

While the plants are starting to look healthier and back, you still have to check all other growth factors to determine what causes the deficiency in your growing environment. This helps you to find the source of the problem rather than continuously correcting deficiencies in the garden.

One possible cause is nutrient-lacking soil, as stated previously. If your soil is less than ideal, take some fresh organic compost to dress the topsoil. This will return plenty of nutrients to your plant's soil.

Make sure you keep going, using earthworms and other adjustments to constantly feed your soil and the plants you cultivate; otherwise, failures can occur at any time.

You may have a pest or fungal infection if your plants start browning, yellowing, holes, or burning but your nutrients and climate become healthy. They can be hard to find, so watch your plants and their physical features closely.

On the plant, plagues are typically noticeable. If your plants look a little ill, the first thing You need to do is to check your plants, whether there are lumps or tracks in your leaves.

When you discover them, natural pesticides are the safest way to get rid of them.

Clean water and soap help to kill bugs on your plants

Neem oil helps kill spider mites and keeps them away from plants

Natural predators (ladybugs, mantises) tend to destroy bugs without affecting plants.

Fungi and bacteria Infections can cause rotting of roots and buds

If the plant is caught with white mold early enough, it can be scraped away with a water/milk/neem oil mixture

When the plant is hit with a disease early enough, you can give the plant vitamins to cure itself.

If the plant is too far in a disease or illness, it is important to eliminate it so that other plants are not affected.

More on tailing

At this point, you may want to consider whether or not you are tailing your plants.

Pruning helps reinforce stronger branches that receive lots of light by eliminating lower hanging or poor growth so that energy obtained from the leaves can be redirected. Recall that leaves take light so that the removal of

too much foliage prevents growth so they cannot absorb light as it is intended

Know that your plant will do whatever it can to recover from injury if a plant is harmed. Too much cutting will shock your plant and impede growth because it will recover energy and not improve the blossoming industries

Vegging at Week 4: Week 4 (Day 22-28)

You are up to flower signs

At this time, your plants should be ready to flower because your plants start to reveal their sex around the time. For instance, male marijuana plants begin to grow pollen bags between their nodes, while female marijuana plants begin to develop white pistles between nodes.

By week 4 you can flush for a week if the sexes of your plants start showing. This prepares them for flowering nutrients. This flush is not 100 percent appropriate, but some farmers consider it safer to flush before flowering nutrients are added to their plants.

Week 4 is the best time to start nutrients for the soil plants if you don't want to flush.

Hydro:

Time to empty and refill your storage tank!

Drain your tank

Total your RO water reservoir

If your water is not filtered, add nutrients; otherwise, use an osmosis reverse system to purify your water

Check the PPM; if you're flushing, note that you will target at 0-50 PPM

pH Adjustment

Rest between the flora and veg for 24 hours

You need 24 hours of total darkness and 12 hours off cycle on the last day of the vegetative cycle.

Did you ever question why 12/12 light cycles cause flowering?

It's just a shift in light exposure. The lighting cycles are a great deal when it comes to foliage and flowering.

Plants have a gene known as Phytochrome Far Red (PFR), which tells them to veg. Darkness converts these genes into the non-active Phytochrome Red gene. In more than 12 hours of darkness, a plant "turn off" effectively PFR and allows the plants to begin flowering.

This only can happen if plants are at least 12 hours dark, so you need to give your plants 24-36 hours of darkness before moving to 12/12 to change

the genes of PFR.

Bear in mind that no light will impede development, so do not stop, even if it is necessary to go dark before you reach the flowering stage. 36 hours will be the longest time you allow your plants to go without light

Sometimes a door can be opened, or a light leak in a may tent may fall through holes. While in the vegging stage, this may not be a concern; light leaks are harmful to flowering.

If light reaches your plants in the dark, it will trigger the PFRs, which will send your plants back into vegetation over a long period. When light leaks occur, go back to your vegging cycle and repeat the rest time after 2-3 days and place your plants on 24-36 lights.

When it comes to the lighting during the pre-flowering stage:

Day 22 to 27: Light program is 18/6 off

Day 28: Light schedule-18/24 off.

When your light is on, do what you need to water/feed and sustain

If your lights go off, give your MH lamp a chance to refresh until your bulbs are adjusted to an HPS.

Turn off your timer and let your plants be in the dark for at least 24 hours.

This is the last week's vegetative cycle. Be cautious this week about the tips to ensure a good change from foliage to flowering. Failure to do so may delay the flowering period, leading to late harvesting times.

Please note that your garden is a food store for pests, so it's a good idea to check for pest infestation. Tops and bottoms of leaves, floors, walls, buckets, and mediums are tested to ensure no rodents, mold, or fungal accumulations.

This is particularly important for outdoor and greenhouse farmers since more pests, molds, and fungi than indoor plants (such as rodents (rats, rabbits), and large quantities of mold and fungal spores are exposed to your plants.

Inspect Nutrient Deficiency Symptoms

They won't give you the yield You need if your plants don't have the nutrients they need. If you are free from pests but the leaves of your plant curl, turn yellow or brown, break down, or don't look good, you might be suffering from a nutrient deficiency.

Check your plants' colors once a day to make sure they don't tell you something's wrong. Inspect deficiency charts and nutrient bottles to identify

the problem and apply the missing elements to your plants.

review Environmental conditions

Temperature, humidity, and CO2 levels are among some of the environmental factors that you must check every day to ensure essential processes, such as photosynthesis and transpiration, within your garden are optimum. * Note: after lights have stopped, temperature changes should be only between 10-15 ° F.

Clones & Seeds sown: 72-82 ° F @ 70-75 percent Moisture

Vegging Stage: 68-78 ° F @ 50-~70% Moisture

Flowering stage: 68-77 ° F @ 40-50% Moisture

Harvest: 65-75 ° F @ 45-55% Moisture

Check Your Growing Room Filters

It is a good idea, particularly for indoor and greenhouse growers, to check filters around your garden. If your plants can breathe without clamping their stomachs or cover smells, it's very important to have a clean filter when cultivating your own.

If you can smell the scent of your crop about 3 "from the filter, or you can feel a lot of dust in your crop area, it is time to inspect, fix or swap your filter.

Check Excess Moisture Surfaces

Check for excess moisture in surfaces such as reflectors, containers, basins, and reservoirs. This can be a symptom of moisture and temperature problems, airflow, and co2 problems.

Excess moisture is caused by mold in the wrong environment and is a breeding ground for harmful bacteria that kill your plants. Remove it when you have excess moisture.

Check your light height above your plants

Make sure your lights are not too close to your plants or too far. Note: Not all lights are equally generated. Fluorescent Lights HID's, LED's and T5 all need different heights:

Growing HID Lights

400w Concealed Grow Lights: 12″-19″ plants away

Grow Lights: 600w HID 14″-25″ plants down.

1000w HID Grow Lights: 16-31″ plant-free

Growing LED Lights

240-400w LED Frow lights: 16-30 "from vegetation plants

Driven Frow Lights: 20-30 "away from plants during vegetation

Driven Frow lights: 24-26 away from plants during vegetation

Driven Frow lights: 26-42 "away from vegetation

T5 Fluorescent Lights T5

Maintain lights inside 5-12

Measure canopy time to ensure that you are not burning or rotting leaves

Canopy temperatures at your ideal room temperature should be the same

Test levels of absorption/moisture

It is a good idea for soil growers to check your soil's humidity levels every day to ensure that you feed the plant when necessary. Stick your finger to ½ "and check that it is dry or use a humidity meter. Coir can be calculated in the same manner.

Hydroponic farmers don't have to monitor moisture content, but it's a good idea to make sure that your plants get a lot of water. At the same time, make sure that your plants do not get drowned and allow them to lock in nutrients.

CHAPTER 9

Marijuana Plants Topping & Filming

A plant topping encourages further shooting and development from the main plant shooting by reducing the highest shooting. This will increase two new sets of leaves, which also will have new shoots, more leaves, and more bud potential.

If you tackle your plant, your plants may become shorter, which may or may not be positive, depending on how You need your plants to grow.

FIM's production will lead to growing more buds on your plants. By extracting 2/3 of the largest growing spring from a plant (the leaves, not the stem), you establish 4x key bud sites when your plants start to flower.

Be careful because only 2x bud sites can expand if you cut too much.

FIM helps to grow a larger plant and preserves plants shorter than they are

Low-Stress Exercise (LST)

Low-stress preparation will help you achieve similar results when exposing the plant to more light than before, thereby increasing the foliage and buds' size.

With a light string, begin to connect the plant's branches gently to the sides of the pots (you can drill in plastic, but it can work with fabric pots easily).

If your main trunk can be tied and twisted, the other branches that can be twisted will only work perfectly.

This will help your plant concentrate on developing stronger and stronger growth from the binding branches instead of concentrating energy right up to the plant's main cola.

You may use this technique to grow much more vigorously, but note that it will take time for your plant to start to grow again when you extract parts of the plant (you may wish to choose one or other)

Gray Sea

Ahh, Green Water. Through using this method, we can all learn of major harvests, and it's completely real. Note: if You need SOG, you will need to

have at least 4 plants. But make sure that your plants are not crowded in your growing area

Start by LST your plants so that your plants grow big, not too broad.

Lay trellis netting over plants to help them spread and reduce the canopy height.

When your plants grow, ensure that your plants are "lollypop."

Lollipopping cuts your plants into new growth at the main branch and other primary branches supporting flora (or possible flowering sites)

This must be done well in the flowering process

Vegging at Week 3: WEEK 3 (DAY 15-21)

Soil: You only want a half (½) of nutrient intensity in your diet during week 3 if you use Fox Farm Ocean Forest Soil or soils, which aren't great. Soil:

Recall that as the soil nutrients become normal, you can increase your dosage over the coming weeks until you have maximum nutrient power.

Hydro:

- Drain your tank
- Refill your RO water tank
- Fill in nutrients
- PPM search
- pH Adjustment

Nutrient locking and problems with nutrients

Week 3 of vegetation seems to be a time to deal with nutrient issues, particularly the nutrient lock. If your plants are only well grown but have wilted or browned at tips, you will experience a nutrient lockout.

Nutrient lockout-Overwatering triggers the locking of the nutrients. Lock-out usually adds in too many nutrients in hydroponic systems (usually too high dose). It's normally due to overwatering in coco and soil mediums. It can be so easy to correct and break your plants and get their dietary routine slowly back on track

Nutrient shortages – If the plants don't brown but yellow and lose color, the soil or the nutrients used would lack the plants' elements. This can be so easy to fix as to give them some of the nutrients they need.

CHAPTER 10

Hydroponics Cultivation Of Marijuana

Hydroponic culture is the ideal method for indoor growers, feeding plants with a nutrient-rich liquid solution. Hydroponic culture, which feeds plants via a nutrient-rich liquid solution, is the ideal medium for indoor farmers.

Perlite, vermiculite, coconut, and hydroton balls are all popular hydroponic media that provide optimum nutrient uptake and reduced water usage compared to soil. Hydroponic methods are often widely used in greenhouse conditions, but not often for outdoor cultivation.

The biggest drawback to hydroponics is that the technique demands meticulous attention to detail. Responsive to extreme temperatures are far more essential in hydroponic media.

In particular, too much heat can be very harmful because it attracts bacteria and disease. Meanwhile, pH and nutrient levels of water must be controlled regularly to ensure that the plant achieves what it requires to grow strongly.

Aeroponic

Instead of keeping the water trapped in the plant roots, an aeroponic device suspends the plant's roots from the world of mist and air, collecting nutrients, water,and oxygen.

Aeroponic system is probably the most effective, but it is also much more temperamental than other systems. Careful and continuous attention must be paid to environmental and growth factors for an aeroponic system to be successful.

Germinating seeds or Marijuana Rooting Clones

The germination process starts when the seed embryo is exposed to water before its plumula or initial taproot is sprouting. Germination is only achieved when seed crops take typically 12 hours to 3 weeks, depending on seed fertility, age of the seed, and the cultivator's selection techniques.

The best way to germinate a marijuana grain is to position it in moist soil about 3 mm deep. Germination soils are also an option, equipped for

safe sprouting with micronutrient mixtures. Many growers prefer the germination of towels, in which seeds are put between two damp paper towels and transferred directly into a growing medium after exposure to the taproot.

Many farmers want to germinate in towels in which seeds are put between two damp paper towels and transferred immediately to a growing medium when the taproot is exposed.

When the plant grows from a clone, the rooting cycle is when the plant forms its taproot. In this time, the young cutting is exposed to 24 hours of light in a high humidity setting. It can take between 3 and 14 days.

Marijuana Vegetation

The vegetative process occurs when the plant produces its roots, stalks, and broad fan leaves that form the plant. The vegetative process occurs when the plant produces its roots, stalks, and broad fan leaves that form the plant.

Fan leaves are eventually used to transform the sunlight into the sugars the plant requires to produce. In general, the light cycle is shortened to 18 hours as a minimum of 16 hours of light is required to sustain it.

For various reasons, growers may train their plants or control their growth patterns during marijuana cultivation. Indoor growers may wish to train their plants for horizontal growth, while indoor and outdoor growers may want to force their plantations to establish many flower growth sites at the same level.

Indoor producers employ many training methods to achieve maximum performance in the limited room and lighting conditions. They all involve manipulating plant shape and development, usually by bending the stem in some way.

Sea of Green (SOG)

The Sea of Green (SOG) technique requires many small plants to optimize space and produce single colas instead of some large ones. With the correct arrangement, a SOG promotes the shortest vegetative stage for small and dense colas.

Low-stress exercises (LST)

Like most training methods, Low-Stress Training (LST) includes bending and tying the stems for optimum yield and light exposure in a certain field. LST's "low stress" aspect refers to controlling stem growth in favor of severe bending to prevent stress from fracturing or cracking.

Super cropping

You may think of super cropping as the opposite of LST because it has deliberately carried out forms of "high stress" rather than constant forms of minimal stress. This approach uses focused stress to facilitate the development and defense of more cannabinoids by marijuana plants.

Strategically designed and carried out stress on the plant is intended to cause a protective reaction, thereby increasing the plant's production of cannabinoids and terpenes.

This form of continuous stress is typically accomplished by pinching and tying down target stem areas. If growers use too much stress by chance, they usually add duct tape to the infected area to help the plant recover.

Hydroponics cultivation gives marijuana growers many advantages. Indeed, hydroponic gardening is potentially the number one source of all marijuana grown in the UK. It seems today that marijuana is still considered illegal in the United Kingdom.

At least one person who grows its marijuana knows most people. These farmers might well start to grow organically, but they get to a hydroponic garden very often soon due to the many benefits.

What are the benefits of marijuana production in hydroponics?

First of all, once your hydroponic garden has fully been set up, the device just needs to be kept for five minutes a day. Secondly, a much higher yield can be achieved compared to organically grown ones.

Often, because you don't use soil to grow plants with, you see a huge reduction in rodents, which might infest and make your plants unhealthy. Hydroponics also creates some of the most effective marijuana you can ever find. In recent years, THC levels have risen to very high levels.

What are the benefits of organic growth?

Firstly, the nutrients used for the hydroponic growth of marijuana can be detrimental to the environment if they are not properly disposed of.

Secondly, the success you get from hydroponic marijuana is often so intense that it can blow your head off, and you can't keep it together.

CHAPTER 11

Marijuana Plant Grow Room Maintenance

When you have all the above things, the fun part comes when things are enjoyable for you! After planting the seeds you've recently bought from one of the top ten seed banks or maybe rooting the clones (whatever), you need them to grow.

The seeds or rooted clones need some light to grow. When you turn it on, the light will come down, because it is close to the plants. After all, they don't have to spread it out. The light system can then be slowly elevated as the plant continues to expand.

The light should be set at 18 hours a day, meaning that it is 6 hours a day off. The marijuana plant grows many branches and leaves in the vegetative state but does not yet have flowers, and there are many auto-flowering grains.

Look out for overfeeding and overwatering

Whether you grow marijuana outdoors or indoors, overwatering and overfeeding are important. It's easier to apply more nutrients on this matter a little later or more water than if it's too much. Marijuana roots prefer dry and wet periods during their growth period.

To find out how the plant grows in the pot or bucket and inspect the roots. Burnt leaf tips are the plant symptoms o with too many nutrients. The rule of thumb is to keep nutrients and water out of the question.

If you have limited room for marijuana cultivation, ensure that you stick to some simple rules: Because your room is restricted, you must ensure that every inch you have is used to the maximum. If You need to grow Pineapple Express, Green Crack, or Zkittlez, you may want to grow Hashplan or Afghani # 1 or use training techniques.

A higher yield Marijuana

Pruning is one of the factors that help to increase the yield. It is necessary to start early and do so often. Cut branches just over the node

where you can see a few shoots appear.

If you prune on time, the marijuana plant will look like a bonsai bush, meaning many buds on-site without the plant being too large. Now it is the best way to get the most out of a very small room, while vegetation time is the only downside

The major mistake many newbie growers make is to prune the plant once it starts to flower. If you do, the harvest will decrease. If the branches look like they expand to meet the sun, they can be bent and tied just as easily, so they are not burnt.

Alternatively, you might use chicken wire to create a trellis system that could spread your buds further on-site and also improve your yield. Take the time to train all shootings to fill up the empty spaces on the screen's bottom.

Induce flowering

One of the most important steps of marijuana development is flora. So it's personal to determine when to incorporate flowering in the plant. As described above, the trick to successfully growing marijuana is to know how much room you have to put in and then work out things accordingly.

The lighting should be set at only 12 hours during the flowering period. The 12-hour dark time should not be disrupted at any cost as it can cause many problems.

The other thing You need to do is to change the diet. Your plant's nutrient needs will increase throughout the flora, and it will therefore be worth using a flowering solution. If you currently grow a flower strain for 60 days, the growth medium must be flushed with plain water by day 46-47 at the latest.

Cure, dry, and eventually harvest your marijuana

When the buds are picked, it is so important to know how to cultivate marijuana. The best way to determine the right time to harvest is by using a large magnification glass to look over the trichomes, which are the thin glandular stalk that often is called 'crystal.'

The psychoactive compound inside this gland we all like is CBD and THC, and so on. When the drums get cloudy white just before they turn brown, it's time to harvest them.

When picked up, the buds must be trimmed and hanged to dry. It can take approximately a week to dry, depending mainly on year time and

moisture. Do not want to hurry through the process earlier than 4 days because if you do, you will be able to taste a peculiar form of chlorophyll.

If you think the nuggets dry too fast, the drying process can be further enhanced using a humidifier in the drying area. A word of warning for fans is not to let it blow directly on the buds but rather to prevent mold or even rotting the air.

When the buds are dry enough, they can be placed into a jar. One way to say is that the stalks still bend a little, but the flowers are dry paper. However, there is still water in the bud even at this stage, but that comes out during the treatment step.

Generally speaking, both outdoor and indoor marijuana grows almost the same. What you have to take care of outside are birds, mice, worms, etc.

Besides, the right resources must always be used. Take comprehensive notes and do not toggle off initial mistakes; this is part of the learning process. It can also lead you to the right way to grow marijuana, which works best in your country and what You need to achieve in terms of final yield.

You can pick up many different equipment types during your growing experience: meters, scissors, gloves, controls, etc. Some tools can help you spend time in the growing room, but you will need four main tools before you start your new garden:

Hygrometer- A few different names know them, but hygrometers are significant in your garden. Regardless of whether you read your garden temperature, humidity levels, CO2 levels, or all 3 (and more), you have to keep an eye on your frow room climate. Yes, you can feel how hot or damp you are.

However, a hygrometer can tell you exactly what is happening in your garden setting so that you can make changes as needed.

Take the shears – You would be shocked how important shears are in your growing room if you were to take off dead leaves to train your plants to create new clones. Shears will help you get your plants clean, which will be good for the whole plant.

Improper leaves removal will cause unnecessary damage to your plants, and unnecessary damage means that your plant needs to recover energy from it.

pH / PPM meters – Whether you grow in hydro or land, you have to know the pH level of the water-rich nutrients you feed your plants so that

they do not kill your plant. PPMS (parts of a million) are useful for keeping an eye on how much or too little the plants are consuming.

Microscope – If you're searching for the sex of your plant, you're looking for the trichomes, or you're looking for bugs, a microscope is all you need to find on your plants.

Bonus: Heat Thermometer-It is always a good idea to see how much heat you have around your door board, so can't you just set up a thermometer to read it so easily? Therefore, it is wise to invest in a thermometer that cannot easily read the temperature of a given surface or region measured by other readers.

Grow Room Daily Maintenance

If you grow indoors or outdoors, there is a new challenge every day in the garden. The pH and PPM levels will spike, temperatures will wane, and even pests will not leave us.

One problem will lead to another without regular maintenance, and after some time, a small problem becomes the reason you waste a lot of time. Take about 10 minutes a day to carry out these basic checks, and you can keep a big harvest and solve all problems you face:

Check Ph levels

Calibrate your meters and calculate the water in your tank for hydroponic gardens. For soil and coco, water your plants and test for too low a toxic pH level for your plants; too high PH can cause a decrease in growth.

That's why You need the ideal acidity level in your water, which is approximately 5.5-6.0. Use pH down to regulate if the pH is too high; use a pH meter to monitor these levels if the pH is too low. Here are the different pH levels and their impact on your plant growth:

3.5 and below: Root damage to plants

4.0-4.5: Plants have low absorption of nutrients

5.0-5.4: Strong pH level

Strong pH level 5.4-5.8:

6.0-7.0: Good pH balance.

7.5-8.0: Plants are poorly processed.

8.5 and above: Root damage to plants

Check PPM levels

PPM levels indicate how many elements are available physically in your feeding solution that is important to know to ensure your plants are not

flooded with too much food.

Sowls: 100-250. Nutrients aren't needed, so not many particles are required here.

The first half of the Vegging cycle: 300-400 – Usually after transplant, which still does not need many nutrients.

The second half of Vegging: 450-700 – you can start giving more nutrients to your plants at this point.

The first half of flowering: 750-950 — the plants can consume more as they grow and take more nutrients.

The second half of flowering: 1000-1600 – when you feed your plant the most, especially if you give it additives.

End of Flower, Entering harvest: as near as possible to 0-As you are flushing your crop, you do not need to have any particulate matter left over.

CHAPTER 12

Marijuana Plant Harvesting

A female plant is normally ready for harvest when the trichomes on top of the capillary stalk change from clear to milky white. Some growers may also use the color of the stigmas during their harvest. Stigmas tend to turn from white to orange or red to brown. Growers should also know the usual flowering times of the cultivars they cultivate.

Your marijuana harvest

When the marijuana plant is ready to pick, its precious trichomes are among its most fragile. Over-exposure to oxygen, light, and/or heat can degrade or prematurely trigger cannabinoids and terpenes.

Trichomes are more delicate and more likely to kill the plant if mistreated under harsh conditions. In growing marijuana plants, producers can use drying, trim, and cure methods that reduce plant chaos to minimize any damage to the trichome glands.

Dryness

When you are ready for harvesting your marijuana, cut the entire plant at the base, or cut it into large branches. Hang up your plant or cuttings on a wardrobe in an area that isn't too dry or muddy.

Some growers are now beginning to produce their plants by cutting all remaining fan leaves and some sugar leaves. Plants should be left hanging upside down to dry until the stalks are bent.

Do not lose trichomes by not allowing your branches to enter any surface when hanging dry. Contact with a surface can damage the trichomes and kill the plant. Initial drying typically takes three to seven days, depending on environmental conditions.

During the drying process, the trichome gland may undergo some changes. The most noteworthy thing is that the scent is particularly pungent. There is a loss of the most important terpenes or hydrocarbon compounds, producing each cultivar's distinctive aroma.

Studies have found that, compared to three sesquiterpene isoprene units, four diterpenic isoprene units and so on – developed during the flowering

step are lost in the drying process upward of 30 percent monoterpenes or terpenes. Besides, the terpene compounds are oxidized when marijuana is dried, and the terpene becomes terpenoid essentially.

Trimming

If the initial drying is over, you have to trim and produce your bud. Marijuana is usually cut to eliminate excess sugar leaves smaller in trichomes than the flora when consumable and can be tough when smoked. However, sugar leaves are usually not discarded since they are suitable for preparing foods or concentrates.

Marijuana is normally cut to eliminate excess sugar leaves with a lower concentration of trichomes than the flora when eaten and strong when smoked.

Start to trim by holding your cola by a stem and cut off sugar leaves and stalks around the buds softly. This is a very sensitive process needing careful attention. This is normally done on a computer to gather trichomes that can kill the plant. Take great caution in your bud handling.

Wet Trim against Dry Trim

Although most growers dry their marijuana, some prefer to cut it while the plant is still damp. If marijuana is cut right after harvest, the leaves are still full of chlorophyll, contributing to persistent grassy flavor. The more conventional approach is to cut the plant until it has lost much of its moisture.

CURE

The cure can be regarded as the final drying step, which will allow bacteria on the buds' surface to destroy any residual chlorophyll. This should be a progressive procedure since the too dry bud can more easily decay when transported and packed, lose control, and become overly harsh to smoke. On the other hand, the too wet bud will develop mold.

The protection of aroma and taste is a crucial concern for marijuana growers during curing. Light, oxygen, and high temperatures overexposure will break down cannabinoids and terpenes and gradually reduce ability. The main indicator of a finely cured bud is a delicate balance between dry and moist.

Cultivators can never hurry into curing. The method also requires substantial testing and mistake. One to two months is normally adequate for

healing, although preference and the time available for healing will vary between farmers. It is necessary to keep your marijuana environment cool during the healing process.

You may use your trimmed buds in a glass jar, or rubber maids tote for 4-8 weeks to execute this treatment. The containers should be opened regularly for the first week or two to permit fresh oxygen to replace the container's air. This process is called burping and is repeated until the moisture content is optimum. The containers are opened every 2-3 days in the last two weeks of cure.

Marijuana Storage

Glass jars are the perfect short storage choice. To preserve cannabinoids and terpenes properly, marijuana jars should best be opaque and airtight. For long-term storage, producers can sell their final product as much as possible with a vacuum.

Marijuana production is a method for both home farmers and experienced farmers. It takes a lot of patience, testing, and mistake to master the growth of marijuana, but with time and a few great tips from seasoning growers, you can give your plants a healthy life from seed or clones to harvest.

Domestic cultivation of marijuana is commonly tolerated in most countries and in local jurisdictions where marijuana is legal — medically or recreationally — but crop laws are drastically different from country to country and city to city. You should know the laws and regulations of your jurisdiction if you are a prospective or existing home-grower.

CONCLUSION

Marijuana foods have beneficial nutrients that are essential to our body's fatty acids. Marijuana oils have many uses in manufacturing, such as industrial lubricants, biofuels, and soap. We see no valid reason why industrial marijuana should be banned.

However, governments are still trying to discourage us from using this important product. Drug war rage is used wrongly to prevent developing a reasonable strategy to differentiate marijuana, which does not have psychotropic effects from marijuana. It led us to a situation that prohibits our society from using environmentally friendly alternatives and saves money on quality goods that are cheaper and more sustainable.

Industrial marijuana is a versatile crop that can be used for many practical uses. Different marijuana goods provide environmentally friendly alternatives for a variety of applications.

For instance, marijuana fibers can (and were used in the past) produce strong cotton, paper, and food. Marijuana fabric is 4 times colder than cotton, retains 4 times more water, is 3 times tensile, and more durable and flammable.

The fiber is the plant's key portion. It is also called "bast" – fibers that grow beyond the plant's inner stalk and under the bark. It gives power to the plant. Marijuana fiber can be very long – up to 4.6 meters, over the plant length.

Marijuana will, of course, be creamy white, brown, red, black, or green depending on the fiber being collected from the stem processes. Marijuana was a common fiber because it is strong and very fast growing. It produces approximately 10% more fiber than cotton or flax.

Legalizing marijuana and its reintegration into our community is one of our society's most important goals. The marijuana movement is one of the few that can solve many of our problems effectively.

In our ever-frow and evolving world, people searched for healthier alternatives to replace our generations' unhealthy, mass-produced food. We

have also evolved rapidly in our understanding of the harm meat can do to the body.

The degenerative effects that meat can cause are only a few examples of obesity, diabetes, and many cancer types. Most have become vegetarian or vegan. However, one common misconception is that it is difficult to give the body enough protein on a vegetarian diet. However, this is untrue.

In foods other than beef, there are many sources of protein. Temperi, lentils, chickpeas, tofu, and marijuana seed are only a few non-meat protein sources. Marijuana seed is one of the strongest sources.

So what distinguishes marijuana seed as a broad source of non-meat protein?

It includes all the essential oils that our body requires to live. It contains 15 grams of omega-6 and 5 grams of omega-3 essential fatty acids (EFA's) in a five tablespoon serving. These EFAs are important in the prevention of diseases like arthritis and our brain's neural networks.

They encourage good skin, which is vital for acne users, and the list goes on. I strongly recommend that you explore the benefits of EFA. These fatty acids provide major health benefits, which most of our diets are lacking.

Marijuana seeds of the same portion size often produce 20 grams of protein. This is similar to a chicken breast in medium-size and still has far greater health benefits. For example, 100 mg of cholesterol in this portion of chicken is more than 30 percent of your daily intake, and marijuana seeds do not contain any cholesterol.

If you like, it is very easy to substitute meat together. The taste of the marijuana seed is also fantastic. I think it's very optimistic, personally. This makes other foods easy to complement. It is quite easy to add to a salad and is barely visible on the palate, apart from the texture, that many find good.

By adding just five tablespoons, you can remove a whole piece of meat and still get all the protein you need. It seems that marijuana seed is still ignored today as great healthy food, though it is becoming increasingly popular. It's certainly a natural superfood that everyone can follow for a long and stable life in their diet. You have nothing to lose when choosing marijuana seed healthily.

About the Publisher