

Altered Nation Cannabis Growing Guide

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Storing Your Seeds 🐌



You may have more seeds than you do pots, or maybe you don't want to use them all up at once, it is always important to store your seeds properly so that they can last and you can always use them in the future.

- Make sure to store them in a dark spot, with no moisture, and in cooler temperatures
- Store them in an airtight container, and in a cool place like a fridge



Step One • Seed Germination 🔌





Before you begin, it's important to look into what type of water you are using, as some can be harmful to your seeds. Avoid using Distilled water, as well as any water that has softeners in it. Regular bottled spring water will work, as long as it has a balanced PH level. Once you have your water it's time to start germinating.



Dampen a piece of Paper Towel with water, this will be the base to rest your seeds. Make sure it is not too wet as that may drown the seeds. Place seeds on the damp paper towel, at least 2-3 inches apart so they have room to sprout. Place your damp paper towel and seeds in a safe spot, making sure to avoid cold areas and direct sunlight.

Once you have your seeds in a safe place, check them every 12-24 hours to make sure they are doing okay. It can take roughly 2-3 days to start seeing the seed split in the middle, this is known as a Taproot and it is the beginning stages of your Cannabis plant. It can take up to a week for the taproot to appear so do not be alarmed if it takes some time for them to grow.

Once the taproot has grown significantly (roughly an inch or so in length) it is time to move to the next step.

ADVISORY

Do NOT plant your seeds directly in your growing medium, as it may result in poor germination Be careful soaking your seeds in water, if left to long it may drown them



Step Two • Growing Your Seedlings **



Now that your Taproot has grown and developed into a seedling it's time to plant it in a pot, but there are a few things to consider before you do so. During the initial growing period your Seedling is at it's most vulnerable and needs extra care and attention to ensure that it survives.

- Make sure to use a Well Draining Pot
- Do not overwater the plant, watering only when soil is dried out
- Start growing your plant **indoors** to protect it from the elements
- Maintain a humid environment. Seedlings like Humidity, although this will change as your plant grows



It's also important to make sure your plant has adequate lighting. If you are using LED lighting make sure to place it at least 6 feet away from the seedlings, especially if you are using powerful lighting. You can use natural sunlight to help grow your plant, just make sure it is getting enough, if not look into lighting options to ensure optimal growth.

You can also strengthen your plant by using a small fan or a gentle breeze. Doing this will help develop the stalk to be stronger and allow for better growth later on in the process.

ADVISORY

Your Cannabis plant needs a lot of light. If the Stalks of your plant are very thin and long, it could be a good sign that your plants aren't getting enough light. Play around with your lighting to get the best results.

Step Three • Blooming Your Plant



It's been about 3-4 weeks and your plants are starting to look big and healthy, the next step is to get them to grow to their desired height, but also the width. There are a few things to keep in mind to ensure the best possible yield

- You may want to **transplant** your plant if you started in a small pot
- Adjust your lighting regime to ensure roughly 18 hours of light and 6 hours of dark
- Begin to acclimate your plant to the outdoors (if you plan on growing it outdoors)
- If growing outdoors, make sure to have good warm weather, Frost can kill your plants.









Larger Pot



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Growing Guide

There are a few different methods of growing Cannabis that can change the way it grows, the yield it produces, the quality of the THC, even increase the Terpenes and Trichomes. Training essentially means that you are teaching the plant to grow a specific way to produce better Cannabis. They are essentially methods of pruning and cutting to force the Cannabis to grow shorter with denser buds.

Low-Stress Training (LST)

A training practice where you gently bend the stems of the Cannabis plant and trying them together to drastically change the shape of it. This creates multiple Bud sites and can be an efficient way to increase your yield.

High-Stress Training (HST)

A training practice where you intentionally cut or wound the Cannabis plant that not only increases the yield, but also the amount of THC produced. It can cause the plant to get over-stressed which may result in poor quality.

While you can use both training methods, it is not always advised as you can over stress your Cannabis plants which could lead to some bad consequences. You can ruin the yield of the plant, badly damage it, or even kill the Cannabis plant all together.

Step Four • The Flower Stage



There are two phases to the flowering stage: the **Early-Flowering Stage** and the **Late-Flowering Stage**. Each stage is roughly 2-3 weeks, depending on location.

Early-Flowering Stage

There are a few things to look out for if you are in the Early-Flowering Stage

- You will start to see little hairs will begin to grow where the **Bud Sites** will form
- The plant is going to start getting wider, use a Trellis or some Bamboo Sticks to support it
- Your plant is requiring a lot of water as it will be growing fast, water sufficiently
- The lighting should be adjusted to 12 hours of light and 12 hours of dark









12hrs of Light Support Stem

Lots of Water

Bud Sites

ADVISORY

Watering is very important during the flowering stage, make sure to use PH Balanced water.

If growing using soil make sure your water has a PH of 6.5 - 7.

If growing using Hydroponics make sure your water has a PH of 5.8 - 6.2



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When it comes to the Early-flowering your Cannabis plant, there are a few things to keep in mind. The first is if you have purchased Autoflower seeds or not. An Autoflower seed is one that will automatically go into the flowering stage without the need for special lighting equipment.

If you do not have Autoflower seeds that just means you will need to change your lighting schedule, especially if you are growing indoors. Your lighting schedule will change from 18 hours of light to 12. If you are growing your Cannabis plant outdoors you will have the benefit of the days getting shorter especially in August (depending on the location). You may need to

The second thing you should do is to check the sex of your Cannabis plant. While most Cannabis dispensaries will sell Feminized seeds (seeds that will only produce female plants), there is always a very small chance that a male seed will have snuck in. If you got your seeds through a friend of from another source it will be good practice to check your plants, as you do not want to waste time, resources, and money into a plant that will not flower.

Determining the Sex of Your Plant



Male Cannabis Plant

- Pollen Sacks
- Banana Shape



Female Cannabis Plant

- Pistil Hairs
- Developed Calyx

Late-Flowering Stage

Determining when you are in the Late-Flowering stage can be a bit tricky but there are a few things to look out for to determine when you are in it.

- Keep a Journal or Record of growth for your Plants and research the strain to see how long it's flowering phase is
- Use a tool called a Jewellers Loop to look the Trichomes
- Check to see if the Trichomes have changed from milky White to Amber



Keep Records



Jeweller Loop



Trichomes

Trichomes

The resinous glands on cannabis buds that contain the plant's cannabinoids, terpenes, and other compounds. Strains with a heavy coating of trichomes typically have more cannabinoids and terpenes.



ADVISORY

Flushing Your Cannabis Plant If you use nutrients on your plant you should only use PH Balanced water for two weeks and avoid feeding your plant anymore nutrients.

Flushing your cannabis is a very good practice for both new growers and veterans. Flushing allows for extra salts that would otherwise sit in the medium, affecting the soil, and potentially causing harm to the plant.

There are a lot of benefits to flushing your plant before harvesting it, such as better aroma, a smoother taste, and a better burn producing whiter and lighter ash. Their are also sustainable benefits to flushing, especially if you use soil, as it allows you to reuse the medium again. It also gives the smoker the benefits of Cannabis that does not have any unwanted chemicals in it.

Selecting the water for the plant is equally important. You want water that is either bottled, or rain water. Tap water is okay as long as it does not have high levels of calcium or magnesium, so soft water is favourable to use. Make sure that you are always using properly PH balanced water, and avoid stagnant water as it could have bacteria that could harm the plant.

Lastly make sure that the water you are using is the right temperature, between 18°C - 22°C. If you use water that is too cold you can shock the plant, and if the water is too hot you can scald the roots, which could hinder the development of the plant or even be fatal.

Step Five • Harvesting Your Cannabis



After weeks of work, it is finally time to start harvesting you Cannabis plant. While collecting the harvest is easy, it is important to set up some space for the drying and curing process.

Drying Cannabis

- A dark room is the best space for drying you cannabis
- Make sure it is cool space between 15°C 20°C, to hot and your Cannabis flower might not dry properly
- The Humidity should be between 55% 65%
- Space to hang the Cannabis Buds after they have been harvested









Mild Humidity



You can use either a hang drying method or a Rack and Tray drying method. Hang drying is preferred as it is cost effective as it exposes your Cannabis flower to open air while being hung upside down. Using the Rack and Tray method, you essentially trim the Cannabis flowers off and place them on trays to dry, then those trays go on a rack storage. Rack and Tray is good for large yields, but can be costly and requires a lot of work. The drying process can take a week or two, but keep monitoring it to ensure proper airflow.



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Curing Cannabis

- Have an airtight container such as Mason Jars, Grove Bags, or Tupperware
- Use a Humidity Pack in the Container
- Keep it in a cool area to prevent mold or mildew from forming
- Make sure that it is still kept in a dark place as sunlight can degrade the cannabis
- Burp the container, slightly opening the container once a week to allow for oxygen and to release moisture











Humidity Pack

Curing the Cannabis is the last step, but equally important. It allows for a tastier smoke full or aromatics, and preserving the cannabinoids and terpenes. The drying phase can take one week, however a lot of growers will opt for a longer curing phase as it allows for a smoother smoke in the long run.

To check that the Cannabis buds have dried fully, you can attempt to break a small stem off of one of them. If it breaks off easily and cleanly then the Buds have fully dried, but if the stem bends or is hard to break off then you buds haven't fully dried out.

Make sure to burp your buds while curing to get rid of any moisture and to allow fresh air into the jar. It's also a good idea to check them to ensure that no mold or mildew has The use of a Humidity pack is also good, and best of all they are not to expensive. Some good brands of Humidity packs are Boost and Boveda, and they can be purchased at your local Dispensary or online.

Curing Cannabis

Curing the Cannabis bud helps to break down the chlorophyll. Chlorophyll gives the buds a grass like smell, and can also make for a harsh tasting Cannabis and a smoother smoke

Conclusion 🔌



After all your hard work is done, it is now time to sit back, relax, and enjoy. There are so many ways you can smoke your newly grown cannabis. While some are more easy then others such as a joint, bong, or pipe, you can look into methods to turn your cannabis into edibles or topicals. If you are more adventurous you can get into making your own extracts or concentrates that you can use to enhance your smoking experience.

But most importantly have a great high and happy smoking!

















Frequently Asked Questions

How Much Cannabis Can I Legally Grow?

Legally, you are only allowed 4 plants per residence (not per person) for non-medical use. You can apply for a special license to grow Medicinal Cannabis on your own, or even have someone grow it for you.

Can Anyone Grow Cannabis?

Ontario has set a law that only those who are 19 years or older can **legally** grow Cannabis. This includes if you have been designated by someone to grow Medicinal Cannabis for them.

What Type of Seeds Should I Buy?

Deciding on the types of seeds to use can be confusing. Look at where you want to grow the Cannabis plant (indoor/outdoor/greenhouse) to determine how much space you have. Going with an Autoflower seed can be easier for first time growers, and doing some research on the strains can help you learn how wide the plants will grow can help determine which seeds best suit your current situation.

Can I use stuff like Miracle Gro?

While Miracle Gro can help gardeners produce more vegetables, it is not a good idea to use it for growing Cannabis plants. Miracle Gro, and products like it, have chemicals that are slow releasing. Because the nutrients needed for Cannabis growing change over time, you do not want something that releases them slowly as it can cause a poor yield or quality of the buds.

I Have a Small Space, Can I Still Grow Cannabis?

Yes you can definitely grow Cannabis in a small space. You might want to research the strain and cultivation to see how big the plant will grow, as well as limit how many plants you can grow.

How Can I Tell How Much Light I Need?

Lighting for your Cannabis plants will change over time, and depends on what type of seeds you use. Standard seeds want the lights close to the plant at the beginning but once it starts the vegetative stage you should switch to an 18hr on/6hr off cycle. In the flowing stage you will want a 12hr on/12hr off cycle.

What are the Lighting Requirements for Autoflower seeds?

Autoflower seeds are easier for beginners as you can keep the lighting on an 18hr on/6hr off cycle from seeds to harvest.

Should I Use Manure and if so What Kind?

Manure is a great addition to your Cannabis growing supplies. It adds vital minerals to grow healthy plants with great yields. There are so many varieties of Manure specifically created for Cannabis growing that is more of a personal preference than anything, just make sure to use the same type throughout the growing process to avoid any compatibility issues.

Do I Need Soil for my Cannabis Plant, or Can I Use Something Else?

You can use soil if you want, but there are other types of mediums you can use such as Rockwool, Cocoa Fibre, or even Hydroponics. Each has it's own benefits so it is up to you which you decide to use.

Can I Sell the Weed That I Grew?

Unless you have a Federal License to cultivate, process, and sell Cannabis in Canada then it is illegal to sell anything that you have grown.