

Seed Germination

“Don’t judge each day by the harvest you reap but by the seeds that you plant.”

- Robert Louis Stevenson



Seeds germination is usually the first step to cultivating quality cannabis. All across the globe growers, farmers and plant enthusiasts use the best quality seeds they can find for their next bumper crop. These days, choosing your seeds can be as easy as surfing the web for a reputable seed vendor. But for the experienced and master growers, breeding and selecting your seeds is an art form. We won't get into seed breeding in this section as it can be quite taxing on beginner growers. So just stick to the basics for now.

The first choice in seed selection usually comes down to the strain you want to grow. As a beginner you'll want to choose a strain with a

history of being easy on beginner growers. Try to pick a strain that is versatile in all growing conditions and regions. It would also be in your interest to find a strain that has a relatively short flowering time, like 8 weeks or shorter. The less time you have to keep your plants alive the less problems you'll have over all.



When you have selected your strain and your source for seeds, you'll want to ensure that the seeds you got are viable. Having viable, or fully mature, seeds is your best bet at having successful germination. There are a few ways to tell if your seeds are viable. One way to tell if the seed is viable is to look at it. Viable seeds while still inside the flower will usually be dark brown, spotty or stripy, and will look like it is about to fall out of the flower. An immature seed will be almost white, will not have spots or stripes, and will not be visible while

the flower. If you are unsure about the seed by its appearance, you can also tell by giving it a light squeeze. If the seed cracks or breaks it was never viable and probably wouldn't have grown. If it holds up to the squeeze it is a viable seed.

But the best way to test for viability is the soak and sink test. Get a shot glass, or small cup, and fill it with water. A shot glass works best because they are usually clear and shallow which makes it easy to get the seed out when you're done. Next, place the seeds in the water and cover the shot glass with an empty coffee mug. The darkness of the cover will put the seed into germination mode and it will start to take on water. Leave the seeds in darkness for 8 hours, over night is best. After the 8 hours, remove the coffee mug and give any floating seeds a tap with your finger to sink them to the bottom. If they stay at the bottom, or are already



down there, they are viable and are ready to plant. If they float back to the top then they were never viable and you should throw them out.

In rare cases, usually with auto flowering strains, the seed can be viable and still float after the 8 hour soak. This is due to the seed's outer shell being a little too thick to allow for water absorption. In this case the seed needs to be scarified. Scarifying a seed means to lightly scratch, or scar, the surface of the seed's outer shell.



To scarify your seeds find a small container that is large enough to loosely hold your seed along with a small piece of sandpaper, an old match box works great. Tape or glue the sandpaper to the inside bottom of the container and add the seeds. Close the container tight and shake it vigorously for about 30 seconds. This will put small scratches on the surface of the seeds and will allow the water to seep in.

After scarification they are ready for germination.

Soaking seeds in a shot glass works great but this is not the only way to start your seeds. Some growers like to wrap their seeds in a wet paper towel and wait for roots to pop naturally. This technique works fine but it requires daily monitoring. If the initial tap root gets too long it can damage the microscopic root hairs and can stunt or stop growth. Don't let the tap root get longer than 1 inch before planting.

Another tried and true way to pop your seed, and probably the most used method, is to just plant them directly into your desired growing medium. A growing medium is the material that the plant will be grown in. Cannabis seeds like to be planted about 1/4in - 1/2in below the surface of your growing medium. This gives them enough space to start their tap root while leaving little resistance when it is ready to break through the surface. Once you have selected your germination method, it is time to choose your growing

medium. The general rule of thumb for choosing a medium is to plant them in the same type of growing medium that they will be in permanently. For example, if you want to grow in soil then start them in soil. If you're using coco coir, plant them in coco coir. Same for rockwool or hydro clay if you plan to grow hydroponically.



After germination is complete, maintain low to mild waterings as seedlings don't require a lot of water in their first few weeks of life. Cannabis seedlings thrive best in 68 - 80 degrees within a 18 - 24 light cycle. If you are not using feminized seeds, temperatures close to 68 degrees will help promote your seedlings to be female.

Some growers swear that nutrients are necessary for popping seeds but scientific studies show that the seed itself contains everything it needs for proper germination. It is highly recommended

to just use plain, pH balanced, water until the plant's true leaves have fully developed. Cannabis seeds perform best when the water has a pH level between 6.3 and 6.8 and it recommended that you check your pH every time you water or feed, check daily if you are growing hydroponically. When your seedlings are about 8 - 10 inches tall, or about 2 weeks old, they can be transplanted into larger containers, if desired, and transitioned into the Vegetative stage. This is where they will live until it is time for flowering.

