



ALL-IN-ONE MUSHROOM GROW BAG GUIDE

To help you get the best out of your mushroom experience, we've put together this handy guide. Take the time to read it in full, we promise it will be well worth it!

The guide covers how to grow mushrooms easily, from start to finish, using an All-In-One mushroom grow bag.

Before we begin, let's go over the basics of how to grow mushrooms:

Spores

Mushroom spores are like plant seeds. They contain all the genetic material required to grow the next generation of mushrooms.

Inoculation

If spores are lucky enough to find themselves in a nutrient-rich environment (a substrate) and the conditions are just right (dark & damp), they will germinate to form mycelium. Mycelium is the root system of a mushroom.

Colonisation

Mycelium grows rapidly to form a mycelial network. This mycelial network releases enzymes that digests the substrate into nutrients. The mycelium absorbs these nutrients to fuel further growth and expansion.

Fruiting

After a period of several weeks, the mycelium will start to produce baby mushrooms. These baby mushrooms are called pins. The healthiest, most vigorous pins will develop and grow into mature mushrooms. Once fully grown, the mushrooms are ready to be harvested.

IMPORTANT NOTE

Sterile technique is critical for mushroom growing. Familiarising yourself with these concepts ahead of time will massively increase your chances of a successful grow. For the inoculation phase, you want to be in a nice sanitary environment, or as clean as you can possibly find. A kitchen surface wiped down with 70% sopropl alcohol or disinfectant is ideal.

Make sure to eliminate as much draft as possible from your workspace. Although not strictly necessary, we recommend that you wear gloves and a facemask to complete the inoculation. Sanitise your hands and arms as well as the area that you are working in.

Now we know the basics, let's begin!



STAGE 1: INOCULATION

1 CHOOSE A SPORE OR LIQUID CULTURE

To start, you'll need to get your hands on either a spore or liquid culture syringe of your chosen species. These are supplied separately to the Mushbag.

Most people opt to start with a spore syringe. These spores can be germinated to produce mycelium. Alternatively, a liquid culture syringe can be used which contains pre-germinated spores, in the form of a liquid mycelium mixture.

We highly recommend using liquid culture syringes over spores if you can. Liquid cultures are a much more reliable and faster way to grow mushrooms. Spore syringes do have their place in mushroom cultivation, but be aware that the success rate is lower.

2 ATTACH THE NEEDLE

Take your spore/culture syringe and shake it vigorously for 10 seconds. Unscrew the syringe cap. Fit the sterile needle onto the syringe.

DO NOT REMOVE THE NEEDLE COVER JUST YET!



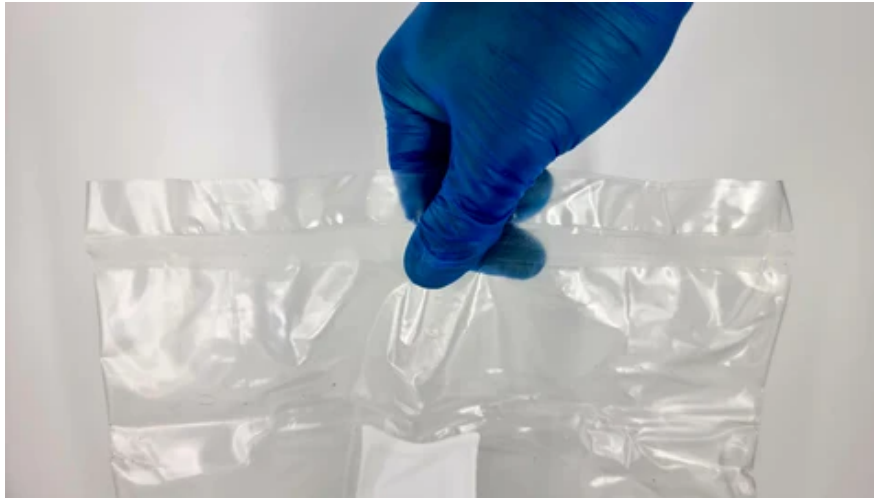
3 SQUEEZE THE BAG

Next, unfold the bag and squeeze it gently to mix up the substrate inside.



4

DRAW FILTERED AIR INTO THE BAG



Hold the bag from the top (towards the seal) for 2 minutes.

Filtered air will be drawn in through the white filter patch.

PRO TIP

Mycelium is a living organism. Like humans, it needs oxygen in order to breathe. Mixing and drawing air into the bag prior to inoculation will aerate the substrate and allow the mycelium to grow and colonise faster. Do not attempt to remove the filter patch or open the bag at this stage. The white filter patch is there to allow air exchange whilst keeping contaminants out.

5

SANITISE THE INJECTION PORT



Wipe down the rubber injection port thoroughly with the alcohol swab provided.

6

INJECT 5ML OF SOLUTION



Remove the cover from the syringe needle. Immediately after doing so, apply gentle pressure and pierce the sanitised injection port with the needle. Compress the syringe plunger and inject 5ml of solution. Remove the needle from the port.

If you have any solution left inside the syringe and want to save it for later, replace the needle cap and store the syringe in the fridge. Stored this way, it will last 6+ months or more.

Congratulations! The inoculation procedure is complete and the bag is now ready for incubation.

PRO TIP

Avoid getting any contaminants on the needle prior to injecting the kit. If you accidentally touch the needle at any point, you can flame sterilise it. Do so by applying a flame from a lighter to the tip of the needle until it glows red hot. Allow a few seconds to cool and proceed with the steps.



STAGE 2: INCUBATION

1 INJECT 5ML OF SOLUTION

Incubate the bag in a dark, warm spot. We recommend keeping the temperature between 24-27°C for optimal growth. Try not to exceed 27°C or you may increase the risk of contamination.



2 INITIAL COLONISATION

After about a week, you should start to see the first signs of colonisation. Healthy mycelium should appear first as fluffy white specs on the substrate.

It can sometimes take longer than a week, so don't be disheartened if it does.

Patience is key!

PRO TIP

Depending on the genetics, strain or species of mushroom you are growing, colonisation times can vary. In some cases, it can take up to 2 or 3 weeks to see the first signs of colonisation. This is especially true if you're using a spore syringe, so be prepared to wait. For the quickest growth, we recommend using a liquid culture or agar.

3

INITIAL COLONISATION

Over the next 2-3 weeks, the mycelium will continue to grow and colonise the substrate. Once around 30% of the substrate has been colonised, gently break apart the mycelium inside the bag and mix with the rest of the substrate. This will drastically speed up the colonisation process.



4

FULL COLONISATION

Over the next week or so, the mycelium will consume all of the substrate until it forms a white block of mycelium. This fruiting block is where your mushrooms will soon grow from.





STAGE 3: FRUITING

PRO TIP

Fully colonised fruiting blocks are much more resistant to contamination, as the mycelium has had time to strengthen. This is why it's safe to expose the mycelium to open air during the fruiting stage. That being said, it's still best practise to keep things as clean as possible, especially when handling the fruiting block.

1 REMOVE CAKE FROM THE BAG

Once fully colonised, gently cut away the bag and remove the colonised fruiting block. Use clean hands and be gentle when handling the block.



2 MOVE TO A FRUITING TENT

Carefully place the cake inside the large fruiting tent provided. Make sure to do this step in a clean area and always wash your hands thoroughly before handling the colonised substrate.



3

GIVE SOME AMBIENT LIGHT

Fill the mister bottle provided with tap water. Mist the inside walls of the tent so that there is visible condensation. Avoid misting the substrate directly.



Next, pin the tent shut with the paper clip. Place the fruiting tent in a warm spot between 21-24°C, where it can receive some indirect sunlight or room light for at least 4-6 hours a day.

You do not need to overthink lighting as mushrooms require very little, but some is always beneficial.

4

MIST EVERY FEW DAYS

For the first flush (crop), very little misting is required. Usually a single misting on the inside walls of the fruiting tent is all that is needed. If the substrate is looking dry or there is little/no condensation on the inside of the fruiting tent, misting every couple of days may be required.

However, make sure that there is no water pooling at the bottom of the tent, as this will promote the growth of bacteria. If water does start to gather, carefully pour it out of the tent.

5

MUSHROOMS BEGIN TO PIN

After about 14-21 days from spawning, you should see your first pins. These are baby mushrooms, that will grow and develop into mature mushroom fruiting bodies over the next few days.



STAGE 4: HARVESTING

1

HARVEST THE MATURE MUSHROOMS

Harvest the mushrooms just as the veils start to break. Once harvested, mist heavily directly onto the cake for 1 minute to rehydrate it.

Repeat fruiting steps 1-5 for subsequent flushes.

2

HARVEST MULTIPLE FLUSHES

Expect 2 to 3 flushes (crops) of mushrooms per cake. Don't throw the cake away after the first flush, there's plenty more to come!

Your grow is finished once mushrooms no longer grow or the substrate eventually succumbs to contaminated.

Dispose of the spent substrate in a compost heap.



As always, happy shrooming!



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