

SHROOM GROW GUIDE

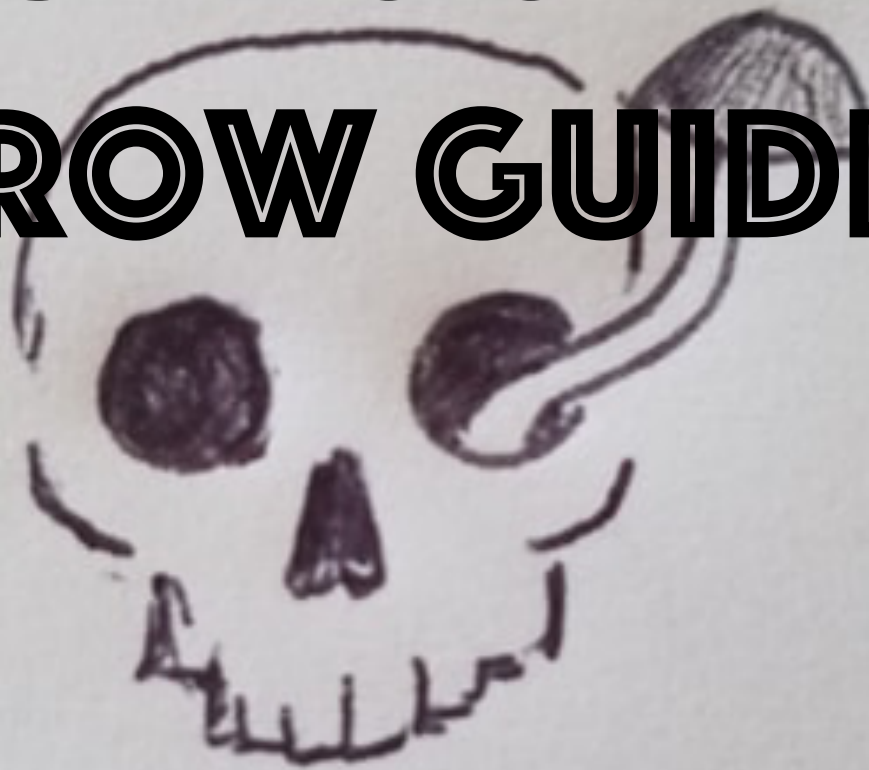
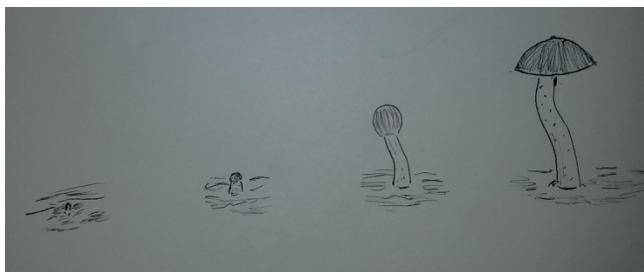


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Introduction

The life cycle of the mushroom is fairly simple and requires only a few key conditions in order for fruiting bodies to develop: high humidity, fresh air exchange, and correct temperatures during each life stage. The following guide is only one of maybe hundreds of different ways to cultivate the psychedelic mushroom, and in no way stands as THE way it should be done. This specific style of growing involves layering of substrates and requires a tad more work than the other option, which is cake growing, but the technique has been discussed as more productive weight wise. The specific strain used during this guide will be the classic *psilocybe cubensis*, and is based on the spore syringes available online. This guide only stands as what I've learned over the years and as a beginner's guide for those too lazy to do their own research.

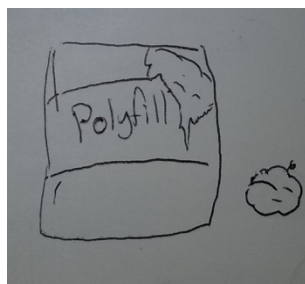
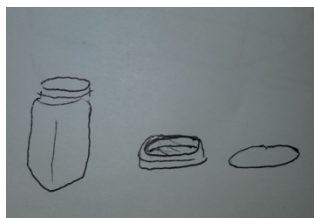


Mushroom Life Cycle

A mature mushroom drops its spores. These spores drop on the ground and under the right conditions germinate. When two compatible spores germinate close to each other they create a matrix of mycelium, usually under ground. After the mycelium develops, pinning heads will originate off the surface of the mycelium. These pinning heads will then grow into mushrooms, and the cycle repeats. If human beings reproduced like mushrooms cabbage patch kids would be a reality.

All Required Materials

- Pressure Cooker
- Cardboard Box (Large)
- Plastic Container (Large)
- Quart Jars (Wide Mouthed)
- Wild Bird Food (Bird Seed)
- Spore Syringe (*Psilocybe cubensis*)
- Packing Tape
- Coffee Filters
- Rubber Bands
- Tin Foil
- Trash Bags (Black)
- Scissors
- Spray Disinfectant
- Manure
- Polyfill
- Peat moss
- Vermiculite
- Lighter or Alcohol wipes
- Spray bottle

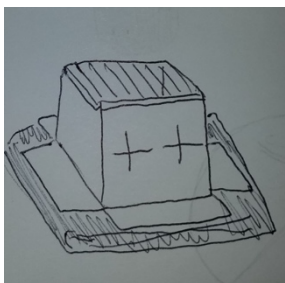


Glove Box

The glove box will be used as your sterile work environment, unless you have more efficient options/methods. Spraying disinfectant spray in a small closet or bathroom to disinfect the air is almost as effective as the glove box, but requires a lot more spray and allows more opportunity for contamination. Make sure the box is in good condition on the sides.

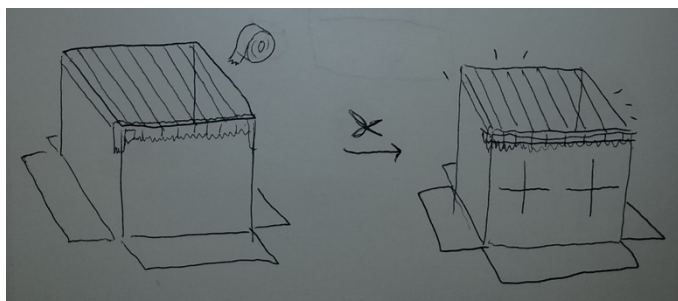
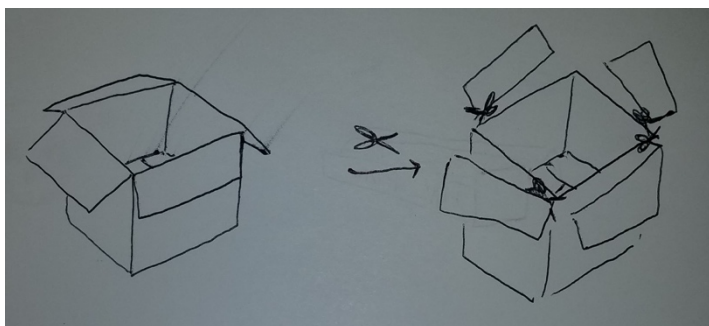
You will need:

- Cardboard box
- Packing tape
- Scissors



1. At one of the open ends of the box cut off the flaps (all 4)
2. On the “flapless” side of the box create a top layer of packing tape (for visibility purposes). This will involve laying long strips of tape slightly overlapping each other on top to create an air tight layer on the “flapless side”. Make sure to tape until all edges and the top are sealed with tape.
3. Cut two “pluses” on one side of the box, roughly 8 in x 8 in for arm holes.

I advise using the glove box on a towel or surface that has a bit of a give to create a seal on the bottom. Make sure to spray disinfectant in the glove box before each use, and re-spray when the box is moved considerably.



Terrarium

The terrarium is your mushrooms home and should be created correctly to allow a comfortable place for them to develop. Conditions which the terrarium maintains are: humidity, air exchange, and light exposure, which all participate in the cultivation process.

You will need:

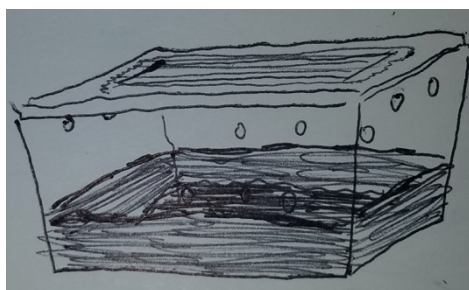
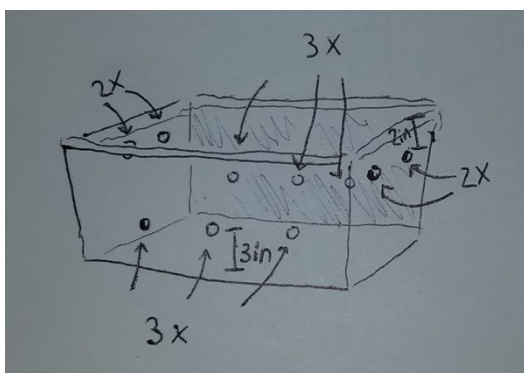
- Large plastic container with lid
- Polyfill
- Scissors
- Packing tape
- Garbage bags (black)

If your lid is not transparent:

1. Cut a rectangle out of the top, leaving an inch margin along the inside of the lid.
2. Tape the rectangular hole similar to the tape style of the glove box (pg. 3)

If your lid is transparent:

1. On the longer sides of the container, 3 inches from the bottom, “cut” or carve/drill three $\frac{3}{4}$ inch wide holes along the side equal distances apart.
2. Repeat the first step on the opposite long side.
3. On the shorter side, 2 inches from the top, “cut” or carve/drill two $\frac{3}{4}$ inch wide holes.
4. Repeat the third step on the opposite short side.
5. Stuff polyfill in each hole, making sure to pack completely but refrain from packing too tightly which will restrict air flow.
6. Line the bottom of the container with black garbage bag, covering the bottom and the sides up to the three side hole level.



Part 1 Seed Preparation

Before anything happens on this wonderful adventure the substrate must be prepared (bird seed). Fungus is involved with a complex world of microorganisms, so if the spores are to cultivate with almost 100% certainty all other contaminants in the seed must be removed.

You will need:

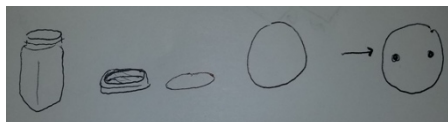
- Pressure cooker
- Large pot
- Wild Bird Food (Bird seed)
- Quart jars (wide mouthed)
- Tin foil
- Strainer



1. First the decided amount of seed you will be working with should be soaked in water. A pot or bucket will be perfect, just make sure there is an inch of water above the layer of seed.

2. Soak for 12-16 hours.

3. After soaking, strain.



4. Fill a pot with water and pour in soaked seed. Make sure to leave an inch layer of water above the seed.

5. Simmer seed for only 5 minutes.

6. Strain seed thoroughly and lay the seed thin on a clean surface to dry excess water (roughly 2 hours).

7. Fill decided Quart jars 3/4 with “dried” seed.

8. Punch 2 small holes in each jar's lid (big enough for syringe tip).

9. Twist lid shut just enough to close, do NOT tighten 100%.

10. Cover the top of each jar with tin foil.

11. Place jars into pressure cooker. Pressure cookers come in many shapes sizes and complexities so the cooking process will be relative to which cooker is used.

12. The decided pressure cooker should be on a considerable setting of heat/pressure, and the jars should be “cooked” for at least 1 hour and 30 minutes.

13. HOT! Remove the jars and allow them to air cool to room temperature (roughly a couple hours).

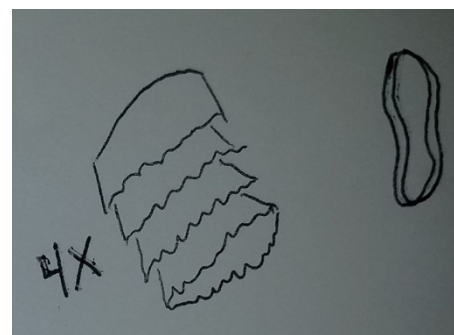


Part 2 Inoculation

Once the bird seed is decontaminated (pasteurized), the spores can now be introduced. This step is one of the most sensitive because even the smallest contamination will require the specific jar to be disposed of immediately. Make sure to use a sterile work environment (small bathroom that has been properly sprayed down with disinfectant) or a glove box while introducing the spores into your jars. Make sure to set aside 4 coffee filters and a rubber band for each jar being inoculated; during the process the filters must be secured over the top quickly to preserve decontaminated jars.

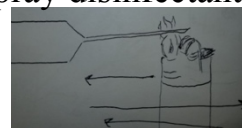
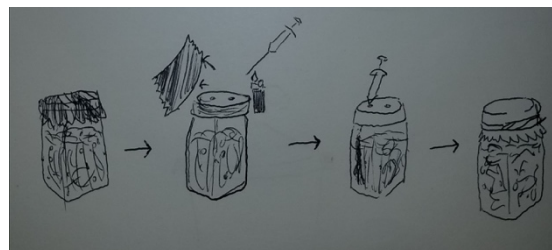
You will need:

- Jars (foil covered/pasteurized)
- Sterile work environment (glove box)
- Spore syringe
- Alcohol wipes or lighter (syringe disinfectant)
- Coffee filters
- Rubber bands



The first 2 steps should be done quickly while also maintaining sterilization of the syringe after repeating the two steps each time.

1. Uncover your jar, while also disinfecting the spore syringe, and stick the tip of the syringe deep into the jar angling the tip against the side of the glass as to cover the side in 1-2 mL of spore liquid.
2. Cover the top of the jar with 4 coffee filters and secure the top tightly with the rubber band around the mouth of the jar (spray disinfectant on the surface of the bottom coffee filter).
3. Shake each jar thoroughly after inoculation.



Once finished place all inoculated jars into a completely dark environment, with a constant temperature of ~ 85 degrees F. Mushrooms produce fruiting bodies when their environment is cooled down roughly 10 degrees, so if you plan to grow in room temp (~ 75 degrees F) the mycelium must be grown in a warmer environment to ensure success.

Check each jar daily. White growth is mycelium (thick, tendrils, not too “fuzzy”), any other color of growth is contamination and should be disposed of immediately. Shake jars often to break up large growths (hit jar on palm of hand cautiously or on a rubber surface, as to not break the glass), and when the jars are practically filled with mycelium you may proceed to the next part.



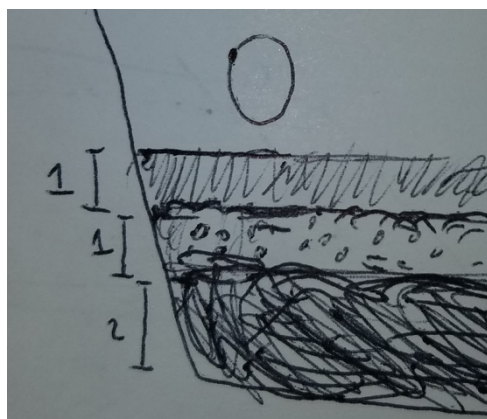
Part 3 Money

This will be the final part in your adventure! At this point you should have a couple of jars filled with mycelium, an empty terrarium (pg. 4), and pasteurized substrates (manure and peat moss), the substrates involved in the terrarium must first go through pasteurization to maintain maximum decontamination (pg. 5).

The three components involved in the terrarium are: a damp peat moss surface, on top of a layer of mycelium, and a bottom layer of manure. The jars of these three components should be prepared in this ratio: for every jar of mycelium pasteurize 1 jar of damp peat moss and 2 jars of damp manure. Below are how these layers should be placed.

You will need:

- Manure
- Peat moss
- Vermiculite
- Terrarium (pg. 4)
- Quart jars (pasteurization)



1. Pour a thin layer of vermiculite on the bottom
2. Pour roughly half a cup of water on the bottom (this will act as a water reservoir).
3. Pour the manure layer, spread evenly.
4. Pour the mycelium, spread evenly.
5. Pour the peat moss, and you guessed it, spread evenly. Make sure the mycelium is entirely covered.

Once the terrarium is filled with its layers, place the container in the same conditions the jars were kept in during their inoculation period (pg. 6). Over time check the container for mycelium to peak out of the surface layer. Once a considerable “carpeting” of mycelium has developed, the container will be ready to be placed in its cooler environment. Mycelium growth shouldn’t be excessive on the surface, and like the jars if any discoloration arises remove the local region immediately to attempt preserving the terrarium.

The terrarium should be kept in a roughly 10 degrees F cooler environment than the previous environments temperature (~75 degrees F). Make sure to provide the terrarium with roughly 3-4 hours of light each day, the amount is fairly

unimportant as long as the mycelium is contacted by light once a day. Last the container will need constant humidity. This can be maintained with a spray bottle filled with water. Spraying on the wall and slightly on the ground surface a couple times a week does the trick, but avoid excess amounts of water on the mycelium due to its negative effects on its growth when too present. If the container receives proper light, air exchange, temperature, and humidity pinning heads should develop and from there grow into fully developed mushrooms!

Trip responsibly!