

Starter's Growkit

Contents

1,3 liter vermiculite
220 gram rice flour
5 filter boxes (325 ml)
3 small filter bags
1 pair of sterile gloves
sterile mask
1 spore syringe *Psilocybe cubensis* 'golden teacher'
manual

Further necessities

- Pressure cooker (a regular pan - that can be closed properly - will do, but is not preferred).
- Water
- Little bit of tape
- Alcohol (or another disinfectant)
- Lighter (or gas burner)
- Tin foil
- Plant sprayer

Introduction

With this starter's grow kit you will be easily guided into the world of mushroom home cultivation. This guide offers a short but clear explanation on how to get your first homegrown mushrooms.

According to many people the easiest method to cultivate the *Psilocybe cubensis* mushroom is the rice flour cake method. This method is also called the PF TEK, named after the person who invented it ("Psilocybe Fanaticus"). With this grow kit you will learn this PF TEK method, with a few alterations.

Once you have mastered the basic principles, further experimentation can begin. In no-time you can become a mushroom cultivation expert!

Growing mushrooms is not very difficult. But there is one thing that demands your full attention: sterility. A clean environment and modus operandi is of vital importance for mushroom cultivation.

Preparing the filter boxes and the substrate

(It's not important to work sterile yet.)

Start with making 4 small holes on top and at the side of the 5 lids of the filter boxes. These small holes will be necessary at a later moment for placing the syringes' needle for inoculation.

Then you can start with preparing the substrate. Mix 1 liter of the vermiculite and the brown rice flour very well. Add 500 ml. water to it and mix it again very well. Fill the boxes one by one with the substrate and do this very loosely; the mycelium needs some space to develop itself further. Make sure there is still 0.5 – 0.75 cm. remaining to the brim. Wipe the top clean with a tissue and fill the remaining space with the final portion of vermiculite.

Close the boxes with the lids and make sure they are completely closed (except for the 4 small holes of course) and wrap them entirely in a double layer of tin foil.

Now it is time to sterilize the substrate. By heating the substrate all the present bacteria will be killed. Fill the pressure cooker with a few centimeters of water (it must not boil dry!). Place the filter boxes in the pan and sterilize them for 45 minutes at 15 psi. You can use a regular pan with a lid that closes properly but unfortunately it is not 100% guaranteed that all bacteria will be killed this way. If you use a regular pan sterilize the boxes for 90 minutes.

Inoculation

You have to start working very clean now. A suitable environment is a clean bathroom. Wear the gloves and mask and spray the direct surroundings with some disinfectant.

Take the boxes out of the pan after they have completely cooled down. Cooling the sterilized substrate takes at least a couple of hours. Don't be too impatient. A substrate that is too warm can kill the mushroom spores and all your preparations will be for nothing.

Before you inoculate your rice flour cakes, you have to sterilize the needle of your syringe first. Sterilize it by heating it with a lighter (or gas burner) until it starts to glow red. Let the needle completely cool down in 20-30 seconds.

After cooling down shake the syringe very well, so the spores will get divided in the syringe again. Remove the tin foil and inoculate the culture medium with the spore syringe through the 4 holes in the lid against the side of the boxes. You should see the spore water running down. A total of 1-2 ml of spore water for every box should be more than enough. After inoculation close the 4 holes with some small pieces of tape. (or even better; a drop of hot glue from a glue gun).

Place the inoculated boxes in a clean, warm and completely dark place. The ideal temperature is 27 - 28 °C. A cupboard above the fridge for example is a nice place. The fridge produces warmth at the back and heat always goes up. You can also use some heat elements. If the temperature is just a few degrees lower that's not a huge problem, although it may slow down the growing process a bit. Now the work is done for a while, as the spores need time to germinate and develop themselves.

Growth

About 3 to 5 days after inoculating the boxes, small white dots will appear. These are the mushroom spores that have germinated and grown into mycelium. After 2 to 4 weeks the rice flour cake will be totally white.

When that has happened, the next important action can begin. It is time to bring the mycelium into fruiting conditions. When we speak about fruiting conditions, it means that you expose the mycelium to fresh air, light and a lower temperature. Changing these three factors will trigger the mycelium to form mushrooms. So, remove the lids from the boxes and give one spray of water over them. Place the boxes in a filter bag (2 boxes will fit inside 1 filter bag) and spray also a bit of water into the bag. Finally place the box in a sunlit room. Make sure they are not in direct sunlight. The best temperature is 20 - 22 °C. It is important the humidity stays high all the time. If you can see drops of water on the inside of the bag the humidity is OK. If you do not see these drops, spray some more water into the bag (open it just a little bit and keep it sterile).

After 1 to 2 weeks the first pinheads will emerge. From this moment on growth can be very rapid. Within a few days the first mushrooms may already have reached their mature hood.

Harvest

The nicest moment for every cultivator; harvesting your own cultivated mushrooms. The best moment to harvest is when the mushroom is about to open it's cap. Hold the mushroom by the bottom of the stem between thumb and index finger. Twist carefully and try to take as much mushroom as possible from the cake. Remove all cake parts that are stuck to the mushroom.

Tips & Tricks

- When you have harvested your mushrooms, spray the box with the substrate again and place it back in the filter bag in the sunlit room. There is a great chance that it will start producing mushrooms for a second time. Even a third harvest is possible!
- It's unwise to harvest mushrooms from a cake that has been infected by a bacterial or fungal infection. This can be identified when (a part of) the cake has turned pink, green or light brown. Also when it starts to smell very bad this is an indicator your cake might be infected.
- Of course you don't have to do all 5 boxes at once. It might be wise to do first only 1 or 2 boxes, so you can correct mistakes that you might have made before. Just divide the vermiculite and the riceflour equally and save it (dry, not mixed with water!) for use whenever you are ready. When the spore syringe is used partially you can place the cap of the needle back and into the zip bag again for use at a later moment without any problem. Just don't forget to shake it and sterilize the needle again.

Disclaimer

The method described in this manual is for educational purposes only. In many countries the cultivation of psilocybin mushrooms is illegal. The purchaser has the responsibility to check the law in his or her country or place of residence. It is not our aim to incite others to use our products for illegal purposes. We can and will not accept any responsibility.