Fungusloci Oyster Mushroom Micro Farm Do-It-Yourself Kit

Kit contains:

- 1 cultivation bucket
- 500g of Oyster Mushroom Spawn (Pleurotus ostreatus mycelium and millet seed)
- 1 roll microporous tape
- Instructions

Keep the spawn bag in the fridge when not in use

You can use coffee grounds or cardboard as the growing medium, or substrate, for your micro mushroom farm. You will get larger crops from coffee grounds because of the nutrients they contain. All being well you can get three or more crops. Making sure the coffee you use is as fresh as possible is key to avoiding contamination with competing moulds. Growing oyster mushrooms on cardboard is easy but because it is low in nutrients (compared to coffee grounds) crops will be much smaller and usually limited to a single flush.

You can use a mixture of coffee grounds and cardboard. Just remember the coffee should be fresh and the cardboard soaked just prior to mixing in each layer of spawn.

Read on for detailed instructions.

Cultivating Oyster Mushrooms on your own Coffee Grounds

You need your fungusloci cultivation bucket kit and a steady supply of fresh coffee grounds (with or without paper filters). Fresh coffee from espresso type machines is the best because it is sterilised by the steam pressure they use.

1. Cut squares of microporous tape and stick over the holes in the sides of your bucket. This helps keep competing organisms out whilst allowing for necessary air exchange.

2. Carefully collect the cooled and spent coffee grounds (filter and all) and place into the container, ensuring they are well drained. These should be fresh grounds inoculated with spawn as soon as they are cool enough. Grounds kept for any length of time will start to grow competing moulds.

3. Massage your mushroom spawn bag to separate the grain into individual bits to maximise their spreading capability.

4. Sprinkle a small amount of the mushroom spawn sparingly over the surface of the coffee grounds. Put the bucket somewhere warm out of direct sunlight.

5. Add coffee grounds daily, sprinkling the spawn sparingly over each layer as you add more. After a few days, mycelium will start to be visible as white threads growing together.

6. Fill the container almost to the top. When you stop adding coffee the mycelium will finish colonising.

7. Once the container is completely colonised expose it to diffuse natural or fluorescent light at room temperature (it will dry out if it gets direct sunlight). Mist the holes that are covered with the microporous tape with a plant sprayer at least twice a day. In rainy weather you can put it outside if it's not too cold.

8. Two or three weeks after colonisation is complete, mushrooms should begin to form from the holes beneath the microporous tape. At this point you can carefully remove the tape. Baby mushrooms (or primordia) appear overnight so check your buckets at least once a day and keep the holes misted. It is particularly important to keep them moist in the earliest stages of growth. The mushrooms should double in size every day. Harvest them when the fruitbodies' growth slows. There may be a powdery spore deposit underneath the caps when they are ready to harvest.

9. After harvest, allow the mycelium to rest by not watering or adding any more growing media, and it should fruit again in a few weeks. No light is needed during the rest period. Soaking the coffee grounds with a generous amount of cold water after a few weeks of resting can help shock the mycelium into more prolific fruiting.

Cultivating Oyster Mushrooms on Cardboard

1. Prepare your bucket as in number 1 above and gather enough brown corrugated cardboard to fill it. Cardboard boxes that are new, dry and have not been left outside are best. Find a large clean receptacle such as a plastic bin or a kitchen sink.

2. Tear your cardboard into pieces small enough to fit in layers in you bucket. Stack it all in the bin or sink, and add enough water to cover it. Let the cardboard soak until completely saturated – for an hour or so. After soaking, drain off the excess.

3. Layer the bottom of your cultivation bucket with a few sheets of cardboard, then sprinkle a small amount of spawn across the surface. Repeat, layering cardboard and spawn, until the container if full. Put the lid on the bucket.

4. Keep the bucket somewhere warm and out of direct sunlight. You can monitor the moisture level inside the bucket – it should be moist but not too wet. If your cardboard was well soaked it is unlikely that you will need to add water.

5. Once the growing medium in the bucket is completely colonised and completely white, expose the bin to diffuse natural or fluorescent light at room temperature. Mist the holes that are covered with the microporous tape with a plant sprayer regularly. Mushrooms will fruit at least twice. Several weeks after the mushrooms fruit again. Soaking the cardboard with a generous amount of cold water after a few weeks of resting can help shock the mycelium into more prolific fruiting.

6. After the second flush, your cardboard or coffee grounds substrate will be spent. However it is full of fungal life and has become a living compost starter. It can be mixed into your outdoor compost pile or wormery to help with the decomposition.

For more information contact see www.fungusloci.cscic.org
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