Selection of Fresh Mushroom

You need a young, fresh and healthy mushroom and a very clean work area to prepare good quality tissue culture. Beginners in mushroom cultivation are encouraged to obtain their tissue cultures from the University of Namibia.

Culture Preparation

In a Mayonnaise glass bottle, dissolve 19.5g of Potato Dextrose agar in 500ml of clean water and close the bottle loosely. Mix the grains and close the bottle securely. Store the bottles up to 2/3 filled with the grain. Close the bottles loosely and pasteurize them in a drum or pressure cooker for 1 hour until the agar is completely dissolved.

Clean the area where you are going to work on with 70% ethanol or methylated spirits. Cut a piece from the fresh mushroom or from a pure culture and place it on the agar in the petri dish. Close the petri dish with aluminium foil and put it in a cool dark place until the mycelia has covered the agar, about 5-10 days. Use the cultures to make spawn and store the remaining cultures in a fridge for not longer than 30 days.

Substrate Preparation

You can use all types of agricultural waste such as straw from maize, millet, sorghum or crushed corn cobs and veld grass as substrate for mushrooms.

Chop your substrate into pieces of about 5-10cm long and place it in sacks. Soak the substrate in water until all of it is wet and remove the sack from the water and allow it to drain overnight. Squeeze out excess running water, add a handful of wheat bran or pearl millet husks and mix the substrate well. Pack the substrate into plastic bags.

Pasteurization, Inoculation and Incubation

Pasteurize the bags in a drum for about 2 hours. Remove the bags from the drum and allow cooling before planting.

It is important to work in a clean place when inoculating your substrate with spawn. Clean your hands and the area you are going to work on with ethanol or methylated spirits and make sure all doors are closed to prevent dust from entering.

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Fruiting and Harvesting

Once the bags are completely white, the mushrooms will fully invaded the substrate and it is ready to produce mushrooms. Remove the plastic bags from the mushroom house and store them in a cool dark place. Harvest the mushrooms by plucking them off with your hand. Do not cut them off with a knife because this may prevent them from pinning again.

Marketing

Make sure the mushrooms are of good quality to increase sales. Do not wait too long before you harvest them. Trim the stems to remove traces of grass and store them in paper bags or Styrofoam boxes. Never use plastic. Mushrooms can also be dried naturally under the shade where there is no dust. Sell your mushrooms directly to consumers. You can be your neighbors, family, friends or wholesalers and at local markets. Mushrooms can also be ground into powder which can be added to porridge, soup or used in making cookies.