

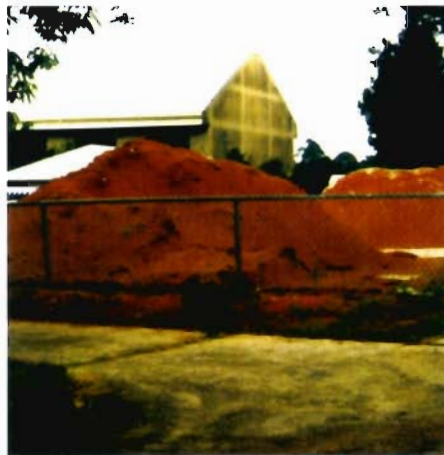
Substrates for Mushroom Production



Composting

The main purpose of composting for mushroom production is to prepare a substrate that will allow the selective growth of mushrooms but not for competing microorganisms. Nutrients for mushroom growth are provided in the substrates, and the substrates vary depending on the type of mushroom grown. Because sawdust is available in sufficient quantities locally, it is used as the basic material for producing compost. The newly collected sawdust, preferably of medium hardwood timber is put in a large pile on a composting area and left to compost outdoor for 3-6 months. During the process of composting calcium carbonate is added and water is sprayed over the pile. Turning the

sawdust is important and this is done once a week, to obtain a homogenous material. At the end of the process, the colour of the sawdust will turn dark brown.



The newly collected sawdust left to compost outdoor for 3 - 6 months

Other method used in composting :

This alternative method is done indoors, under a roof to protect against the weather. Fresh sawdust from sawmill, rice bran and calcium carbonate are mixed thoroughly.

Water is added to achieve a moisture content of 65% - 70%. Pile the mixture and cover with clean plastic sheet.

Allow the mixture to compost for 5 days. Turning is done every 2 days in order to remove toxic gases and also to allow change of gases which is required for the decomposition process.

After five days of composting, the pile is finally aerated to remove further toxic gases and to loosen the compost pile until the ammonia odour of the compost is removed. The microorganisms active during the composting process can be divided into three groups ie: thermophilic bacteria, actinomycetes and thermophilic moulds.