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Mushroom: A Balanced Food

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SUMMARY

The global mushroom industry has grown rapidly in recent years in terms of beneficial effects, market value, and demand. Mushroom cultivation not only helps recycle agro wastes, but also fills the nutritional gap prevalent among a large population of India. Recently, many unemployed people have begun to adopt mushroom cultivation as a means of self-employment. It is high time that Indian mushroom cultivators and consumers became aware of the nutritional and medicinal values of cultivated and wild species of mushrooms. This article helps of mushroom growers to grow mushroom at low cost.

INTRODUCTION

Mushroom – An edible fungi serve as both medicinal as well as nutritional food. Mushroom is a large group which comprises of great number of species as a food, But in India four species of mushroom has gained significance importance as food namely "White button mushroom, Oyster mushroom, Milky mushroom and Paddy straw mushroom". Mushroom also acts as a decomposer in some ways and reduces environmental pollution. Mushrooms are grown on the waste produced from livestock and agricultural fields. Mushrooms have different types of nutritional value such as Water: 90%, Protein: 2.5-3%, Carbohydrates: 4-6%, Fat: 0.4-0.6% and Fiber: 1%

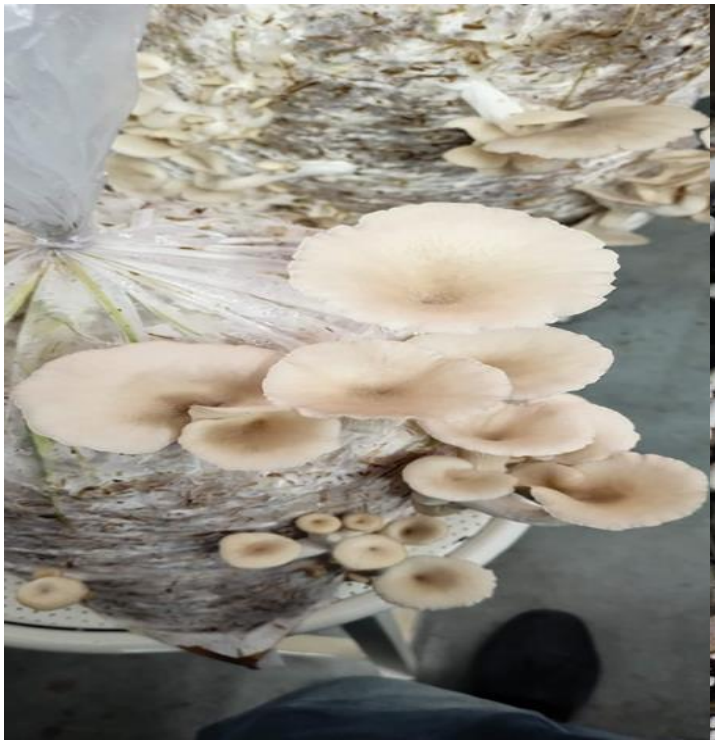
Mushroom have significant role to resolve the problems of Malnutrition, Heart related Problems, Diabetics, Help to lose Weight. Mushroom also helps to boost immunity and thus act as a balanced food. Mushroom is a balanced food but like other agricultural crops it is also perishable in nature, to overcome these problems, farmers can prepare value added products from mushroom. Value added products have great demand in market. But now in India some mushrooms are grown which have significant medicinal value, for example: Ganoderma: It is a medicinal mushroom with anti- cancer, anti-H.I.V., and anti-diabetics properties. Ganoderma can be grown on the plants such as Mango, Poplar, Shisham and Coconut.

Material required for the production of Mushroom:

- Wood Chips
- Wheat Flour (Choker)
- Calcium Sulphate ($CaSO_4$)
- Calcium Carbonate ($CaCO_3$)
- Polypropylene Bags

Method of cultivation for low cost production:

- Mix wooden chips and wheat flour (20%), calcium sulphate (2%) and calcium carbonate (0.5%). Then maintain the pH of Mixture 5.5-6 by sprinkling fitkari water on the mixture. Then after 10-12 hours mixture is filled in Polypropylene Bags (1 Kg in each bag).
- After sealing the bag with cotton plug with the help of neck ring. Then Autoclave these bags for sterilization at 126.5^0 C for 2 hours.
- Then inoculate the spawn (3% in each bag) in bags under laminar air flow to avoid contamination.
- Then put these bags in the room or chamber where temperature is $24\text{-}25^0$C for the growth of mycelium.
- When mycelium cover the entire media (after 22-25days) cut the polythene bad from upper side and put the bags into the chamber where temperature is near about $28\text{-}30^0$C and Relative humidity must be 90-95%.
- After 15 days Mushroom will be ready to harvest. Farmers cut them with knife and sale them after packaging.



Pic. a. Oyster Mushroom

Pic. b. Button Mushroom

CONCLUSION

Mushrooms are the fungi which help to recycle the waste produced in environment and supply nutrients to consumer and can be used as balance food. It is low input based high income source crop.

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