

Mushroom Cultivation Technology to Improve Socio-Economic Status of Tribale People in Bundelkhand Region

Dr. Pratima Khare

Professor Botany

Govt. Autonomous Girls P.G. College of Excellence, Sagar (M.P.)

Abstract -

The main purpose of this study was to determine the impact of mushroom cultivation of Socio-Economic condition of beneficiaries. Musroom cultivation is beneficial both for social and economic imporvement. There are two popular species of edible mushrooms Agaricusbisporeus (Button mushroom) and Pleurotus spp. (Dhingri). Button mushroom is found naturally grown in temperate conditions; people are however growing it in sub-tropical conditions. It requires scientific and technological expertise. Dhingri is easy to grow with little experience of cultivation technology. Bheel, Baiga, Gond and other tribals of this region are very poor and have little opportunity to earn livelihood. Mushroom cultivation technology may not only improve their living conditions but also eam them enough money. Mushrooms are sold at very high rates. For button mushroom, market price is Rs. 150-200 Per Kg. Dhingri Rs. 80-100 Kg. Button mushroom requires cultivation cost of Rs. 75-80 Per Kg. and Dhingri requires Rs. 20-25 per kg. approximately. This gives high profit margin to mushrooms grower. Mushroom cultivation is benefecial both for social and economic improvement.

Key words - Mushroom, Pleurotus, Agaricus

Introduction -

Sagar is one of the important town of Bundelkhand region of M.P. Poor industrialization, less job opportunities and rapid urbanization resulted in sinking of forest and agricultural land. This has affected adversely many tribal castes which are solely dependent on agriculture. Most of the tribal people are hardworker but due to unavailability

of work they are financially very poor. Mushroom cultivation not only provides them work but also make them economically sound. Here we propose cultivation technique of Pleurotus (Dhingri) mushroom and its market potential for tribal and common people.

Materials and Methods -

Waste materials such as wheat straw, rice straw, and other plant waste are used as substrates. The substrate material is treated by steeping in chemical solution of bavistine (75 ppm) and formaldehyde (500 ppm) (Vijay and Sohi 1987) for a period of 16-18 hrs. After 16-18 hrs. the substrate is taken out and kept on a clean polythene sheet for 2 hrs., so that the excess water is drained out. The substrate was filled in polythene bag (30 cm x 45 cm) and spawning was carried out in layer using 2%. Bags were laid and kept at ambient temperature ($24 \pm 2^\circ\text{C}$) for 17-20 days for spawn running when the substrate was fully permeated by the fungal mycelium, the bags were opened. Adequate relative humidity (80%) was maintained throughout the experiment by spraying water. The sporophore production started after 3-4 days and were ready for harvest in another 3-4 days.

Table-1: Cultivation Cost of Pleurotus (Dhingri) Mushroom

S.N.	Substrates	Cost
1	Wheat Straw 10 Kg.	50/-
2	Bavistine 3 gm. (100 gm. 107/-)	10/-
3	Formaline 60 ml	25/-
4	Polythene bag 20 pieces	40/-
5	Spawn 1 Kg.	200/-
6	Miscellaneous	100/-
	Total cost	425/-

Mushroom Production	=	15 kg
Fresh mushroom cost	=	80/- (per kg.)
Total Income	=	15 x 80 = 1200/-
Net Profit	=	Total Income - Total investment
775/-	=	1200 - 425

Results and Discussion -

It is evident that from the table that investment of Rs. 425/- for cultivation of Pleurotus (Dhingri) may give the earning of Rs. 1200/- and net profit Rs. 775/-.

Thus starting with a very little amount of money one can make a lot of money within no time. Since mushroom is rich in food value and may be used for curing serious diseases, its demand is increasing day by day. In one year survey of different localities of Sagar city and near by places. We can say that almost 10-20% demand of mushroom is increased in Sagar only. Our survey report confirms that Sagar could become good market for mushroom growers. Therefore if we trained tribals and other people of this region for mushroom cultivation. Then we are not only able to increase the production of mushroom but also able to fulfill the demand of the market. By selling mushroom a lot of money will be earned by the mushroom growers/sellers. This earned money would be enough to improve the socio-economic status of the tribals and other people. In Jabalpur region many tribals and villagers were trained by Rai (1997). According to him by cultivation of mushroom many of them have improved their financial status.

References -

1. Rai, B.K. 1997. "Mushroom udpadaneknayaudyam", vol. 3.
2. Vijay, B. and Sohi, H.S. 1987. "Cultivation of oyster mushroom Pleurotusajorca-ju on chemical sterilized wheat-straw Mush". J. Tropics 7. 67 75.