

CULTIVATION OF EDIBLE MUSHROOM IN INDIA: PRECAUTIONS, OPPORTUNITIES AND CHALLENGES

*Vikas Kumar, ¹Subha Chandra, M.P., ¹Shancy, S.C., ¹Sabnam, V.S. and ¹Lamya, T.V.

**Department of Silviculture and Agroforestry, College of Forestry, Vellanikkara*

**Kerala Agricultural University, KAU, Thrissur, Kerala 680656, India*

¹Dept. of Microbiology, Kerala Veterinary and Animal Sciences University, Thrissur, Kerala

Email: ykskumar49@gmail.com

Received-05.03.2015, Revised-24.03.2015

Abstract: Mushroom cultivation has enormous potential to improve food security and income generation, which in turn can help boost rural and peri-urban economic growth regularly. These mushrooms grow on sawdust, wood, cereal straws or millet like wheat, bajra, jowar and rye mixed with calcium source (chalk-powder and gypsum). The substrates for cultivation of these mushrooms were steam pasteurized/sterilized, and no chemicals/pesticides were used during the cultivation of these mushrooms. Almost all the specialty mushrooms are lignicolous mushrooms, meaning lignin loving. The medium is sterilized after in heat resistant glass bottles or polypropylene bags at 121°C and 15 lbs pressure or for 2 hours at 100°C and inoculated with pure primary culture of *Agaricus bisporus*. The medium is incubated at 25°C and soon gets impregnated with mushroom mycelium. Sphagnum peat moss is the most commonly used material for casing. Harvestable mushrooms appear 18 to 21 days after casing.

Keywords:

REFERENCES

Ahlawat OP (2003). Survivability of paddy straw mushroom cultures on storing under different conditions. *Indian J Mushroom XXI* (1&2): 13-18.

Chang, S.T. (1999). Global impact of edible and medicinal mushrooms on human welfare in the 21st Century: non-green revolution.

Kaul, T.N. and Dhar, B.L. (Eds). (2007). Biology and cultivation of edible mushrooms. Westville Publishing House, New Delhi, India, p. 225.

Maheshwari S (2013) A guide for white button mushroom (*Agaricus bisporus*) production. *Open Access Scientific Reports*, 2(3): 668.

Marshall, E. and Nair, N.G. (2009). Make money by growing mushrooms. Diversification booklet number 7. Rural Infrastructure and Agro-Industries Division Food and Agriculture Organization, United Nations.

Rai, R.D., Upadhyay, R.C. and Sharma, S.P. (Eds.). (2005). Frontiers in Mushroom Biotechnology. National Research Centre for Mushroom, Solan (HP), India.

Verma, B.N., Prasad, P.K. and Sahu, K.K. (2013). Mushrooms: Edible and medicinal cultivation, conservation strain improvement with their marketing. Daya Publishing House. A division of Astral International Pvt. Ltd., New Delhi.

*Corresponding Author