

Effect of different casing materials on the yield of *Agaricus bisporus* (Lange) Imbach

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ABSTRACT : Mushroom cultivation is of recent origin in India. It is mainly cultivated on the hills, as it requires low temperature for its growth; however, with the advent of modern cultivation technology, it is now possible to cultivate this mushroom seasonally throughout the year by employing environmentally controlled conditions. This study was designed to determine the effect of certain casing materials on the pinhead formation time, yield and biological efficiency of *Agaricus bisporus*. The experiment was conducted in mushroom crop room, Department of Plant Protection, SHIATS, Allahabad. A total of seven treatments (T₁- waste tea leaves, T₂- poultry manure, T₃- vermi-compost, T₄- pigeon pea manure, T₅- cow dung, T₆- bavistin and T₀- control) were replicated four times. Days for pinhead initiation, number of fruiting bodies, weight of fresh mushroom (kg/bag) and biological efficiency were observed. Harvesting of button mushroom was carried out time to time. Number of fruiting bodies, highest average yield, biological efficiency and minimum number of days required for pinhead initiation was recorded in treatment T₁ (waste tea leaves), followed by T₃ (vermi-compost), T₆ (bavistin), T₅ (cow dung), T₄ (pigeon pea manure), T₂ (poultry manure) as compared to control.

Key Words : Mushroom, compost, *Agaricus bisporus*, casing soil.