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Optimization of Compost Quantity for Fruit Body Yield in Button Mushroom (*Agaricus bisporus*)

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Abstract: The experiment was conducted to investigate the effect of substrate quantity on yield of button mushroom using plastic bags under controlled condition. No significant difference in morphological characteristics *viz*. pileus diameter, stipe length and average fruit body weight was observed, however, increase in mushroom yield was recorded with increase in compost quantity. Significant increase in yield was recorded upto 3 kg of compost. Biological efficiency did not exhibit any significant difference using different quantity of substrate. However, maximum biological efficiency of 10.13 was recorded with 3 kg of substrate and thereafter exhibited a consistent decrease with lowest being observed with 5 kg of substrate.

Keywords: Compost, Biological efficiency, Polythene bags