

Indian Journal of Ecology

Optimization of Spawn Production Technology of *Agaricus bisporus* (Lange) Sing.

Ravneet Kaur, S. Dhanda and H.S. Sodhi

Department of Microbiology, Punjab Agricultural University, Ludhiana-141 004, India E-mail: ravneetkaurmander@yahoo.com

Abstract: The present investigation was carried out to improve the existing technology of spawn production technology of *Agaricus bisporus* (Lang) Singh to produce quality spawn with high yield potential to make this venture a profitable. Various factors that could affect spawn mycelial growth rate are the substrate boiling period (20-50 minutes), supplementation with CaCO₃:CaSO₄ and inoculum size. The grains boiled for 30 minutes supplemented with CaCO₃:CaSO₄ in ratio 1:2 produced maximum linear mycelial growth. Beneficial in mycelial growth rate was observed by using one and two bits of inoculum with two bits of culture. Yield data after four weeks of harvest gave 10.5 -15.25 kg mushrooms per quintal compost.

Key Words: Agaricus bisporus, Spawn Supplement, Spawn Age, Yield Potential