

Effect of different substrates and supplements on growth parameters of oyster mushroom

V. Kashyap¹, R. Mishra², B.P. Raghubanshi², P. Kumar³ and Y.D. Mishra¹

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ABSTRACT : The popularity of oyster mushroom has been increasing due to its ease of cultivation on various unfermented cellulose and lignin containing wastes, high yield potential, high nutritional value and has medicinal properties. Therefore, keeping in view the importance of *Pleurotus* mushroom (*Pleurotus florida*) and substrates in cultivation, the present investigation was undertaken with the objectives to evaluate different substrates for the cultivation of *P. florida* and to study the effect of different supplements on the yield of *P. florida*. Three supplements namely, wheat bran, rice bran and cow dung were added separately @ 100 g/ kg dry weight basis in different substrates to assess the biological efficiency of *P. florida*. Wheat straw substrate was significantly superior to rest of the substrates except paddy straw, where as it differs significantly from sugarcane bagasse, maize straw and moong straw. The substrate supplemented with rice bran gave maximum yield (838.25 g), followed by wheat bran (798.75 g) and cow dung (646.75 g). The various crop residues can be used in producing oyster mushrooms as main substrates with supplements.

Key Words : Biological efficiency, oyster mushroom, substrate, supplement, yield.