

## Evaluation of Production Sustainability of Oyster mushroom (*Pleurotus pulmonarius*) Cultivation through the use of low- cost Agricultural Wastes

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Different agro -wastes contain minerals, cellulose and lignin which promote the growth of oyster mushroom. High production sustainability of Oyster mushroom cultivation can be achieved through the usage of low- cost agricultural wastes. In this study autoclaved sterilized substrates such as date palm leaves, corncobs, wastepaper and cotton waste were used for the analysis of yield and growth performance of oyster mushroom (*Pleurotus pulmonarius*). Under complete randomized design, combinations of these substrates were assessed on the basis of parameters i.e mycelial growth, days to pinhead formation, no. of pinhead formation, days to fruiting bodies , yield of three flushes, fresh weight, total yield and B.E. Significant ( $P<0.05$ ) results declared that compared to all other substrate combinations, T5 (25% date palm leaves+ 25% corncobs+ 25% wastepaper+ 25% cotton waste) proved to be best as it gave peak values of mycelial growth , lowest days to pinhead formation (52 days), no. of pinhead formation (53), took minimum days to fruiting bodies (6 days) , yield of three flushes (158 g),(148 g and 128 g), fresh weight (434 g), highest B.E (87%) and 434.8 g yield. So according to results, T5 could be aggressive growing option for farmers to cultivate maximum *Pleurotus pulmonarius* including exported values.