

Cultivation of Pink Oyster mushroom *Pleurotus djamor* var. *roseus* on various agro-residues by low cost technique

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Cultivation of the oyster mushroom, *Pleurotus* spp., has increased greatly throughout the world and commonly grown on pasteurized agro wastes. It can be cultivated on a wide variety of lignocellulosic substrates, enabling it to play an important role in managing organic wastes whose disposal is problematic. Mushroom cultivation is a simple, low cost and environmentally friendly technology for the utilization of rural and agro-industrial residues. The substrate used for the cultivation of one such species is pink oyster mushroom, *Pleurotus djamor* var. *roseus*, which is becoming important as this is an unfamiliar edible mushroom and can be cultivated easily throughout the year. In the present study different substrates viz. paddy straw, sugarcane bagasse, coir pith, sorghum straw, ragi straw and mixed bed were used for the cultivation of pink oyster mushroom. The selected substrates were chopped into 5 cm long pieces and soaked in clean tap water for 12 h. The pre-soaked straw was sterilized for 30 min at 15 lb/sq inch pressure. After cooling the substrate, a handful of spawn of *P. djamor* var. *roseus* was inoculated in perforated polypropylene bags (15 cm x 25 cm) row by row until it covers the whole size of the bag. The inoculated bags were incubated under dark for 12-14 d with the humidity range at 80-90% for mycelial formation. Primordium initiation was observed on 17-22nd day after spawning. Maximum yield of *P. djamor* var. *roseus* was obtained using paddy straw. The biological efficacy, energy value, energy recovery, proximate composition and elemental analyses of the fruiting bodies obtained on these substrates were reported.

Key words: *Pleurotus djamor* var. *roseus*, edible mushroom, cultivation, primordial, biological efficacy
