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**A CASE STUDY**

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# Compost production and Oyster mushroom cultivation – A potential entrepreneurship for cotton growing farmers

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**ABSTRACT :** Currently, the stalks generated after cotton harvest is burnt in the field itself which results in soil fertility deterioration and environmental pollution. ICAR-CIRCOT, Mumbai has developed technologies for on-farm utilization of cotton stalks to restore soil fertility and bring additional remuneration to farmers by preparation of bio-enriched compost and cultivation of oyster mushroom using cotton stalks. The chipped cotton stalks of 3-4 cm in length were used for compost preparation. The bio-enriched compost was prepared from cotton stalks using microbial consortium within two months. The NPK level of cotton stalks compost was three times higher than farm yard manure. The application of 2 tonnes of cotton stalks compost per acre could sufficiently replace the requirement of 5 tonnes of farm yard manure in integrated nutrient management practice. The cost of production of one tonne of cotton stalks compost was Rs. 3000/- while market cost of farm yard manure ranges from Rs. 3000 to 3500/-. Thus, on an average, a farmer can save Rs. 9000/- per acre by replacing farm yard manure with cotton stalks compost. The hot water treated chipped cotton stalks of 3-4 cm length were used for oyster mushroom (*Pleurotus florida*) cultivation. The mushroom was cultivated by hanging bag technique during July to September, 2016. The average cropping period of mushroom was 27 days. About 130 g of mushroom was harvested from one kg of cotton stalks. The cost of production of one kg of oyster mushroom is Rs. 50 including spawn cost. The market value of oyster mushroom is Rs. 150/-. As an entrepreneurial activity, a cotton farmer can earn minimum of Rs. 1000/- for compost preparation while, Rs. 10,000/- for oyster mushroom cultivation from one acre of land, besides utilizing stalks generated in the field.

**KEY WORDS :** Compost production, Mushroom, Cotton, Farmers

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