

**REPORT OF THE MINOR RESEARCH  
PROJECT**

**MRP(S)-1208/11-12/ KLM G022/UGC-SWRO 3 NOV-11**

**Nutritional Evaluation and Biological Efficiency of  
*Pleurotus* spp.on Mission grass  
( *Pennisetum polystachion*, Linn. ) as substrate.**

**SUBMITTED**

**BY**

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**Mission grass**  
( *Pennisetum polystachion*, Linn. )



## SUMMARY OF THE PROJECT

In India , cultivation of oyster mushroom has been succeeded on different agricultural waste . In South India, paddy straw is the popular substrate used for the cultivation of oyster mushroom. Success of mushroom cultivation in any locality depends on the substrate, which are cheap and easily available as well as viable technology suitable for a particular agroclimatic region . This study shows that the dry straw of mission grass (*Pennisetum polystachion* )are equally good as paddy straw for cultivation of oyster mushroom . Highest number of sporocarp is produced by *P. florida* on paddy straw during the month of June- July. Biological efficiency is highest in *P. florida*(72%) grown in mission grass during June –July and is found to be superior or equally good as paddy straw where it is 73.6%. It is found that this agricultural weed is equally good and an additional new substrate materials for oyster mushroom cultivation. The proximate analysis of oyster mushroom grown on mission grass showed that *Pleurotus djamor* was high in protien content (13mg)and fibre content(16.3%) compared to *P. sajor caju* and *P. forida* .The expenditure for production of 100kg mushroom per cycle from mission grass requires Rs 8030/- as recurring cost . Then the profit will be Rs. 21970/- If paddy straw is used as substrate an additional amount 1600/- is required. One cycle of production requires 45 days. So in one year three cycle of production can be done. The non recurring expenditure requires Rs 1,84,000/- for getting 100kg mushroom. Mushroom production is the most appropriate job for the poor landless both men and women farmers. Mushrooms can be grown in the small space of a farmer's own house for small scale production and generate income that aids in the family support. Mushroom cultivation is a most popular activity for development programs targeting income generation among women