217/B

Study the suitability of the locally available waste materials for the production of large size blooms of oyster mushroom (*Pleurotus ostreatus*)

T Gayathiri* and V Arulnandhy
Department of Agricultural Biology, Faculty of Agriculture, Eastern University, Sri Lanka

The local agricultural wastes were tested to use as appropriate media (substrate) for the production of large size of oyster mushroom (*Pleurotus ostreatus*) blooms. The four wastes included sawdust, paddy straw, dry leaves and shredded paper. The sawdust is the control treatment and was mixed with other wastes in the ratio of 1:1. The experiment was a Complete Randomized Design (CRD) with seven treatments replicated thrice. The large bloom percentage, large bloom diameter and weight were the parameters used to evaluate the appropriate substrate to produce large blooms in this study.

The results revealed that, substrate consisting of sawdust and shredded paper produced the highest percentage of large blooms amounts to about 50 percent in contrast to the control treatment sawdust that showed only 30 percent. The diameter and weight of the large blooms were found to be high in the substrate consisting of sawdust and shredded paper mixture. This treatment showed significantly higher diameter and weight of the blooms compared to sawdust included as control. In this study, the sawdust and shredded paper mixture depicts as appropriate since it showed more number of largest size and highest weight of blooms. The sawdust and dry leaves mixture was found to be the less efficient substrate for the production of large oyster mushrooms due to production of the small size and low weight of blooms.

*thgayathiri2yahoo.com Tel: 065-2240490