B – 30

Effect of *Lantana camara* on yield of *Pleurotus ostreatus*

Pleurotus ostreatus is an important mushroom, popularly grown in Sri Lanka at present. *Lantana camara* is a shrub, which is reported to have a suppressive effect on wild mould growth and increase yield of mushroom.

The study was conducted to determine the effect of *L camara* on the yield of *P. ostreatus.* Chopped *L. Camara* leaves were incorporated in to the normal substrate at four different rates (0, 0.5, 1, 1.5 Kg per 10 Kg of substrate). Forty bags were prepared from each mixture and only half of them were autoclaved> The bags were spawned and allowed

for incubation for three weeks, before opening to indirect sunlight for one week. In the firth week, bags were transferred to the harvesting room and harvest was continued for a period of two months.

There was a significant yield improvement in autoclaved bags compared to none autoclaved bags irrespective of *L. camara* rates. In autoclaved bags, *L. camara* rate of 1 Kg per 10 kg substrate increased the yield by 60% over the bags without *L. camara* . The yield differences between *L. camara* rates of 0.5, 1, 1.5 kg per 10kg was not statically significant, although the maximum yield of 350 g per bag difference due to the incorporation of *L. camara* in none of the autoclaved bags and yields were very low (below 75 g per bag).

This reveals that the yield of *P. ostreatus* can be increased by 60% with the incorporation of *L. camara* in to the substrate at the rate of 1 Kg per 10 kg substrate. However, the yield improvement could not be attributed to the suppressive effect on wild mould (*Penicellium, Aspergillus* and *Tricoderma* species) growth.