

**USE OF TEA WASTE AS A GROWING MEDIUM FOR MUSHROOM
CULTIVATION**

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ABSTRACT

Paddy Straw and Saw Dust are the currently recommended medium for mushroom production in Sri Lanka and their scarcity have lead to consider other possible alternatives. Therefore, a study was conducted to determine the feasibility of using Tea Waste as a medium for mushroom production in Sri Lanka. The varieties of American Oyster and Makadura White were used for the experiment at the Regional Agricultural Institute, the department of Agriculture, Makadura, Gonawila, Sri Lanka. There were seven treatment media viz Tea Waste (T1), Paddy Straw (T2), Saw Dust (T3), Saw Dust + Tea Waste (T4), Saw Dust + Paddy Straw (T5), Tea Waste + Paddy Straw (T6) and Saw Dust + Tea Waste + Paddy Straw(T7) . Treatments were arranged in Complete Randomized Design (CRD) with three replicates. Growth rate of mycelium and fresh weights of the yield were recorded. The results revealed that the Tea Waste alone treatment did not produce any yield in both tested varieties. The treatment, Saw Dust + Tea Waste (T4) reported the highest mycelium the growth rate and fresh yield for Makadura White which is significantly ($P < 0.05$) greater than those of other treatment media. The current recommended medium, Saw Dust (T3) showed the highest mycelium growth rate and fresh Yield of American Oyster variety and the fresh yields of Saw Dust alone, Saw Dust + Tea Waste (T4) and Paddy Straw + Tea Waste (T6) are comparable. It is thus concluded that, Tea Waste alone is not suitable as a medium for mushroom cultivation, but Tea Waste incorporated with Saw Dust or Paddy Straw is found to be suitable media for mushroom cultivation.

Key words: Tea Waste, Saw Dust, Paddy Straw, Mycelium Growth Rate