COMPARISON OF PLANTING MEDIA COMPOSITION BETWEEN COFFEE HUSK WASTE AND SAWDUST ON THE GROWTH OF

OYSTER MUSHROOM (*Pleurotus ostreatus*)

Supervisor : Eva Rosdiana, S.P., M.P.

Nimas Kirana Aprilia Putri <u>elephanticookies@gmail.com</u> Study Program Coffee Plantation Management Majoring of Agricultural Production

ABSTRACT

Oyster mushroom (Pleurotus ostreatus) is one of the products that are currently in great demand by the public. Oyster mushrooms need a substrate to grow and develop. Baglog media substrates usually use agricultural waste that has cellulose content such as sawdust. In addition to sawdust, agricultural waste that can be used as a substrate for mushroom growing media is coffee skin waste. The purpose of this study was to determine the effect of the comparison of the composition of planting media between coffee skin waste which has a cellulose content of 63% with sawdust sawdust which is generally used as a growing medium for ovster mushrooms only has about 33-44% on the growth of oyster mushrooms. This research was conducted in March-June 2024 in the Mushroom Barn of Plant Protection Laboratory of Jember State Polytechnic. The design used was a completely randomised design with 5 treatments, namely P0 (85% sengon wood sawdust+14% rice bran+1% agricultural lime), P1 (60% sengon wood sawdust: 25% coffee skin waste+14% rice bran+1% agricultural lime), P2 treatment (42.5% sengon wood sawdust : 42.5% coffee peel waste+14% rice bran+1% agricultural lime), treatment P3 (25% sengon wood sawdust : 60% coffee husk waste+14% rice bran+1% agricultural lime) and treatment P4 (85% coffee husk waste+14% rice bran+1% agricultural lime) which were repeated 4 times. Parameters observed were mycelial growth, primordia growth time, number of fruiting bodies, and wet weight. The results showed that the P0 treatment had a faster mycelial growth time and also more wet weight compared to the other treatments. P4 took a shorter time to grow primordia, and P2 had more fruiting bodies than the other treatments.

Keywords: Oyster Mushroom, Coffee Peel Waste, Sawdust