Pengaruh Jenis dan Kosentrasi Bahan Tambahan terhadap pertumbuhan Jamur Tiram Coklat (Pleurotus pulmonarius)

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Author Order	2 of 3
Accreditation	4
Abstract	Brown oyster mushroom (Pleurotus pulmonarius) is one type of wood mushroom that can be cultivated, but it is not yet popular for oyster mushroom cultivators and consumers in Indonesia. Planting medium materials give different results, depending on the ratio of the given composition. This study aims to determine the effect of different types and concentrations of additives on the growth of brown oyster mushrooms and to determine the best type and concentration of additives for the growth of chocolate oyster mushrooms. This study used a Factorial Completely Randomized Design (CRD) consisting of the following treatments: type of additives, namely rice bran, corn flour, polar, and wheat flour, as well as different concentration factors of additives, namely 0%, 5%, 10%, 15%, and 20%. Each treatment was repeated 4 times, so there were 80 experimental units. The independent variables in this study were the type and concentration of additives, while the dependent variable was the growth rate of fungal mycelium. The main parameters observed were mycelium growth and fruit body weight of brown oyster mushroom (P. pulmonarius), while the supporting parameters were the appearance of the first fruiting body, mycelium density, incubation room temperature, and pH of the growing medium. The data obtained were analyzed using analysis of variance (ANOVA) with an error rate of 5% and followed by Duncan's Multiple Range Test (DMRT) with an error rate of 5%. The results showed that the interaction between the type and concentration of additives suffected the production of brown oyster mushrooms (P < 0.05). The type of rice bran additive with a concentration of 20% showed the best results, namely 0.97 cm/day for mycelium growth rate and 0.885 kg for brown oyster mushroom fruiting body weight. Keywords: Pleurotus pulmonarius, types of additives, concentration of additives, mycelium growth, fruiting body weight
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