

**Pengaruh Kadar CaCO<sub>3</sub> pada Media Kayu Flamboyan (*Delonix regia*) Terhadap Pertumbuhan Jamur Tiram (*Pleurotus ostreatus*) dan Jamur Kuping (*Auricularia auricula*)**

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**INTISARI**

Budidaya jamur khususnya tiram dan kuping di Indonesia sedang mengalami perkembangan pesat dengan potensi ekonomi yang menjanjikan. Limbah gergajian kayu sengon (*Paraserianthes falcataria*) selama ini digunakan sebagai media tanam, namun persaingan pemanfaatannya sebagai bahan baku briket dan papan partikel mendorong perlunya media alternatif. Kayu flamboyan (*Delonix regia*), yang menghasilkan banyak limbah dari pemangkasan, memiliki potensi sebagai media tanam karena sifatnya yang sesuai. pH optimal diperlukan untuk penanaman jamur. Penambahan CaCO<sub>3</sub> dilakukan untuk mengatur derajat keasaman (pH) dari media tanam. Penelitian ini bertujuan untuk menganalisis interaksi variasi kadar CaCO<sub>3</sub> dan jenis jamur terhadap produktivitas jamur dengan media kayu flamboyan.

Penelitian ini menggunakan rancangan acak lengkap (*Completely Randomized Design*) dengan dua faktor perlakuan yaitu jenis jamur (tiram dan kuping) dan kadar CaCO<sub>3</sub> (0%, 1%, dan 2%) sebanyak 3 kali ulangan. Penelitian dilakukan menggunakan media serpih kayu flamboyan. Parameter yang diamati antara lain adalah pH media, pertumbuhan miselia, berat basah, berat kering, kadar air jamur, berat akhir baglog, kadar air media, dan *biological conversion* jamur.

Hasil penelitian menunjukkan bahwa interaksi faktor jenis jamur dan kadar CaCO<sub>3</sub> berpengaruh signifikan pada berat kering dan kadar air jamur. Sementara *biological conversion* hanya dipengaruhi secara signifikan oleh faktor jenis jamur. Pertumbuhan miselia jamur tiram sebesar 0,68 cm/hari dan jamur kuping 0,80 cm/hari. Berat basah jamur tiram sebesar 34,14 g dan jamur kuping 35,59 g. Berat kering jamur tiram sebesar 4,49 g dan jamur kuping 8,10 g. Kadar air jamur tiram sebesar 86,77% dan jamur kuping 76,82%. *Biological conversion* jamur tiram sebesar 8,28% dan jamur kuping 25,07%. Kadar CaCO<sub>3</sub> terbaik untuk produktivitas jamur tiram adalah 1% dan untuk jamur kuping adalah 0%.

Kata Kunci: pH, produktivitas, badan buah, berat kering, *biological conversion*

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**Effect of CaCO<sub>3</sub> Percentage in Flamboyant Wood (*Delonix regia*) Media on the Growth of Oyster Mushroom (*Pleurotus ostreatus*) and Wood ear Mushroom (*Auricularia auricula*)**

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**ABSTRACT**

Mushroom cultivation, particularly oyster (*Pleurotus sp.*) and wood ear mushrooms (*Auricularia sp.*) in Indonesia, is growing rapidly with significant economic potential. Sengon wood sawdust (*Paraserianthes falcataria*) is commonly used as a growing medium, but its competing uses necessitate alternatives. Flamboyant wood (*Delonix regia*), with its abundant pruning waste, has potential as a medium. CaCO<sub>3</sub> is added to regulate pH, which is crucial for mushroom growth.

This study analyzed the interaction between CaCO<sub>3</sub> levels (0%, 1%, 2%) and mushroom types (oyster and wood ear) on productivity using Completely Randomized Design (CRD) with three replications. The research was conducted using flamboyant wood chips as the growing medium. The parameters observed included pH, mycelium growth, fresh weight, dry weight, moisture content, and biological conversion.

Results showed that the interaction of CaCO<sub>3</sub> levels and mushroom type significantly affected dry weight and moisture content, while biological conversion was influenced only by mushroom type. Oyster mushroom mycelium grew 0.68 cm/day, while wood ear mushrooms grew 0.80 cm/day. Fresh weights were 34.14 g for oyster and 35.59 g for wood ear, with dry weights of 4.49 g and 8.10 g, respectively. Moisture content was 86.77% for oyster and 76.82% for wood ear. Biological conversion for oyster mushrooms was 8.28%, while for wood ear mushrooms, it reached 25.07%. The 1% CaCO<sub>3</sub> was optimal for oyster mushrooms, while 0% CaCO<sub>3</sub> was best for wood ear mushrooms.

**Keywords:** *pH, productivity, fruiting body, dry weight, biological conversion*

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