

**PENGARUH PERSENTASE CaCO_3 TERHADAP PRODUKTIVITAS
JAMUR TIRAM (*Pleurotus ostreatus*) DAN JAMUR KUPING
(*Auricularia auricula*) PADA MEDIA SERBUK KAYU JABON
MERAH**

Safira Salsa Bella¹, Denny Irawati²

INTISARI

Jamur tiram (*Pleurotus ostreatus*) dan jamur kuping (*Auricularia auricula*) dibudidayakan luas karena nilai gizinya. Serbuk gergaji kayu Jabon merah (*Anthocephalus macrophyllus*) menjadi media tanam yang potensial, terutama karena persediaan serbuk ini melimpah keberadaanya. Penelitian ini bertujuan mengetahui interaksi antara persentase kalsium karbonat (CaCO_3) dan jenis jamur terhadap produktivitas jamur. Dengan variasi kadar CaCO_3 , penelitian ini mencari kondisi optimal untuk budidaya jamur pada serbuk gergaji kayu jabon merah, mendukung praktik berkelanjutan dalam budidaya jamur di Indonesia.

Metode yang digunakan adalah Rancangan Acak Lengkap (RAL) dengan dua faktor perlakuan: persentase CaCO_3 (0%, 1%, dan 2%) dan jenis jamur (jamur tiram dan jamur kuping), dengan tiga kali ulangan. Parameter yang diamati meliputi pertumbuhan miselia, berat basah, berat kering, kadar air, dan konversi biologi.

Hasil penelitian menunjukkan bahwa interaksi antara persentase CaCO_3 dan jenis jamur mempengaruhi produktivitas. Penurunan pH setelah sterilisasi mendukung pertumbuhan miselia, terutama pada CaCO_3 0%. Jamur tiram tumbuh tercepat pada CaCO_3 0%, sementara jamur kuping menunjukkan berat basah dan konversi biologi tertinggi pada CaCO_3 1%. Meskipun variasi CaCO_3 tidak berpengaruh signifikan terhadap berat kering, jamur kuping lebih efisien dalam memanfaatkan nutrisi. Penelitian ini menyimpulkan bahwa media kayu jabon merah lebih cocok untuk membudidayakan jamur kuping.

Kata Kunci: Jamur Tiram, Jamur Kuping, Jabon Merah, pH, Konversi Biologi

¹ Mahasiswa Fakultas Kehutanan UGM

² Staff Pengajar Fakultas Kehutanan UGM

**THE INFLUENCE OF CaCO_3 PRCENTAGE ON THE
PRODUCTIVITY OF OYSTER MUSHROOMS (*Pleurotus ostreatus*)
AND WOOD EAR MUSHROOMS (*Auricularia auricula*) ON RED
JABON WOOD POWDER MEDIUM**

Safira Salsa Bella¹, Denny Irawati²

ABSTRACT

*Oyster mushrooms (*Pleurotus ostreatus*) and ear mushrooms (*Auricularia auricula*) are widely cultivated due to their nutritional value. Red Jabon wood sawdust (*Anthocephalus macrophyllus*) serves as a potential growing medium, especially due to its abundant supply. This study aims to investigate the interaction between the percentage of calcium carbonate (CaCO_3) and mushroom type on mushroom productivity. By varying CaCO_3 levels, the research seeks to find optimal conditions for mushroom cultivation on red jabon wood sawdust, supporting sustainable practices in mushroom farming in Indonesia.*

The method used is a Completely Randomized Design (CRD) with two treatment factors: the percentage of CaCO_3 (0%, 1%, and 2%) and mushroom type (oyster and ear mushrooms), with three replications. The parameters observed include mycelial growth, fresh weight, dry weight, moisture content, and biological conversion.

The results indicate that the interaction between CaCO_3 percentage and mushroom type significantly affects productivity. A decrease in pH after sterilization supports mycelial growth, particularly at 0% CaCO_3 . Oyster mushrooms exhibit the fastest growth at 0% CaCO_3 , while ear mushrooms demonstrate the highest fresh weight and biological conversion at 1% CaCO_3 . Although variations in CaCO_3 do not significantly affect dry weight, ear mushrooms are more efficient in nutrient utilization. This study concludes that red jabon wood sawdust is more suitable for cultivating ear mushrooms.

Keywords: Oyster Mushroom, Ear Mushroom, Red Jabon, pH, Biological Conversion

¹ Mahasiswa Fakultas Kehutanan UGM

² Staff Pengajar Fakultas Kehutanan UGM