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DAN PRODUKSI JAMUR TIRAM (Pleurotus ostreatus)**
Qisthi Nur'Azizah, Prof. Ir. Denny Irawati, S.Hut, M.Si, Ph.D., IPM.
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

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Qisthi Nur'azizah[1], Denny Irawati[2]

INTISARI

Jamur tiram (*Pleurotus ostreatus*) merupakan salah satu jamur konsumsi bernilai ekonomi tinggi sehingga kebutuhan media tanam terus meningkat. Salah satu media alternatif yang berpotensi dimanfaatkan adalah serbuk kayu flamboyan (*Delonix regia*). Flamboyan banyak ditanam sebagai tanaman peneduh jalan dan menghasilkan limbah penggergajian serta hasil pemangkasan cabang yang berpotensi menghasilkan ukuran serbuk berbeda. Selain itu, penambahan bekatul sebagai sumber nutrisi diduga turut memengaruhi pertumbuhan jamur tiram. Penelitian ini bertujuan menganalisis pengaruh ukuran serbuk kayu flamboyan dan persentase bekatul terhadap pertumbuhan jamur tiram serta menentukan kombinasi perlakuan yang paling sesuai.

Penelitian menggunakan Rancangan Acak Lengkap (RAL) faktorial dengan dua faktor, yaitu ukuran serbuk kayu (lolos ayakan 20 mesh, campuran, dan tertahan ayakan 20 mesh) serta persentase bekatul (0%, 5%, 15%, dan 25%). Parameter yang diamati meliputi periode panen, berat basah, berat kering, kadar air, dan *biological conversion* (BC). Data dianalisis menggunakan analisis ragam (ANOVA dua arah) dan uji HSD Tukey.

Hasil penelitian menunjukkan bahwa persentase bekatul berpengaruh sangat nyata terhadap periode panen pertama, berat basah, berat kering, dan BC. Ukuran serbuk kayu serta interaksinya dengan persentase bekatul juga berpengaruh sangat nyata terhadap BC. Kombinasi ukuran serbuk kayu campuran dan bekatul 25% menghasilkan nilai BC tertinggi sebesar 15,00% dengan berat basah 78,20 g/baglog. Selain itu, penambahan bekatul 15–25% mampu mempertahankan produksi tubuh buah hingga periode panen ketiga selama 60 hari pengamatan.

Kata Kunci : Bekatul, Produktivitas, *Biological Conversion*, Baglog, Mesh

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THE EFFECT OF FLAMBOYANT (*Delonix regia*) SAWDUST PARTICLE SIZE AND NUTRIENT PERCENTAGE ON THE GROWTH AND PRODUCTION OF OYSTER MUSHROOM (*Pleurotus ostreatus*)

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ABSTRACT

Oyster mushroom (Pleurotus ostreatus) is one of the edible mushrooms with high economic value, so the demand for growing media continues to rise. One potential alternative medium is flamboyant wood (Delonix regia) sawdust. Flamboyant trees are widely planted as roadside shade trees and generate sawing waste as well as branch pruning residues that can produce sawdust of varying particle sizes. In addition, rice bran addition as a nutrient source is also thought to affect oyster mushroom growth. This study aimed to analyze the effects of flamboyant wood sawdust particle size and rice bran percentage on oyster mushroom growth, and to determine the most suitable treatment combination.

The study used a factorial Completely Randomized Design (CRD) with two factors, sawdust particle size (passing 20 mesh, mixed, and retained on 20 mesh) and rice bran percentage (0%, 5%, 15%, and 25%). Parameters observed were harvest period, wet weight, dry weight, moisture content, and biological conversion (BC). Data were analyzed using two-way analysis of variance (ANOVA) and Tukey's HSD test.

Rice bran percentage had a highly significant effect on the first harvest period, wet weight, dry weight, and BC. Sawdust particle size and its interaction with rice bran percentage also had a highly significant effect on BC. The combination of mixed sawdust particle size and 25% rice bran produced the highest BC value of 15.00% with a wet weight of 78.20 g/baglog. Adding 15–25% rice bran was able to sustain fruiting body production through the third harvest period during the 60-day observation.

Keywords: Rice bran, Productivity, Biological Conversion, Baglog, Mesh

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