STUDI PEMANFAATAN TIGA JENIS FUNGI PADA PELAPUKAN DAUN DAN RANTING MANGIUM DI TEMPAT TERBUKA

(Study on the Utilization of Three Fungi Species for Mangium Leaf and Twig Decomposition in the Plan Site)

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ABSTRACT

Study on decomposition of mangium (Acacia mangium) leaves and twigs as wood extraction waste was done using three isolates of decomposing fungi i.e. Schizophyllum commune HHBI-204, Marasmius sp. HHBI-346 and Pycnoporus sp. HHBI-348, incubated for 30 days in open area, in Bogor. Degradation rate of the samples was evaluated based on the changing content of organic carbon, total nitrogen, nutrition value and cation exchange capacity (CEC). The result indicated that the fungi inoculation was influence the chemical content on the mangium leaves and twigs. C/N ratio of sample was around 33.1-36.4 %. . urther, nutrient content on mangium were N 0,75% - 0,86%, P 0,26% - 0,35%, K 0,21% - 0,25%; while the CEC was about 21.46–26.12 me/100 g. Furthermore, up to 30 days after incubation, the role of those tested fungi as an activator for decomposition onmangium waste were still not clear enough.

Keywords: Wood extraction waste, mangium, fungi, dekomposisition

ABSTRAK

Studi dekomposisi daun dan ranting mangium (Acacia mangium) dari limbah tebangan, menggunakan tiga isolat fungi pelapuk yaitu Schizophyllum commune HHBI-204, Marasmius sp. HHBI-346 dan Pycnoporus sp. HHBI-348, dan diinkubasikan selama 30 hari di tempat terbuka, di Bogor. Tingkat dekomposisi contoh uji dievaluasi berdasarkan perubahan kandungan karbon organik, nitrogen total, kadar unsur hara, dan 2kapasitas tukar kation (KTK). Hasilnya menunjukkan bahwa inokulasi fungi berpengaruh terhadap kandungan kimia daun dan ranting mangium. Nisbah C/N contoh uji berkisar antara 33,1-36,4. Kandungan unsur hara makro tersebut yaitu N 0,75% - 0,86%, P 0,26% -0,35%, K 0,21% - 0,25%. Sedangkan nilai KTK berkisar antara 21,46 me/100g - 26,12 me/100g. Pada umur inkubasi 30 hari, peran fungi pelapuk sebagai aktivator dekomposisidaun dan ranting mangium belum cukup nampak.

Kata kunci: Limbah tebangan, mangium, fungi pelapuk putih, dekomposisi