

KETAHANAN EMPAT JENIS KAYU HUTAN TANAMAN TERHADAP BEBERAPA JAMUR PERUSAK KAYU

(The Resistance of Four Plantation Wood Species Against Several Wood Destroying Fungi)

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ABSTRACT

Generally, wood extracted from plantation is low in diameter and susceptible to fungal attack. The resistance of four plantation wood species (*Acacia aulacocarpa* A. Cunn., *Acacia auriculiformis* A. Cunn., *Acacia crassicarpa* A. Cunn., and *Eucalyptus pellita* F.v.M.) against wood destroying fungi were evaluated using DIN 52176-modified standard. Wood samples were divided into two groups based on radial surfaces, namely outer and inner parts of logs. Results showed that *Acacia aulacocarpa* and *Eucalyptus pellita* were moderately resistant against several fungal attacks (Class III), while, *Acacia auriculiformis* dan *Acacia crassicarpa* were not resistant (Class IV). Based on two groups of samples, weight loss percentage of the inner part, which is 6.3% (class III), was lower than that of the outer part, which is about 12.4% (class IV). The highest weight loss was encountered on the outer part of *Acacia crassicarpa* when exposed to *Polyporus* sp. (36.8%), while the lowest percentage was found on the inner part of *Acacia crassicarpa*, which has been exposed to *Pycnoporus sanguineus* HHB-8149 (0.8 %). Among the fungus, the most severe attacks were performed by *Tyromyces palustris*, followed by *Polyporus* sp., *Pycnoporus sanguineus* HHB-324, and *Schizophyllum commune*.

Keywords: Resistance, wood destroying fungi, weight loss²

ABSTRAK

Pada umumnya kayu dari hutan tanaman memiliki diameter kecil dan mudah terserang jamur perusak kayu. Ketahanan empat jenis kayu hutan tanaman (*Acacia aulacocarpa* A. Cunn., *Acacia auriculiformis* A. Cunn., *Acacia crassicarpa* A. Cunn., dan *Eucalyptus pellita* F.v.m.) diuji terhadap jamur menggunakan standar DIN 52176 yang telah dimodifikasi. Contoh uji dibagi dalam dua kelompok secara radial, yaitu bagian tepi dan dalam dolok. Hasil penelitian menunjukkan bahwa kayu *Acacia aulacocarpa* dan *Eucalyptus pellita* termasuk kelompok kayu agak-tahan (kelas III) dan kayu *Acacia auriculiformis* dan *Acacia crassicarpa* termasuk kelompok kayu tidaktahan (kelas IV). Berdasarkan dua kelompok contoh uji, kehilangan berat kayu bagian dalam sebesar 6,3% (kelas III) lebih rendah dibandingkan dengan kehilangan berat kayu bagian tepi sebesar 12,4% (kelas IV). Kehilangan berat tertinggi (36,8%) terjadi pada bagian tepi kayu *Acacia crassicarpa* yang diletakkan pada biakan *Polyporus* sp. Sedangkan kehilangan berat terendah (0,8%) terjadi pada bagian dalam kayu *Acacia crassicarpa* yang diletakkan pada biakan *Pycnoporus sanguineus* HHB-8149. Berdasarkan kemampuan jamur untuk melapukkan kayu, kemampuan tertinggi dijumpai pada *Tyromyces palustris*, kemudian diikuti *Polyporus* sp., *Pycnoporus sanguineus* HHB-324, dan *Schizophyllum commune*.

Kata kunci: Ketahanan kayu, jamur perusak, kehilangan berat