

**THE RESISTANCE OF MAHOGANY (*Swietenia macrophylla* King.) WOOD  
AGAINST MARINE BORERS  
Ketahanan Kayu Mahoni (*Swietenia macrophylla* King)  
Terhadap Penggerek Kayu Di Laut**

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**ABSTRAK**

Tiga pohon mahoni berumur 12, 21, dan 30 tahun diambil secara acak dari hutan tanaman. Dari ketiga log kayu tersebut dibuat contoh uji berukuran 2,5 cm x 5 cm x 30 cm. Contoh uji diawetkan dengan larutan CCB konsentrasi 3% melalui proses sel penuh dengan tekanan 10 atmosfer selama 2 jam. Contoh uji yang diawet dan yang tidak diawetkan diuji terhadap penggerek kayu di laut selama 3 dan 6 bulan. Hasil penelitian menunjukkan bahwa contoh uji yang tidak diawetkan mendapat serangan penggerek di laut. Sebaliknya, yang diawetkan dengan CCB sangat tahan, terutama contoh uji yang diambil dari pohon yang berumur 12 tahun. Penggerek yang menyerang adalah *Martesia striata* Linne. dari famili Pholadidae, serta *Teredo bartchi* Clapp., *Dicyathifer manni* Wright., dan *Bankia cieba* Clench./Turner. dari famili Teredinidae. Pada contoh uji juga ditemukan crustacean yaitu *Sphaeroma* sp. dari famili Sphaeromatidae.

Kata kunci: Proses sel-penuh, CCB, mahoni, penggerek kayu di laut

**ABSTRACT**

Three mahogany trees representing three age classes viz. 12-year-old, 21-year-old and 30-year-old were randomly selected from a forest plantation. Sample log from each tree, was cut into specimens measure 2,5 cm by 5 cm by 30 cm. The specimens were treated with CCB using the full cell process for 2 hours at pressure on 10 atmosphere. The treated and untreated wood samples were tested against marine borers for 3 and 6 2 months. The results showed that all of the untreated specimens were attacked by marine borers. The treated specimens showed greater resistance to marine borer attack, particularly the specimens taken from 12-year-old tree. The specimens were mostly attacked by several borers, i.e. *Martesia striata* Linne. of the Pholadidae family, *Teredo bartchi* Clapp., *Dicyathifer manni* Wright., and *Bankia cieba* Clench./Turner. of the Teredinidae family. Crustacean, *Sphaeroma* sp. (Sphaeromatidae) was also encountered on the attacked specimens.

Keyword: Full-cell process, CCB, mahogany, marine borers