PENURUNAN SIFAT FISIS DAN MEKANIS TIGA JENIS KAYU DAN KAYU KELAPA TERHADAP SERANGAN PENGGEREK DI LAUT
(Decreasing Physical and Mechanical Properties of Three Wood Species and Coconut trunk Attacked by Marine Borers)

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ABSTRACT

Three wood species and coconut trunk from Sukabumi, West Java were exposed to marine borers for determining their decreasing of physical and mechanical properties. The study was conducted at Rambut Island seashore using test samples measuring 5 cm by 5 cm by 106 cm. The test samples were randomly arranged using nylon rope and then observed after three months for each treatment, species were test with 5 replications. Results revealed that most of the test samples were attacked by marine borers, and decreased its physical and mechanical properties. Before treatment, rasamala (Altingia exelsa Noronha) was belong to strength class II, and changed to class III after treated. Coconut wood (Cocos nucifera L.) from class II-III turned to class IV after treated. While, rubber wood (Hevea brasiliensis Muell. Arg.) and nangka (Artocarpus heterophyllus Lamk.) before treated both species belonged to strength class III, and turned to strength class V for rubber wood, but for nangka still on class III after three months infestation.

Keywords: wood and coconut trunk, physical and mechanical properties, marine borers

ABSTRAK

Tiga jenis kayu dan kayu kelapa dari Sukabumi, Jawa Barat diuji terhadap penggerek di laut untuk diketahui penurunan sifat fisis dan mekanisnya. Penelitian ini dilakukan di perairan Pulau Rambut dengan contoh uji yang berukuran 5 cm x 5 cm x 106 cm. Contoh uji direnteng dengan tali plastik dan diamati setelah tiga bulan. Hasil penelitian menunjukkan bahwa sebagian besar contoh uji diserang oleh penggerek di laut, sehingga menurunkan sifat fisis dan mekanisnya. Rasamala yang tidak direndam termasuk dalam kelas kuat II dan 2 setelah direndam menjadi kelas kuat III. Kelapa yang tidak direndam termasuk kelas kuat II-III, setelah direndam menjadi kelas kuat IV. Karet dan nangka yang tidak direndam termasuk kelas III, setelah direndam kekuatan kayu karet menjadi kelas kuat V dan nangka tetap termasuk dalam kelas kuat III.

Kata kunci: Kayu dan kayu kelapa, sifat fisis dan mekanis, penggerek di laut.