KEAWETAN 52 JENIS KAYU INDONESIA

The Durability of 52 Indonesian Wood Species

Oleh/By:

Ginuk Sumarni & Mohammad Muslich

ABSTRACT

Fifty two Indonesian wood species were collected from forest areas in Indonesia for durability test. The samples measuring 60 cm (in length) by 5 cm (width) by 5 cm (height) were prepared. The durability's field test was conducted at Cikampek experimental forest using a graveyard method. The samples were vertically but partially buried lengthwise in the soil, leaving behind 10 cm upright still exposed to the air. The spaces (distances) between the buried samples were 15 cm. Assessment on the buried samples (stacks) was carried out once after the succession of each 6-month interval. The assessment involved the degrees of attack by termites and the depth (extent) of decay inflicted by particular fungi. Afterwards, the 52 wood species as each represented by their tested stacks/samples could be categorized into five durability classes.Most of the samples were severely attacked by termites. Forty nine out of 52 wood species (i.e. 94 percent) were attacked by termites. Meanwhile, the remaining 3 wood species (Glochindion philippicum Robins., Blumeodendron kurzii J.J. S.M. and Myristica lognifes Ward.) were attacked by the decaying fungi. Therefore, those three species were categorized as durability class V. In total, there were 33 wood species (63,4 percent) that belonged to durability class V, 17 wood species (32,6 percent) as class IV, and 2 wood species (3,8 percent) as class III. Since none can be categorized as durability class I or II, the preservative treatment is necessary for the overall 52 wood species. The species categorized as durability class III were rengas manuk (Gluta wallichii (Hook f. Ding Hou) and kempas (Koompasia malaccensis Maing.).

Keywords: Durability, Indonesian wood, graveyard test, termites, and fungi

ABSTRAK

Lima puluh dua jenis kayu yang berasal dari beberapa daerah di Indonesia untuk diuji keawetannya. Jenis-jenis kayu di atas dibuat contoh uji yang berukuran 60 cm x 5 cm x 5 cm. Pengujian dilakukan di hutan percobaan Cikampek, dikubur secara vertikal di lapangan terbuka sedalam 50 cm di dalam tanah dan dibiarkan 10 cm tetap timbul di atas permukaan, dengan jarak antara masing-masing 15 cm. Masing-masing contoh uji diamati setiap 6 bulan sekali serta dinilai tingkat serangan rayap dan kedalaman pelapukannya. Dari hasil pengujian tersebut dibuat klasifikasi keawetan berdasarkan umur rata-rata contoh uji.Hasil penelitian menunjukkan bahwa sebagian besar contoh uji rusak berat akibat serangan rayap. Dari 52 jenis kayu yang diteliti, 49 jenis yang diserang oleh rayap atau sekitar 94%, sisanya yang 3 jenis diserang oleh jamur pelapuk yaitu Glochidion philippicum Robins., Blumeodendron kurzii J.J. SM. dan Myristica lognifes Ward. Ketiga jenis kayu tersebut termasuk katagori dalam kelas awet V. Hasil pengujian juga menunjukkan bahwa 33 jenis termasuk kelas V yaitu sekitar Penelitian Hasil Hutan Vol. 22 No. 1, Juni 2004: 1–8263,4%, 17 jenis termasuk kelas awet IV yaitu 32,6% dan 2 jenis termasuk kelas awet III yaitu 3,8%. Dengan demikian jenis-jenis kayu tersebut di atas dalam pemakaian harus diawetkan lagi. Jenis-jenis kayu yang termasuk kelas awet III adalah rengas manuk (G. wallichi Hook f. Ding Hou) dan kempas (K. malaccensis Maing.).

Kata kunci: Keawetan, kayu Indonesia, uji kuburan, rayap, jamur