

THE INTERNATIONAL RESEARCH GROUP ON WOOD PRESERVATION

Section 1

Biology

Laboratory Evaluation of Termite Resistance of Five Lesser-known Malaysian Hardwoods Used for Roof and Ceiling Construction

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Paper prepared for the 32nd Annual Meeting
Nara, Japan
20-25 May 2001

**IRG Secretariat
c/- KTH
SE-100 44 Stockholm
Sweden**

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ABSTRACT

The general laboratory procedure of AWP A E1-97 was used to evaluate the termite resistance of 5 lesser-known species (LKT) of Malaysian hardwoods: Kekatong (*Cynometra* sp.), Kelat (*Eugenia* spp.), Mempening (*Lithocarpus* spp.), Perah (*Elateriospermum tapos*) and Pauh Kijang (*Irvingia malayana*) against the subterranean termite *Coptotermes curvignathus* over 28 days. Kempas (*Koompassia malaccensis*) and Rubberwood (*Hevea brasiliensis*) were included for comparison with these LKT. Employing the AWP A five-point visual rating scale of termite resistance of wood material, Rubberwood and to an extent Mempening, were the least resistant (rating 4-7), Kekatong was virtually immune (rating 9) to the *Coptotermes* species, while Kempas, Kelat, Pauh Kijang and Perah sustained between light-to-moderate attack (rating 7-9). There was a tendency for higher final wood moisture content, higher mass loss or reduced termite mortality to correspond with the lower visual ratings (low termite resistance) generally. In-ground natural durability test results did not correlate with mass loss or visual rating data from the laboratory test.

KEY WORDS: Natural durability, termite resistance, Lesser-utilised timbers, mixed hardwoods, Malaysian hardwoods, *Coptotermes curvignathus*

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