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

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ABSTRACT

The general laboratory procedure of AWPA 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 AWPA 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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