

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/260164985>

Termite resistance of selected lesser-known Malaysian hardwoods

CONFERENCE PAPER · FEBRUARY 2014

READS

34

2 AUTHORS:



[Andrew H.H. Wong](#)

University Malaysia Sarawak

82 PUBLICATIONS 113 CITATIONS

[SEE PROFILE](#)



[J. Kenneth Grace](#)

University of Hawai'i at Mānoa

218 PUBLICATIONS 2,138 CITATIONS

[SEE PROFILE](#)

Termite resistance of selected lesser-known Malaysian hardwoods

¹Andrew H.H. Wong and ²J. Kenneth Grace

¹Universiti Malaysia Sarawak
Faculty of Resources Science and Technology
94300 Kota Samarahan, Sarawak
Email: ahhwong@frst.unimas.my

²University of Hawai'i at Manoa
College of Tropical Agriculture & Human Resources
3050 Maile Way, Room 202, Honolulu, Hawai'i 96822, USA
Email: kennethg@hawaii.edu

A combination of field and laboratory termite tests were used to evaluate the subterranean termite resistance of lesser-known tropical hardwoods from Malaysia, which have potential future use where termites pose problems to timber structures. The 28-day lab test followed the procedure of AWP A E1-97 subjecting mainly the heartwood of selected woods to either *Coptotermes formosanus* (in Hawai'i) and/or *C. Curvignathus* (Malaysia). Up to 22 hardwoods were evaluated. Test block mass losses and termite ratings were compared to show a range of termite resistance between wood species and in cases, within a single tree species occurred due to different degrees of attacks between these termites especially with rubberwood and kempas. Overall the most termite-resistant woods are notably: Burmese teak, Casuarina, Kekatong, Perah and Rengas (including surprisingly its sapwood) while notable perishable woods are: Carribean pine, Scots pine, *Acacia mangium* and *Albizia* sp. Malaysian teak sustained moderate resistance, as were the woods Tualang, Sentang, Hoop pine, Kedondong, Kelat, mampening, Pauh Kijang and Keledang. Such findings contribute to the selection of wood species for structural applications aboveground indoor (or outdoor) with options for wood protection among the lesser-resistant woods.

Keywords: Termite resistance, wood durability, Malaysian hardwoods, Lesser-known timbers, *Coptotermes curvignathus*, *Coptotermes formosanus*

Wong, A. H. H. and J. K. Grace, J. K. 2014. Termite resistance of selected lesser-known Malaysian hardwoods. Proceedings of the 10th Pacific-Rim Termite Research Group Conference (B. T. Forschler, Ed.). Kuala Lumpur, Malaysia, 26-28 February 2014. S3:2, 1 p. <http://www.prtrg.org>