

DAYA TAHAN 25 JENIS ROTAN TERHADAP RAYAP TANAH
(The Resistance of 25 rattan Species Against Subterranean Termites)

Oleh / By:
Jasni & Han Roliadi

ABSTRACT

This research aimed to look into the resistance of 25 rattan species against subterranean termites (*Coptotermes curvignathus* Holmgren). Each rattan species was prepared into test samples with length of 2 cm and particular diameter depending on the rattan species itself. The test took place in jampot into which were previously put 200 subterranean termites of the worker type, being active and healthy. The parameters tested include percentages of rattan-weight loss and number of termite survival, which were then statistically analyzed and further used to classify the 25 rattan species in accordance with their resistance class. In addition, degree of attack by termite was subjectively examined on the rattan.

Results revealed that out of the 25 tested rattan species, 7 species (28%) were categorized as high-resistance class (class I and II), while the rest .i.e. 18 species (72%) belonged to low-resistance class (class III, IV, V). In their uses, rattan species with-lowresistance class require a thorough preservation process. It also turned out that despite being subjectively examined, the degree of termite attacks correlated positively with the rattan weight loss ($R = + 0.618^{**}$) and with the number of rattan survival ($R = + 0.697^{**}$).

Key words: Rattan, subterranean termites, mortality, termites attacks.

ABSTRAK

Penelitian ini bertujuan untuk mengetahui ketahanan 25 jenis rotan terhadap serangan serangga rayap tanah (*Coptotermes curvignathus* Holmgren) dengan menggunakan contoh uji berukuran panjang 2 cm dan diameter tergantung jenis rotannya.

Pengujian berlangsung dalam jampot yang didalamnya terdapat 200 ekor rayap tanah kasta pekerja yang sehat dan aktif. Parameter yang diuji adalah persentase penurunan berat rotan dan persentase rayap yang hidup, yang kemudian melalui bantuan penelaahan statistik dipakai sebagai dasar penggolongan 25 jenis rotan tersebut menurut kelas ketahanannya. Disamping itu dilakukan pula pengamatan secara subyektif derajat serangan rayap terhadap rotan. Hasil penelitian menunjukkan bahwa pada 25 jenis rotan yang diteliti, 7 jenis (28%) termasuk kelas ketahanan tinggi (kelas I dan II), sisanya yaitu 18 jenis (72%) termasuk kelas ketahanan rendah (kelas III, IV dan V). Dalam penggunaan rotan dengan kelas ketahanan rendah diperlukan proses pengawetan. Walaupun diamati secara subjektif, ternyata derajat serangan rayap berkorelasi positif dengan penurunan berat rotan ($R = + 0,618^{**}$) dan jumlah rayap hidup ($R = + 0,697^{**}$).

Kata kunci: Rayap tanah, pengurangan berat, persen rayap yang hidup dan derajat