

ABSTRACT

Laboratory assays were conducted to find the possibility of using some unconventional methods for controlling the drywood termite, *Cryptotermes brevis* Wlk. The applied materials were; MVP_{II} (a *Bacillus thuringiensis* bioinsecticide), Cascade (an I.G.I.), combination of MVP_{II} + LC₁₀ Cascade, inorganic compounds (Zinc chloride, copper sulphate, Borax and Boric acid), petroleum oil fractions Cap_I, Cap_{II} and Masrona), and plant extracts (dry and fresh *Ambrosia*; Neem, *Azadirachta indica* and *Eucalyptus*). In all treatments, mortality percentages increased by increasing the applied concentration. also the LC₅₀ decreased as the exposure period was prolonged, and the LT₅₀ became shorter as the applied concentration increased. Mortality percentages were higher by using MVP_{II} + LC₁₀ of I.G.I., than those recorded from using either of the two preparations alone. Among the alive termites after treatments, fecundity was found to be reduced by increasing the applied concentration.

Comparing the preference of termites to infest different kinds of wood, Mirbeck's oak wood was the most infested, while bamboo wood was the highest resistant.

The effects of heating, freezing, heating followed by cooling, and cooling followed by heating of wood infested by termites on mortality percentages were also investigated.

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