

**EVALUATION OF SELECTED HERBS SPECIES AS
REPELLENT AGAINST TERMITES (*Coptotermes curvignathus*)**

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ABSTRACT

EVALUATION OF SELECTED HERBS SPECIES AS REPELLENT AGAINST TERMITES (*Coptotermes curvignathus*)

Termites encompass a various range of destruction of crops and capable of decomposing woods. The widely being used of hazardous chemical pesticides has develop many health problem to the users. Hence, the aim of this study was to substitute the use of hazardous chemical pesticides to herbs based pesticides as repellent agent against termites, *Coptotermes curvignathus*, which is safer and easier to use. The selected herbs species for this study are Lemongrass (*Cymbopogon citratus*), Garlic (*Allium sativum*) and Mint leaf (*Mentha arvensis*). As for *C.curvignathus*, they were obtained from Forest Research Institute Malaysia, Kepong Selangor. Khaya Wood (*Khaya senegalensis*) (3cm x 2cm x 2cm) is the woods sample that being used. All woods samples were treated with all the selected herbs extract. The repellent testing was conducted for 21 days. The result obtained showed that the three herbs were effective to be used as repellent when compared to percentage weight loss of control which is 23.58. The percentages of weight loss of treated groups were 0.61, 0.52, 1.56, 1.13, 1.72 and 1.55. From ANOVA table there is significant different in mean among group $F=275.49$, $p\text{-value}=0.000<0.05$.

Keywords: *Coptotermes curvignathus*, *Khaya senegalensis*, Pesticides, Repellent agent