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Insecticidal Effects of Plant Extracts of Thymus daenensis and Eucalyptus camaldulensis on Callosobruchus maculatus (Coleoptera: Bruchidae)

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Abstract : This study has been investigated for finding alternative and safe botanical pesticides instead of chemical insecticides. The effects of plant extracts of Eucalyptus camaldulensis and Thymus daenensis were tested against adult of Callosobrochus maculatus F. Experiments were carried out at 27±1°C and 60 ± 5% R. H. under dark condition with adopting a complete randomized block design. Three replicates were set up for five concentrations of each plants extract. LC50 values were determined by SPSS 16.0 software. LC50 values indicated that plant extract of Thymus daenensis with 1.708 (µl/l air) against adult was more effective than the plant extract of Eucalyptus camaldulensis with LC50 12.755 (µl/l air). It was found that plant extract of Thymus daenensis in comparison with extract of Eucalyptus camaldulensis could be used as a pesticide for control store pests.

Keywords : callosobruchus maculatus, Eucalyptus camaldulensis, insecticidal effects, Thymus daenensis
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