

Insecticidal Activity of Lantana camara L. Essential Oil against the Stored Wheat Pest, *Tribolium castaneum* (Herbst) (Coleoptera: Tenebrionidae)

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Abstract: This study was conducted to determine the insecticidal activity of *Lantana camara* (Verbenaceae) essential oil against adults of *Tribolium castaneum*. Chemical composition of essential oil isolated by hydrodistillation from the aerial part of *L. camara* was analyzed by GC-MS. 1H-Cycloprop [E]-Azulène (19.23%), Methanophtalène (15.49%) and Caryophyllèneoxide (11.77%) were the main constituents. The results indicate that essential oil of the aerial part of *L. camara* shows toxic effects against adults of *T. castaneum*. The LD₅₀ and LD₉₀ of the aerial part of *L. camara* against of *T. castaneum adults* was 89.83 and 193.37 µl at 120 hours exposure. The maximum mortality caused by the extracted essential oil was 93.33% at 120 hours exposure at 200 µl. The LT₅₀ values were respectively 22.52 hours in dose 200 µl for *T. castaneum* adults.

Keywords: Insecticidal activity, Lantana camara, Essential oil, Tribolium castaneum