EFFECT OF USING SOME SPICES TO CONTROL THE ADULTS OF RED FLOUR BEETLE *Tribolium castaneum* (HERBEST) (COLEOPTERA:TENEBRIOIDAE).

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ABSTRACT

The study aim to investigate insecticidal and the repellency effects of four plants :*Cinnamomum zeylancium*,*Zingiber officinale*, *Myristica fragrans* and *Coriandrum sativum* against the red flour beetles *Tribolium castaneum* and estimating the percentage of the insecticidal effect for the following concentrations 0.0, 0.5 ,1 , 2 , 4 g within seven days , and the percentage of the repellency effect for the same concentrations after 48 hours. The study showed no significant differences in insecticidal and repellent effects of plants powder between wheat and barley treatments, However there were highly significant differences among concentrations of plant powders of treatments.

Also results showed excellence effect of *Myristica fragrans* powder at concentration 4% g for repellency effect with value 8.667% while the value for, *Zingiber officinale*, *Coriandrum sativum* and *Cinnamomum zeylancium* powders at the same concentration are 8.167%, 8.000%,7.167% respectively, as well as the insecticidal effect for concentration 4% g are 1.483%, 4.350%,4.350%,5050%for *Myristica fragrans*, *Zingiber officinale*, *Coriandrum sativum* and *Cinnamomum zeylancium* powder respectively.

Keywords: *Tribolium castaneum*, Plant powders, *Cinnamomum zeylancium,Zingiber officinale, Myristica fragrans,Coriandrum sativum*