



**2- Salwa S. Pasha, (2021).** Assessment of Some Essential Oils and Their Mixtures as Material Repellents against Adults of The Confused Flour Beetle, *Tribolium confusum* (DuVal) (Coleoptera: Tenebrionidae). Arab Universities Journal Agricultural Sciences, 29(2):753-763. DOI: 10.21608/ajs.2021.68479.1351

**ABSTRACT:** Repellency of the six essential oils (EOs), Clove (*Eugenia aromaticum*), Aloe (*Aloe vera*), Lemon (*Citrus limon*), Camphor (*Eucalyptus camaldulensis*), Mint (*Mentha spicata*), Marjoram (*Origanum vulgare*) were evaluated against adult of the confused flour beetle *Tribolium confusum*, by allowing adults to choose between untreated filter paper halves with 1 -2g white flour or treated with different concentrations of the oils and their mixture at three different exposure times. In individual oils experiments, *Eucalyptus camaldulensis* was found to be the best effective of repellent efficacy, followed by *Mentha spicata* and *Eugenia aromaticum*. *Citrus limon* and *Aloe vera* have moderate repellent efficacy. Results of combination effective showed that mixtures' repellent activity. It has been shown that the most powerful mixture of Clove + Mint repels activity against adults with Lemon + Aloe, Lemon + Marjoram, Lemon + Mint, and Mint + Aloe during the entire exposure period, while Lemon + Camphor and Camphor + Mint lost repellent activity after 24 hours.

**Keywords:** *Tribolium confusum*, Essential oils, Oils combination, Repellency.