

## Ovicidal effect of three plant essential oils on *Callosobruchus maculatus* F. (Col., Bruchidae)

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### Abstract

In order to find recyclable, environment friendly and easy accessible insecticides, the essential oils of three plant species including *Mentha aquatica* L., *M. piperita* L. and *Anethum graveolens* L. were used against the eggs of *Callosobruchus maculatus*. The experiment was conducted in 6 replications using a completely randomized design of factorial experiment. The essential oils were prepared by water distillation method. Experiment was carried out at 30±2 °C and 60±5% R. H. under dark condition. Results show that all three plant essential oils reduced percentage of egg hatching significantly. At the concentration of 37.03 µl/l essential oils of *M. aquatica*, *M. piperita* and *A. graveolens* caused 100, 100 and 92.73% mortalities of eggs, respectively. Values of 50% lethal concentration on eggs were 2.628, 3.806 and 4.468 µl/l for *M. aquatica*, *M. piperita* and *A. graveolens*, respectively.

**Key Words:** Essential oil, *Callosobruchus maculatus*, Ovicidal

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