

EFFECT OF ESSENTIAL OILS OF CITRUS BERGAMIA ON TRIBOLIUM CASTANEUM

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ABSTRACT

In recent years, many research were performed in stored products according to access the safe alternatives instead of insecticides increasing world population. In the countries with low level of storage technologies damages due to storage pests are approximated between 10 to 40 percent. However, in some of the rural areas of Iran, due to traditional methods of storage, damage caused by pests is estimated up to 80 percent. food shortage crisis is causing the problem. In this research the mortality of Citrus bergamia were tested at the Adults of Tribolium castaneum. In addition, Bioassay experiments were carried out at 27 ± 1 C° and 65 ± 5 RH with four replicated at 24,48, and 72h times. Results indicate that increasing Mortality at 24 and 48h at highest concentration. This approach suggests that 40.73 $\mu\text{L/L}$ air after 72 h is an optimum concentration. and may be used as a safe concentration for management of Tribolium castaneum.

Keywords: Citrus bergamia, Tribolium castaneum, Bioassay

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