

USING SOME ENTOMOPATHOGENIC FUNGI TO CONTROL THE RED RUST BEETLE *Tribolium castaneum* (Hbst.) (Coleoptera : Tenebrionidae).

Hussein A. M.*

N. A. Kamass**

A. Sultan***

H. A. Al Saïdy**

*College of Agriculture – Univ. of Diyala. .

***Biology Dep. College of Pure Science Education- Univ of Diyala.: Drammarmohamed@yahoo.com

**Animal Resources Dept.-College of Agriculture-Univ. of Diyala.

** Animal Resources Dept.-College of Agriculture-Univ. - Diyala. drh.alsaidy@yahoo.com

ABSTRACT

A study was conducted in the laboratory of microbiology –College of Agriculture - University of Diyala. Form March until June 2013 - to compare the effect of some Entomo pathogenic Fungi in to control on the rust red beetle (*Tribolium castaneum*) and different concentrations, and the results showed outweigh the treatment of pathogenic fungus *Beauveria bassiana* isolation local BSA3 significantly ($P < 0.05$) by the second concentrations (35×10^9) spore / ml) in recording the highest rates of death in star larvae first insect beetle 52.5%, did not differ with treatments fungus (isolation BSA3) first (57×10^8) spore / ml) and the product's commercial pathogen fungus *Lecanicillium muscarium* (Mycotal) concentrations 1×10^7 spore / ml significantly rates of death 42.0% and 46.5%, respectively, while given treatment fruit body extract of the fungus pathogen *Calvatia carniiformis* lower rates of death for the larvae of a red beetle rust insect 21.5%, which differed significantly from the treatment comparison 8.5%. And given the fungus treatment *B. bassiana* isolation BSA3 (second concentrations 35×10^9) spore / ml) and the treatment of the preparation commercial Mycotal of the fungus *L. muscarium* concentrations 1×10^7 spore / ml higher rates of loss in adults insect 41.5% and 38.5% respectively, while recent treatment did not differ significantly from the treatment of fungus *B. bassiana* (first concentrations), amounting to 35%. Treatment showed fungus *B. bassiana* isolation BSA3(second concentrations 35×10^9 spore/ml) Significant differences in the percentage of adult emergence of a red beetle rust insect when the treatment of insect pupae 77.5% .

Key Words: Fungi, *Beauveria bassiana* (Blasamo) (BSA3), *Lecanicillium muscarium* (Mycotal) and *Calvatia carniiformis*, Red Bettel.