

## **Toxic Activity of Biopesticide *Metarhizium anisopliae* var *acridium* 'Green Muscle' on the Cuticle of the Desert Locust *Schistocerca gregaria* (Forskål, 1775)**

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**Abstract :** Locust is causing significant losses in agricultural production in the countries concerned by the invasion. Up to the present control strategy has consisted only of the spreaders chemicals; they have proven harmful to the environment and taking a conscience prompted researchers and institutions to lean towards the biological control based mostly by using microorganism. It is in that sense is we've made our contribution by the use of a biopesticide which is entomopathogenic fungus *Metarhizium anisopliae* var *acridium* 'Green Muscle' on part of the cuticle the larval of fifth instar locust *Schistocerca gregaria*. Preliminary test on the study of the pathogenicity of the bio-control agent, was conducted in the laboratory on L5 *S. gregaria*, on which we inoculated treatment by direct spraying of the cuticle, 5 days after treatment individuals are sacrificed. Microscopic observation revealed alterations in the architecture of the cuticle which leads to disorganization of cell layers.

**Keywords :** biopesticide, cuticle, desert locust, effect

**Conference Title :** ICABBBE 2015 : International Conference on Agricultural, Biotechnology, Biological and Biosystems Engineering

**Conference Location :** Istanbul, Türkiye

**Conference Dates :** May 21-22, 2015