# Biocontrol of the Taeniopoda reticulata (Locust) Plague Using the Fungus Metarhizium anisopliae

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An assessment is made of the effect of biological control using the entomopathogenic fungus Metarhizium anisopliae, on the Taeniopoda reticulata, Fabricius (1978) locust plague when introduced as a specific enemy. The research method was quantitative, experimental with a fully randomized biostatistical design. The fungus Metarhizium anisopliae was obtained from insects, through the separation in an isolation chamber. At the same time, adult locust from the species Taeniopoda reticulate were collected. Four Petri dishes were prepared, with the four treatments consisting of different concentrations of the fungus dissolved in 100 ml of distilled water: Treatment N. 1: 5g; treatment N. 2: 4g; treatment N. 3: 3g and treatment N. 4: 2g. Different treatments were applied for every 5 locust. A 10-liter plastic container was adapted for that purpose (simulating a hood), by removing the bottom to place the locust on filter papers. The treatment suspension was placed on the container opening so each treatment would drip gently and directly on the insects, in an attempt to simulate aerial spraying. After 12 to 15 days of applying the treatment, the results started to become apparent. Treatment N.1 with a higher concentration of the fungus resulted in an 80% death rate. This proves that concentrations of the entomopathogenic fungus Metarhizium anisopliae are effective in the biological control of the Taeniopoda reticulate fungus.

**Awards Won:**