

## Effect of *Beauveria bassiana* in some biological control agents

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STEP Employee 2011

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*Beauveria bassiana* is considered a great potential as biological control agents against insects. However, the success of this fungus depends not only on high efficacy against insect pests, but also on low virulence against non target insects (Thungrabead and Tongma, 2007). One example of an insect that can be affected by *B. bassiana* field applications is the Green Lacewing, *Chrysoperla rubrilabris* (Neuroptera: Chysopidae). It is found in Mississippi Delta and could play an important role in *Lygus* bugs population control.

In this project I was assigned to work with this specific insect to evaluate the effect of the fungus of *B. bassiana* on the reproductive potential of green lacewings. I set up the entire experiment starting from the production of fungus powder, quality control of sporulation percentage, dilutions, and sprayed different formulation of *B. bassiana* using a spray tower. Four replicas were use for treatments (concentrations). Daily observation on mortality, sporulation and oviposition were recorded. I found that *C. rufirilabris* is highly affected by the strain NI8 *B. bassiana* when compared with other biological control agents such as lady bugs or minute pirate bug (Laboratory observations).

During my stay I assisted in conducting different bioassays to determine the efficacy of the entomopathogenic fungi. Mortality and sporulation were recorded until next generation and full mortality of the population was acquired for every studied insect.

Even though I was not a science major I understand that science is a continuing effort to discover and increase human knowledge and understanding through disciplined research using controlled methods. I have learned that scientists collect observable evidence of natural or social phenomena, record measurable data relating to the observations, and analyze this information to construct explanations of how things work. I have learned how to do a majority of these things

working with Maribel for the past two years and I am thankful that I was granted this opportunity.

#### Reference

1. Thungrabeab and S. Tongma. 2007. Effect of entomopathogenic fungi, *Beauveria bassiana* (Blasam) and *Metarhizium anisopliae* (Metsch) on non target insects. Sci, Tech. J. Vol 7 N0. 2007.