

Dquan J. Wilson S.I.M.R.U. *Prevalence of Naturally Occurring Beauveria in Lygus lineolaris*

*The Beauveria bassiana fungus is being evaluated to be able to control the important insect pest of cotton. Tarnished plant bugs in cotton growing regions may be better suited for controlling these populations. Surveys were taken in Mississippi to determine the prevalence of this fungus in tarnished plant bugs populations from wild host plants. Nine wild host plants were sampled over a three year period. Percentage of tarnished plant bugs were infected with this fungus ranged from 0 to 8 percent and averaged .3 percent. This level of infection was much lower than that previously observed in western tarnished plant bugs from California, which averaged approximately 10 percent.*

*Nonetheless, 23 new isolates of this fungus were obtained from this survey, which will be looked at for characteristics to select one for development as a control agent of tarnished plant bugs. There were approximately two commercial mycoinsecticides that has been*

LELAND and SNODGRASS: *B. bassiana* in Mississippi *L. lineolaris*

Dquan J. Wilson S.I.M.R.U. *evaluated against L. lineolaris and L. hesperus with mixed success.*

*Mycotrol Emerald Bioagriculture caused high mortality to L. lineolaris caged on cotton. Control of L. Hesperus in alfalfa with Mycotrol was relatively poor.*

*Additionally, the tarnished plant bug to B. bassiana was compared among different populations from wild host plants in laboratory bioassays. Pathogenicity of B. bassiana to plant bug adults was similar among populations from different host plants and collection dates. Natural infection levels will be useful when evaluating the efficacy of B. bassiana in field trials targeting these populations and evaluating potential for displacement of naturally occurring bassiana.*