

# **SURVIVAL OF *BACILLUS THURINGIENSIS* STRAINS IN GYPSY MOTH (*LYMANTRIA DISPAR*) LARVAE IS CORRELATED WITH PRODUCTION OF UREASE**

**Phyllis A.W. Martin, Robert R. Farrar, Jr.,  
and Michael B. Blackburn**

USDA ARS, Invasive Insect Biocontrol and  
Behavior Laboratory, Beltsville, MD 20705

## **ABSTRACT**

We tested 50 lepidopteran-toxic *Bacillus thuringiensis* Berliner (*Bt*) strains with diverse phenotypes for the ability to survive repeated passages through larvae of the gypsy moth, *Lymantria dispar* (L.), without intervening growth on artificial media. These

experiments have revealed a remarkable correlation between the production of urease (22 of 25) by the bacteria and its ability to survive repeated passages through larvae.