

## Biotechnology For Insect Control

CHICAGO, IL — Although many breakthroughs in agricultural biotechnology have been reported by scientists recently, several more years of research will be required in most cases to develop products which farmers can use for crop or livestock production.

Biological insecticides, however, are among the few products of biotechnology currently available for use by farmers on a commercial basis.

According to Dr. Brian Melin, research entomologist with Abbott Laboratories, most biological insecticides in the marketplace today are made from the naturally occurring bacteria, *Bacillus thuringiensis* (Bt).

"Bt is one of the few natural pathogens presently available that can be cultivated and produced in quantities large enough for commercial use on major crops," Melin says. "It is particularly effective against crop-destroying caterpillars of the Lepidoptera order, which are major pests of crops such as corn, cotton, fruits

and vegetables."

Dave Martin, director of marketing for the Agricultural Products Division of Abbott Laboratories, notes that a rapid growth in the demand for biological pesticides over the last three years is due to several factors.

"Biologists today are more effective and economical than they've ever been due to improved product formulations and recent advances in fermentation and recovery technology," Martin says. "Equally important is the fact that these materials have shown no toxicity to people or animals, and they're not a threat to groundwater contamination.

"Environmental considerations are particularly significant in irrigated crop areas and where leaching or runoff of chemicals may cause problems," Martin adds. "The feedback we're receiving from farmers and their families shows that they want effective pesticides, but they also want the safest products available."

Abbott Laboratories is the world's largest producer of biolog-

ical pesticides, including several Bt-based products used to control insects on over 200 agricultural crops in the U.S. and other coun-

tries. A \$30 million expansion of the company's laboratory and fermentation facilities was recently completed to ensure production

capacity will be sufficient to meet growing market demand for biologicals over the next several years.



The Cumberland Cooperative Sheep and Wool Growers recently sponsored a Lamb and Wool Queen Contest. Debra J. Martin, daughter of Mr. and Mrs. Melvin Martin, R1, Box 380, Sickmans Mill Road, Conestoga, Pa. was selected to represent them at the Pa. Lamb and Wool Contest. Debra is shown here with Sandra Hopple (left) of 860 Bolling Springs Road, Mechanicsburg, who was chosen first runner-up and Carol Perry (right) of R3 Newville, the 1986-87 Cumberland Cooperative Sheep and Wool Growers Lamb and Wool Queen.

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