America The Bountiful

New Corn Seed Provides Farmers With Simple, Effective Control

(NAPSA)—According to USDA estimates, corn rootworm causes nearly $1 billion in damage and control measures to the U.S. corn crop each year. It has become a significant problem that now has a simple, effective solution. Recently approved by the Environmental Protection Agency (EPA), YieldGard Rootworm corn is now available to assist U.S. farmers in providing quality corn yields even during tough infestations.

With regulatory reviews complete in both the United States and Japan—a key export market for U.S. corn growers—Monsanto is the first company to commercialize a biotechnology product designed to combat the corn rootworm.

"Corn rootworm does most of its damage as a larva—the immature stage of the insect," says Todd DeGooyer, U.S. corn technical lead for Monsanto. "These larvae feed on the roots of young corn plants, inhibiting the plants' ability to take up water and nutrients, fully develop and remain upright. This ultimately can lead to yield loss."

How it works

YieldGard Rootworm contains a gene from *Bacillus thuringiensis (Bt)*, a common soil microbe, which allows the corn plant to protect itself naturally. Larvae stop feeding and die soon after eating the plant's roots.

Farmers have typically fought corn rootworm through crop rotation or the application of soil insecticides. However, it has been observed that corn rootworms are adapting to rotation practices. The effectiveness of soil-applied insecticides can also vary from year to year depending on the environmental conditions.

A new kind of genetically engineered corn protects itself against infestation.

"In the past, we've had to spray up to three insecticides in a single growing season to control this pest," says Kevin Penny, a corn grower from Burlington, Colo. "We are very excited about having the type of technology that can have this rootworm resistance built within the plant itself."

Research at academic field trial locations for the past three years has shown that YieldGard Rootworm corn was more consistent in controlling rootworm damage than the best performing insecticide.

Additionally, in 2002, a number of grower cooperators participated in Experimental Use Permit (EUP) trials and were able to see first-hand how the technology worked in their field.

"Overall, my YieldGard Rootworm corn went way beyond my expectations," says trial grower John Sears of Colby, Kan. "We expected a two- to five-bushel difference between the YieldGard Rootworm corn and the non-rootworm corn. The Rootworm corn yielded 198 bushels, and the other half yielded 171 bushels. If you multiply that by $2.50 per bushel, that's a big difference."

Once state registrations are granted, YieldGard Rootworm corn will be available from approximately 100 seed companies across the Corn Belt. The product is a part of the Market Choices grain stewardship program and is fully approved for food and feed use in the United States and Japan, but is pending in the European Union. Appropriate markets for marketing this grain away from Europe include: feedlots, feed mills, on-farm feeding, and elevators who agree to accept the grain. Growers should contact their local grain handler or refer to the American Seed Trade Association (ASTA) Web site amseed.org for more details.