

## Patricia D. Hastings

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**Subject:** Plant incorporated protectant: Bt protein Cry3Bb1 for Corn Rootworm

*Extracted from EPA Pesticide Program Updates from EPA's Office of Pesticide Programs 2/25/03*

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### NEW CORN PEST CONTROL APPROVED BY EPA CAN LEAD TO REDUCED PESTICIDE USE

#### Non-Chemical Alternative To Conventional Insecticides For Control Of Corn Rootworm

After an intensive, multi-year scientific analysis, EPA has approved the use of a new **plant-incorporated protectant designed to control corn rootworm**, a widespread and destructive insect in the United States. This new product will provide corn growers with a safe, non-chemical pest control alternative that can reduce reliance on traditional insecticides. The reduced pesticide use will benefit the environment directly and can mean less exposure to people who apply chemical pesticides to corn.

"EPA has put this new product through a rigorous, science-based review process, including extensive public comment and independent scientific peer review, to ensure that it is safe for human health and the environment," commented Stephen L. Johnson, EPA's Assistant Administrator for Prevention, Pesticides, and Toxic Substances. "This new variety of corn pest control holds great promise for reducing reliance on conventional insecticides now used on millions of acres of corn in the U.S." continued Johnson.

The new corn pest control, referred to as "**MON 863**" and developed by Monsanto, **produces its own insecticide within the plant derived from Bacillus thuringiensis (Bt)**, a naturally occurring soil bacterium. The **Bt protein, called Cry3Bb1, controls corn rootworm**, a highly destructive pest responsible for the single largest use of conventional insecticides in the United States. At roughly 80 million planted acres, corn is the largest crop grown in the United States. Use of the new pest-control tool is expected to result in major reductions in the use of numerous conventional insecticides. Many of the older alternative insecticides belong to the organophosphate and carbamate chemical classes which have been the subject of increased EPA analysis and regulatory restrictions since passage of the Food Quality Protection Act of 1996.

In order to reduce the possibility of corn rootworm developing resistance to Bt, EPA is requiring Monsanto to ensure that 20 percent of the planted acreage of this product be set aside where non-Bt corn will be grown to serve as a "refuge." These refuge areas will support populations of corn rootworm not exposed to the Bt bacterium. The insect populations in the refuges will help prevent resistance development when they cross-breed with insects in the Bt fields. This resistance management strategy was developed as a condition of the

registration, and EPA will require routine monitoring and documentation that these measures are followed. EPA is also requiring Monsanto to conduct additional research on corn rootworm to ensure that optimal long-term resistance management practices are maintained.

Today's action is based on a thorough and comprehensive scientific and regulatory evaluation by EPA. It also builds upon a multi-year reassessment performed by the Agency on all currently available Bt plant-incorporated protectants regulated by EPA which was completed in October 2001. As with all similar products, EPA has approved MON 863 for time-limited use which will be subject to reevaluation in several years. For more information on EPA's regulation of these products, see: <http://www.epa.gov/pesticides/biopesticides/>.

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Specific information on MON 863 has yet to be posted on EPA's site; we will post details as appropriate.

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