USB-funded booklet details environmental benefits of biotech

Compiled by Staff

Anaheim, CA. March 5. Agricultural biotechnology is a powerful tool for increasing yields, improving crop quality and characteristics, and facilitating sustainable farming practices such as conservation tillage, according to a new booklet developed by the Conservation Technology Information Center (CTIC).

"Facilitating Conservation Farming Practices and Enhancing Environmental Sustainability with Agricultural Biotechnology" details the data surrounding the adoption of biotech crops. Among many statistics, booklet shows a 69-percent increase in no-till farming since the 1996 introduction of herbicide-resistant crops; a drop in herbicide usage of 47.4 million pounds of active ingredient where herbicide-tolerant soybeans or cotton were planted in the U.S. in 2007; the replacement of 8.67 million pounds of insecticide active ingredient in 2007 where U.S. growers planted insect-resistant cotton and corn varieties; and the reductions in soil loss of 90 percent or more, and reduced movement of phosphorus by more than 70 percent where no-till is used;

The booklet is the latest in a vast library created by CTIC throughout its 25-year history as a repository for information on conservation farming practices. Funded by the United Soybean, the booklet "explores the breadth of the environmental benefits of conservation tillage practices, which are facilitated significantly by biotechnology crops," says Karen A. Scanlon, executive director of CTIC in West Lafayette, Ind. "We've been seeing extremely positive and informative data on improvements in soil, water and air quality, including large potential impacts on greenhouse gases in the atmosphere."

The booklet updates a prepared by CTIC in 2003. Since the original paper was published, studies have explored emerging issues such as the effect of tillage practices on carbon sequestration and greenhouse gas releases, as well as other environmental impacts of conservation farming practices, notes Dr. Rich Joost, Director of Production Research for USB in Chesterfield, Mo. Collecting data from researchers around the world in a single, concise, readable document provides growers with important talking points about the benefits of their management choices, Joost says – insight that can help other stakeholders understand the dramatic improvements in environmental sustainability and productivity over the past several years.

The paper, which was reviewed by a multi-disciplinary panel of experts, is available online at http://www.ctic.org/BiotechSustainability, or in hard copy by calling CTIC at (765) 494-9555. The new document complements other elements of USB's extensive online library of information on agricultural biotechnology, which is accessible at http://www.unitedsoybean.org/programs/biotechnology.aspx.