
Abstract

Use of crop biotechnology products, such as genetically engineered (GE) crops with input traits for pest management, has risen dramatically since commercial approval in the mid-1990s. This report addresses several of the economic dimensions regarding farmer adoption of bioengineered crops, including herbicide-tolerant and insect-resistant varieties. In particular, the report examines: (1) the extent of adoption of bioengineered crops, their diffusion path, and expected adoption rates over the next few years; (2) factors affecting the adoption of bioengineered crops; and (3) farm-level impacts of the adoption of bioengineered crops. Data used in the analysis are mostly from USDA surveys.

Keywords: Biotechnology, technology adoption, genetic engineering, pest management, financial effects, tillage, herbicide-tolerant crops, Bt crops, corn, soybeans, cotton.

Acknowledgments

The authors would like to thank Robbin Shoemaker, Kitty Smith, Susan Offutt, Utpal Vasavada, Margriet Caswell, George Norton, and William Lin for their helpful comments and suggestions. We are also grateful to Dale Simms for his valuable and prompt editorial assistance and Wynnice Pointer-Napper for the cover design, document layout, and final charts.

Note: The use of brands or firm names in this publication does not imply endorsement by the U.S. Department of Agriculture.

1800 M Street, NW
Washington, DC 20036-5831

May 2002