

Adoption of Bioengineered Crops. By Jorge Fernandez-Cornejo and William D. McBride, with contributions from Hisham El-Osta, Ralph Heimlich, Meredith Soule, Cassandra Klotz-Ingram, Stan Daberkow, Rachael Goodhue, and Corinne Alexander. Agricultural Economic Report No. 810.

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.

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