

Concluding Comments

Despite environmental and food safety concerns about the use of genetically engineered crops, farmers believe that the use of these crops will offer them many benefits, such as higher yields, lower pest management costs, and greater cropping practice flexibility. While benefits and performance of these crops vary greatly by region because of pest infestation levels and other factors, the rapid adoption rates are evidence that, for many farmers, expected benefits outweigh expected costs.

The econometric analysis from ongoing research shows that the impacts of genetically engineered crops

on pesticide use, crop yields, and net returns vary with the crop and technology examined. Controlling for other factors, increases in adoption of herbicide-tolerant cotton led to statistically significant increases in yields and net returns, but were not associated with significant changes in herbicide use. On the other hand, increases in adoption of herbicide-tolerant soybeans led to small but statistically significant increases in yields and significant decreases in herbicide use. Increases in adoption of Bt cotton in the Southeast led to significant increases in yields and net returns and decreases in insecticide use.