Biotechnology and Demand Concerns: The Case of Genetically Modified US Sugar Beets

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While genetically modified (GM) crops have provided significant agricultural productivity gains in recent years, some consumers oppose GM products as being unsafe. We use the case of GM sugar beets and their recent adoption by US producers to examine the effect of GM technology using a partial equilibrium framework. This analysis provides insights on the demand for sugar from GM US sugar beets versus sugar from non-GMO US sugarcane. We show that the negative demand impacts for sugar from GMO sugar beets can outweigh the supply-induced gains of GM sugar beet research and development. However, this is not likely to come about by mandatory labeling given the recent adoption of the National Bioengineered Food Disclosure Standard, which does not classify sugar as a bioengineered food.

Key words: biotechnology, genetically modified crops, sugar beets, sugarcane, sugar.