



CELEBRATING WORLD FOOD DAY 2009

Agricultural biotechnology is helping farmers grow food sustainably.

The Obama Administration has made global food security a top priority in which American agriculture must play a key role.

“Our strategies must deal with increasing agriculture production. A number of things could help countries increase output including seed technology.”

- U.S. Agriculture Secretary Tom Vilsack, August 5, 2009

Biotechnology allows farmers to grow more food on less land using farming practices that are environmentally sustainable. Through biotechnology:

- ◆ **Seeds yield more per acre, plants naturally resist specific insect pests and diseases, and farming techniques improve soil conservation.**
- ◆ **Farmers and ranchers can help plants and animals fight diseases and adapt to environmental stress and climate change.**
- ◆ **We can enhance the nutritional content of foods and improve human health through plant- and animal-produced therapies.**

The benefits of biotechnology are especially meaningful at a time when our global population is growing and our demand for food is increasing, especially in developing countries.

Feeding a world population of 9.1 billion in 2050 will require raising overall food production by 70 percent (nearly 100 percent in developing countries).

- United Nations Food and Agriculture Organization

AGRICULTURAL BIOTECHNOLOGY: Helping Farmers Grow Food Sustainably



“The best thing for agriculture is to produce a lot on fewer acres. And that can happen if you have the right kinds of technology... and it’s a technology that’s right in the seed plants. These are different than what I would have planted a generation ago because they are genetically modified so that they can tolerate a herbicide. When you have a tool like that it makes farming much more efficient and makes my life a lot easier.”

- John Reifsteck, Champaign County, Illinois

DID YOU KNOW... Biotechnology traits have added 67.8 million tons and 62.4 million tons respectively to global production of soybeans and corn since their introduction in 1996.

- Brookes, Graham, & Peter Barfoot. 2009. GM crops: global socio-economic and environmental impacts 1996-2007. PG Economics Ltd., UK.

“As a believer in modern farming technology, I was one of the pioneer farmers who planted biotech corn in 2003. From then, I was able to experience the benefits brought about by biotech farming such as increased yields and lower production costs.”

- Rosalie Ellasus, San Jacinto, Philippines



DID YOU KNOW... In the United States alone, corn yield has increased 36 percent and soybean yield has increased 12 percent since 1995, in part due to biotechnology.

- USDA, NASS



“Because of biotechnology, we’re able to feed more people with less farmland than ever before. Biotechnology enhances production efficiency and creates a more plentiful supply of safe, reliable and affordable food for a hungry world. In the years ahead, our capabilities will do nothing but improve.”

- Terry Wanzek, Jamestown, North Dakota

DID YOU KNOW... Crop yields are expected to increase in the future with several new biotech products under development, such as crops that are drought resistant or flood tolerant.

“Biotech crops produced for food and biofuels carry an added environmental benefit as we deal with climate change. Biotechnology allows farmers to use conservation agriculture practices that leave crop residue on the surface to fight water and wind erosion. Biotech crops also allow a significant carbon sink in the soil.”

- Maria Gabriela Cruz, Elvas Portugal



DID YOU KNOW... Because biotech crops require less tillage, farmers save fuel and reduce greenhouse gas emissions. In 2007, this was equivalent to removing more than 31 billion pounds of carbon dioxide from the atmosphere, or removing nearly 6.3 million cars from the road for one year.

- Brookes, Graham, & Peter Barfoot. 2009. GM crops: global socio-economic and environmental impacts 1996-2007. PG Economics Ltd., UK.