The Pluses of Biotechnology in Corn Production
FEEDING THE WORLD

Between population growth and rising food prices, feeding the world becomes more challenging each year. In the past century, the global population increased from 1.6 billion to 6 billion. Estimates suggest 8 billion people will share the planet by 2030.

To feed our growing population, we rely on biotechnology. Biotechnology is helping research scientists enhance food production in many ways, including: reducing the impact of insects and diseases on crops, increasing the amount of food produced per plant, and even enhancing nutritional qualities. In fact, biotechnology is already helping us feed the world today. Here’s how:

TECHNOLOGY

By combining the knowledge of plant science and genetics, biotechnology furthers the centuries old tradition of crossbreeding plants to enhance successful traits and diminish weak traits. It has advanced agricultural research around the world, increasing the speed and precision of scientists’ efforts to improve food quality and quantity.

At the same time, biotechnological advancements are rigorously tested. Genetically modified seeds take an average of 13 years to bring to market because of the extensive research and regulatory approvals required.

REGULATION

NCGA supports a regulatory system based on sound science. We support the U.S. Food and Drug Administration’s efforts to provide guidance for voluntary labeling that indicates whether foods have been developed using bioengineering to identify attributes that are important to consumers. Federal standards will ensure food and beverage manufacturers follow consistent regulations nationwide, so consumers can have confidence that GMO labeling is consistent.

EDUCATION

NCGA continues to educate farmers about biotech issues, on subjects including insect resistance, weed resistance, and marketing options for biotech corn.

14 Billion

The number of pounds of additional crop yield as a result of biotechnology. (Source: National Center for Food and Agricultural Policy (NCFAP) report)

75 PERCENT

Farmers will need to produce about 75% more food per acre by 2020 to meet anticipated demand. (Source: UN Population Fund)

$2.5 Billion

The amount farm income improved as a result of biotechnology (Source: NCFAP report)
FARMERS

Biotechnology has improved farming efficiency. It allows farmers to produce more food on less land so they can continue to meet rising demand while improving production processes and minimizing environmental impacts. For farmers, biotechnology:

- Increases yield
- Decreases the need for inputs like water & fertilizer
- Reduces the amount of pesticides needed
- Reduces the amount of crop lost to insects & diseases
- Reduces production costs
- Improves a farm’s environmental profile
- Helps create hardier crops and reduces land use
- Improves crop quality

ENVIRONMENT

Biotechnology helps us produce more with less – less land, less labor, less pesticide, less water and less risk of crop loss. It supports the conservation of our natural resources because increasing the amount of food produced on existing agricultural acres allows us to keep up with rising food demand without encroaching further on existing wildlife habitat. Biotechnology also reduces CO₂ emissions and is creating new sources of energy.

CONSUMERS

Thanks to biotechnology, consumers will enjoy a larger yield of fresh produce that lasts longer. Biotechnology has also helped keep food prices down by ensuring a sustainable supply in the face of rising demand. Researchers have been able to enhance the nutritional value of food for consumers’ benefit. In addition, biotechnology research is facilitating the production of new medicines for human health. U.S. agriculture is leading the way with innovation, product development and acceptance of biotechnology crops. Let’s keep it that way.

Supporting the continued coexistence of different cropping systems is important to facilitate grower and consumer choice without undermining innovation, productivity or land stewardship.
Founded in 1957, the National Corn Growers Association represents more than 42,000 dues-paying corn farmers nationwide and the interests of more than 300,000 growers who contribute through corn checkoff programs in their states. NCGA and its 48 affiliated state associations and checkoff organizations work together to create and increase opportunities for their members and their industry.