



BEYOND PROMISES: Top 10 Facts about Biotech/GM Crops in 2014





Biotech crop hectares increased by more than 100-fold from 1.7 million hectares in 1996 to 181.5 million hectares in 2014.

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2014 is the 19th year of commercialization of biotech crops. The experience of the last 19 years of commercialization confirmed the promise of biotech crops to deliver substantial agronomic, environmental, economic, health, and social benefits to large and small scale farmers worldwide.

Biotech crops are the fastest adopted crop technology in recent history, reflecting farmer satisfaction of their benefits and their high adoption rates.

This booklet presents the 10 important highlights about biotech crops in 2014, from the ISAAA Brief *"Global Status of Commercialized Biotech/GM Crops: 2014"* written by Clive James, and available for download at: <http://www.isaaa.org/>.



The number of countries planting biotech crops more than quadrupled from 6 in 1996 to 28 in 2014.



2014 was the 19th year of commercialization of biotech crops

Hectarage of biotech crops increased every single year from 1996 to 2014 with 12 years of double digit growth rates.

Since the recorded commercialization of GM crops in 1996 up to 2014, several countries have contributed to an unprecedented 100-fold increase in the global area of transgenic crops.



Biotech crop plantings increased to 181.5 million hectares in 2014



In 2014, hectarage of biotech crops grew at an annual rate of 3-4%, up by 6.3 million from 175.2 million hectares in 2013.

The top biotech crops in order of hectarage are: soybean, maize, cotton, and canola. Other biotech crops grown in 2014 are: alfalfa, sugar beet, papaya, squash, poplar, tomato, sweet pepper, and brinjal/eggplant.

A photograph of a cornfield at sunset or sunrise. The sky is filled with soft, white and grey clouds, and the sun is low on the horizon, casting a warm glow. The corn plants are in the foreground, with their green leaves and tall, thin stalks reaching up. A semi-transparent green banner is overlaid across the middle of the image, containing white text.

**Developing countries planted 8 biotech crops in 2014
with an accumulated hectareage of 94.1 million hectares.**



Bangladesh planted Bt brinjal for the first time in 2014, when 120 farmers planted 12 hectares of the crop.

For the third consecutive year, developing countries planted more biotech crops than industrial countries

Farmers from Latin America, Asia, and Africa collectively grew 96 million hectares, or 53% of the global 181.5 million hectares of biotech crops in 2014, compared with industrial countries at 85 million hectares, or 47% of the global total.



28 countries, up one from 27 in 2013, planted biotech crops in 2014



Of the 28 countries which planted biotech crops in 2014, 20 were developing and 8 were industrial countries.

The 5 lead developing countries in Latin America (Brazil, Argentina), Asia (India, China), and Africa (South Africa) grew 47% of global biotech crops.



Brazil continues to be the top developing country in 2014, planting 3 biotech crops with a total of 42.2 million hectares.





7.1 million farmers in China and another 7.7 in India planted more than 15 million hectares of Bt cotton in 2014.



A record 18 million farmers grew biotech crops in 2014

More than 90%, or 16.5 million farmers that grew biotech crops in 2014 are risk-averse, small, resource-poor farmers in developing countries.

In the last 19 years, millions of farmers in ~30 countries worldwide have made more than 100 million independent decisions to plant and replant an accumulated hectareage of more than 1.8 billion hectares of biotech crops.



The top 5 countries planting biotech crops are USA, Brazil, Argentina, India, and Canada



The USA continued to be the lead producer of biotech crops globally with 73.1 million hectares, and average adoption rate of over 90% across all biotech crops.

Each of the 10 countries which grew biotech crops in 2014 planted more than 1 million hectares.

A wide-angle photograph of a vast field of yellow canola flowers in full bloom. The field stretches to the horizon under a bright blue sky filled with scattered white cumulus clouds. The perspective is from a low angle, looking across the field.

In Canada, biotech canola had a high adoption rate of 95% in 2014.



Sudan, in its third year of commercialization, increased its Bt cotton hectarage to 90,000 hectares in 2014.

In Africa, Burkina Faso and Sudan continued to make progress in increasing their Bt cotton hectarage in 2014

2014 was the seventh year for farmers in Burkina Faso to plant Bt cotton. In Sudan, more than 30,000 farmers planted Bt cotton in 2014.

South Africa planted 2.7 million hectares of biotech maize, soybean, and cotton in 2014.



Five countries in the European Union planted 143,016 hectares of biotech maize in 2014



Spain is the leading country in the EU with 131,538 hectares of Bt maize in 2014.

The other EU countries which grew biotech crops in 2014 are: Portugal, Czech Republic, Romania, and Slovakia.



Spain had a record adoption rate of 31.6% in 2014.



In 2014, biotech crops have helped more than 16.5 million small farmers and their families worldwide.



Biotech crops contribute to food security, sustainability, and climate change

From 1996 to 2013, economic gains at the farm level of US\$133.3 billion were generated globally by biotech crops, due to reduced production costs and substantial yield gains.

Biotech crops have reduced the amount of pesticides used by ~500 million kilograms. In 2013 alone, fewer insecticide sprays reduced CO₂ emissions by 28 billion kilograms, equivalent to taking 12.4 million cars off the road for a year.



The outlook for biotech crops in the second decade of commercialization look encouraging



Modest annual gains are expected due to high rates of adoption of principal biotech crops. The pipeline is full of new biotech crop products which could be available in the next five years.

Biotech crops can serve as engine of rural economic growth for the alleviation of poverty for the world's small and resource-poor farmers.



Modest annual gains are due to high adoption rates of principal biotech crops in developing and industrial countries.





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