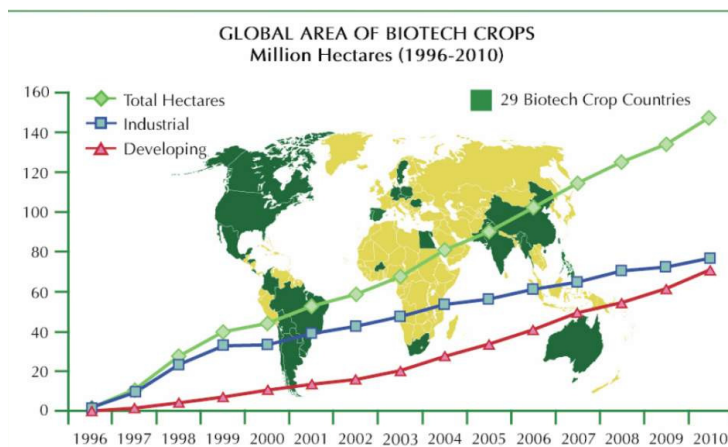


## 2010 Biotech crop cultivation figures for Europe and beyond

According to the annual report by the International Service for the Acquisition of Agri-Biotech Applications (ISAAA) the global biotech crop acreage increased in 2010 by 10%. The executive summary report can be downloaded from <http://www.isaaa.org/>

### Global Cultivation Figures ISAAA 2010 Report

- In 2010 **15.4 million farmers** planted **148 million hectares** of biotech crops in **29 countries**.
- Compared to 2009, this is up from 14 million farmers and 134 million hectares or an increase of **10 percent**.
- Notably, in 2010, 14.4 of the 15.4 million farmers, or over **90 percent, were small and resource-poor farmers from developing countries**.
- Record hectarages were reported for all four major biotech crops:
  - Biotech soybean occupied 81% of the 90 million ha of soybean globally
  - Biotech cotton 64% of the 33 million ha of cotton
  - Biotech maize 29% of the 158 million ha of maize
  - Biotech canola 23% of the 31 million ha of canola



*A record 15.4 million farmers, in 29 countries, planted 148 million hectares (365 million acres) in 2010, a sustained increase of 10% or 14 million hectares (35 million acres) over 2009.*

Source: Clive James, 2010.

- The 87-fold increase in biotech crop hectares between 1996 and 2010 is unprecedented, and makes biotech crops the **fastest adopted crop technology** in the recent history of agriculture.
- Updated global impact assessments of biotech crops indicate that for the period 1996 to 2008 **economic gains of €38.44 billion** were generated from:

1. **Reduced production costs (50%),**
  2. **Substantial yield gains (50%)** of 167 million tons; the latter would have required **62.6 million additional hectares** had biotech crops not been deployed, hence biotech crops are an important land saving technology.
- During the same period, 1996 to 2008, pesticide reduction was estimated at 356 million kg of active ingredient, **a saving of 8.4% in pesticides.**

**For Europe:**

- In Europe, only two biotech crops can be grown commercially: an insect-resistant (Bt) maize since 1998, and a biotech starch potato for industrial use, grown for the first time in 2010. Currently, 20 other GM crops are awaiting authorization for cultivation in the EU (maize, potato, sugarbeet and soybean).
- **8 EU countries** planted GM crops in 2010. Bt maize is grown in Spain, Czech Republic, Portugal, Romania, Poland and Slovakia.  
In 2010 the Amflora potato was grown in Czech Republic, Sweden, and Germany.
- **91.438 ha** of biotech crops were grown in 2010 in the EU:  
91.193 ha of Bt maize and 245 ha of biotech potato.
- There is a slight decrease in biotech crop acreage compared to 2009. This can be associated with several factors, including the economic recession, decreased total plantings of hybrid maize and disincentives for farmers due to onerous reporting of intended plantings of Bt maize.
- Spain was by far the largest EU grower with **84%** of the EU total Bt maize area and a record adoption of **24%**.

**Biotech crop acreage in Europe – Planting Figures (in ha)**

Country vs. Year	2007	2008	2009	2010 Bt maize	2010 Amflora	2010 Total
Spain	75148	79269	76057	76575	-	76575
France	21174	-	-	-	-	-
Czech Republic	5000	8380	6480	4680	150	4830
Portugal	4263	4851	5094	4868	-	4868
Germany	2685	3173	-	-	15	15
Slovakia	900	1900	875	1248	-	1248
Romania	350	7146	3244	822	-	822
Poland	327	3000	3000	3000	-	3000
Sweden	-	-	-	-	80	80
<b>Total</b>	<b>88673</b>	<b>107719</b>	<b>94750</b>	<b>91193</b>	<b>245</b>	<b>91438</b>

## Information per country in Europe:

### Spain:

- Spain is the lead biotech crop country in Europe, with 84% of all the Bt maize hectares planted in Europe in 2010.
- Spain has successfully grown Bt maize for the last 13 years.
- In 2010 Spain cultivated 76,575 hectares of Bt maize, an increase of 518 ha compared to 2009.
- Enhanced farm income from biotech Bt maize is estimated at **US\$94 million** for the period of 1998 to 2009 and for 2009 alone at US\$16 million.

### Portugal:

- In 2010, Portugal planted 4,868 hectares of Bt maize, a 4% decrease compared with 2009. However, in 2010, the total hectareage planted to maize also decreased in Portugal from 135,000 hectares to 132,000 hectares, a 2% drop.
- In 2010, Bt maize was grown in 4 regions by 191 farmers with an average Bt maize planting of 25 hectares per farm.
- Portuguese farmers, who first cultivated Bt maize in 1999, resumed successful planting in 2005. Since then, they have elected to continue to plant Bt maize for six years because of the benefits they offer.

### Czech Republic:

- In 2010, the Czech Republic grew 4,680 hectares of biotech Bt maize, and for the first time, 150 hectares Amflora, the biotech potato newly approved for cultivation in the EU in March 2010. Thus, the total hectareage of the two biotech crops was 4,830 hectares.
- Compared with 2009 there was a decrease of 1,800 hectares of Bt maize planting. The decrease was associated with various factors including less total maize hectareage, and the onerous disincentive for farmers who were required to report intended biotech plantings to government authorities very early.
- Of the three countries which cultivated the 'Amflora' potato in 2010 the Czech Republic had the biggest acreage: 150 hectares compared to 80 hectares in Sweden and 15 hectares in Germany.

### Poland:

- The hectareage planted to Bt maize in Poland in 2010 was the same as in 2009, and is estimated at 3,000 hectares.

### Slovakia:

- In 2010, the hectareage of Bt maize in Slovakia was 1,248 hectares compared with 875 hectares in 2009.
- The increase of 43% was a result of several factors, including, in particular, the continued satisfaction of farmers with Bt maize.

### Romania:

- Romania grew its first 350 hectares of Bt maize in 2007 which increased to 7,146 hectares in 2008.
- Following the severe economic recession, the biotech maize area in 2009 receded to 3,243 hectares and to a further 822 hectares in 2010. Onerous reporting requirements for farmers regarding intended planting details, and

decreased total plantings of hybrid maize are partly responsible for the lower hectareage in 2010.

- Up until 2006, Romania successfully grew over 100,000 hectares of RRsoybean, but on entry to the EU in January 2007, was forced to discontinue the use of any extremely cost-effective technology because RRsoybean is not approved for commercialized planting in the EU.
- It is noteworthy that because conventional soybeans yield substantially less than RRsoybean, the hectareage of soybeans has dropped precipitously in Romania from 177,000 hectares in 2006 to 46,000 in 2008.
- Romania is estimated to have enhanced farm income from RRsoybean of US\$45 million in the period 2001 to 2008 after which it had to discontinue planting when Romania became an EU member state.

#### Sweden:

- It is noteworthy that in 2010, Sweden became the first Scandinavian country to grow biotech crops.
- Sweden officially grew 80 hectares of the biotech potato 'Amflora' for seed multiplication and commercial production.

#### Germany:

- In 2010, Germany resumed planting biotech crops commercially when it approved the commercial production of the newly EU-approved biotech potato 'Amflora' on 15 hectares in 2010.
- Germany discontinued the cultivation of Bt maize after 2008 when it planted 3,173 hectares, up 18% from the 2,685 hectares planted in 2007.