13.3 million farmers cultivate GM crops

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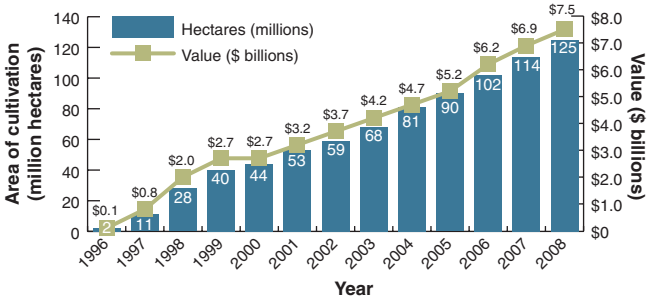
Last year 13.3 million farmers in 25 countries planted transgenic crops, over 90% of them in developing nations. It was also the year the second billionth acre of transgenic crop was planted—only 3 years after the first billionth acre was achieved. In Canada and the US, Monsanto (St. Louis) successfully introduced a new biotech crop, glyphosate-resistant sugar beet. Latin America, India and China continued to rapidly adopt GM varieties; 7 of 27 European Union countries cultivated the only transgenic crop approved there (*Bt* maize); France illegally froze its commercial plantings. Stacked traits continue to rise in popularity.

Historical global area of transgenic crops

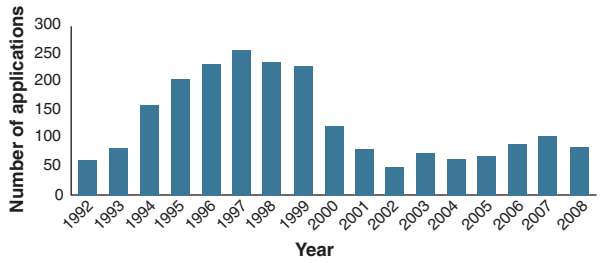
The area planted with transgenic crops rose by ~10% in 2008, with their estimated value climbing by $750 million.



Source: International Service for the Acquisition of Agri-Biotech Applications, Cropnosis

EU transgenic crop field trials

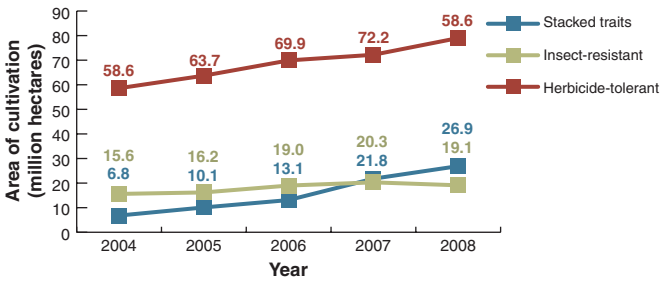
The number of field trials decreased partly as a result of the freeze on planting in France.



Source: European Union, GMO Compass

Global area by transgenic trait

Stacked traits continued to grow in 2008, with 10 countries planting ~27 million hectares.



Source: International Service for the Acquisition of Agri-Biotech Applications

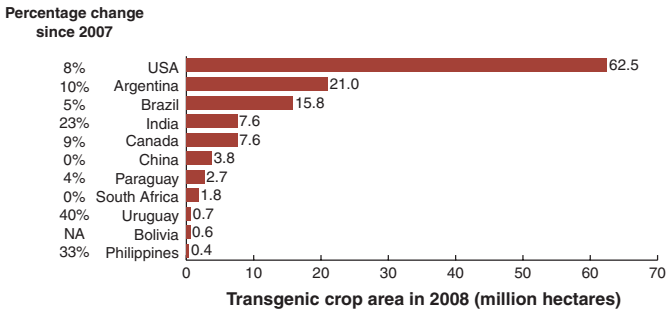
2008 transgenic crop approvals in US and EU

Country	Company	Description	Approval type
US	Pioneer Hi-bred International	98140/Maize resistant to glyphosate and ALS-inhibiting herbicides	Food/feed
US	Syngenta Seeds	MIR162/maize resistant to lepidopteran pests via expression of Bt Vip3Aa	Food/feed
US	Monsanto	MON89034/maize resistant to lepidopteran pests via expression of Bt Cry1A.105 and Cry2Ab2	Environment
US	Pioneer Hi-bred International	DP356043/Soybean resistant to glyphosate and ALS-inhibiting herbicides	Environment
EU	Bayer CropScience	LLCotton25/Cotton resistant to glyphosate herbicide via expression of phosphinothricin acetyl transferase	Food/feed
EU	Aventis CropScience	A2704-12/Soybean resistant to glyophosate herbicide via expression of phosphinothricin acetyl transferase	Food/feed
EU	Monsanto	MON89788/Glyphosate-tolerant soybean	Food/feed

Source: agbios.com

Global area of biotech crops by country

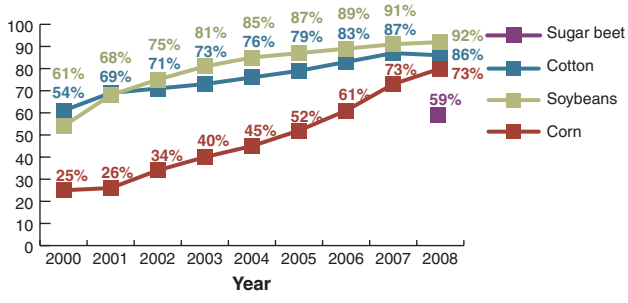
Bolivia became the ninth South American country to plant transgenic crops; India's GM acreage continued to grow, equalling Canada's.



Source: International Service for the Acquisition of Agri-Biotech Applications

Transgenic crops as a share of total US crops

Herbicide-tolerant sugar beet constituted 59% (258,000 hectares) of the US crop in its first year of adoption.



Source: National Agricultural Statistics Service

Andrew Marshall is Editor, Nature Biotechnology