

4. Current state of cultivation and trade with GM products

Dramatic increase in transgenic crop area of 1.7 million hectares in 1996 to 160 million hectares in 2011, representing the fastest adoption of a culture in the modern history of agriculture. Of the 29 countries on the list of producers, five of them represent approximately 90% of all GM crops worldwide: USA (43%), Brazil (19%), Argentina (15%), India (6.6%) and Canada (6.5%). (Figure 1). While 29 countries have biotech crops in 2010, 31 countries out of 60 in 1996 have allowed the importation of GM crops as food for humans, animals and environment (James, 2011). Corn is a plant that has received the most licenses (65) is followed by cotton (39), rape (15), potatoes and soybeans (14 each). Current culture of transgenic plants focuses on two characteristics: tolerance to herbicides, which represents more than 75% of the total (glyphosate tolerant) and eliminate insect pests, especially plant (Figure 2). The largest areas are planted with transgenic soybean, cotton, corn, canola (Figure 3).

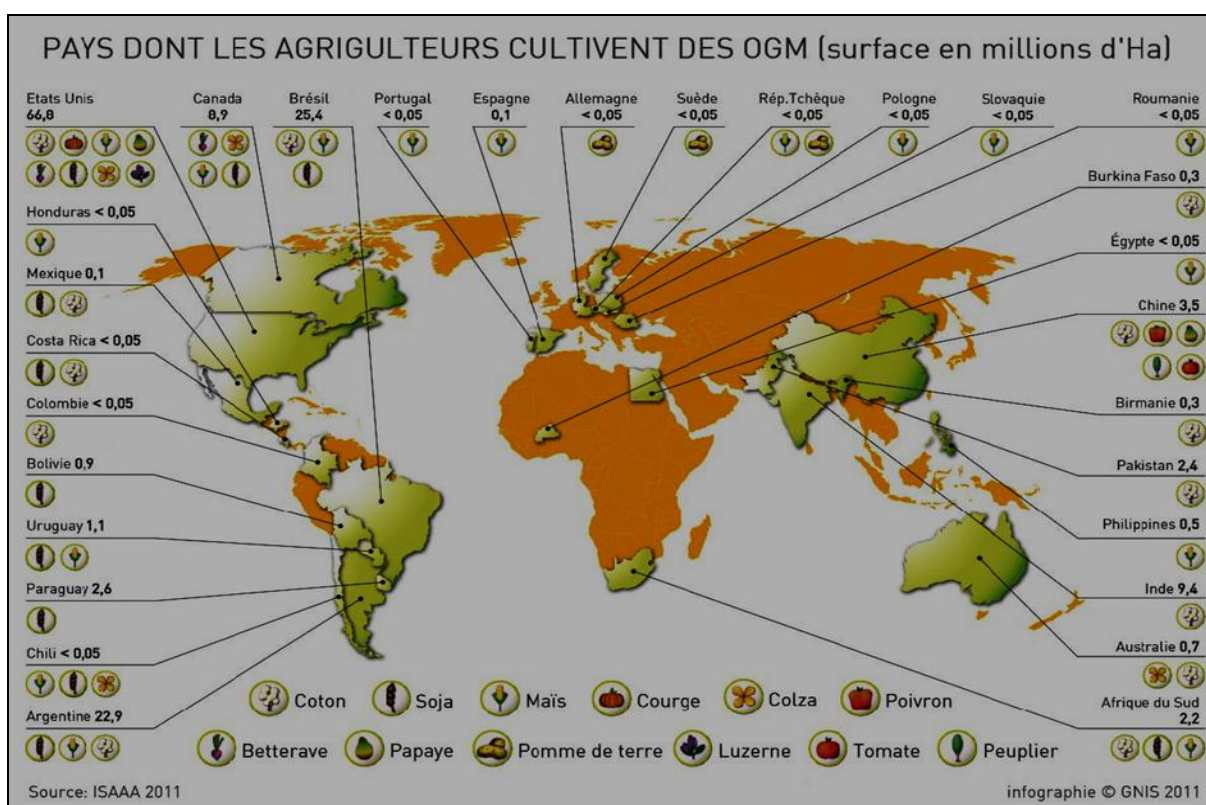


Figure.1 Situation level of GMO crops. Source: International Service for the Acquisition of Agri-biotech Applications, ISAAA 2011 : <http://www.ogm.org>

In our country, soybeans and corn were the only commercially grown GM plants (Cionga, 2005). In 2001, our country was cultivated with transgenic soy approximately 15,000 ha, reaching over 50,000 ha in 2004. Romania remained under the category of countries with more than 50,000 hectares of transgenic crops in subsequent years (James, 2008), Roundup Ready soybeans continued to hold the largest proportion in this category. According to data in 2005, Roundup Ready soybean occupies an area of about 86,000 ha that area are expected to reach 126,000 hectares by the end of 2006, representing about 10% of the total agricultural area of the country. During this period there were over 1,100 transgenic soybean growers, spread in 31 counties, the most important areas are located in Brăila (~ 31,000 ha), Calarasi (~ 24.000ha), Ialomita (~ 20,000 ha), Timis (~ 17,000 ha) and Iasi (~ 6,000 ha).

