



The European Association for Bioindustries



The Facts : Why EU farmers should also be allowed to choose to grow GM crops

Introduction

All over Europe, farmers are facing difficult times. They are confronted with 4 major challenges:

- 1) Keeping farming profitable, while production costs are steadily increasing
- 2) Growing more food in a more sustainable and environmentally friendly way, on the same if not reduced area of land
- 3) Adapting to the effects of climate change, including less productive land, new plant diseases, higher energy costs and scarcer water supplies
- 4) Remaining competitive at a global scale, while being deprived of modern methods available to many other farmers worldwide.

Farmers are struggling to meet these combined challenges while also trying to optimise inputs of fuel, fertiliser, pesticides and water. New technologies, such as genetic modification, are helping farmers to respond to these demands. That is why 13.3 million farmers around the world now choose to grow GM crops¹; making agricultural biotech one of the fastest adopted agricultural innovations ever.

The advantage is clear – 13 years of global GM crop cultivation have demonstrated their benefits.

In all EU Member States, however, farmers are being denied access to the tools necessary to meet the challenges they face, due to the EU's dysfunctional authorisation process. Some approvals for cultivation of GM crops have been blocked for a decade and the backlog of new approvals increases every year. Today, European farmers only have access to one GM trait in one single crop, and in a number of countries even this is not accessible, due to politically motivated bans or other measures. While these bans have been assessed by the EU



Food Safety Authority (EFSA) as having no scientific justification, they prevent European farmers from planting the very same GM crops that are harvested each year by their global counterparts – who are reaping the benefits.

Many farmers in the EU would like the choice to use this technology, even in countries where cultivation of GM crops is rendered impossible and where destruction of GM crop trials is widespread. Europe's political leaders have a responsibility to acknowledge the challenging times farmers face. Political leaders should respond by offering them the freedom to choose the same tools as those available to their global competitors.

The six facts presented here should compel decision-makers to act now in support of their farmers' right to choose.

¹ ISAAA Executive Summary 2008
<http://www.isaaa.org/resources/publications/briefs/39/executivesummary/default.html>

FACT 1 Every year, more European farmers grow GM crops, where they are allowed to

In 2008, for the thirteenth consecutive year, the global area of cultivated biotech crops increased further, reaching 125 million hectares worldwide with growth continuing at 9.4%. In Europe, despite an illegal ban in France (and now including five other EU countries), GM crops are planted by more farmers every year. A pattern is developing - in countries where European farmers are allowed to grow GM, they do so.

Evolution of GM maize cultivation in Europe (hectares)²

Country	2006	2007	2008	Increase 2007-2008
 Spain	53,667	75,148	79,269	+ 5 %
 France	5,000	21,147	Ban	2006 to 2007 increase was + 300%
 CZ Republic	1,290	5,000	8,380	+ 68 %
 Portugal	1,250	4,500	4,851	+ 8 %
 Germany	950	2,285	3,173	+ 39 %
 Slovakia	30	900	1,900	+ 111 %
 Romania	137,000	350	7,146	+ 1942 %
 Poland	100	320	3,000	+ 838 %
Total :	67,187	110,077	107,719	

FACT 2 European farmers grow GM crops because they offer significant economic advantages

Today, only one type of GM, an insect-resistant maize, or so-called “Bt maize”, has been officially approved by the EU for farmers to grow. Other traits for maize and other GM crops (sugar beet, soybean, rapeseed, potato and cotton) have been awaiting EU approval for up to 10 years and have meanwhile been approved and grown elsewhere in the world.

Bt maize is identical to conventional maize but it has a selective built-in protection against an insect pest known as the European corn borer. This destructive pest is present in southern and middle Europe and is gradually making its way further north. Where present, it can seriously impair yields and is capable of destroying up to 20% of a maize crop. Farmers choose Bt maize because of its resistance to the corn borer, resulting in increased crop yields of +10% with profitability improvements of between 12% and 21%. According to a study by the Commission’s Joint Research Centre, farmers growing GM insect-resistant maize in the EU have on average earned an additional € 186 per hectare (range of € 25 - € 201/ha)³.

On a global level, in 2008, 125 million hectares of biotech crops were cultivated by 13.3 million farmers in 25 countries. Some 90% (12.3 million) of these were small, resource-poor farmers in developing countries. Biotech crops have contributed to substantial economic benefits worth € 34 billion from 1996 to 2007. About 44% of these benefits were due to substantial yield gains and 56% to reduction in production costs⁴.

FACT 3 Given the choice, many more European farmers would grow GM crops

Opinion polls of farmers across Europe show that they want to make their own decisions about growing GM crops⁵. In 2008, in **Italy**, a survey of maize farmers in Lombardy, the country’s main maize growing area, showed that 67% said they would plant GM maize if allowed to. In the **United Kingdom**, a poll of farmers who grew GM crops as part of test trials showed that 95% would grow them if allowed to do so; of 24,000 farmers polled overall in the UK in 2008, almost half were in favour while only 15% opposed GM. In **Poland**, 85% of farmers agreed they should have the option of planting approved GM crops. In **Spain**, of 350 maize farmers asked, 83% felt farmers should have the option to plant. In countries such as France and Hungary, where bans are currently in force, farmer opinion is also supportive. In **France**, a 2007 survey of 400 maize farmers showed that those cultivating 62% of the maize area felt they should have the option to plant. In **Hungary** of 250 maize farmers asked, 53% of respondents said they wanted to plant GM maize.

² Data taken from James, Clive. 2008. Global Status of Commercialized Biotech/GM Crops: 2008. ISAAA Brief No. 39. ISAAA: Ithaca, NY.

³ Adoption and performance of the first GM crop introduced in EU agriculture: Bt maize in Spain; Manuel Gómez-Barbero, Julio Berbel, Emilio Rodríguez-Cerezo, June 2008 <http://ftp.jrc.es/EURdoc/JRC37046.pdf>

⁴ ISAAA Executive Summary 2008 <http://www.isaaa.org/resources/publications/briefs/39/executivesummary/default.html>

⁵ EuropaBio Press Release, 13 million farmers around the world can't be wrong: It's time to give European farmers the same choice http://www.europabio.org/PressReleases/green/090212_Final_Right_to_choose.pdf

FACT 4 Many farmers are blocked from benefiting from GM and other innovative crop cultivation

There are a number of GM crops stuck in the EU regulatory system that could boost yield and reduce costs of production in Europe. Worse still for European farmers, GM cultivation has been banned in six EU Member States (Austria, France, Germany, Greece, Hungary and Luxembourg). The data on which these bans are based have been rejected as non-scientific by EFSA, which reconfirmed the safety of the GM maize.

Furthermore, many European countries that theoretically allow cultivation of GM crops have coexistence and monitoring requirements or administrative hurdles in place, intended to make growing either difficult or impossible. In addition, GM fields are frequently vandalized and destroyed by anti-GM activists without adequate protection being offered by the authorities.

Europe also has a zero-tolerance rule for technically unavoidable GM seed in non-GM seed batches (adventitious presence). As a result, it has become almost impossible to import any seeds from countries that produce GM seeds, so severely limiting European farmer's ability to innovate with new non-GM varieties.

All of these points are evidence of the unscientific and undemocratic diminishing of farmer's freedom to choose what they grow. While policy makers are encouraging European farmers to respond to global market trends as the EU opens up its agriculture markets, unfounded political decisions on GM simultaneously deny farmers access to the very tools needed to compete on a global scale.

FACT 5 European farmers grow GM crops because they offer real environmental advantages

GM crops offer farmers environmental advantages in several key areas.

- 1) Increasing yields by 6% - 30% on the same amount of land avoids the need to cultivate land which currently provides a haven for biodiversity or is used for conservation.
- 2) More efficient protection against insect damage results in a significant reduction in the need to spray crops.
- 3) Less tillage or ploughing means less fuel use and less CO₂ emissions. In 2007 this resulted in global emission reductions of 14.2 million tons of CO₂, equivalent to 6.3 million fewer cars on the road for one year⁶.
- 4) Mitigation of the impact of climate change by enabling farmers to grow more food, more reliably, in less predictable and harsher climatic conditions.
- 5) Protection of soils from erosion and compaction through less ploughing, with a concomitant conservation of soil moisture.
- 6) Increased water use efficiency with field trials showing that drought-tolerant crops can yield up to 20% more than their non-GM counterparts under the same growing conditions.

FACT 6 Four global trends pointing to more GM crops being grown in the future

The prospect of global and European agriculture increasingly points towards a future including GM. Four key emerging facts support this widely held belief:

- 1) The world, including Europe, needs to produce more food, feed and fuel for a rapidly growing population, and this needs to be done without destroying vast tracts of uncultivated land, much of which constitutes important habitats for preserving biodiversity. GM crops are an important tool for achieving greater yield, with reduced inputs (e.g. fertiliser, fuel and water), from the same amount of land.
- 2) The first generation of GM crops offers many benefits for farmers. The second generation, already being tested, will also offer direct health benefits to consumers. GM crops already produce food and feed containing fewer cancer-causing natural agents, known as mycotoxins. Better, safer and healthier food and feedstuffs, such as crops with an altered oil content and improved nutrient composition, will become available in the coming years.
- 3) Acceptance of GM food in Europe is growing. A recent EU Commission-funded study concluded that where GM products are available in shops, consumers will purchase them⁷. Food producers and retailers are finding it increasingly costly and difficult to access GM-free products, and are focusing on a future that includes GM food, which they know is not far away.
- 4) Europe imports food and feed from producing countries that grow more GM hectares and varieties every year. This puts European farmers in an ironic and untenable position where they cannot grow the imported GM crops that Europeans are consuming every day.

⁶ ISAAA Executive Summary 2008 <http://www.isaaa.org/resources/publications/briefs/39/executivesummary/default.html>

⁷ Do European Consumers Buy GM Foods? European Commission (14.10.08) <http://www.kcl.ac.uk/schools/biohealth/research/nutritional/consumerchoice/downloads.html>



What needs to change to help European farmers – six solutions

For European farmers to be able to compete fairly with global competitors and to produce more and better food and feed, they need to have fair and equal access to approved GM crops. Political leaders should:

- 1) Ensure a science-based approach towards GM and put an end to the existing illegal GM cultivation bans
- 2) Ensure that the agreed timeframes on GM crop approvals are properly applied
- 3) Publicly acknowledge the importance of biotech and its growing role in sustainable agriculture
- 4) Establish pragmatic labelling thresholds for the technically unavoidable presence of GM seeds in seed lots
- 5) Establish a pragmatic approach towards low levels of GM products in traded commodities
- 6) Make sure countries' coexistence measures are proportionate, non discriminatory and workable

What EU Farmer's Representatives think

“Farmers must respond to increased demand for food. We need access to modern technologies that help us to remain competitive. At the same time we have to protect our fragile environment”

*Pekka Pesonen, Secretary General of COPA-COGECA
and a speaker at the roundtable on climate change in EP 27/01/09.*

“European farmers are increasingly interested in using new technologies such as agricultural biotechnology to meet the multiple challenges of feeding a growing population whilst minimizing the impact on the environment. Europe's political leaders should respond to the demands of their farmers and offer them the freedom to choose the same tools available to their competitors globally”

*James Ede of the National Farmers Union of the United Kingdom.
Press conference in Brussels 12/02/09.*

EuropaBio's mission is to promote an innovative and dynamic biotechnology-based industry in Europe.

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