Portugal's Biotech Standing Report

Approved By:
Robert Hanson, Agricultural Attaché

Prepared By:
Diogo Machado Mendes, Agricultural Specialist

Report Highlights:

The area planted to GM corn is expected to increase markedly in Portugal this year, despite adverse regulations and judicial decisions. This is due to a higher overall corn area, severe corn borer attacks in the previous campaign, and to the suspension of new applications to agri-environmental payments in 2010. The new Government that started functions on June 21, 2011 includes a newly formed Ministry of Agriculture, Sea, Environment, and Land Planning. The possible policy changes that the new Government may implement as well as the results from the inclusion of Agriculture and Environment under the same Ministry are awaited by various stakeholders in the country.
Section I. Executive Summary:

Portugal is the second largest producer of GM crops in the EU. The area under GM corn is expected to rise by about 50% in 2011, based on the mandatory notifications submitted by farmers. This is due to a higher overall corn area, severe corn borer attacks in the previous campaign, and to the suspension of new applications to agri-environmental payments in 2010.

This development also marks a recovery from the previous campaign when a number of reasons contributed to the lower GM corn area. These were, according to a report published by the Directorate General for Agriculture and Rural Development (DGADR):

- delays in sowing due to unfavorable weather conditions that caused farmers to choose varieties with shorter FAO cycles that are not GM
- the scarcity of seed of some of the GM varieties sought by the farmers
- the framework established in the regulation of application of the Rural Development Program (PRODER) action 2.2.1 “Alteration of Agricultural Production Modes” in what concerns the use of GM seeds

The latter are commonly known as agri-environmental payments and the implementing order that regulates them in Portugal establishes that “the amount of support paid to production areas where genetically modified organisms are grown shall be zero”. This fact alone has a very important impact on farmers’ planting decisions.

The new Government that started functions on June 21, 2011 includes a newly formed Ministry of Agriculture, Sea, Environment, and Land Planning. The possible policy changes that the new Government may implement as well as the results from the inclusion of Agriculture and Environment under the same Ministry are awaited with anticipation by various stakeholders in the country.

Of particular relevance is the cultivation dossier, an area where Portugal has been represented in the EU Council by the former Ministry of Environment that voted in favor of the Commission’s proposal to pass to Member States the responsibility of allowing, restricting or banning the cultivation of GM varieties on part or all of their territory.
Section II. Plant Biotechnology Trade and Production:

1. Commercial Planting

Currently the only varieties of GE organisms planted for commercial use in Portugal are those derived from the genetically modified organism MON810. This GMO contains a gene from the bacteria *Bacillus thuringiensis* that expresses a toxin poisonous to the insect pests *Ostrinia nubilalis* and *Sesamia nonagrioides* that attack the ears of the corn as well as the stalks.

The National Association of Corn and Sorghum Producers (ANPROMIS) in its July bulletin estimates total corn area in Portugal to reach 137,411 ha in 2011, up from 132,488 ha in 2010. These numbers are based on yet unpublished farmer declarations to the Portuguese Financial Institute of Agriculture and Fisheries (IFAP). Diagram 1 shows a breakdown of these declared areas by Region on mainland Portugal in 2010.

Diagram 1. Breakdown of corn area by Region based on farmer declarations for 2010

![Diagram 1: Breakdown of corn area by Region](image)

Source: IFAP

The total area cultivated with grain corn in Portugal is forecasted by the National Institute of Statistics (INE) to rise by 5% in 2011 from the previous season to just above 100,000 ha (Diagram 2).

Diagram 2. Total grain corn area in Portugal
The planting notifications submitted to the Ministry of Agriculture show that the area under GM Bt corn in 2011 will rise by about 50% and be above 7,300 ha (Diagram 3). The reasons for this are:

- the overall corn area increase
- severe corn borer attacks in 2010
- the suspension of new applications to Agri-environmental payments in 2010 (more below)

The increase in area was especially important Alentejo, a region where the average farm area is higher and where the costs with the coexistence measures can more easily be borne by farmers.

According to the DGADR some farmers declared their intention to plant GM corn in the previous season and then decided not to do it for the following reasons:

- Delays in sowing due to unfavorable weather conditions that caused farmers to choose varieties with shorter FAO cycles that are not GM;
- The scarcity of seed of some of the GM varieties sought by the farmers;
- The framework established in the regulation of application of the Rural Development Program (PRODER) action 2.2.1 “Alteration of Agricultural Production Modes” in what concerns the use of GM seeds. These are commonly known as Agri-environmental payments.

Diagram 3 - GM corn area in Mainland Portugal by Region
The implementing order that regulates agro-environmental payments in Portugal (Portaria n.229-B/2008 of 6 March 2008) establishes in its Article 12, Paragraph 11, that “the amount of support paid to production areas where genetically modified organisms are grown shall be zero”. This fact alone has a very important impact on farmers’ planting decisions. The fact that applications to these payments have been suspended in 2010 due to the financial stress the country is passing through at present is seen as one of the main reason for farmers to decide to plant more GM corn in 2011. However this situation may be reversed in the future.

2. Research and Development – Field Trials of GM Crops

The last official field trials of GM crops ended in 2010. There were no requests for more field trials this year and as such there are currently no official trials going on.

3. Imports of Biotech Plant Products

a. Seed

Portugal sources some of the GM corn seed directly from the U.S. and Chile but the majority is U.S. produced seed imported after repacking in France and other Member States.

Besides the varieties included in the Common Catalogue in 2011, the Decision 2004/842/EC allows for the commercialization of seed varieties that are in the process of inclusion in the catalogue of a Member State and to which a temporary sales authorization has been issued. This authorization is granted by the
national authority of the country where the inscription process is running, it is limited in time, quantity, and the countries where it can be sold. The following varieties have been issued a temporary authorization for sale in Portugal during the 2010 campaign: Accua YG, Kavala YG, KXA8641, Talca YG, totaling 7,672kg.

a. Grain

Portugal benefits from a reduced-tariff quota for the import of 500,000 tons of corn from third countries with an import duty that cannot exceed 50 euro per ton. This agreement, known as “Abatimento” was negotiated under the U.S.-EU Enlargement Agreement in 1986 as compensation for the loss of the Iberian Peninsula grain market. However in the last 3 years Portugal has not been able to fill this quota with imports from the U.S. because of the very slow approval mechanism for new GM varieties in the EU and its asynchronicity with the U.S. mechanism.

Section III. Plant Biotechnology Policy:

1. Regulation

a. Traceability and labeling

The coming into force of Regulation (EC) N. 1830/2003 and Regulation (EC) N.65/2004 made it mandatory for the rules of traceability and labeling to be observed. This encompasses seed of GM varieties and food and feed made from GE organisms. The packages with seed of GM varieties must display an orange colored label as the one shown in Fig. 1 in which it is stated “Variedade Geneticamente Modificada” and the code identifying the GMO that originated it.

![Fig.1 – Label used in packages of seed of genetically modified varieties](source: DGADR)

On what concerns traceability, farmers must communicate in writing to the operator purchasing their products that the product is derived from a GMO and the single identifying code of that GMO. They are required to keep copies of those documents for a period of five years.

a. Rules for Coexistence
Following the Commission Recommendation 2003/556/EC, the Portuguese Decreto-Lei n.160/2005 includes a set of rules and obligations to farmers, farmers’ organizations, and seed companies and it establishes the remit and responsibility of the Government Authorities. New technical requirements are defined for the growing of each species, so as to reduce to a minimum the accidental or unavoidable presence of GM material in non-GM crops. It is taken into account the characteristics of the organic production mode and the production of special quality products.

Portugal was one of the first countries to create legislation that recognizes the right of farmers to voluntarily associate and establish both GM Production Zones and Zones Free of GM:

- In **GM Production Zones** farmers are still mandated to fulfill all legal obligations related to farming GM varieties, namely completing training requirements and notifying the State and adjacent farmers about their GM crop farming intentions. However, and except for limit zones, farmers are exempt from applying measures to minimize the accidental presence of GM material, be it through pollen contamination or mechanical mix. In 2010, 21 production zones were active in Portugal, accounting for 46 percent of total biotech corn planted area.

- The initiative to create a **GM Free Zone** can stem from the farmers or from the Municipal Administration. In the latter case, farmers are still required to express their opinion and the process will only progress if farmers give their public consent. The right for an individual farm to be excluded from the free zone is safeguarded. The request for the creation of a GM free zone is then submitted to the respective Regional Directorate for Agriculture and Fisheries (DRAP), who are responsible for the assessment of the process, decision and public dissemination of the decision in the official Journal of the Republic (Diário da República). In October 2007 the Municipality of Lagos was declared a GM free zone.

1. **Recent Policy Issues**
   
   a. **Agriculture and Environment under the same Ministry**

   The new Government that started functions on June 21, 2011 includes the Ministry of Agriculture, Sea, Environment, and Land Planning. The possible changes that may result from the inclusion of Agriculture and Environment in the same Ministry are awaited with anticipation by various stakeholders in the country. This is especially so in the cultivation dossier, an area where Portugal was represented in the EU Council by the former Environment Ministry that voted in favor of the Commission’s proposal to pass to Member States the responsibility of allowing, restricting or banning the cultivation of GE varieties on part or all of their territory.

   b. **Madeira**

   The Portuguese Autonomous Region of Madeira became the first Region of the EU to declare itself a
zone free of the cultivation of genetically modified organisms (GMOs) since the European Commission proposed to confer Member States the freedom to allow, restrict or ban the cultivation of GMOs on part or all of their territory, in July 2010.

The Regional Legislative Decree n.15/2010/M voted on August 13th, 2010 prohibits the introduction in the Region’s territory of any propagating material, whether vegetative or seminal, containing genetically modified organisms, as well as its use in agriculture. The legislator concluded for the impossibility of respecting the technical norms of coexistence between conventional and GMO varieties based on the Region’s natural and socio-economic specificities in the National and European context.

The process started in May 2009 when Portugal notified the European Commission, in accordance with Article 95(5) of the EC Treaty, with a draft Regional Legislative Decree declaring the Autonomous Region of Madeira to be an Area Free of Genetically Modified Organisms. The draft decree was accompanied by the documents with the arguments justifying the declaration of Madeira as an Area Free from GMOs. In its justification, Portugal pointed to agricultural and natural reasons, and specific arguments were focused on agricultural aspects and the protection of biodiversity in Madeira.

The adoption of a decision within the deadline of six months, which is laid down by Article 95(6)(1) of the EC Treaty, would lack scientific support taking in consideration the complexity of the matter and the Commission extended the period to decide until 4 May 2010. The Commission also considered necessary for a scientific risk assessment to be made and it mandated the European Food Safety Authority (EFSA) in September 2009 to assess on the basis of the new evidence provided by Portugal.

On January 27, 2010, EFSA concluded that: “Following investigation of the evidence presented in the Portuguese submission, the EFSA GMO Panel did not identify new scientific information on the environmental or human and animal health impacts of EU approved GM plants. The EFSA GMO Panel therefore concludes that, based on the supporting documents submitted by Portugal, no new scientific evidence, in terms of risk to human and animal health and the environment, was provided that would justify a prohibition of the cultivation of GM plants in the Autonomous Region of Madeira.”

However, socio-economic aspects related to the cultivation of GM plants and the coexistence between cropping systems fall outside the remit of EFSA and are not addressed in the scientific opinion. In the end of the procedure the authorization would be given by the Commission that left the deadline expire in May 2010, thereby tacitly accepting the Portuguese draft decree.

c. Azores

The Regional Government of Azores is also preparing the submission of a request to the Commission to be considered a GM free zone. The Regional Director for Agriculture noted that the European authorities were prepared to discuss this request on the June 21 Environment Council meeting, along with similar requests from different Member States.
The Council’s press release states that “the Council examined progress with a proposal that would allow member states to ban or restrict the cultivation of genetically modified organisms (GMOs) in their territory. Member states are still examining the draft act that would give EU countries the possibility to ban or restrict the cultivation of one or several GMOs in all or part of their territory. In view of the doubts about the conformity of national GMO bans adopted under the proposed legislation with the internal market and WTO rules, some delegations consider that further reflection and analyses are needed.”

Two requests for the experimental cultivation of Bt corn were submitted to the Regional Secretariat for Agriculture in the Azores for the 2011 campaign. The Regional Director confirmed that the experiments were being carried out using certified and EU approved varieties and therefore could not be forbidden. According to the coexistence legislation in force, farmers need to observe the requirements concerning their training, the boundary strips relative to other crops, and the notification of neighbor farmers, all of which are being assessed by the authorities.

At the Regional Parliament level the government has the backing of the Social Democrat (PSD) opposition in pursuing a ban to GMO cultivation in the archipelago. Recently a Member of the Regional Parliament by the PSD accused the socialist government of a lack of commitment in fighting the cultivation of GM crops in the Region affirming that the present legislation would allow these to be stopped.

However a European Member of Parliament by the PSD called for an enlarged debate on the matter and asked the Azorean Regional Government to commission an economic analysis of the two alternatives – lowering the production costs of the milk and beef sectors with the use of GM crops or marketing farm products from a GM free Region.

d. Rice LL62

On 24 July 2010 the Portuguese Parliament approved the Resolution Project 166/XI defending the rejection of the marketing of the glufosinate tolerant genetically modified rice variety LLRice62. This initiative, submitted by the “Bloco de Esquerda” (Left Block Party) and approved unanimously by the Members of Parliament, recommends the Portuguese Government to:

i. manifest to the EU institutions its position of rejection of the marketing of the GMO variety LLRice62

ii. not to allow imports and marketing of this GM rice variety in the national territory, should the EU decide to authorize LLRice62 in the EU space
iii. support the production of conventional rice

The then Minister of Agriculture had previously announced his intention to vote against the introduction in the EU of this rice variety intended for human consumption. The reasons put forward by the Minister relate to scientific fragilities of the variety and also to the protection of Portuguese rice varieties.

This was in spite of the opinion adopted on 30 October 2007 by the GMO Panel of EFSA that “the information available for LLRICE62 addresses the scientific comments raised by the Member States and that LLRICE62 is as safe as its non-GM comparator with respect to potential effects on human and animal health or the environment. Therefore the GMO Panel concludes that LLRICE62 is unlikely to have any adverse effect on human and animal health or on the environment in the context of its intended uses”.

The European Union is still analyzing the application from Bayer CropScience GmbH for the placing on the market of the GM rice variety LLRICE62 for food and feed uses, import and processing, under Regulation (EC) No 1829/2003.

Portugal is the fourth largest rice producer in the EU, having produced 170,000 tons of rice in 2010 on 29,000 ha of land.

e. Court Rulings

Two decisions by Portuguese Courts have influenced the state of affairs of GMO crops in Portugal. The first was a Court decision in favor of the continuing of the variety tests at the State Research Center of Escaropim, and the second was a Court decision to make the Ministry of Agriculture disclose data about farmers who have planted GMO crops:

**Variety tests at the State Research Center**
In June 2010, the Administrative and Fiscal Court of Leiria ruled as inadmissible the protective order submitted by the Municipality of Salvaterra de Magos and two NGOs, requesting the annulment of the decision taken by the Ministry of Environment authorizing tests with GMO corn NK603. This authorization had been granted within the scope of Directive 2001/18/EC of the European Parliament and of the Council of 12 March 2001, part B. These official trials were held to assess varieties with a view to their inscription in the National Catalogue of Varieties.

**Disclosure of information on farmers who planted GMO varieties**
The Administrative Court of Lisbon decided on May 12, 2010 not to rectify the Appeal n.169/10-1 submitted by the former Ministry of Agriculture, Rural Development, and Fisheries (MADRP). In this way MADRP was compelled to hand in all information requested by the plaintiff regarding the
notifications of growing of GMO corn varieties between the years 2005 and 2008, under Decreto-Lei n.º 160/2005, of 21 September 2005. The information supplied included complete identity of the farmer, land register number, seed batch number, among other detailed information. This decision contributed to many farmers desisting of planting GM varieties of corn in 2010 and the subsequent lower sown area in that year.

Section IV. Plant Biotechnology Marketing Issues:

Citizens in General
A recent Eurobarometer survey shows that Portuguese citizens are less worried with the use of genetically modified organisms in farming than the EU average citizen. From a list of environmental issues, 13 per cent of the Portuguese respondents included the use of GM organisms in farming in their top five worries against an EU-27 average of 19 per cent.

Farmer Associations
Farmers Associations do not have a common position on GM cultivation. The Portuguese Farmer Confederation (CAP) tends to support GM technology as a tool to increase farmer efficiency. The National Confederation of Agriculture (CNA) has a clearer position and is against the cultivation and trade of GM crops. Some corn producers with supply contracts to food companies are reticent to the use of GM varieties because of the expensive and hard to implement segregation measures.

Industry
Portugal is a net importer of soybeans and corn for feed. Animal production and feed producer associations are generally in favor of cultivation and increasing imports of GM feed materials. The Federation of the Food Industry Associations (FIPA) is also in favor of GMO cultivation and trade, having participated and sharing the conclusions of the recently held seminar “Biotechnology for the Portuguese Agriculture” (below).

NGOs
There are organized anti-GM NGOs with an important presence in the media and influence in Public Administration bodies.

Section V. Plant Biotechnology Capacity Building and Outreach:

Mandatory Training
The training of farmers that wish to cultivate GM varieties is mandatory in Portugal. Farmers participate in training actions developed by seed companies or farmers’ organizations. These training actions follow a program established by DGADR. These actions include general notions of national and EU legislation about GMO and about the main characteristics of GM insect tolerant corn. In 2010, four training actions were carried out and a total of 64 farmers have attended. A total of 1,385 farmers have
received training since 2005.

Civil Society Initiatives
The Center for Biotechnology Information (CIB) organized the seminar “Biotechnology for the Portuguese Agriculture” on July 7, 2011 which counted with the participation of more than 90 farmers, agronomists, seed traders, food producers and researchers from Portugal, Spain, and Brazil. The conclusions of the meeting included recognition of the importance of GM varieties in world agriculture; the acknowledgement that Portuguese farmers wish to use more of these varieties, seen by the 50% increase in Bt corn area in 2011; and the advantages of GM varieties in fighting climate change and increasing food security. It was also concluded that it is fundamental to implement the development of common evaluation and approval systems, which are synchronous with other countries and which will allow avoiding recurrent problems related with the availability of raw materials that are fundamental to the activity of the food, agriculture, and livestock industries in Europe.

Section VI. Animal Biotechnology:
There is no reported use or research into genetically modified animals for agricultural use in Portugal.

Annex A – Legal background regulating GMOs in Portugal

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12
<table>
<thead>
<tr>
<th><strong>EU Sectoral Legislation</strong></th>
<th><strong>Commission Recommendations</strong></th>
<th><strong>National Legislation</strong></th>
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<tbody>
<tr>
<td></td>
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<td>Decreto-Lei n.º 160/2005, of 21 September 2005, regulating the cultivation of genetically modified varieties with the aim of ensuring its coexistence with conventional and organic crops</td>
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<td>Portaria n.º 904/2006, of 4 September 2006, establishing the necessary conditions and procedure for the creation of zones free of genetically modified varieties</td>
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<td>Decreto-Lei n.º 387/2007, of 28 November 2007, creating the Compensation Fund destined to compensate economic damages from the accidental contamination with genetically modified varieties</td>
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