

GM Inspectorate

Seed Monitoring News

July 2008

This is the first issue of a newsletter intended for seed companies invited to participate in the monitoring programme for adventitious GMOs in conventional seed that is run by CSL on behalf of Defra.

The newsletter brings together information on GMOs from a number of sources that we regularly access, and summarises issues relevant to seed companies operating in England. We hope the format is accessible and interesting. We anticipate six-monthly publication.



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Seed monitoring programme 2007-08

The 2007/2008 programme has just been completed. The crops included in the current audit programme are *Brassica napus*, *Brassica rapa*, soya and maize including sweetcorn. During 2007/2008, 12 detailed audits and 38 basic audits were carried out. Summary tables detailing the outcomes of the programme will be published early July on the GM Inspectorate website. Under the revised programme, following the audit visit seed companies receive a report which summarises the discussions and identifies areas of concern, should any exist, and any recommended actions. Feedback on the reports has been positive to date, and a number of companies have reported that they have implemented changes as a result of the recommendations.

Timeline for the seed audit programme 2008/09

The programme for 2008/09 is currently underway. A flow chart describing how the audit process operates and what you can expect from us and when, is available on our website at <http://www.gm-inspectorate.gov.uk/seedAuditProgramme/Timingofseedaudits.cfm>.

Marketing of authorised GM seeds

The present situation is that two GM maize lines have been authorised for cultivation in the EU - Monsanto's MON810 and Bayer's T25. To date only varieties of maize line MON810, modified for resistance to the European Corn Borer (*Ostrinia nubilialis*) have been placed on the EU Common Catalogue of varieties. There are currently 74 varieties of maize line MON810 on the catalogue. In principle these varieties could be marketed in the UK provided they were correctly labelled. However, the modified varieties are all late-maturing and suited to cultivation in areas where corn borer is present. They are not suitable for cultivation in the shorter UK growing season.

Thresholds for adventitious GM presence in seeds

The European Commission held a forum in April at which they communicated the results of a stakeholder consultation exercise on the impact of setting thresholds for adventitious GM presence in seeds. No announcement was made as to when a threshold might be proposed. The Commission will publish the presentation in due course and we will create a link to this from the GM Inspectorate website.

European Corn Borer: not a maize pest in the UK



GM crop cultivation

GM crop area increases in 2007

In 2007 the area of genetically modified (GM) crops planted worldwide increased by 12%, to reach 114.3 million hectares (m Ha) (up from 102 m Ha in 2006). The number of countries planting biotech crops increased to 23, comprising 11 industrial countries and 12 developing countries. They were, in descending order of GM area: USA, Argentina, Brazil, Canada, India, China, Paraguay, South Africa, Uruguay, Philippines, Australia, Spain, Mexico, Colombia, Chile, France, Honduras, Czech Republic, Portugal, Germany, Slovakia, Romania and Poland. Chile and Poland are newcomers to commercial GM crop production, with Chile growing over 25,000 ha of commercial biotech crops (soya, maize and rapeseed) for "seed export", and Poland growing Bt maize for the first time.

Source International Service for the Acquisition of Agri-Biotech Applications, ISAAA (<http://www.isaaa.org/>) and GMO Compass (http://www.gmo-compass.org/eng/agri_biotechnology/gmo_planting/257.global_gm_planting_2006.html)

GM alfalfa update

Following deregulation, GM glyphosate tolerant (Roundup Ready or RR) alfalfa (*Medicago sativa*; lucerne) was planted on 80,000 ha of land in the US in 2006. In March 2007 a US District Court ruled that the potential environmental impacts of the GM plant had not been adequately documented, and the US Department of Agriculture announced that RR alfalfa could no longer be grown commercially. A future decision regarding commercial cultivation will be issued only after the completion of an environmental assessment, although growers who had already purchased RR alfalfa seed were allowed to plant, harvest and sell their crop.

Following the legal pronouncement the cultivation area of GM alfalfa decreased to 20,000 ha in 2007. Meanwhile, New Zealand has implemented import controls stipulating that each alfalfa seed lot must be tested for the presence of unapproved GM events. Currently RR alfalfa is only approved for commercial cultivation in Canada and Japan.

For further information see:

<http://www.aphis.usda.gov/newsroom/content/2007/03/allalfarr.shtml> and <http://www.biosecurity.govt.nz/faq/term/899>

GM rapeseed contamination in Germany

In late 2007, German authorities discovered the presence of GM events (seeds tolerant to the herbicide glufosinate) in conventional seeds of oilseed rape. About 1500 hectares had already been planted with the contaminated seed and German authorities ruled for the plants to be destroyed as no GM oilseed rape is approved for commercial cultivation in the EU. The origin of the contamination is unclear.

<http://www.agrarheute.com/index.php?re did=189465>

Switzerland approves GM wheat trials

The Swiss National Agency for the Environment, Forests and Landscape conditionally approved three field trials for genetically modified wheat. The trials will be conducted from 2008 to 2010 and involve GM wheat lines resistant either to blight, or to several fungal pathogens. Research will focus on the effectiveness of the resistance as well as on questions of biological safety.

http://www.seedtoday.com/articles/GM_Wheat_Trials_Approved_for_Switzerland-48480.html

Record area of GM maize in EU

The cultivation of genetically modified plants in the EU continued to increase in 2007, with a total area of almost 110,000 ha of MON810 maize planted. In Spain an estimated 25% of the current maize production is MON810 varieties; in France the area of GM maize has increased more than forty fold in two years, resulting in around 21,200 hectares being cultivated in 2007. However, in 2008 the French government invoked a safeguard clause, which prohibits planting of GM maize.

EU GM maize cultivation 2007

Country	GM maize (ha)
Spain	75,150
France	21,200
Czech Republic	5,000
Portugal	4,500
Germany	2,685
Slovakia	900

For further information see: http://www.gmo-compass.org/eng/agri_biotechnology/gmo_planting/191.eu_growing_area.html

GM creeping bentgrass update

The application by Monsanto and The Scotts Company for deregulation of glyphosate tolerant (RR) creeping bentgrass (*Agrostis stolonifera*) in the USA is undergoing the approvals process. In September 2004 APHIS announced its decision to prepare an Environmental Impact Statement to examine potential environmental effects associated with commercialisation. When complete, APHIS will open its assessment to public consultation. Most commentators agree that GM bentgrass still has some way to go before it appears on US golf courses.

http://www.aphis.usda.gov/brs/fedregister/BRS_20051012a.pdf

This publication is also available to download at <http://www.gm-inspectorate.gov.uk/seedAuditProgramme/SeedMonitoringNews.cfm>

If you do not wish to receive this newsletter please email gm-inspectorate@csl.gov.uk or call 01904 462223

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Next issue:

- In addition to GM crop news, we will explain the risk assessment methodology behind the seed audit programme.

Visit the GM Inspectorate website: www.gm-inspectorate.gov.uk