

Safety Assessment RP608 Genetically Modified GHB614 Cotton

Area of research interest: Research projects

Project status: Completed Project code: RP608

Conducted by: Regulated Products Risk Assessment Unit FSA and Risk Assessment Team FSS

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Summary

Following the submission of application RP608 to the Food Standards Agency (FSA) under assimilated Regulation (EC) No. 1829/2003 from BASF Agricultural Solutions Seed US LLC, (New Jersey, USA), FSA/FSS (Food Standards Scotland) have undertaken a safety assessment on genetically modified GHB614 cotton. To support the safety assessment by FSA/FSS, the Advisory Committee on Novel Foods and Processes (ACNFP) provided advice to FSA/FSS on the data submitted for the renewal of authorisation for the genetically modified cotton GHB614, as outlined in this document. The advice of the ACNFP has been taken into account in this safety assessment which represents the opinion of FSA/FSS on the safety of genetically modified GHB614 cotton.

Cotton is primarily used worldwide for its lint, however raw, unprocessed cottonseed may be fed to ruminants as meal, or the seed can be processed into oil. Cottonseed oil has been in use since the 19th century and is considered to be a premium quality oil. GHB614 cotton is modified to express the 2mEPSPS (5-enolpyruvylshikimate 3-phosphate synthase) protein. The 2mepsps gene sequence has been modified by introducing two mutations to the epsps gene from maize which decreases the binding affinity of glyphosate, conferring tolerance to glyphosate herbicides.

GHB614 cotton has previously been authorised for food and feed uses and is most commonly used as animal feed. The scope of this application is for the renewal of the authorisation for placing on the market GHB614 cotton products for food and feed uses, import, and processing. The application does not include cultivation and therefore no GHB614 cotton will be grown in the UK.

In providing its advice on the safety of GHB614 cotton for food and feed, the ACNFP considered data provided as part of application RP608 (post-market environmental monitoring reports, evaluation of systematic literature searches, additional studies performed by or on behalf of the applicant, and updated bioinformatics analyses), additional information provided by the applicant, and analyses and reports from outside contractors. The ACNFP assessed these data for possible new hazards, modified exposures, or new scientific uncertainties identified during the authorisation period and not previously assessed in the context of the original application (EFSA GMO Panel 2009).

FSA/FSS concludes, based on ACNFP advice, that there is no evidence in the renewal application RP608 for new hazards, modified exposures, or new scientific uncertainties that would change the conclusions of the original risk assessment on genetically modified cotton GHB614 (EFSA GMO Panel 2009).

Safety assessment

PDF

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