

TECHNICAL REPORT OF EFSA

Overall opinion of the European Food Safety Authority in accordance with Articles 6 and 18 of Regulation (EC) No 1829/2003 on application (reference EFSA-GMO-CZ-2006-33) for the placing on the market of the genetically modified insect resistant and glyphosate tolerant maize MON 88017 X MON 810 for food and feed uses, import and processing under Regulation (EC) No 1829/2003 from Monsanto¹

Report of the GMO Unit

(Question No EFSA-Q-2006-020)

Issued on 21 July 2009

SUMMARY

This document provides an overall opinion of the European Food Safety Authority on genetically modified maize MON 88017 X MON 810 in accordance with the requirements of Articles 6 and 18 of Regulation (EC) No 1829/2003.

The scope of this application EFSA-GMO-CZ-2006-33 is for food and feed uses², food and feed containing, consisting of or produced from maize MON 88017 x MON 810. The scope does not include cultivation.

The Scientific Panel on Genetically Modified Organisms (EFSA GMO Panel) has carried out the scientific assessment of genetically modified maize MON 88017 x MON 810 in accordance with Articles 6(6) and 18(6) of Regulation (EC) No 1829/2003 and considers that the genetically modified maize MON 88017 x MON 810 is unlikely to have any adverse effect on human and animal health or on the environment in the context of its intended uses. The Community Reference Laboratory considers the method validated as fit for the purpose of regulatory compliance. The certified reference materials of maize MON 88017 x MON 810 can be accessed at the Joint Research Centre of the European Commission, Institute for Reference Materials and Measurements and at the American Oil Chemists' Society (AOCS-USA).

The information presented for the Cartagena Protocol, the labelling proposal and the monitoring plan are in line with Regulation (EC) No 1829/2003.

¹ For citation purposes: Technical report of EFSA prepared by the GMO Unit on application EFSA-GMO-CZ-2006-33 for the placing on the market of the genetically modified insect-resistant and glyphosate tolerant maize MON 88017 X MON 810 for food and feed uses, import and processing under Regulation (EC) No 1829/2003 from Monsanto. *EFSA Scientific Report* (2009) 329, 1-8

² This does include GM maize MON 88017 x MON 810 for import and processing as designated under part C of Directive 2001/18/EC.

Under the terms of the Regulation (EC) No 1829/2003, the overall opinion fulfils the requirements of Articles 6 and 18 for the placing on the market of genetically modified maize MON 88017 x MON 810.

Key words: overall opinion, GMO, maize, *Zea mays*, MON 88017 x MON 810, insect tolerant, glyphosate tolerant, food and feed uses, food safety, feed safety, human and animal health, environment, Regulation (EC) No 1829/2003.

TABLE OF CONTENTS

Summary	1
Table of Contents	3
Background	4
Terms of reference	4
Acknowledgements.....	5
Results.....	6
1. Applicant.....	6
2. Designation and specification of the product.....	6
3. Scientific opinion of the EFSA GMO Panel	6
4. Cartagena Protocol	6
5. Labelling	6
6. Method for detection	7
7. Certified reference materials.....	7
8. Post-market environmental monitoring	7
9. Member States' Comments	7
Conclusions	7
List of annexes.....	8

BACKGROUND

On 3 January 2006, the European Food Safety Authority (EFSA) received from the Competent Authority of the Czech Republic an application for authorisation of GM maize MON 88017 x MON 810 (MON-88Ø17-3 x MON-ØØ81Ø-6) submitted by Monsanto within the framework of Regulation (EC) No 1829/2003 on genetically modified food and feed (reference EFSA-GMO-CZ-2006-33).

The scope of application EFSA-GMO-CZ-2006-33 covers genetically modified maize MON 88017 x MON 810 for food and feed uses, food and feed containing of or consisting from MON 88017 x MON 810.

In accordance with Articles 5 and 17 of Regulation (EC) No 1829/2003, EFSA informed the Member States and the European Commission and made the summary of the application publicly available on the EFSA website³ on 06 March 2006. EFSA initiated a completeness check of the application to check compliance with the requirements laid down in Articles 5 and 17 of Regulation (EC) No 1829/2003. On 25 November 2005, the Community Reference Laboratory (CRL) confirmed receipt of the detection method, samples and control samples in accordance with Articles 5 and 17 of Regulation (EC) No 1829/2003. EFSA declared the application valid on 21 February 2007 and started the clock in accordance with Articles 6 and 18 of Regulation (EC) No 1829/2003.

From that date, EFSA has endeavoured to respect a time limit of 6 months in giving its overall opinion (Articles 6(1) and 18(1)). EFSA made the valid application available to Member States and the European Commission. Following the procedure laid down in Articles 6.4 and 18.4 of Regulation (EC) No 1829/2003, EFSA consulted the Member States. In this context, the Member States risk assessment bodies, as well as the national competent authorities under Directive 2001/18/EC, were given three months after the date of receipt of the valid application (*i.e.* until 21 May 2007) within which to make their opinion known.

Making use of the provisions under Articles 6(2) and 18(2), EFSA requested additional information from the applicant and the clock was stopped from 26 March 2007 to 08 April 2009⁴.

The overall opinion on application EFSA-GMO-CZ-2006-33 includes the scientific opinion of the Scientific Panel on Genetically Modified Organisms together with the particulars required under Articles 6(5)(a-g) and 18(5)(a-g) of Regulation (EC) No 1829/2003: i) the name and address of the applicant, ii) the designation of the food and its specification, iii) the information required under Annex II to the Cartagena Protocol, iv) the labelling proposal, v) the method for detection, validated by the Community Reference Laboratory, including sampling, identification of the transformation event in the food-feed and/or foods-feeds produced from it, vi) an indication of where appropriate reference materials can be accessed, vii) the monitoring plan and, viii) the Member States' comments submitted during the three-month consultation period.

TERMS OF REFERENCE

The European Food Safety Authority (EFSA) received from the Competent Authority of the Czech Republic an application for authorisation of GM maize MON 88017 x MON 810 (MON-88Ø17-3 x MON-ØØ81Ø-6) submitted by Monsanto within the framework of Regulation (EC) No 1829/2003 on genetically modified food and feed (reference EFSA-GMO-CZ-2006-33). EFSA was requested to

³ <http://registerofquestions.efsa.europa.eu/roqFrontend/questionLoader?question=EFSA-Q-2006-020>

⁴ Request for additional information from the EFSA GMO Panel: requested (1) on 26/03/2007 - received on 10/12/2007, requested (2) on 13/03/2008- received on 16/04/2008, 13/10/2008 and clock restarted on 08/04/2009.

issue an overall opinion in line with the requirements of the Regulation (EC) No 1829/2003 (Articles 6 and 18).

ACKNOWLEDGEMENTS

This technical report was prepared by the GMO Unit. The European Food Safety Authority wishes to thank the members of its staff Christina Ehlert and Karine Lheureux for the preparation of this report.

RESULTS

1. Applicant

The application was submitted by

Monsanto Europe S.A.
Avenue de Tervuren 270-272
B-1150 Brussels
Belgium

Monsanto Company
800 N Lindbergh Boulevard
St Louis, Missouri 63167
USA

2. Designation and specification of the product

The scope of application EFSA-GMO-CZ-2006-33 covers genetically modified maize MON 88017 x MON 810 for food and feed uses⁵. The scope does not include cultivation.

Maize MON 88017 x MON 810 was produced by crosses between maize inbred lines containing MON 88017 and MON 810 events to combine resistance to certain coleopteran (MON 88017 trait) and lepidopteran (MON 810 trait) pests and to confer tolerance to glyphosate (MON 88017 trait).

3. Scientific opinion of the EFSA GMO Panel

The EFSA GMO Panel has carried out the scientific assessment of the genetically modified maize MON 88017 x MON 810 in accordance with Articles 6(6) and 18(6) of Regulation (EC) No 1829/2003 and adopted its scientific opinion on 2 July 2009. The EFSA GMO Panel considered all comments submitted by Member State bodies and where deemed necessary, requested additional information from the applicant before finalising its scientific assessment. The EFSA GMO Panel concludes that the information available for GM maize MON 88017 x MON 810 addresses the scientific comments raised by the Member States and considers that the genetically modified maize MON 88017 x MON 810 is unlikely to have any adverse effect on human and animal health or the environment in the context of its intended uses (Annex A).

4. Cartagena Protocol

The information presented in the application and as required under Annex II of the Cartagena Protocol on Biosafety is in line with the scientific opinion of the EFSA GMO Panel (Annex B).

5. Labelling

The labelling proposal provided in the application is in line with the requirements in Regulation (EC) No 1829/2003. On the basis of the scientific opinion of the EFSA GMO Panel that GM maize MON 88017 x MON 810 is compositionally and phenotypically equivalent to its non-genetically modified

⁵ This does include GM maize MON 88017 X MON 810 for import and processing as designated under part C of Directive 2001/18/EC.

maize except for the introduced traits, EFSA is of the opinion that there is no need for a specific labelling in accordance with Articles 13(2)(a) and 25(2)(c) (Annex C).

6. Method for detection

The Joint Research Centre (JRC) as Community Reference Laboratory for the GM Food and Feed has carried out an in-house verification study to assess the performance of two quantitative event-specific methods on the hybrid maize line MON 88017 x MON 810 which combines the MON 88017 and MON 810 transformation events. The two methods have been previously validated on single trait events, to detect and quantify each event in maize samples. The Community Reference Laboratory considers that the methods are applicable in accordance with the requirements of Annex I-2.C.2. to Commission Regulation (EC) No 641/2004 (Annexes D1, D2a, D2b).

7. Certified reference materials

The certified reference materials of genetically modified maize MON 88017 can be accessed at the American Oil Chemists' Society (AOCS-USA) (Annex E1).

The certified reference materials of maize MON 810 (ERM-AD413) can be accessed at the Joint Research Centre of the European Commission, Institute for Reference Materials and Measurements (Annex E2).

8. Post-market environmental monitoring

The EFSA GMO Panel evaluated the post-market environmental monitoring plan proposed by the applicant. The EFSA GMO Panel considered that the monitoring plan provided by the applicant is in line with the intended uses for the GMO (Annex F).

9. Member States' Comments

The EFSA GMO Panel has addressed the comments submitted by the Member States during the three-month consultation period (Annex G).

CONCLUSIONS

Under the terms of the Regulation (EC) No 1829/2003, the overall opinion fulfils the requirements of Articles 6 and 18 for the placing on the market of genetically modified maize MON 88017 x MON 810.

LIST OF ANNEXES

- Annex A: Scientific opinion of the EFSA GMO Panel (maize MON 88017 x MON 810)
- Annex B: Cartagena Protocol (maize MON 88017 x MON 810)
- Annex C: Labelling (maize MON 88017 x MON 810)
- Annex D1: Validation report (maize MON 88017 x MON 810)
- Annex D2a: Validated method (maize MON 88017)
- Annex D2b: Validated method (maize MON 810)
- Annex E1: Certified reference materials report (maize MON 88017)
- Annex E2: Certified reference materials report (maize MON 810)
- Annex F: Post-market environmental monitoring plan (maize MON 88017 x MON 810)
- Annex G: Member States' comments (maize MON 88017 x MON 810)