

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 EFSA-GMO-RX-MON810_[8-1b/20-1b] for renewal of the authorisation of existing products produced from insect resistant genetically modified maize MON810_[8-1b/20-1b], under Regulation (EC) No 1829/2003 from Monsanto¹

Report of the GMO Unit

(Question No EFSA-Q-2007-150)

Issued on 22 June 2009

SUMMARY

This document provides an overall opinion of the European Food Safety Authority on genetically modified maize MON810_[8-1b/20-1b] in accordance with the requirements of Articles 6 and 18 of Regulation (EC) No 1829/2003.

The scope of this application covers the continued marketing of existing food additives produced from maize MON810, and feed produced from maize MON810 (feed materials, feed additives) which were lawfully placed on the market in the Community before the date of entry into force of Regulation (EC) No 1829/2003. The scope does not include cultivation.

The Panel on Genetically Modified Organisms (EFSA GMO Panel) has carried out one scientific assessment of genetically modified maize MON810 covering all scopes (MON810_[8-1a] [20-1a] [8-1b/20-1b]) in accordance with Articles 6(6) and 18(6) of Regulation (EC) No 1829/2003 and considers that the genetically modified maize MON810 is unlikely to have any adverse effect on human and animal health or on the environment in the context of its intended uses. This also applies to the products which are the subject of the present application. For the scope cultivation, the EFSA GMO Panel also concludes that maize MON810 is unlikely to have any adverse effect on the environment in the context of its intended uses, especially if appropriate management measures are put in place in order to mitigate possible exposure of non-target Lepidoptera. Moreover, the EFSA GMO Panel advises that pest resistance management strategies continue to be employed.

The Community Reference Laboratory considers the method validated as fit for the purpose of regulatory compliance. The certified reference materials of maize MON810 can be accessed at the Joint Research Centre of the European Commission, Institute for Reference Materials and Measurements.

The information presented for the labelling proposal is 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-RX-MON810_[8-1b/20-1b] for renewal of the authorisation of existing products produced from insect resistant genetically modified maize MON810_[8-1b/20-1b], under Regulation (EC) No 1829/2003 from Monsanto. *EFSA Scientific Report* (2009) 313, 1-8.

Under the terms of the Regulation (EC) No 1829/2003, the overall opinion fulfils the requirements of Articles 6 and 18 for the renewal of authorisation of genetically modified maize MON810_[8-1b/20-1b].

Key words: overall opinion, GMO, maize (*Zea mays*), MON810, insect resistant, Cry1Ab, food safety, feed safety, human and animal health, environment, Regulation (EC) No 1829/2003, Directive 2001/18/EC, Directive 90/220/EEC, renewal, existing products

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BACKGROUND

On 29 June 2007, the European Food Safety Authority (EFSA) received from the European Commission an application for renewal of the authorisation of existing products produced from insect-resistant genetically modified maize MON810_[8-1b/20-1b] (MON-ØØ81Ø-6) submitted by Monsanto within the framework of Regulation (EC) No 1829/2003 on genetically modified food and feed (reference EFSA-GMO-RX-MON810_[8-1b/20-1b]).

The scope of this application covers the continued marketing of existing food additives produced from maize MON810, and feed produced from maize MON810 (feed materials, feed additives) which were lawfully placed on the market in the Community before the date of entry into force of Regulation (EC) No 1829/2003. The scope does not include cultivation.

In accordance with Articles 5 and 17 of Regulation (EC) No 1829/2003, EFSA informed the Member States and made the summary of the application publicly available on the EFSA website² on 3 July 2007. 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 18 May 1999, the Community Reference Laboratory (CRL) confirmed receipt of samples and control samples in accordance with Articles 5 and 17 of Regulation (EC) No 1829/2003. EFSA declared the application valid on 29 January 2008 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 29 April 2008) 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 24 April 2008 to 7 April 2009³.

The EFSA overall opinion on application EFSA-GMO-RX-MON810 includes one scientific opinion of the Panel on Genetically Modified Organisms (EFSA GMO Panel) covering all scopes (MON810_[8-1a] [20-1a] [8-1b/20-1b]) 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 labelling proposal, iv) 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, v) an indication of where appropriate reference materials can be accessed and vi) the Member States' comments on MON810_[8-1b/20-1b] submitted during the three-month consultation period.

TERMS OF REFERENCE

EFSA received from the European Commission an application, submitted by Monsanto under Articles 8(4) and 20(4) of Regulation (EC) No 1829/2003, for the renewal of authorisation of existing products derived from maize MON810 (EFSA-GMO-RX-MON810_[8-1b/20-1b]) for food additives produced from

² <http://registerofquestions.efsa.europa.eu/roqFrontend/questionLoader?question=EFSA-Q-2007-150>

³ Request for additional information from EFSA-GMO Panel: requested (1) on 24/04/2008 - received on 15/05/2008, requested (2) on 22/07/2008 - received on 30/09/2008, requested (3) on 12/11/2008 - received on 05/12/2008, requested (4) on 11/02/2009 - received on 27/02/2009, and clock restarted on 07/04/2009.

maize MON810, and feed produced from maize MON810 (feed materials, feed additives) which were notified according to Articles 8(1)(a) and 20(1)(a) of Regulation (EC) No 1829/2003. EFSA was requested to 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./N.V.
Avenue de Tervuren 270-272
B-1150 Brussels
Belgium

Monsanto Company
800 N. Lindbergh Boulevard
St. Louis, Missouri 63167
U.S.A.

2. Designation and specification of the product

The scope of this application covers the continued marketing of existing food additives produced from maize MON810, and feed produced from maize MON810 (feed materials, feed additives) which were lawfully placed on the market in the Community before the date of entry into force of Regulation (EC) No 1829/2003. The scope does not include cultivation.

Genetically modified maize MON810 expresses a Cry1Ab insecticidal protein which confers protection against lepidopteran target pests such as the European corn borer (*Ostrinia nubilalis*) and species belonging to the genus *Sesamia*.

3. Scientific opinion of the EFSA GMO Panel

The EFSA GMO Panel has carried out one scientific assessment of the genetically modified maize MON810 covering all scopes (MON810^[8-1a] ^[20-1a] ^[8-1b/20-1b]) in accordance with Articles 6(6) and 18(6) of Regulation (EC) No 1829/2003 and adopted its scientific opinion on 15 June 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 MON810 addresses the scientific comments raised by the Member States and considers that GM maize MON810 is unlikely to have any adverse effect on human and animal health or the environment in the context of its intended uses. For the scope cultivation, the EFSA GMO Panel also concludes that GM maize MON810 is unlikely to have any adverse effect on the environment in the context of its intended uses, especially if appropriate management measures are put in place in order to mitigate possible exposure of non-target Lepidoptera. Moreover, the EFSA GMO Panel advises that pest resistance management strategies continue to be employed (Annex A).

4. Cartagena Protocol (not applicable)

Due to the scope of the application, there are no requirements for a Cartagena Protocol.

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 MON810 is compositionally and phenotypically equivalent to its non-genetically modified 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 GM Food and Feed has carried out a collaborative study to assess the performance of a quantitative event-specific method to detect and quantify the MON810 transformation event in maize DNA. The summary of the report was published on 10 March 2006. The validity of the method was verified and confirmed by the Community Reference Laboratory in June 2009. The Community Reference Laboratory considers that the method is applicable to the control samples provided, in accordance with the requirements of Annex I-2.C.2. to Commission Regulation (EC) No 641/2004 (Annexes D1, D2).

7. Certified reference materials

The certified reference materials of maize MON810 (ERM-AD413) can be accessed at the Joint Research Centre of the European Commission, Institute for Reference Materials and Measurements (Annex E).

8. Post-market environmental monitoring (not applicable)

Due to the scope of the application, there are no requirements for a post-market environmental monitoring plan for maize MON810_[8-1b/20-1b].

9. Member States' Comments

The EFSA GMO Panel has addressed the comments on GM maize MON810_[8-1b/20-1b] 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 renewal of authorisation of genetically modified maize MON810_[8-1b/20-1b].

LIST OF ANNEXES:

- Annex A: Scientific opinion of the GMO Panel (maize MON810)
- Annex B: not applicable
- Annex C: Labelling (maize MON810_[8-1b/20-1b])
- Annex D1: Validation report, method and extraction (maize MON810)
- Annex D2: Verification report (maize MON810)
- Annex E: Certified reference materials report (maize MON810)
- Annex F: not applicable
- Annex G: Member States' comments (maize MON810_[8-1b/20-1b])