



VKM Report 2023:9

Assessment of genetically modified soybean MON 87701 for food and feed uses, import and processing under Regulation (EC) No 1829/2003 (renewal application EFSA-GMO-RX-021)

Scientific Opinion of the Panel on genetically modified organisms of the Norwegian Scientific Committee for Food and Environment

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ISBN: 978-82-8259-420-2

ISSN: 2535-4019

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Cover photo: Colourbox

Suggested citation: VKM, Monica Sanden, Eirill Ager-Wick, Johanna Bodin, Nur Duale, Anne Marthe Ganes Jevnaker, Kristian Prydz, Volha Shapaval, Ville Erling Sipinen and Tage Thorstensen (2023). Assessment of genetically modified soybean MON 87701 for food and feed uses, import and processing under Regulation (EC) No 1829/2003 (renewal application EFSA-GMO-RX-021). Scientific Opinion of the Panel on genetically modified organisms – food and feed. VKM Report 2023:9, ISBN: 978-82-8259-420-2, ISSN: 2535-4019. Norwegian Scientific Committee for Food and Environment (VKM), Oslo, Norway.

Assessment of genetically modified soybean MON 87701 for food and feed uses, import and processing (renewal application EFSA-GMO-RX-021) under regulation (EC) No 1829/2003 of the European Parliament and of the Council of 22 September 2003 on genetically modified food and feed

Authors of the opinion

The authors have contributed to the opinion in a way that fulfils the authorship principles of VKM (VKM, 2019). The principles reflect the collaborative nature of the work, and the authors have contributed as members of the VKM Panel on genetically modified organisms.

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Summary

Event MON 87701 is a genetically modified soybean developed via *Agrobacterium tumefaciens* transformation. MON 87701 plants contain the transgene *cry1Ac* which encodes the protein Cry1Ac. The protein Cry1Ac provides resistance against specific lepidopteran pests.

The scientific documentation provided in the renewal application (EFSA-GMO-RX-021) for soybean MON 87701 is adequate for risk assessment, and in accordance with EFSA guidance on risk assessment of genetically modified plants for use in food or feed. The VKM GMO panel does not consider the introduced modifications in soybean MON 87701 to imply potential specific health or environmental risks in Norway, compared to EU-countries. The EFSA opinion is adequate also for Norwegian considerations. Therefore, a full risk assessment of event MON 87701 was not performed by the VKM GMO Panel.

Sammendrag

MON 87701 er en genmodifisert soya utviklet ved transformasjon av planteceller ved hjelp av *Agrobacterium tumefaciens*. MON 87701 uttrykker transgenet *cry1Ac* som koder for proteinet Cry1Ac. Proteinet gjør planten resistent mot enkelte planteskadegjørere innen sommerfuglordenen, Lepidoptera.

Søkers vitenskapelige dokumentasjon for den genmodifiserte soyaen er dekkende for risikovurdering, og i samsvar med EFSA retningslinjer for risikovurdering av genmodifiserte planter til bruk i mat eller fôr. De genetiske endringene i MON 87701 tilsier ingen økt helseeller miljørisiko i Norge sammenlignet med EU-land. EFSAs risikovurdering er derfor tilstrekkelig også for norske forhold. Ettersom det ikke har blitt identifisert særnorske forhold som gjelder egenskaper ved MON 87701, har VKMs GMO panel ikke utført en fullstendig risikovurdering av soyaen.

Background as provided by the Norwegian Food Safety Authority and the Norwegian Environment Agency

The Norwegian Food Safety Authority (NFSA) and the Norwegian Environment Agency (NEA) have assigned VKM to perform assessments of genetically modified organisms (GMOs) and derived products thereof, for which there are sought approval of authorisation to the European market under the Regulation (EC) No 1829/2003 of the European Parliament and of the Council of 22 September 2003 on genetically modified food and feed. VKM is requested to perform assessments for all GMO applications made accessible through the EFSA Document Management System (DMS), where the main focus should be on potential health or environmental risks specific to Norway compared to the EU.

1 Assessment of genetically modified soybean MON 87701 (renewal application EFSA-GMO-RX-021)

1.1 Comments during the EFSA scientific consultation-period

When EFSA submits an application for scientific consultation with a three-month commenting deadline, VKM shall initiate the scientific assessment. From the application is submitted for scientific consultation until EFSA has published its Scientific Opinion (6.5 months + the period when 'the clock stops') VKM should:

- Use this period to assess the scientific quality of the documentation presented in the application. Possible lack of essential information and other relevant scientific literature should be addressed. The application must be in compliance with Regulation (EU) No. 503/2013 and adhere to EFSA guidance (EFSA 2010, 2011) for risk assessment of genetically modified organisms.
- Provide comments to EFSA within the deadline and inform The Norwegian Food Safety Authority (NFSA) and the Norwegian Environment Agency (NEA) no later than two weeks before the deadline. If no comments are provided to EFSA, VKM notifies the NFSA and NEA for the reasons why no comment was submitted.
- Assess whether there are considerations specific to Norway that need to be addressed. If such considerations are identified VKM should immediately inform the NFSA and NEA.

Stage 1

1. Application

EFSA-GMO-RX-021

Genetically modified soybean MON 87701

2. Information related to the genetic modification:

Event MON 87701 is a genetically modified soybean developed via *Agrobacterium tumefaciens* transformation. MON 87701 plants contain the transgene *cry1Ac* which encodes the protein Cry1Ac. Cry1Ac provides resistance against specific lepidopteran pests.

Genes Proteins

cry1Ac Cry1Ac

3. Previously assessed by VKM YES: X NO:

4. If yes in item 3. – comments from VKM:

VKM performed a preliminary risk assessment of MON 87701 in 2010, and a finale assessment in 2015 (application EFSA-GMO-BE-2010-79).

5. Date when EFSA declared the application as valid in accordance with Articles 6(1) and 18(1)

04.05.21

6. Deadline of EFSAs commenting period

04.08.21

7. VKMs assessment of the documentation in the application

Applicants documentation: The VKM Panel on genetically

modified organisms finds the documentation provided as satisfactory for risk assessment.

Additional literature used by VKM: No

Documentation in compliance with Regulation (EU)

No. 503/2013: YES: X NO:

Documentation in accordance with EFSA guidance for risk assessment of genetically modified plants

(EFSA 2010, 2011): YES: X NO:

8. Comments submitted from VKM during

EFSAs public consultation YES: NO: NA: X

9. Date of submission from VKM

NA

10.Comment(s) to EFSA:

11. If NO or NA in item 8. - comments from VKM:

VKM did not assess the application during EFSAs scientific consultation in accordance with the assignment from NFSA and NEA, due to other pressing priorities.

12. Need for national consideration(s)

YES: NO: X

13. If YES in item 12. - comments from VKM:

14. If NO in item 12. – comments from VKM:

The VKM GMO Panel does not consider the introduced modifications in event MON 87701 to imply potential specific health or environmental risks in Norway, compared to EU-countries.

15. VKMs conclusion regarding the application:

The scientific documentation provided in the application is adequate for risk assessment, and in accordance with the EFSA guidance on risk assessment of genetically modified plants for use in food or feed.

1.2 Considerations after EFSAs publication of their scientific opinion – part 1

When EFSA publishes their scientific opinion together with the comments from the member states, VKM shall within a month inform the NFSA and EEA on the following:

- Are EFSA's answer(s) to the Norwegian comments satisfactorily answered, or do VKM still have scientific objections to EFSA's conclusions
- Do EFSA's answers to comments from member states indicate need for follow-up by VKM
- Considerations specific to Norway

Stage 2			
1. Date of publication of EFSA opinion	19.12	.22	
2. VKMs deadline for informing NFSA and EEA	19.01	.23	
3. If YES in item 8. (Table 1)—			
Answer from EFSA has been considered by VKM			
as satisfactory (Annex G)	YES:	NO:	NA: X
4. If YES in item 3 – Comments from VKM:			

5. If NO or NA in item 3 – Comment(s) and further considerations from VKM:

VKM did not assess the application during EFSAs scientific consultation in accordance with the assignment from NFSA and NEA, due to other pressing priorities.

6. Follow-up item 12 (Table 1) – comments from VKM

The VKM GMO Panel does not consider the introduced modifications in event MON 87701 to imply potential specific health or environmental risks in Norway, compared to EU-countries.

7. Considerations from VKM regarding comments from EU member states and other countries under Annex G:

No member state comments imply the need for follow-up by VKM.

1.3 Considerations after EFSAs publication of their scientific opinion – part 2

If VKM's comments regarding health and environmental risk are not considered to be satisfactorily answered by EFSA, VKM shall within three months carry out a risk assessment of these conditions, as well as conditions specific to Norway. VKM shall highlight uncertainty and knowledge gaps. It shall be stated in what area there are knowledge gaps, and whether the uncertainty, quality of the data, and knowledge gaps will affect the conclusion.

Stage 3

- 1. Need for further assessment(s) YES: NO: X
- 2. If YES in item 1. Further considerations from VKM:

3. If NO in item 1. – comments from VKM:

The scientific documentation provided in the application is adequate for risk assessment, and in accordance with the EFSA guidance on risk assessment of genetically modified plants for use in food or feed.

The EFSA opinion is adequate also for Norwegian considerations.

- **4. Need for national considerations** YES: NO: X
- 5. If YES in item 4. comments from VKM:

6. If NO in item 4. - comments from VKM

The VKM GMO Panel does not consider the introduced modifications in event MON 87701 to imply potential specific health or environmental risks in Norway, compared to EU-countries.

7. Need for a risk assessment	YES: NO: X
8. Date of deadline for risk assessment	Not applicable
9. Date of publication of assessment	30.04.23

2 Conclusions

The VKM GMO Panel has performed an assessment of genetically modified soybean MON 87701. MON 87701 plants contain the transgene *cry1Ac* which encodes the protein Cry1Ac. Cry1Ac provides resistance against specific lepidopteran pests.

The VKM GMO panel has assessed the documentation in application EFSA-GMO-RX-021. The scientific documentation provided in the application is adequate for risk assessment, and in accordance with the EFSA guidance on risk assessment of genetically modified plants for use in food or feed.

The GMO panel does not consider the introduced modifications in event MON 87701 to imply potential specific health or environmental risks in Norway, compared to EU-countries. The EFSA opinion is adequate also for Norwegian considerations.

3 References

EFSA (2010) Guidance on the environmental risk assessment of genetically modified plants. Scientific option from the EFSA Panel on Genetically Modified Organisms (GMO). The EFSA Journal 8 (11):1-111 http://www.efsa.europa.eu/en/efsajournal/doc/1879.pdf

EFSA (2011) Guidance for risk assessment of food and feed from genetically modified plants. The EFSA Journal 9(5): 2150. http://www.efsa.europa.eu/en/efsajournal/doc/2150.pdf

EFSA (2022) Assessment of genetically modified soybean MON 87701 for renewal authorisation under Regulation (EC) No 1829/2003(application EFSA-GMO-RX-021) EFSA Journal 2022;20(12):768

https://efsa.onlinelibrary.wiley.com/doi/epdf/10.2903/j.efsa.2022.7683

VKM (2010) Foreløpig helserisikovurdering av genmodifisert soya MON 87701 fra Monsanto Company (EFSA-GMO-BE-2010-79)

https://www.vkm.no/download/18.1b70ef9115d3ac376453254/1500473409737/0fbc3b7532.pdf

VKM (2015) Final health and environmental risk assessment of genetically modified soybean MON 87701

https://www.vkm.no/download/18.2994e95b15cc545071614c4e/1498139673384/bb614a71b8.pdf