



**SCIENTIFIC PANEL
ON GENETICALLY MODIFIED ORGANISMS**

160th Working Group meeting
on Molecular Characterization



19-20 May 2025

14:00 – 18:00 Day 1; 09:00 – 17:00 Day 2

MINUTES - Agreed on 09/06/2025

Location: Parma

Attendees:

- Working Group Members:
Francisco Barro Losada, Josep Casacuberta, Jean-Luc Gallois, Fabien Nogué, Alan H. Schulman and Elisabeth Waigmann
- Hearing Experts¹:
None
- European Commission and/or Member States representatives:
Mara Sgroi
- EFSA:
NIF: Sara Jacchia, Dafni Maria Kagkli, Silvija Kolosevska, Paolo Lenzi, Aleksandra Lewandowska, Nikoletta Papadopoulou, Tommaso Raffaello, Marta Rodrigues

1. Welcome and apologies for absence

The Chair welcomed the participants.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence² and the Decision of the Executive Director on Competing Interest Management,³ EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting and the preparatory meetings listed under agenda item 6. No Conflicts of Interest related to the issues discussed in these meetings have been identified during the screening process and no interests were declared orally by the members at the beginning of these meetings.

4. Agreement of the minutes of the 159th Working Group meeting held on 23 April 2025, via web-conference

The [minutes of the 159th Working Group meeting](#) were agreed on the 12th of May 2025.

¹ As defined in Article 17 of the Decision of the Executive Director concerning the selection of members of the Scientific Committee, the Scientific Panels, and the selection of external experts to assist EFSA with its scientific work: <http://www.efsa.europa.eu/en/keydocs/docs/expertselection.pdf>

² http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

³ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf



5. Scientific topics for discussion

5.1 Soybean 305423xDAS-44406-6 GMFF-2024-29150 ([EFSA-Q-2024-00728](#))

The Working Group discussed the application. Further discussion is needed.

5.2 Soybean COR23134 GMFF-2023-21132 ([EFSA-Q-2024-00570](#))

The Working Group discussed the application. Further discussion is needed.

5.3 Soybean DBN-09004-6 EFSA-GMO-BE-2019-165 ([EFSA-Q-2020-00013](#))

The Working Group discussed the application. No further discussion is needed.

5.4 Soybean MON 94637 GMFF-2023-21116 ([EFSA-Q-2024-00054](#))

The Working Group discussed the application. Further discussion is needed.

5.5 Soybean GMB151 x DAS-44406-6 GMFF-2024-21774 ([EFSA-Q-2024-00330](#))

The Working Group discussed the application. Further discussion is needed.

5.6 EFSA opinion on new developments in biotechnology applied to animals (including synthetic biology and new genomic techniques) M-2018-0205 ([EFSA-Q-2023-00050](#))

The Working Group discussed the mandate. Further discussion is needed.

5.7 Soybean MON 87705 GMFF-2023-21236 ([EFSA-Q-2024-00153](#))

The Working Group discussed the renewal application. Further discussion is needed.

5.8 Maize NK603 GMFF-2023-21250 ([EFSA-Q-2024-00166](#))

The Working Group discussed the renewal application. No further discussion is needed.

5.9 Additional information on AMR genes in RXs - cotton MON 15985 GMFF-2023-21233 ([EFSA-Q-2024-00139](#)); cotton MON 1445 GMFF-2023-21231 ([EFSA-Q-2024-00144](#)); cotton MON 531 x 1445 GMFF-2023-21232 ([EFSA-Q-2024-00146](#)); cotton MON 531 GMFF-2023-21230 ([EFSA-Q-2024-00147](#)); maize MON 87460 GMFF-2023-21251 ([EFSA-Q-2024-00165](#))

The Working Group discussed the renewal applications. Further discussion is needed.

5.10 GMPseq: presentation

EFSA updated the Working Group on the Plant Sequences (GMPSeq) portal and its current application to sequence quality check analysis.

Any Other Business

NGT Activities

The Working Group was updated on the status of the current activities related to NGTs.



6. Preparatory meetings

Since the last MC WG meeting, a preparatory meeting chaired by EFSA staff was held on 8 May 2025.

WG members:

Josep Casacuberta, Fabien Nogué, Elisabeth Waigmann

Next meeting

The next Working Group meeting will be held on 23-24 June 2025, online.

SCIENTIFIC PANEL ON GENETICALLY MODIFIED ORGANISMS

159th Working Group meeting
on Molecular Characterization



23 April 2025

09:00 – 17:00

MINUTES - Agreed on 12-05-2025

Location: Webconference

Attendees:

- Working Group Members:
Francisco Barro Losada, Josep Casacuberta, Jean-Luc Gallois, Fabien Nogué, Alan H. Schulman and Elisabeth Waigmann
- Hearing Experts¹:
None
- European Commission and/or Member States representatives:
Mara Sgroi
- EFSA:
NIF: Sara Jacchia, Silvija Kolosevska, Paolo Lenzi, Aleksandra Lewandowska, Nikoletta Papadopoulou, Pietro Piffanelli, Tommaso Raffaello, Marta Rodrigues

1. Welcome and apologies for absence

The Chair welcomed the participants.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence² and the Decision of the Executive Director on Competing Interest Management,³ EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process. Certain interests were declared orally by the members before the beginning of the meeting. For further details on the outcome of the screening of the Oral Declarations of Interest made at the beginning of the meeting, please refer to the Annex.

4. Agreement of the minutes of the 158th Working Group meeting held on 10-11 March 2025, via web-conference

The [minutes of the 158th Working Group meeting](#) were agreed on the 26st of March 2025.

¹ As defined in Article 17 of the Decision of the Executive Director concerning the selection of members of the Scientific Committee, the Scientific Panels, and the selection of external experts to assist EFSA with its scientific work: <http://www.efsa.europa.eu/en/keydocs/docs/expertselection.pdf>

² http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

³ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf



5. Scientific topics for discussion

- 5.1 Soybean GMB151 x DAS-44406-6 GMFF-2024-21774 ([EFSA-Q-2024-00330](#))**
The Working Group discussed the application. Further discussion is needed.
- 5.2 Maize Bt11 x MIR162 x 1507 x NK603 GMFF-2024-22091 ([EFSA-Q-2024-00558](#))**
The Working Group discussed the application. Further discussion is needed.
- 5.3 Maize Bt11 x MIR162 x MZIR098 x DP4114 x NK603 GMFF-2024-22152 ([EFSA-Q-2024-00635](#))**
The Working Group discussed the application. Further discussion is needed.
- 5.4 New sequencing information on event MON 531 in RXs - cotton MON 15985 GMFF-2023-21233 ([EFSA-Q-2024-00139](#)); cotton MON 531 x 1445 GMFF-2023-21232 ([EFSA-Q-2024-00146](#)); cotton MON 531 GMFF-2023-21230 ([EFSA-Q-2024-00147](#))**
The Working Group discussed the renewal applications. Further discussion is needed.
- 5.5 Additional information on AMR genes in RXs - cotton MON 15985 GMFF-2023-21233 ([EFSA-Q-2024-00139](#)); cotton MON 1445 GMFF-2023-21231 ([EFSA-Q-2024-00144](#)); cotton MON 531 x 1445 GMFF-2023-21232 ([EFSA-Q-2024-00146](#)); cotton MON 531 GMFF-2023-21230 ([EFSA-Q-2024-00147](#)); maize MON 87460 GMFF-2023-21251 ([EFSA-Q-2024-00165](#))**
The Working Group discussed the renewal applications. Further discussion is needed.

6. Any Other Business

Introduction of application Soybean 305423xDAS-44406-6 GMFF-2024-29150 ([EFSA-Q-2024-00728](#)).

The Working Group introduced the application. Further discussion is needed.

NGT Activities

The Working Group was updated on the status of the current activities related to NGTs.

Next meeting

The next Working Group meeting will be held on 19-20 May 2025, in Parma.



Annex

Interests and actions resulting from the Oral Declaration of Interest done at the beginning of the meeting

With regard to this meeting, Dr. Josep Casacuberta and Dr. Francisco Barro declared the following interest: Participation in a publicly funded project aiming at providing scientific advice to the Spanish Ministry of Agriculture (MAPA) on issues related to NGTs and their potential use for agriculture in Spain. In accordance with EFSA's Policy on Independence⁴ and the Decision of the Executive Director on Competing Interest Management⁵, and taking into account the specific matters discussed at the meeting in question, the interest above was not deemed to represent a Conflict of Interest for the two experts concerned.

⁴ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

⁵ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf



SCIENTIFIC PANEL ON GENETICALLY MODIFIED ORGANISMS

158th Working Group meeting
on Molecular Characterization



10-11 March 2025

09:00 – 17:00 Day 1; 09:00 – 13:00 Day 2

MINUTES - Agreed on 26/03/2025

Location: Webconference

Attendees:

- Working Group Members:
Francisco Barro Losada, Josep Casacuberta (Day 1), Jean-Luc Gallois, Simon Moxon (item 5.9), Fabien Nogu  , Alan H. Schulman and Elisabeth Waigmann
- Hearing Experts¹:
None
- European Commission and/or Member States representatives:
Mara Sgroi, Katharina Kosjak (Day 1)
- EFSA:
NIF: Giacomo De Sanctis (item 6.4), Sara Jacchia, Silvija Kolo  evska, Paolo Lenzi, Aleksandra Lewandowska, Nikolett   Papadopoulou, Pietro Piffanelli, Tommaso Raffaello, Marta Rodrigues

1. Welcome and apologies for absence

The Chair welcomed the participants.

2. Adoption of agenda

The agenda was adopted with changes. Items 5.10 and 5.11 were included for discussion.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence² and the Decision of the Executive Director on Competing Interest Management,³ EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process and no interests were declared orally by the members at the beginning of this meeting.

4. Agreement of the minutes of the 157th Working Group meeting held on 20-21 January 2025, via web-conference

The [minutes of the 157th Working Group meeting](#) were agreed on the 31st of January 2025.

¹ As defined in Article 17 of the Decision of the Executive Director concerning the selection of members of the Scientific Committee, the Scientific Panels, and the selection of external experts to assist EFSA with its scientific work: <http://www.efsa.europa.eu/en/keydocs/docs/expertselection.pdf>

² http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

³ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf



5. Scientific topics for discussion

5.1 Soybean COR23134 GMFF-2023-21132 ([EFSA-Q-2024-00570](#))

The Working Group discussed the application. Further discussion is needed.

5.2 Sugar beet KWS20-1 GMFF-2023-14732 ([EFSA-Q-2023-00378](#))

The Working Group discussed the application. No further discussion is needed.

5.3 Soybean MON 94637 GMFF-2023-21116 ([EFSA-Q-2024-00054](#))

The Working Group discussed the additional information received. Further discussion is needed.

5.4 Maize DP202216 x NK603 x DAS-40278-9 GMFF-2022-6232 ([EFSA-Q-2023-00197](#))

The Working Group discussed the additional information received. Further discussion is needed.

5.5 Cotton MON 88913 GMFF-2023-21234 ([EFSA-Q-2024-00131](#))

The Working Group discussed the application. No further discussion is needed.

5.6 Cotton MON 15985 GMFF-2023-21233 ([EFSA-Q-2024-00139](#))

The Working Group discussed the application. Further discussion is needed.

5.7 Cotton MON 531xMON 1445 GMFF-2023-21232 ([EFSA-Q-2024-00146](#))

The Working Group discussed the application. Further discussion is needed.

5.8 Cotton MON 531 GMFF-2023-21230 ([EFSA-Q-2024-00147](#))

The Working Group discussed the application. Further discussion is needed.

5.9 Soybean 305423 GMFF-2024-23560 ([EFSA-Q-2024-00274](#))

The Working Group discussed the application. Further discussion is needed.

5.10 Oilseed rape MON 88302 GMFF-2023-21220 ([EFSA-Q-2024-00133](#))

The Working Group discussed the application. No further discussion is needed.

5.11 Maize NK603 GMFF-2023-21250 ([EFSA-Q-2024-00166](#))

The Working Group discussed the application. Further discussion is needed.

6. Any Other Business

6.1 Introduction of Application Bt11 x MIR162 x 1507 x NK603 GMFF-2024-22091 ([EFSA-Q-2024-00558](#)) and Application Maize Bt11 x MIR162 x MZIR098 x DP4114 x NK603 GMFF-2024-22152 ([EFSA-Q-2024-00635](#))

The Working Group introduced the applications. Further discussion is needed

6.2 Scientific and technical assistance for a regular horizon scanning to assess new scientific data on plants, animals, microorganisms and products thereof obtained by new genomic techniques ([EFSA-Q-2024-00643](#))

The Working Group discussed the mandate. Further discussion is needed.

6.3 Bioinformatic (BI) Analysis



The Working Group discussed the future needs for the risk assessment of BI. Further discussion is needed.

6.4 Risk assessment methodology for stack applications

The Working Group discussed the risk assessment methodology for stack applications. Further discussion is needed.

Next meeting

The next Working Group meeting will be held on 23 April 2025, online.



**SCIENTIFIC PANEL
ON GENETICALLY MODIFIED ORGANISMS**

157th Working Group meeting
on Molecular Characterization



20-21 January 2025

Day 1 09:00 – 17:00; Day 2 09:00 – 13:00

MINUTES - Agreed on 31/01/2025

Location: Webconference

Attendees:

- Working Group Members:
Francisco Barro Losada, Josep Casacuberta, Pilar Cubas, Jean-Luc Gallois, Fabien Nogué, Alan H. Schulman and Elisabeth Waigmann
- Hearing Experts¹:
None
- European Commission and/or Member States representatives:
Mara Sgroi
- EFSA:
NIF: Sara Jacchia, Silvija Kolosevska, Paolo Lenzi, Aleksandra Lewandowska, Nikoletta Papadopoulou, Pietro Piffanelli, Tommaso Raffaello, Marta Rodrigues
FIP: Emmanouil Tsochatzis (item 5.1)

1. Welcome and apologies for absence

The Chair welcomed the participants.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence² and the Decision of the Executive Director on Competing Interest Management,³ EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process and no interests were declared orally by the members at the beginning of this meeting.

4. Agreement of the minutes of the 156th Working Group meeting held on 04 December 2024, via web-conference

The [minutes of the 156th Working Group meeting](#) were agreed on the 16th of December 2024.

¹ As defined in Article 17 of the Decision of the Executive Director concerning the selection of members of the Scientific Committee, the Scientific Panels, and the selection of external experts to assist EFSA with its scientific work: <http://www.efsa.europa.eu/en/keydocs/docs/expertselection.pdf>

² http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

³ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf



5. Scientific topics for discussion

5.1 Oilseed rape NS-B50027-4 EFSA-GMO-NL-2019-160 ([EFSA-Q-2019-00572](#))

The Working Group discussed the application. Further discussion is needed.

5.2 Soybean DBN-09004-6 EFSA-GMO-BE-2019-165 ([EFSA-Q-2020-00013](#))

The Working Group discussed the application. Further discussion is needed.

5.3 Soybean MON 94313 GMFF-2022-6595 ([EFSA-Q-2022-00575](#))

The Working Group discussed the application. Further discussion is needed.

5.4 Maize DP202216 x NK603 x DAS-40278-9 GMFF-2022-6232 ([EFSA-Q-2023-00197](#))

The Working Group discussed the application. Further discussion is needed.

5.5 Soybean MON 87708 GMFF-2023-21237 ([EFSA-Q-2024-00154](#))

The Working Group discussed the application. Further discussion is needed.

5.6 Maize T25 GMFF-2024-22651 ([EFSA-Q-2024-00185](#))

The Working Group discussed the application. Further discussion is needed.

5.7 Cotton GHB614xLLCotton25 GMFF-2024-21890 ([EFSA-Q-2024-00186](#))

The Working Group discussed the application. Further discussion is needed.

Any Other Business

Introduction of Application soybean COR23134 GMFF-2023-21132 (EFSA-Q-2024-00570)

The Working Group introduced the application. Further discussion is needed.

Scientific and technical assistance for a regular horizon scanning to assess new scientific data on plants, animals, microorganisms and products thereof obtained by new genomic techniques ([EFSA-Q-2024-00643](#))

The Working Group discussed the mandate. Further discussion is needed.

Bioinformatic Analyses

The Working Group discussed the assessment of bioinformatic analyses. Further discussion is needed.

Risk assessment methodology for stack applications

The Working Group discussed the risk assessment methodology for stack applications. Further discussion is needed.

Risk assessment considerations for RNAi-based genetically modified plants ([EFSA-Q-2024-00613](#))

EFSA staff provided an update on the progress of the guidance development.

Next meeting

The next Working Group meeting will be held on 10-11 March 2025, online.



**SCIENTIFIC PANEL
ON GENETICALLY MODIFIED ORGANISMS**

156th Working Group meeting
on Molecular Characterization



4 December 2024

09:00 – 17:00

MINUTES - Agreed on 16 December 2024

Location: Parma and Webconference

Attendees:

- Working Group Members:
Francisco Barro Losada, Josep Casacuberta, Pilar Cubas, Jean-Luc Gallois, Simon Moxon (Item 5.1), Fabien Nogué, Alan H. Schulman and Elisabeth Waigmann
- Hearing Experts¹:
None
- European Commission and/or Member States representatives:
Mara Sgroi
- EFSA:
NIF: Sara Jacchia, Silvija Kolosevska, Paolo Lenzi, Aleksandra Lewandowska, Nikoletta Papadopoulou, Pietro Piffanelli, Tommaso Raffaello
MESE: Irene Munoz Guajardo (item 5.5)

1. Welcome and apologies for absence

The Chair welcomed the participants.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence² and the Decision of the Executive Director on Competing Interest Management,³ EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process and no interests were declared orally by the members at the beginning of this meeting.

4. Agreement of the minutes of the 155th Working Group meeting held on 11-12 November 2024, via web-conference

The [minutes of the 155th Working Group meeting](#) were agreed on the 29th of November 2024.

¹ As defined in Article 17 of the Decision of the Executive Director concerning the selection of members of the Scientific Committee, the Scientific Panels, and the selection of external experts to assist EFSA with its scientific work: <http://www.efsa.europa.eu/en/keydocs/docs/expertselection.pdf>

² http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

³ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf



5. Scientific topics for discussion

5.1 Risk assessment considerations for RNAi-based genetically modified plants ([EFSA-Q-2024-00613](#))

The Working Group discussed the guidance. Further discussion is needed.

5.2 Maize DAS1131, GMFF-2021-1530 ([EFSA-Q-2022-00410](#))

The Working Group discussed the application. Further discussion is needed.

5.3 Mandate on "GMA-NGT" ([EFSA-Q-2023-00050](#))

The Working Group discussed the mandate. Further discussion is needed.

5.4 Soybean GMB151 x DAS-44406-6, GMFF-2024-21774 ([EFSA-Q-2024-00330](#))

The Working Group discussed the application. Further discussion is needed.

5.5 Scientific and technical assistance for a regular horizon scanning to assess new scientific data on plants, animals, microorganisms and products thereof obtained by new genomic techniques ([EFSA-Q-2024-00643](#))

The Working Group discussed the mandate. Further discussion is needed.

Any Other Business

NGT Activities

The Working Group discussed the current activities related to NGTs.

BI Analysis

Not discussed due to lack of time.

Next meeting

The next Working Group meeting will be held on 20-21 January 2025, online.



SCIENTIFIC PANEL ON GENETICALLY MODIFIED ORGANISMS

155th Working Group meeting
on Molecular Characterization



11-12 November 2024

14:00-17:00 / 09:00 – 17:00

MINUTES - Agreed on 29/11/2024

Location: Parma and Webconference

Attendees:

- Working Group Members:
Francisco Barro Losada, Josep Casacuberta, Pilar Cubas, Jean-Luc Gallois, Fabien Nogué, Alan H. Schulman and Elisabeth Waigmann
- Hearing Experts¹:
None
- European Commission and/or Member States representatives:
Mara Sgroi, Ilaria Ciabatti (AOB)
- EFSA:
NIF: Michele Ardizzone (Item 5.12), Sara Jacchia, Silvija Kolosevska, Paolo Lenzi, Aleksandra Lewandowska, Nikoletta Papadopoulou, Pietro Piffanelli, Tommaso Raffaello

1. Welcome and apologies for absence

The Chair welcomed the participants.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence² and the Decision of the Executive Director on Competing Interest Management,³ EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting and the preparatory meetings listed under agenda item 6. No Conflicts of Interest related to the issues discussed in these meetings have been identified during the screening process and no interests were declared orally by the members at the beginning of this meeting.

4. Agreement of the minutes of the 154rd Working Group meeting held on 23-24 September 2024, via web-conference

The [minutes of the 154th Working Group meeting](#) were agreed on the 9th of October 2024.

¹ As defined in Article 17 of the Decision of the Executive Director concerning the selection of members of the Scientific Committee, the Scientific Panels, and the selection of external experts to assist EFSA with its scientific work: <http://www.efsa.europa.eu/en/keydocs/docs/expertselection.pdf>

² http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

³ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf



5. Scientific topics for discussion

5.1 Maize DAS1131, GMFF-2021-1530 ([EFSA-Q-2022-00410](#))

The Working Group discussed the application. Further discussion is needed.

5.2 Sugar beet KWS20-1, GMFF-2023-14732 ([EFSA-Q-2023-00378](#))

The Working Group discussed the application. Further discussion is needed.

5.3 Cotton MON 88913, GMFF-2023-21234 ([EFSA-Q-2024-00131](#))

The Working Group discussed the application. Further discussion is needed.

5.4 Oilseed rape MON 88302, GMFF-2023-21220 ([EFSA-Q-2024-00133](#))

The Working Group discussed the application. Further discussion is needed.

5.5 Cotton MON 15985, GMFF-2023-21233 ([EFSA-Q-2024-00139](#))

The Working Group discussed the application. Further discussion is needed.

5.6 Maize MON 87460, GMFF-2023-21251 ([EFSA-Q-2024-00165](#))

The Working Group discussed the application. Further discussion is needed.

5.7 Maize MON 87427, GMFF-2023-21254 ([EFSA-Q-2024-00182](#))

The Working Group discussed the application. Further discussion is needed.

5.8 Maize T25, GMFF-2024-22651([EFSA-Q-2024-00185](#))

The Working Group discussed the application. Further discussion is needed.

5.9 Cotton GHB614xLLCotton25, GMFF-2024-21890 ([EFSA-Q-2024-00186](#))

The Working Group discussed the application. Further discussion is needed.

5.10 Soybean 305423, GMFF-2024-23560 ([EFSA-Q-2024-00274](#))

The Working Group discussed the application. Further discussion is needed.

5.11 Soybean GMB151 x DAS-44406-6, GMFF-2024-21774 ([EFSA-Q-2024-00330](#))

The application was not discussed, due to lack of time.

5.12 Mandate on "GMA-NGT" ([EFSA-Q-2023-00050](#))

The Working Group discussed the mandate. Further discussion is needed.

5.13 Canola LBFLFK, EFSA-GMO-DE-2019-157 ([EFSA-Q-2019-00394](#))

The Working Group discussed the application. Further discussion is needed.

5.14 Self-task mandate of the GMO panel on a scientific opinion regarding protein safety assessment M-2023-00096 ([EFSA-Q-2023-00664](#))

The Working Group discussed the mandate. Further discussion is needed.

Any Other Business

NGT Activities

The Working Group discussed the current activities related to NGTs.



6. Preparatory meetings

Since the last MC WG meeting, a preparatory meeting chaired by EFSA staff was held on 24 October 2024.

WG members: Francisco Barro Losada, Jean-Luc Gallois, Alan H. Schulman.

Next meeting

The next Working Group meeting will be held on 4 December 2024, online.



SCIENTIFIC PANEL ON GENETICALLY MODIFIED ORGANISMS

154th Working Group meeting
on Molecular Characterization



23-24 September 2024

09:00-17:00 / 09:00 – 17:00

MINUTES - Agreed on 09 October 2024

Location: Webconference

Attendees:

- Working Group Members:
Francisco Barro Losada, Josep Casacuberta, Jean-Luc Gallois, Fabien Nogué, Alan H. Schulman and Elisabeth Waigmann
- Hearing Experts¹:
None
- European Commission and/or Member States representatives:
Mara Sgroi (Day 2)
- EFSA:
NIF: Sara Jacchia, Dafni Maria Kagkli, Paolo Lenzi, Aleksandra Lewandowska, Nikoletta Papadopoulou, Pietro Piffanelli, Tommaso Raffaello, Marta Rodrigues, Antonio Fernandez Dumont (item 5.6)
FEEDCO: Rosella Brozzi (item 5.1)

1. Welcome and apologies for absence

The Chair welcomed the participants.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence² and the Decision of the Executive Director on Competing Interest Management,³ EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting and the preparatory meetings listed under agenda item 6. No Conflicts of Interest related to the issues discussed in these meetings have been identified during the screening process.

4. Agreement of the minutes of the 153rd Working Group meeting held on 17-18 June 2024, via web-conference

The [minutes of the 153rd Working Group meeting](#) were agreed on the 08th of July 2024.

¹ As defined in Article 17 of the Decision of the Executive Director concerning the selection of members of the Scientific Committee, the Scientific Panels, and the selection of external experts to assist EFSA with its scientific work: <http://www.efsa.europa.eu/en/keydocs/docs/expertselection.pdf>

² http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

³ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf



5. Scientific topics for discussion

5.1 Update of the Guidance on the characterisation of microorganisms used in the food chain ([EFSA-Q-2022-00249](#))

The Working Group discussed the draft opinion. No further discussion is needed.

5.2 *Komagataella phaffii* soy leghemoglobin, EFSA-GMO-NL-2019-162 ([EFSA-Q-2019-00651](#))

The Working Group discussed the application and finalised the Molecular Characterisation text of the opinion. No further discussion is needed.

5.3 Maize DP51291, GMFF-2021-0071 ([EFSA-Q-2023-00051](#))

The Working Group discussed the application and finalised the Molecular Characterisation text of the opinion. No further discussion is needed.

5.4 Cotton GHB614 x T304-40 x GHB119 x COT102, EFSA-GMO-ES-2017-147 ([EFSA-Q-2017-00505](#))

The Working Group discussed the application. Further discussion is needed.

5.5 Cotton T304-40 x GHB119 x COT102, EFSA-GMO-BE-2018-155 ([EFSA-Q-2018-00809](#))

The Working Group discussed the application. Further discussion is needed.

5.6 Self-task mandate of the GMO panel on a scientific opinion regarding protein safety assessment M-2023-00096 ([EFSA-Q-2023-00664](#))

The Working Group discussed the mandate. Further discussion is needed.

5.7 Soybean MON 94637, GMFF-2023-21116 ([EFSA-Q-2024-00054](#))

The Working Group discussed the application. Further discussion is needed.

5.8 Maize DP202216 x NK603 x DAS-40278-9, GMFF-2022-6232 ([EFSA-Q-2023-00197](#))

The Working Group discussed the application. Further discussion is needed.

5.9 Oilseed rape NS-B50027-4, EFSA-GMO-NL-2019-160 ([EFSA-Q-2019-00572](#))

The Working Group discussed the application. Further discussion is needed.

5.10 Soybean DBN-09004-6, EFSA-GMO-BE-2019-165 ([EFSA-Q-2020-00013](#))

The item was not discussed, due to lack of time.



Any Other Business

Renewal applications

The Working Group discussed overarching aspects in the risk assessment of renewal applications. Further discussion is needed.

Development of risk assessment methodology for RNAi-based GM plants

The Working Group discussed the developmental project. Further discussion is needed.

6. Preparatory meetings

Since the last MC WG meeting, a preparatory meeting chaired by EFSA staff was held on 9 September 2024.

WG members: Francisco Barro Losada, Jean-Luc Gallois, Alan H. Schulman

Next meeting

The next Working Group meeting will be held on 11-12 November 2024, in Parma and webconference.



**SCIENTIFIC PANEL
ON GENETICALLY MODIFIED ORGANISMS**

153rd Working Group meeting
on Molecular Characterization



17-18 June 2024

14:00-17:00 / 09:00 – 16:00

MINUTES - Agreed on 08 July 2024

Location: Parma

Attendees:

- Working Group Members:
Josep Casacuberta, Tamas Dalmay, Philippe Guerche, Jan Hejatko, Fabien Nogué, Nils Rostoks, Jose Juan Sánchez Serrano and Elisabeth Waigmann
- Hearing Experts¹:
Endre Sebestyen (item 5.1)
- European Commission and/or Member States representatives:
Mara Sgroi, Ilaria Ciabatti (item 5.2)
- EFSA:
NIF: Dafni Maria Kagkli, Sara Jacchia, Paolo Lenzi, Nikoletta Papadopoulou, Pietro Piffanelli, Tommaso Raffaello, Marta Rodrigues

1. Welcome and apologies for absence

The Chair welcomed the participants.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence² and the Decision of the Executive Director on Competing Interest Management,³ EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

4. Agreement of the minutes of the 152nd Working Group meeting held on 14 May 2024, via web-conference

The [minutes of the 152nd Working Group meeting](#) were agreed on the 24th of May 2024.

¹ As defined in Article 17 of the Decision of the Executive Director concerning the selection of members of the Scientific Committee, the Scientific Panels, and the selection of external experts to assist EFSA with its scientific work: <http://www.efsa.europa.eu/en/keydocs/docs/expertselection.pdf>

² http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

³ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf



5. Scientific topics for discussion

5.1 Development of the tool for the prediction of RNAi off targets in plants.

The contractor presented the development of the bioinformatic tool for RNAi off-target prediction.

5.2 European Parliament's request for a scientific opinion on recent studies on the proposal for a regulation of the European Parliament and the Council on plants obtained by certain NGTs and their food and feed and amending regulation (EU) 2017/625 ([EFSA-Q-2024-00178](#))

The Working Group discussed the mandate and finalised the draft opinion. No further discussion is needed.

5.3 Maize MON95275, GMFF-2022-5890 ([EFSA-Q-2022-00330](#))

The Working Group discussed the application and finalised the draft opinion. No further discussion is needed.

5.4 Sugar beet KWS20-1 GMFF-2023-14732 ([EFSA-Q-2023-00378](#))

The Working Group discussed the additional information received. Further discussion is needed.

5.5 *P. pastoris* soy Leghemoglobin, EFSA-GMO-NL-2019-162 ([EFSA-Q-2019-00651](#))

The Working Group discussed the application. Further discussion is needed.

5.6 Soybean DBN-09004-6, EFSA-GMO-BE-2019-165 ([EFSA-Q-2020-00013](#))

The Working Group discussed the application. Further discussion is needed.

5.7 Soybean DBN-8002, GMFF-2022-11530 ([EFSA-Q-2023-00103](#))

The item was not discussed as the expected additional information was not received.

5.8 Oilseed rape NS-B50027-4 EFSA-GMO-NL-2019-160 ([EFSA-Q-2019-00572](#))

The Working Group discussed the application. Further discussion is needed.

Any Other Business

Next meeting

The next Working Group meeting will be held on 23-24 September 2024, online.



**SCIENTIFIC PANEL
ON GENETICALLY MODIFIED ORGANISMS**

152nd Working Group meeting
on Molecular Characterization



14 May 2024

09:00 – 16:00

MINUTES - Agreed on 24 May 2024

Location: Webconference

Attendees:

- Working Group Members:
Josep Casacuberta, Pier Sandro Cocconcelli (item 5.1), Tamas Dalmay, Philippe Guerche, Jan Hejatko, Fabien Nogué, Nils Rostoks, Jose Juan Sánchez Serrano and Elisabeth Waigmann
- Hearing Experts¹:
Christoph Tebbe (item 5.1)
- European Commission and/or Member States representatives:
Mara Sgroi
- EFSA:
NIF: Dafni Maria Kagkli, Sara Jacchia, Paolo Lenzi, Nikoletta Papadopoulou, Pietro Piffanelli, Tommaso Raffaello, Marta Rodrigues
FEEDCO: Rosella Brozzi (item 5.1), Elisa Pettenati (item 5.1)

1. Welcome and apologies for absence

The Chair welcomed the participants.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence² and the Decision of the Executive Director on Competing Interest Management,³ EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

4. Agreement of the minutes of the 151st Working Group meeting held on 23 April 2024, via web-conference

The [minutes of the 151st Working Group meeting](#) were agreed on the 06th of May 2024.

¹ As defined in Article 17 of the Decision of the Executive Director concerning the selection of members of the Scientific Committee, the Scientific Panels, and the selection of external experts to assist EFSA with its scientific work: <http://www.efsa.europa.eu/en/keydocs/docs/expertselection.pdf>

² http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

³ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf



5. Scientific topics for discussion

5.1 Update of the Guidance on the characterisation of microorganisms used as feed additives or as production organisms ([EFSA-Q2022-00249](#))

The Working Group discussed updates in the text of the opinion. Further discussion is needed.

5.2 Soybean MON 94637 GMFF-2023-21116 ([EFSA-Q-2024-00054](#))

The Working Group discussed the application. Further discussion is needed.

5.3 Maize MON95275, GMFF-2022-5890 ([EFSA-Q-2022-00330](#))

The Working Group discussed the application. Further discussion is needed.

5.4 Oilseed rape NS-B50027-4 EFSA-GMO-NL-2019-160 ([EFSA-Q-2019-00572](#))

The Working Group discussed the application. Further discussion is needed.

Any Other Business

EFSA staff provided an update on the developmental project “Development of risk assessment methodology for RNAi-based GM plants”.

MC WG Experts provided feedback on their experience as Working Group members.

Next meeting

The next meeting will be held on 17-18 June 2024, in Parma.



SCIENTIFIC PANEL ON GENETICALLY MODIFIED ORGANISMS

151st Working Group meeting
on Molecular Characterization



23 April 2024

09:00 – 16:30

MINUTES - Agreed on 06 May 2024

Location: Webconference

Attendees:

- Working Group Members:
Tamas Dalmay, Philippe Guerche, Jan Hejatko, Fabien Nogué, Nils Rostoks, Jose Juan Sánchez Serrano and Elisabeth Waigmann
- Hearing Experts¹:
None
- European Commission and/or Member States representatives:
Mara Sgroi, Marie Muller
- EFSA:
NIF: Michele Ardizzone (item 5.5), Tilemachos Goumperis (item 5.4), Antonio Fernandez Dumont (item 5.4), Dafni Maria Kagkli, Sara Jacchia, Paolo Lenzi, Aleksandra Lewandowska, Nikoletta Papadopoulou, Tommaso Raffaello, Marta Rodrigues

1. Welcome and apologies for absence

The Chair welcomed the participants. Apologies were received from Josep Casacuberta.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence² and the Decision of the Executive Director on Competing Interest Management,³ EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

4. Agreement of the minutes of the 150th Working Group meeting held on 11-12 March 2024, via web-conference

The [minutes of the 150th Working Group meeting](#) were agreed on the 22nd of March 2024.

5. Scientific topics for discussion

¹ As defined in Article 17 of the Decision of the Executive Director concerning the selection of members of the Scientific Committee, the Scientific Panels, and the selection of external experts to assist EFSA with its scientific work: <http://www.efsa.europa.eu/en/keydocs/docs/expertselection.pdf>

² http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

³ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf



5.1 Cotton GHB614 x T304-40 x GHB119 x COT102, EFSA-GMO-ES-2017-147 ([EFSA-Q-2017-00505](#))

The Working Group discussed the application. Further discussion is needed.

5.2 Cotton T304-40 x GHB119 x COT102, EFSA-GMO-BE-2018-155 ([EFSA-Q-2018-00809](#))

The Working Group discussed the application. Further discussion is needed.

5.3 *Brassica juncea* RF3, EFSA-GMO-NL-2019-158 ([EFSA-Q-2019-00412](#))

The Working Group discussed the application. Further discussion is needed.

5.4 Maize MON95275, GMFF-2022-5890 ([EFSA-Q-2022-00330](#))

The Working Group discussed the application. Further discussion is needed.

5.5 EFSA opinion on new developments in biotechnology applied to animals (including synthetic biology and new genomic techniques) M-2018-0205 ([EFSA-Q-2023-00050](#))

EFSA staff provided an update on the progress of the mandate.

5.6 Maize DP202216 x NK603 x DAS-40278-9, GMFF-2022-6232 ([EFSA-Q-2023-00197](#))

The Working Group discussed the application. Further discussion is needed.

5.7 Self-task mandate of the GMO panel on a scientific opinion regarding protein safety assessment M-2023-00096 ([EFSA-Q-2023-00664](#))

The mandate was not discussed due to lack of time.

Any Other Business

EFSA staff provided an update on the mandate received from the European Parliament requesting a scientific opinion on recent studies on the proposal for an EU regulation on plants obtained by certain new genomic techniques and their food and feed, and amending Regulation (EU) 2017/625.' (M-2024-00031- [EFSA-Q-2024-00178](#)).

MC WG Experts provided feedback on Opinion of the FAF Panel - *Pichia pastoris* Soy leghemoglobin ([EFSA-Q-2022-00031](#)).

Next meeting

The next meeting will be held on 14 May 2024, online.



SCIENTIFIC PANEL ON GENETICALLY MODIFIED ORGANISMS

150th Working Group meeting
on Molecular Characterization



11-12 March 2024

09:00 – 13:00 / 09:00 – 13:00

MINUTES - Agreed on 22/03/2024

Location: Webconference

Attendees:

- Working Group Members:
Josep Casacuberta, Tamas Dalmay, Philippe Guerche, Jan Hejatko, Fabien Nogu  , Nils Rostoks
Jose Juan S  nchez Serrano and Elisabeth Waigmann
- Hearing Experts¹:
None
- European Commission and/or Member States representatives:
Mara Sgroi
- EFSA:
NIF: Giacomo De Sanctis (item 5.4), Tilemachos Goumperis (item 5.5), Dafni Maria Kagkli,
Sara Jacchia, Paolo Lenzi, Aleksandra Lewandowska, Franco Maria Neri (item 5.4), Pietro
Piffanelli, Tommaso Raffaello, Marta Rodrigues

1. Welcome and apologies for absence

The Chair welcomed the participants.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence² and the Decision of the Executive Director on Competing Interest Management,³ EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

4. Agreement of the minutes of the 149th Working Group meeting held on 22-23 January 2024, via web-conference

The [minutes of the 149th Working Group meeting](#) were agreed on the 02nd of February 2024.

¹ As defined in Article 17 of the Decision of the Executive Director concerning the selection of members of the Scientific Committee, the Scientific Panels, and the selection of external experts to assist EFSA with its scientific work: <http://www.efsa.europa.eu/en/keydocs/docs/expertselection.pdf>

² http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

³ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf



5. Scientific topics for discussion

5.1 *P. pastoris* soy Leghemoglobin, EFSA-GMO-NL-2019-162 ([EFSA-Q-2019-00651](#))

The Working Group discussed the application. Further discussion is needed.

5.2 Soybean DBN-09004-6, EFSA-GMO-BE-2019-165 ([EFSA-Q-2020-00013](#))

The Working Group discussed the application. Further discussion is needed.

5.3 Maize DP51291, GMFF-2021-0071 ([EFSA-Q-2023-00051](#))

The Working Group discussed the application. Further discussion is needed.

5.4 Maize DP202216 x NK603 x DAS-40278-9, GMFF-2022-6232 ([EFSA-Q-2023-00197](#))

The Working Group discussed the application. Further discussion is needed.

5.5 Update of the Guidance on the characterisation of microorganisms used as feed additives or as production organisms” - [EFSA-Q-2022-00249](#)

The Working Group discussed the draft guidance document and provided suggestions for improvement to be conveyed to the FEEDAP Panel.

Any Other Business

EFSA staff provided an update on the BI Framework Contract

Next meeting

The next meeting will be held on 22-23 April 2024, online.



**SCIENTIFIC PANEL
ON GENETICALLY MODIFIED ORGANISMS**

149th Working Group meeting
on Molecular Characterization



22-23 January 2024

14:00 – 18:00 / 9:30 – 16:30

MINUTES - Agreed on 2nd February 2024

Location: Webconference

Attendees:

- Working Group Members:
Josep Casacuberta, Tamas Dalmay, Philippe Guerche, Jan Hejatko, Fabien Nogué, Nils Rostoks and Jose Juan Sánchez Serrano
- Hearing Experts¹:
None
- European Commission and/or Member States representatives:
Alexandre Huchelmann (Day 1), Mara Sgroi
- EFSA:
NIF: Sara Jacchia, Dafni Maria Kagkli, Paolo Lenzi, Aleksandra Lewandowska, Nikoletta Papadopoulou, Pietro Piffanelli, Tommaso Raffaello, Marta Rodrigues
FEEDCO: Rosella Brozzi, Elisa Pettenati (AOB item - *Update of the Guidance on the characterisation of microorganisms used as feed additives or as production organisms* - EFSA-Q-2022-00249)

1. Welcome and apologies for absence

The Chair welcomed the participants.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence² and the Decision of the Executive Director on Competing Interest Management,³ EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

4. Agreement of the minutes of the 148th Working Group meeting held on 27-28 November 2023, via web-conference

The [minutes of the 148th Working Group meeting](#) were agreed on the 15th of December 2023.

¹ As defined in Article 17 of the Decision of the Executive Director concerning the selection of members of the Scientific Committee, the Scientific Panels, and the selection of external experts to assist EFSA with its scientific work: <http://www.efsa.europa.eu/en/keydocs/docs/expertselection.pdf>
² http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf
³ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf



5. Scientific topics for discussion

5.1 Oilseed rape NS-B50027-4, EFSA-GMO-NL-2019-160 ([EFSA-Q-2019-00572](#))

The Working Group discussed the application. Further discussion is needed.

5.2 Maize DP910521, GMFF-2021-2473 ([EFSA-Q-2022-00409](#))

The Working Group discussed the application. Further discussion is needed.

5.3 Maize DAS1131, GMFF-2021-1530 ([EFSA-Q-2022-00410](#))

The Working Group discussed the application. Further discussion is needed.

5.4 Maize DP51291, GMFF-2021-0071 ([EFSA-Q-2023-00051](#))

The Working Group discussed the application. Further discussion is needed.

5.5 Soybean DBN8002, GMFF-2022-11530 ([EFSA-Q-2023-00103](#))

The Working Group discussed the application. Further discussion is needed.

5.6 Maize MON 94804, GMFF-2022-10651 ([EFSA-Q-2023-00106](#))

The Working Group discussed the application. Further discussion is needed.

5.7 Maize DP202216 x NK603 x DAS-40278-9, GMFF-2022-6232 ([EFSA-Q-2023-00197](#))

The application was presented but not discussed as the Risk Assessment of DP202216 event is still ongoing

5.8 Sugar beet KWS20-1, GMFF-2023-14732 ([EFSA-Q-2023-00378](#))

The Working Group discussed the application. Further discussion is needed.

Any Other Business

EFSA staff provided an update on the developmental project "Development of risk assessment methodology for RNAi-based GM plants".

EFSA staff from FEEDCO Unit presented the progress on the ongoing work on "Update of the Guidance on the characterisation of microorganisms used as feed additives or as production organisms" - [EFSA-Q-2022-00249](#)

Next meeting

The next meeting will be held on 11-12 March 2024, online.

6. Preparatory meetings

Since the last MC WG meeting, a preparatory meeting chaired by EFSA staff was held on 5 December 2023 on "Development of risk assessment methodology for RNAi-based GM plants".

6.1 WG members:

Tamas Dalmay, Simon Moxon

6.2 Declarations of Interest of Working Groups members:



In accordance with EFSA's Policy on Independence⁴ and the Decision of the Executive Director on Competing Interest Management,⁵ EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

⁴ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

⁵ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf



**SCIENTIFIC PANEL
ON GENETICALLY MODIFIED ORGANISMS**

148th Working Group meeting
on Molecular Characterization



27-28 November 2023

14:00 – 18:00 / 9:00 – 17:00

MINUTES - Agreed on 15 December 2023

Location: Parma, Italy

Attendees:

- Working Group Members:

Josep Casacuberta, Pier Sandro Cocconcelli (item 5.6), Tamas Dalmay, Philippe Guerche, Jan Hejatko, Lieve Herman (item 5.6), Simon Moxon (AOB), Fabien Nogué, Nils Rostoks and Jose Juan Sánchez Serrano

- Hearing Experts¹:

None

- European Commission and/or Member States representatives:

Alexandre Huchelmann

- EFSA:

iDATA: Adrián César Razquin (day 2)

NIF: Sara Jacchia, Dafni Maria Kagkli, Paolo Lenzi, Aleksandra Lewandowska, Nikoletta Papadopoulou, Pietro Piffanelli, Tommaso Raffaello, Marta Rodrigues

1. Welcome and apologies for absence

The Chair welcomed the participants.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence² and the Decision of the Executive Director on Competing Interest Management,³ EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. Certain interests were declared orally by the members before the beginning of the meeting. For further details on the outcome of the screening of the Oral Declaration of Interest made at the beginning of the meeting, please refer to the Annex.

4. Agreement of the minutes of the 147th Working Group meeting held on 25-26 September 2023, Paris, France

The [minutes of the 147th Working Group meeting](#) were agreed on the 13th of October 2023.

¹ As defined in Article 17 of the Decision of the Executive Director concerning the selection of members of the Scientific Committee, the Scientific Panels, and the selection of external experts to assist EFSA with its scientific work: <http://www.efsa.europa.eu/en/keydocs/docs/expertselection.pdf>

² http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

³ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf



5. Scientific topics for discussion

5.1 Cotton GHB614 x T304-40 x GHB119 x COT102, EFSA-GMO-ES-2017-147 ([EFSA-Q-2017-00505](#))

The Working Group discussed the application. Further discussion is needed.

5.2 Cotton T304-40 x GHB119 x COT102, EFSA-GMO-BE-2018-155 ([EFSA-Q-2018-00809](#))

The Working Group discussed the application. Further discussion is needed.

5.3 Maize MON 94804, GMFF-2022-10651 ([EFSA-Q-2023-00106](#))

The Working Group discussed the application. Further discussion is needed.

5.4 Soybean DBN8002, GMFF-2022-11530 ([EFSA-Q-2023-00103](#))

The Working Group discussed the application. Further discussion is needed.

5.5 Sugar beet KWS20-1, GMFF-2023-14732 ([EFSA-Q-2023-00378](#))

The Working Group discussed the application. Further discussion is needed.

5.6 Pichia pastoris soybean Leghemoglobin, EFSA-GMO-NL-2019-162 ([EFSA-Q-2019-00651](#))

The Working Group discussed the application. Further discussion is needed.

5.7 Maize DP910521, GMFF-2021-2473 ([EFSA-Q-2022-00409](#))

The Working Group discussed the application. Further discussion is needed.

5.8 Oilseed rape NS-B50027-4, EFSA-GMO-NL-2019-160 ([EFSA-Q-2019-00572](#))

The Working Group discussed the application. Further discussion is needed.

5.9 Maize DAS1131, GMFF-2021-1530 ([EFSA-Q-2022-00410](#))

The Working Group discussed the application. Further discussion is needed.

Any Other Business

The Working Group Experts discussed 3 recent publications on NGTs sent to EFSA by the EC ^{4,5,6}. The Experts concluded that these publications do not describe new aspects relevant for the assessment of safety of NGTs other than those already described in the EFSA opinions on NGTs whose conclusions remain valid. A summary of the discussion is presented in Annex 2.

[The Working Group discussed](#) the draft EFSA Technical Note on the quality of DNA sequencing ([EFSA GMO Panel, 2018](#)) and the comments received by the targeted consultation to GMO applicants.

The Working Group discussed the progress of the ongoing development of the Guidance on Microorganisms.

Next meeting

The next meeting will be held on 22-23 January 2024, online.

⁴ sKoller F, Cieslak M, A perspective from the EU: unintended genetic changes in plants caused by NGT- their relevance for a comprehensive molecular characterisation and risk assessment. *Frontiers in Bioengineering and Biotechnology* 11, 2023. DOI:10.3389/fbioe.2023.1276226.
⁵ Aguirre L, et al., IdiosyncraticIdiosyncratic, and dose-dependent epistasis drives variation in tomato fruit size. *Science* 382, 2023. DOI:10.1126/science.adi5222.
⁶ Liu, J, et al. Hidden prevalence of deletion-inversion bi-alleles in CRISPR-mediated deletions of tandemly arrayed genes in plants. *Nat Comm.un* 14, 2023. DOI: 10.1038/s41467-023-42490-1.



Annex 1

Interests and actions resulting from the Oral Declaration of Interest done at the beginning of the meeting

With regard to this meeting, prof. Jan Hejatko declared the following interest: Researcher in a scientific project "TANGENC" studying the role of hormonal regulations in the control of *Arabidopsis* and *Brassica napus* root growth and architecture and in the inflorescence shoot apical meristem activity; October 2023- June 2028. In accordance with EFSA's Policy on Independence⁷ and the Decision of the Executive Director on Competing Interest Management⁸, and taking into account the specific matters discussed at the meeting in question, the interest above was not deemed to represent a Conflict of Interest for the Expert concerned.

⁷ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

⁸ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf



Annex 2

The Working Group Experts discussed 3 recently published papers in the area of New Genomic Techniques (NGTs) applied to plants sent to EFSA by the EC (Koller F and Cieslak M, 2023; Lyndsey Aguirre et al., 2023; Liu, 3., Wang, FZ., Li, C. et al., 2023).

The paper from Koller F and Cieslak M (2023) is an opinion paper/review and not a primary research paper, which includes considerations and aspects on NGTs already taken into consideration by the Working Group Experts. The relevant scientific literature cited by Koller F and Cieslak M (2023) has been already assessed and taken into consideration by EFSA in its scientific opinions on NGTs. Therefore, the Working Group Experts considered that the paper from Koller F and Cieslak M (2023) does not provide any new information that would change the conclusions of the EFSA opinions on NGTs.

The paper from Aguirre L. and co-authors (2023) describes the epistatic relationship between mutations in genes of the CLAVATA-WUSCHEL (CLV-WUS) regulatory circuit in tomato. The authors analyze how genetic circuits are affected by replacing one critical gene, CLAVATA3 (CLV3), with a wide range of stronger and weaker cis- regulatory alleles. Epistasis (i.e., the dependence of the effect of a mutation in a gene on the presence of mutations in a different gene) is a phenomenon known since long time that may affect genes involved in genetic circuits and their spontaneous mutations. This phenomenon is independent from the mechanism by which the mutation(s) were introduced (i.e., spontaneous, induced by random mutagenesis or targeted by gene editing). Therefore, the Working Group Experts considered that the paper from Aguirre L. and co-authors (2023) does not change the conclusions of the EFSA opinions on NGTs.

The paper from Liu 3. and co-authors (2023) describes how the application of CRISPR/Cas to delete tandemly arrayed genes (TAGs) in plants can lead to inversion of the targeted genomic region. The authors observed that CRISPR/Cas-mediated TAG knockout alleles in *Arabidopsis* and rice can result in both deletion and inversion as a bi-allelic genomic locus, which can be easily misidentified as homozygous deletion alleles by preliminary PCR-based genotyping. Inversions following the application of NGTs have been already reported in several papers both in animals and plants (Li et al., 2015; Zhang et al. 2017; Schmidt et al., 2019; Schwartz et al., 2020; Santillán Martínez et al., 2020; Angelopoulou et al., 2022). Production of inversions and deletion is not a specificity of double-strand breaks induced by NGTs, and all double-strand breaks, whether spontaneous (caused for example by replication errors or UV radiation) or induced (caused by genetic scissors, X-rays, gamma rays or fast neutrons irradiation), can lead to genomic inversions or deletions. Examples of genomic inversion induced by ionizing radiation can be found in many plants such as sorghum (Mizuno et al., 2013) or rice (Li et al., 2019). Examples of spontaneous genomic inversions can also be found in many plants such as *Arabidopsis* (Blanc et al., 2000), tomato (Xu et al., 2015; Wolters et al., 2015), rice (Chen et al., 2012), wheat (Ma et al., 2014), and maize (Schnable et al., 2009; Yu et al., 2011). Genomic inversions of tandemly arrayed genes, as the ones observed in the Liu 3. and co-authors article, can also be induced spontaneously (for example in tomato, see Seah et al., 2004). All the above-mentioned examples demonstrate how genomic inversions are not specific to NGT but can be found in plant produced by classical breeding approaches. The Working Group Experts considered that:

- Inversions and deletions are frequent in plants and can be caused by both induced and spontaneous double strand breaks. Heteroalleles containing a deletion on one of the allele and an inversion on the other one can be expected and are routinely detected by standard PCR analysis.
- The proper screening of the progeny of a plant containing a bi-allelic version of the modification (i.e. heterozygous for the modified intended locus) will allow the selection of plants homozygous for the inversion or for the deletion mutation.



- The paper does not describe any new relevant aspect on the safety of NGTs techniques other than those already discussed in the EFSA opinions. Genomic inversions and deletions, which are essentially two types of mutations that can be spontaneous or induced, have been described and exploited already in conventional breeding. Therefore, the Working Group Experts considered that the EFSA conclusion that NGTs do not show any additional risks compared to conventional breeding remains valid.

In conclusion, the Working Group Experts considered that the paper from Liu J. and co-authors (2023) does not change the conclusions of the EFSA opinions on NGTs.

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SCIENTIFIC PANEL ON GENETICALLY MODIFIED ORGANISMS

147th Working Group meeting
on Molecular Characterization



25-26 September 2023

9:00 – 18:00 / 9:00 – 12:00

MINUTES - Agreed on 13 October 2023

Location: Paris, France

Attendees:

- Working Group Members:

Josep Casacuberta, Pier Sandro Cocconcelli (item 5.1), Tamas Dalmay, Philippe Guerche, Jan Hejatko, Lieve Herman (item 5.1), Simon Moxon (item 5.1, AOB), Fabien Nogué, Nils Rostoks and Jose Juan Sánchez Serrano

- Hearing Experts¹:

None

- European Commission and/or Member States representatives:

Alexandre Huchelmann, Olga Orlova (item 5.1)

- EFSA:

iDATA: Adrián César Razquin

NIF: Aleksandra Lewandowska, Sara Jacchia, Dafni Maria Kagkli, Paolo Lenzi, Nikoletta Papadopoulou, Pietro Piffanelli, Tommaso Raffaello

1. Welcome and apologies for absence

The Chair welcomed the participants.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence² and the Decision of the Executive Director on Competing Interest Management,³ EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

4. Agreement of the minutes of the 146th Working Group meeting held on 26-27 June 2023, via web-conference

The [minutes of the 146th Working Group meeting](#) were agreed on 27 June 2023.

5. Scientific topics for discussion

¹ As defined in Article 17 of the Decision of the Executive Director concerning the selection of members of the Scientific Committee, the Scientific Panels, and the selection of external experts to assist EFSA with its scientific work: <http://www.efsa.europa.eu/en/keydocs/docs/expertselection.pdf>

² http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

³ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf



5.1 Soy leghemoglobin, EFSA-GMO-NL-2019-162 ([EFSA-Q-2019-00651](#))

The Working Group discussed the application. Further discussion is needed.

5.2 Maize DP-023211-2, EFSA-GMO-NL-2019-163 ([EFSA-Q-2019-00807](#))

The Working Group discussed the application. Further discussion is needed.

5.3 Soybean DBN-09004-6, EFSA-GMO-BE-2019-165 ([EFSA-Q-2020-00013](#))

The Working Group discussed the application. Further discussion is needed.

5.4 Maize MON 95275, GMFF-2022-5890 ([EFSA-Q-2022-00330](#))

The Working Group discussed the application. Further discussion is needed.

5.5 Soybean MON 94313, GMFF-2022-6595 ([EFSA-Q-2022-00575](#))

The Working Group discussed the application. Further discussion is needed.

5.6 Maize DP51291, GMFF-2021-0071 ([EFSA-Q-2023-00051](#))

The Working Group discussed the application. Further discussion is needed.

**5.7 Oilseed rape MON 94100 x MON 88302 x RF3, GMFF-2022-11270
([EFSA-Q-2023-00084](#))**

The Working Group discussed the application. Further discussion is needed.

5.8 Maize MON 94804, GMFF-2022-10651 ([EFSA-Q-2023-00106](#))

The Working Group did not discuss the application due to lack of time.

Any Other Business

The Working Group discussed the draft EFSA Technical Note on the quality of DNA sequencing ([EFSA GMO Panel, 2018](#)).

Next meeting

The next meeting will be held on 27-28 November 2023 in Parma.

6. Preparatory meetings

Since the last MC WG meeting, a preparatory meeting chaired by EFSA staff was held on the 3 August 2023 on the following:

**6.1 Cotton GHB614 x T304-40 x GHB119 x COT102, EFSA-GMO-ES-2017-147
([EFSA-Q-2017-00505](#))**

The Working Group discussed the application. Further discussion is needed.

**6.2 Cotton T304-40 x GHB119 x COT102, EFSA-GMO-BE-2018-155
([EFSA-Q-2018-00809](#))**

The Working Group discussed the application. Further discussion is needed.

6.3 WG members:



Josep Casacuberta, Tamas Dalmay, Philippe Guerche, Nils Rostoks and Jose Juan Sánchez Serrano

6.4 Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence⁴ and the Decision of the Executive Director on Competing Interest Management,⁵ EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

⁴ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

⁵ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf



**SCIENTIFIC PANEL
ON GENETICALLY MODIFIED ORGANISMS**
146th Working Group meeting
on Molecular Characterization



26-27 June 2023

9:30 – 17:00 / 9:30 – 14:00

MEETING MINUTES - Agreed on 27 June 2023

Location: Webconference

Attendees:

- Working Group Members:

Josep Casacuberta, Tamas Dalmay (chair, day 2), Philippe Guerche, Jan Hejatko, Simon Moxon (item 5.1, 5.3, 5.4, AOB), Fabien Nogué, Nils Rostoks (chair, day 1) and Jose Juan Sánchez Serrano

- Hearing Experts¹:

None

- European Commission and/or Member States representatives:

Alexandre Huchelmann

- EFSA:

iDATA: Adrián César Razquin

NIF: Aleksandra Lewandowska, Dafni Maria Kagkli, Paolo Lenzi, Nikoletta Papadopoulou, Pietro Piffanelli

1. Welcome and apologies for absence

The Chair welcomed the participants.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence² and the Decision of the Executive Director on Competing Interest Management,³ EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

4. Agreement of the minutes of the 145th Working Group meeting held on 11 May 2023, via web-conference

The [minutes of the 145th Working Group meeting](#) were agreed by written procedure on 26 May 2023.

¹ As defined in Article 17 of the Decision of the Executive Director concerning the selection of members of the Scientific Committee, the Scientific Panels, and the selection of external experts to assist EFSA with its scientific work: <http://www.efsa.europa.eu/en/keydocs/docs/expertselection.pdf>

² http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

³ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf



5. Scientific topics for discussion

5.1 Maize DP51291, GMFF-2021-0071 ([EFSA-Q-2023-00051](#))

The Working Group discussed the application. Further discussion is needed.

5.2 Oilseed rape MON 94100 × MON 88302 × RF3, GMFF-2022-11270 ([EFSA-Q-2023-00084](#))

The Working Group discussed the application. Further discussion is needed.

5.3 Maize MON 94804, GMFF-2022-10651 ([EFSA-Q-2023-00106](#))

The Working Group discussed the application. Further discussion is needed.

5.4 Maize MON 95275, GMFF-2022-5890 ([EFSA-Q-2022-00330](#)) The Working Group discussed the application. Further discussion is needed.

5.5 Maize DAS1131, GMFF-2021-1530 ([EFSA-Q-2022-00575](#)) The Working Group discussed the application. Further discussion is needed.

Any Other Business

The Working Group discussed the potential updates to the EFSA Technical Note on the quality of DNA sequencing ([EFSA GMO Panel, 2018](#)).

Next meeting

The next meeting will be held on 25-26 September in Paris.



**SCIENTIFIC PANEL
ON GENETICALLY MODIFIED ORGANISMS**
145th Working Group meeting
on Molecular Characterization



11 May 2023

9:00 – 17:00

MEETING MINUTES - Agreed on 26 May 2023

Location: Webconference

Attendees:

- Working Group Members:

Josep Casacuberta (except item 5.3), Tamas Dalmay, Philippe Guerche, Jan Hejatko, Lieve Herman (item 5.3), Simon Moxon (item 5.3, AOB), Fabien Nogué, Nils Rostoks and Jose Juan Sánchez Serrano

- Hearing Experts¹:

None

- European Commission and/or Member States representatives:

None

- EFSA:

iDATA: Adrián César Razquin

NIF: Aleksandra Lewandowska, Tilemachos Goumperis (item 5.4), Paolo Lenzi, Nikoletta Papadopoulou, Pietro Piffanelli, Tommaso Raffaello, Kyriaki Xiftou (item 5.4)

1. Welcome and apologies for absence

The Chair welcomed the participants. Apologies were received from Pier Sando Coconcelli.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence² and the Decision of the Executive Director on Competing Interest Management,³ EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

4. Agreement of the minutes of the 144th Working Group meeting held on 28 February 2023, via web-conference

The [minutes of the 144th Working Group meeting](#) were agreed by written procedure on 30 March 2023.

¹ As defined in Article 17 of the Decision of the Executive Director concerning the selection of members of the Scientific Committee, the Scientific Panels, and the selection of external experts to assist EFSA with its scientific work: <http://www.efsa.europa.eu/en/keydocs/docs/expertselection.pdf>

² http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

³ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf



5. Scientific topics for discussion

5.1 Cotton GHB614 x T304-40 x GHB119 x COT102, EFSA-GMO-ES-2017-147 ([EFSA-Q-2017-00505](#))

The Working Group discussed the application. Further discussion is needed.

5.2 Cotton T304-40 x GHB119 x COT102, EFSA-GMO-BE-2018-155 ([EFSA-Q-2018-00809](#))

The Working Group discussed the application. Further discussion is needed.

5.3 Soy leghemoglobin, EFSA-GMO-NL-2019-162 ([EFSA-Q-2019-00651](#))

The Working Group discussed the application. Further discussion is needed.

5.4 Soybean MON 94313, GMFF-2022-6595 ([EFSA-Q-2022-00575](#))

The Working Group discussed the application. Further discussion is needed.

Any Other Business

The Working Group discussed the potential updates to the EFSA Technical Note on the quality of DNA sequencing ([EFSA GMO Panel, 2018](#)).

Next meeting

The next meeting will be held on 26-27 June by TELE/WEB.



**SCIENTIFIC PANEL ON
GENETICALLY MODIFIED ORGANISMS**
144th Working Group meeting on Molecular
Characterization



13-14 March 2023

14:00 – 18:00 / 9:00 – 17:00

MINUTES - Agreed on 30 March 2023

Location: Parma

Attendees:

- Working Group Members:
Josep Casacuberta, Tamas Dalmay, Philippe Guerche, Jan Hejatko, Simon Moxon (AOB), Fabien Nogué, Nils Rostoks and Jose Juan Sánchez Serrano
- Hearing Experts¹:
None
- European Commission and/or Member States representatives:
EC: Alexandre Huchelmann
- EFSA:
iDATA: Adrián César Razquin (AOB)
NIF: Silvia Federici, Andrea Gennaro (item 5.2), Dafni Maria Kagkli, Aleksandra Lewandowska, Franco Maria Neri (item 5.2), Nikoletta Papadopoulou, and Tommaso Raffaello
FEEDCO: Emmanouil Tsochatzis

1. Welcome and apologies for absence

The Chair welcomed the participants.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence² and the Decision of the Executive Director on Competing Interest Management,³ EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process.

Certain interests were declared orally by the members before the beginning of the meeting. For further details on the outcome of the screening of the Oral Declaration of Interest made at the beginning of the meeting, please refer to the Annex.

¹ As defined in Article 17 of the Decision of the Executive Director concerning the selection of members of the Scientific Committee, the Scientific Panels, and the selection of external experts to assist EFSA with its scientific work: <http://www.efsa.europa.eu/en/keydocs/docs/expertselection.pdf>

² http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

³ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf



4. Agreement of the minutes of the 143rd Working Group meeting held on 28 February 2023, via web-conference

The [minutes of the 143rd Working Group meeting](#) were agreed in the meeting on 28 February 2023.

5. Scientific topic(s) for discussion

5.1 Canola LBFLFK, EFSA-GMO-DE-2019-157. ([EFSA-Q-2019-00394](#))

The Working Group discussed the application. Further discussion is needed.

5.2 Maize Bt11 x MIR162 x MIR604 x MON 89034 x 5307 x GA21, EFSA-GMO-DE-2018-149 ([EFSA-Q-2018-00292](#))

The Working group finalised the Molecular Characterisation text of the opinion.

5.3 Cotton COT102, EFSA-GMO-DE-2017-141 ([EFSA-Q-2017-00271](#))

The Working Group discussed the application. Further discussion is needed.

5.4 Maize DP-202216-6, EFSA-GMO-NL-2019-159 ([EFSA-Q-2019-00419](#))

The Working Group discussed the application. Further discussion is needed.

5.5 Maize MON95275, GMFF-2022-5890 ([EFSA-Q-2022-00330](#))

The Working Group discussed the application. Further discussion is needed.

5.6 Maize DP-915635-4, EFSA-GMO-NL-2020-172 ([EFSA-Q-2020-00834](#))

The Working Group discussed the application. Further discussion is needed.

Any Other Business

The working group discussed the potential updates to the EFSA Technical Note on the quality of DNA sequencing ([EFSA GMO Panel, 2018](#)).

Next meeting

The next meeting will be held on 8 May 2023, by TELE/WEB.



Annex

Interests and actions resulting from the Oral Declaration of Interest done at the beginning of the meeting

With regard to this meeting, prof. Josep Casacuberta declared the following interest: participation to activities under the EFSA's contract OC/EFSA/ED/2022/03 'Development of Roadmaps for Action on Applying Omics and Bioinformatics Approaches: Towards Next Generation Risk Assessment', with the role of consultant for Sequentia Biotech. In accordance with EFSA's Policy on Independence⁴ and the Decision of the Executive Director on Competing Interest Management⁵, and taking into account the specific matters discussed at the meeting in question, the interest above was not deemed to represent a Conflict of Interest for the Expert concerned.

⁴ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

⁵ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf



**SCIENTIFIC PANEL ON
GENETICALLY MODIFIED ORGANISMS**
143rd Working Group meeting on Molecular
Characterization



28 February 2023

10:30-12:30

MINUTES - Agreed on 28 February 2023

Location: Webconference

Attendees:

- Working Group Members:
Josep Casacuberta, Tamas Dalmay, Simon Moxon
- Hearing Experts¹:
none
- European Commission and/or Member States representatives:
none
- EFSA:
Silvia Federici, Dafni Maria Kagkli and Nikoletta Papadopoulou

1. Welcome and apologies for absence

The Chair welcomed the participants.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence² and the Decision of the Executive Director on Competing Interest Management³, EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

4. Agreement of the minutes of the 142nd Working Group meeting held on 23-24 January 2023, via web-conference

The [minutes of the 142nd Working Group meeting](#) were agreed by written procedure on 1 February 2023.

¹ As defined in Article 17 of the Decision of the Executive Director concerning the selection of members of the Scientific Committee, the Scientific Panels, and the selection of external experts to assist EFSA with its scientific work: <http://www.efsa.europa.eu/en/keydocs/docs/expertselection.pdf>

² http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

³ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf



5. Scientific topic(s) for discussion

5.1 Maize DAS1131, GMFF-2021-1530. ([EFSA-Q-2022-00410](#))

The Working Group discussed the application. Further discussion is needed.

6. Any Other Business

The working group discussed the potential updates to the EFSA Technical Note on the quality of DNA sequencing (EFSA GMO Panel, 2018).

Next meeting

The next meeting will be held on 13-14 March 2023, in Parma.



**SCIENTIFIC PANEL ON
GENETICALLY MODIFIED ORGANISMS**
142nd Working Group meeting on Molecular
Characterization



23-24 January 2023
09:30-17:00 / 09:30-16:00
MINUTES - Agreed on 1 February 2023

Location: Webconference

Attendees:

- Working Group Members:
Josep Casacuberta, Tamas Dalmay, Philippe Guerche, Jan Hejatko, Fabien Nogu , Nils Rostoks and Jose Juan S nchez Serrano
- Hearing Experts¹:
Francisco Javier Moreno (item 5.4)
- European Commission and/or Member States representatives:
EC: Alexandre Huchelmann
- EFSA:
Silvia Federici, Giacomo De Sanctis (item 5.6), Antonio Fernandez Dumont (item 5.4), Dafni Maria Kagkli, Paolo Lenzi, Aleksandra Lewandowska, Nikoletta Papadopoulou and Tommaso Raffaello

1. Welcome and apologies for absence

The Chair welcomed the participants.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence² and the Decision of the Executive Director on Competing Interest Management³, EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

4. Agreement of the minutes of the 141st Working Group meeting held on 28-29 November 2022, via web-conference

¹ As defined in Article 17 of the Decision of the Executive Director concerning the selection of members of the Scientific Committee, the Scientific Panels, and the selection of external experts to assist EFSA with its scientific work: <http://www.efsa.europa.eu/en/keydocs/docs/expertselection.pdf>

² http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

³ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf



The [minutes of the 141st Working Group meeting](#) were agreed by written procedure on 7 December 2022.

5. Scientific topic(s) for discussion

5.1 Maize DP910521, GMFF-2021-2473. ([EFSA-Q-2022-00409](#)) The Working Group discussed the application. Further discussion is needed. **5.2**

Maize DAS1131, GMFF-2021-1530. ([EFSA-Q-2022-00410](#)) The Working Group discussed the application. Further discussion is needed. **5.3**

Soybean MON 94313, GMFF-2022-6595. ([EFSA-Q-2022-00575](#)) The Working Group discussed the application. Further discussion is needed. **5.4**

Canola LBFLFK, EFSA-GMO-DE-2019-157. ([EFSA-Q-2019-00394](#)) The Working Group discussed the application. Further discussion is needed.

5.5 *Brassica juncea* RF3 Canola Quality, EFSA-GMO-NL-2019-158. ([EFSA-Q-2019-00412](#))

The Working Group discussed the application. Further discussion is needed.

5.6 Maize DP-202216-6, EFSA-GMO-NL-2019-159. ([EFSA-Q-2019-00419](#))

The Working Group discussed the application. Further discussion is needed.

5.7 Maize MON 95275, GMFF-2022-5890. ([EFSA-Q-2022-00330](#))

The Working Group discussed the application. Further discussion is needed.

Any Other Business

Next meeting

The next meeting will be held on 13-14 March 2023, in Parma.



SCIENTIFIC PANEL ON GENETICALLY MODIFIED ORGANISMS

MINUTES OF 141st MEETING OF THE WORKING GROUP ON MOLECULAR CHARACTERISATION

**Held on 28-29 November 2022, TELE/WEB
(Agreed on 7 December 2022)**

Participants

- Working Group Members:
 - Josep Casacuberta, Pier Sandro Cocconcelli (item 5.6), Tamas Dalmay, Philippe Guerche, Jan Hejatko, Lieve Herman (item 5.6), Simon Moxon (item 6), Fabien Nogué, Nils Rostoks and Jose Juan Sánchez Serrano
- Hearing Experts¹:
 - None
- European Commission and/or Member States representatives:
 - EC: Juliette-Marie Margueritte
- EFSA:
 - NIF Unit: Silvia Federici, Antonio Fernandez Dumont (item 5.6), Andrea Gennaro (item 5.2), Dafni Maria Kagkli, Paolo Lenzi, Aleksandra Lewandowska, Nikoletta Papadopoulou, and Tommaso Raffaello
- Others:
 - none

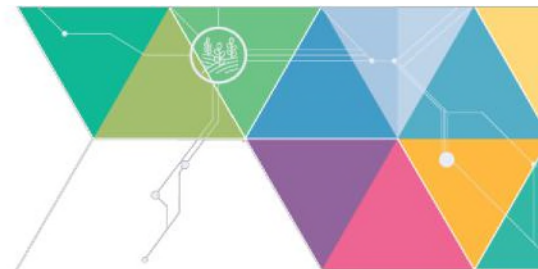
1. Welcome and apologies for absence

The Chair welcomed the participants.

2. Adoption of agenda

The agenda was adopted without changes.

¹ As defined in Article 17 of the Decision of the Executive Director concerning the selection of members of the Scientific Committee, the Scientific Panels, and the selection of external experts to assist EFSA with its scientific work: <https://www.efsa.europa.eu/en/corporate/pub/expertselection>



3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence² and the Decision of the Executive Director on Competing Interest Management³, EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process.

4. Agreement of the minutes of the 140th Working Group meeting held on 11 October 2022 via TELE/WEB.

The minutes of the 140th Working Group meeting held on 11 October 2022 were agreed.⁴

5. Scientific topics for discussion

5.1 EFSA-GMO-DE-2017-141 (Cotton COT102)⁵

The Working Group discussed the application. Further discussion is needed.

5.2 EFSA-GMO-DE-2018-149 (Maize Bt11 x MIR162 x MIR604 x MON 89034 x 5307 x GA21)⁶

The Working Group discussed the application. Further discussion is needed.

5.3 EFSA-GMO-DE-2019-157 (Canola LBFLFK)⁷

The Working Group discussed the application. Further discussion is needed.

5.4 EFSA-GMO-NL-2019-158 (Brassica juncea RF3 Canola Quality)⁸

The Working Group discussed the application. Further discussion is needed.

5.5 EFSA-GMO-NL-2019-159 (Maize DP-202216-6)⁹

The Working Group discussed the application. Further discussion is needed.

5.6 EFSA-GMO-NL-2019-162 (Soy Leghemoglobin)¹⁰

The Working Group discussed the application. Further discussion is needed.

5.7 EFSA-GMO-NL-2020-172 (Maize DP-915635-4)¹¹

The Working Group discussed the application. Further discussion is needed.

5.8 EFSA-GMO-NL-2022-173 (Maize MON 95275)¹²

The Working Group discussed the application. Further discussion is needed.

² https://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

³ https://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf

⁴ <https://www.efsa.europa.eu/sites/default/files/wgs/gmo/wg-applications-molecular-characterisation-2018-2021.pdf>

⁵ <https://open.efsa.europa.eu/questions/EFSA-Q-2017-00271>

⁶ <https://open.efsa.europa.eu/questions/EFSA-Q-2018-00292>

⁷ <https://open.efsa.europa.eu/questions/EFSA-Q-2019-00394>

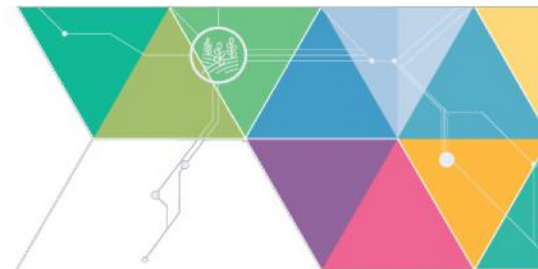
⁸ <https://open.efsa.europa.eu/questions/EFSA-Q-2019-00412>

⁹ <https://open.efsa.europa.eu/questions/EFSA-Q-2019-00419>

¹⁰ <https://open.efsa.europa.eu/questions/EFSA-Q-2019-00651>

¹¹ <https://open.efsa.europa.eu/questions/EFSA-Q-2020-00834>

¹² <https://open.efsa.europa.eu/questions/EFSA-Q-2022-00330>



6. AOB

The Working group discussed the need to update the Technical Note on DNA sequencing. Further discussion is needed.

7. Next meeting

23-24 January, 2023, TELE/WEB



SCIENTIFIC PANEL ON GENETICALLY MODIFIED ORGANISMS

MINUTES OF 140th MEETING OF THE WORKING GROUP ON MOLECULAR CHARACTERISATION

**Held on 11 October 2022, TELE/WEB
(Agreed on 11 October 2022)**

Participants

- Working Group Members:
 - Tamas Dalmay, Jose Juan Sánchez Serrano, Pier Sandro Cocconcelli, Lieve Herman
- Hearing Experts¹:
 - none
- European Commission and/or Member States representatives:
 - none
- EFSA:
 - NIF Unit: Michele Ardizzone, Antonio Fernandez Dumont, Tilemachos Goumperis, Dafni Maria Kagkli, Paolo Lenzi, Aleksandra Lewandowska, Nikoletta Papadopoulou, Reinhilde Schoonjans and Tommaso Raffaello
- Others:
 - none

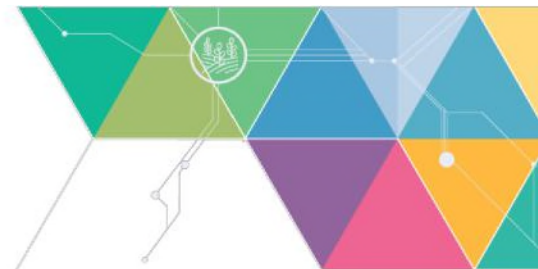
1. Welcome and apologies for absence

The Chair welcomed the participants.

2. Adoption of agenda

The agenda was adopted without changes.

¹ As defined in Article 17 of the Decision of the Executive Director concerning the selection of members of the Scientific Committee, the Scientific Panels, and the selection of external experts to assist EFSA with its scientific work: <https://www.efsa.europa.eu/en/corporate/pub/expertselection>



3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence² and the Decision of the Executive Director on Competing Interest Management³, EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process.

4. Agreement of the minutes of the 139th Working Group meeting held on 26-27 September via TELE/WEB.

The minutes of the 139th Working Group meeting held on 26-27 September 2022 were agreed.⁴

5. Scientific topics for discussion

5.1 EFSA GMO NL 2019-162 (Soy Leghemoglobin) [EFSA-Q-2019-00651](#)

The Working Group discussed the application. Further discussion is needed.

6. Next meetings

141st meeting, 28-29 November 2022, TELE/WEB

² https://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

³ https://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf

⁴ <https://www.efsa.europa.eu/sites/default/files/wgs/gmo/wg-applications-molecular-characterisation-2018-2021.pdf>



SCIENTIFIC PANEL ON GENETICALLY MODIFIED ORGANISMS

MINUTES OF 139th MEETING OF THE WORKING GROUP ON MOLECULAR CHARACTERISATION

**Held on 26-27 September 2022, TELE/WEB
(Agreed on 12 October 2022)**

Participants

- Working Group Members:
 - Josep Casacuberta, Tamas Dalmay, Philippe Guerche, Jan Hejatko, Fabien Nogué, Nils Rostoks and Jose Juan Sánchez Serrano
- Hearing Experts¹:
 - none
- European Commission and/or Member States representatives:
 - EC: Juliette-Marie Margueritte, Olga Orlova
- EFSA:
 - NIF Unit: Michele Ardizzone (item 6), Silvia Federici, Antonio Fernandez Dumont (item 5.4), Tilemachos Goumperis (item 6), Dafni Maria Kagkli, Paolo Lenzi, Aleksandra Lewandowska, Nikoletta Papadopoulou, Pietro Piffanelli (item 6), and Tommaso Raffaello
- Others:
 - none

1. Welcome and apologies for absence

The Chair welcomed the participants.

2. Adoption of agenda

The agenda was adopted without changes.

¹ As defined in Article 17 of the Decision of the Executive Director concerning the selection of members of the Scientific Committee, the Scientific Panels, and the selection of external experts to assist EFSA with its scientific work: <https://www.efsa.europa.eu/en/corporate/pub/expertselection>



3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence² and the Decision of the Executive Director on Competing Interest Management³, EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process.

Certain interests were declared orally by the members at the beginning of the meeting. For further details on the outcome of the screening of the Oral Declaration(s) of Interest made at the beginning of the meeting, please refer to the Annex.

4. Agreement of the minutes of the 138th Working Group meeting held on 28 June via TELE/WEB.

The minutes of the 138th Working Group meeting held on 28 June 2022 were agreed.⁴

5. Scientific topics for discussion

5.1 EFSA-GMO-DE-2016-137 (Maize GA21 x T25)⁵

The Working Group discussed the application. Further discussion is needed.

5.2 EFSA-GMO-NL-2017-140 (Maize MON 87419)⁶

The Working Group discussed the application. Further discussion is needed.

5.3 EFSA-GMO-DE-2018-149 (Maize Bt11 x MIR162 x MIR604 x MON 89034 x 5307 x GA21)⁷

The Working Group discussed the application. Further discussion is needed.

5.4 EFSA-GMO-DE-2019-157 (Canola LBFLFK)⁸

The Working Group discussed the application. Further discussion is needed.

5.5 EFSA-GMO-NL-2019-158 (Brassica juncea RF3 Canola Quality)⁹

The Working Group discussed the application. Further discussion is needed.

5.6 EFSA-GMO-NL-2022-173 (Maize MON 95275)¹⁰

The Working Group discussed the application. Further discussion is needed.

6. AOB

² https://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

³ https://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf

⁴ <https://www.efsa.europa.eu/sites/default/files/wqs/gmo/wg-applications-molecular-characterisation-2018-2021.pdf>

⁵ <https://open.efsa.europa.eu/questions/EFSA-Q-2016-00775>

⁶ <https://open.efsa.europa.eu/questions/EFSA-Q-2017-00263>

⁷ <https://open.efsa.europa.eu/questions/EFSA-Q-2018-00292>

⁸ <https://open.efsa.europa.eu/questions/EFSA-Q-2019-00394>

⁹ <https://open.efsa.europa.eu/questions/EFSA-Q-2019-00412>

¹⁰ <https://open.efsa.europa.eu/questions/EFSA-Q-2022-00330>



7. Next meetings

140th meeting, 11 October 2022, TELE/WEB

141st meeting, 28-29 November 2022, TELE/WEB

Annex

Interests and actions resulting from the Oral Declaration of Interest done at the beginning of the meeting

With regard to this meeting, Prof. Nils Rostoks declared the following interest: their participation in a Horizon Europe project "Capturing the potential of Gene editing for a sustainable BioEconomy (GeneBEcon)", funded entirely by the European Union budget. This focuses primarily on fundamental aspects of the impact of new genome editing techniques on sustainable bioeconomy. In accordance with EFSA's Policy on Independence¹¹ and the Decision of the Executive Director on Competing Interest Management¹², and taking into account the specific matters discussed at the meeting in question, the interest above was not deemed to represent a Conflict of Interest for the expert concerned.

¹¹ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

¹² http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf



SCIENTIFIC PANEL ON GENETICALLY MODIFIED ORGANISMS

MINUTES OF 138th MEETING OF THE WORKING GROUP ON MOLECULAR CHARACTERISATION

**Held on 28 June 2022, TELE/WEB
(Agreed on 6 July 2022)**

Participants

- Working Group Members:
 - Josep Casacuberta, Tamas Dalmay, Philippe Guerche, Jan Hejatko, Simon Moxon (item 5.3), Fabien Nogué, Nils Rostoks, and Jose Juan Sanchez Serrano
- Hearing Experts¹:
 - Pier Sandro Cocconcelli (item 5.5)
- European Commission and/or Member States representatives:
 - EC: Alexandre Huchelmann (items 5.1, 5.5)
- EFSA:
 - NIF Unit: Silvia Federici, Dafni Maria Kagkli, Paolo Lenzi, Aleksandra Lewandowska, Nikoletta Papadopoulou, Pietro Piffanelli, Reinhilde Schoonjans (item 5.5) and Tommaso Raffaello
- Others:
 - none

1. Welcome and apologies for absence

The Chair welcomed the participants. Apologies were received from Lieve Herman.

2. Adoption of agenda

The agenda was adopted without changes.

¹ As defined in Article 17 of the Decision of the Executive Director concerning the selection of members of the Scientific Committee, the Scientific Panels, and the selection of external experts to assist EFSA with its scientific work: <https://www.efsa.europa.eu/en/corporate/pub/expertselection>



3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence² and the Decision of the Executive Director on Competing Interest Management³, EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

4. Agreement of the minutes of the 137th Working Group meeting held on 23 May 2022 via TELE/WEB.

The minutes of the 137th Working Group meeting held on 2-3 May 2022 were agreed.⁴

5. Scientific topics for discussion

5.1 EFSA-GMO-DE-2016-137 (Maize GA21 x T25)⁵

The Working Group discussed the application. Further discussion is needed.

5.2 EFSA-GMO-NL-2017-140 (Maize MON 87419)⁶

The Working Group discussed the application. Further discussion is needed.

5.3 EFSA-GMO-NL-2019-160 (Oilseed rape NS-B50027-4)⁷

The Working Group discussed the application. Further discussion is needed.

5.4 EFSA-GMO-NL-2019-161 (Maize MON 87429)⁸

The Working Group discussed the application. Further discussion is needed.

5.5 EFSA-GMO-NL-2019-162 (Soy Leghemoglobin)⁹

The Working group discussed the application. Further discussion is needed.

6. AOB

7. Next meetings

26-27 September 2022, TELE/WEB

² https://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

³ https://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf

⁴ <https://www.efsa.europa.eu/sites/default/files/wgs/qmo/wg-applications-molecular-characterisation-2018-2021.pdf>

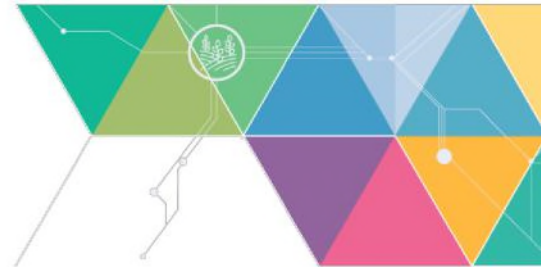
⁵ <https://open.efsa.europa.eu/questions/EFSA-Q-2016-00775>

⁶ <https://open.efsa.europa.eu/questions/EFSA-Q-2017-00263>

⁷ <https://open.efsa.europa.eu/questions/EFSA-Q-2019-00572>

⁸ <https://open.efsa.europa.eu/questions/EFSA-Q-2019-00628>

⁹ <https://open.efsa.europa.eu/questions/EFSA-Q-2019-00651>



SCIENTIFIC PANEL ON GENETICALLY MODIFIED ORGANISMS

MINUTES OF 137th MEETING OF THE WORKING GROUP ON MOLECULAR CHARACTERISATION

**Held on 2-3 May 2022, TELE/WEB
(Agreed on 12 May 2022)**

Participants

- Working Group Members:
 - Josep Casacuberta, Tamas Dalmay, Philippe Guerche, Jan Hejatko, Fabien Nogué, Nils Rostoks, and Jose Juan Sanchez Serrano
- Hearing Experts¹:
 - None
- European Commission and/or Member States representatives:
 - EC: Alexandre Huchelmann
- EFSA:
 - NIF Unit: Giuseppe Condorelli, Silvia Federici, Dafni Maria Kagkli, Paolo Lenzi, Aleksandra Lewandowska, Nikoletta Papadopoulos, Pietro Piffanelli and Tommaso Raffaello
- Others:
 - none

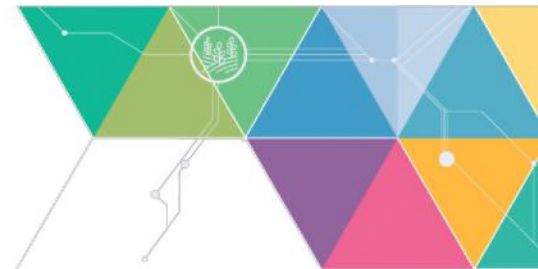
1. Welcome and apologies for absence

The Chair welcomed the participants.

2. Adoption of agenda

The agenda was adopted without changes.

¹ As defined in Article 17 of the Decision of the Executive Director concerning the selection of members of the Scientific Committee, the Scientific Panels, and the selection of external experts to assist EFSA with its scientific work: <https://www.efsa.europa.eu/en/corporate/pub/expertselection>



3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence² and the Decision of the Executive Director on Competing Interest Management³, EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

4. Agreement of the minutes of the 136th Working Group meeting held on 8 April 2022 via TELE/WEB.

The minutes of the 136th Working Group meeting held on 8 April 2022 were agreed.⁴

5. Scientific topics for discussion

5.1 EFSA-GMO-NL-2018-151 (Maize MON 89034 x1507 x MIR162 x NK603 x DAS-40278-9)⁵

The Working Group discussed the application. Further discussion is needed.

5.2 EFSA-GMO-NL-2019-161 (Maize MON 87429)⁶

The Working Group did not discuss the application due to time constraints. Further discussion is needed.

5.3 EFSA-GMO-NL-2020-169 (Oilseed rape MON 94100)⁷

The Working group discussed the application. Further discussion is needed.

5.4 EFSA-GMO-NL-2020-170 (Maize MON 95379)⁸

The Working Group discussed the application. Further discussion is needed.

5.5 EFSA-GMO-NL-2020-171 (Maize DP4114xMON89034xMON87411xDAS-40278-9)⁹

The Working Group discussed the application. Further discussion is needed.

5.6 EFSA-GMO-RX-026/2 (Oilseed rape GT73)¹⁰

The Working Group discussed the application. Further discussion is needed.

5.7 EFSA-GMO-RX-19 (Cotton 281-24-236 x 3006-210-23)¹¹

The Working Group discussed the renewal application. Further discussion is needed.

5.8 EFSA-GMO-RX-025 (Maize MIR162)¹²

The Working Group discussed the renewal application. Further discussion is needed.

² https://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

³ https://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf

⁴ <https://www.efsa.europa.eu/sites/default/files/wgs/gmo/wg-applications-molecular-characterisation-2018-2021.pdf>

⁵ <https://open.efsa.europa.eu/questions/EFSA-Q-2018-00457>

⁶ <https://open.efsa.europa.eu/questions/EFSA-Q-2019-00628>

⁷ <https://open.efsa.europa.eu/questions/EFSA-Q-2020-00749>

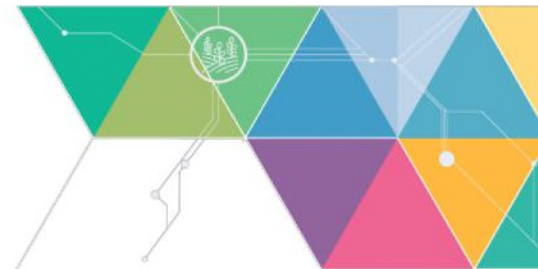
⁸ <https://open.efsa.europa.eu/questions/EFSA-Q-2020-00786>

⁹ <https://open.efsa.europa.eu/questions/EFSA-Q-2020-00833>

¹⁰ <https://open.efsa.europa.eu/questions/EFSA-Q-2021-00283>

¹¹ <https://open.efsa.europa.eu/questions/EFSA-Q-2020-00793>

¹² <https://open.efsa.europa.eu/questions/EFSA-Q-2021-00122>



5.9 Cotton DAS-24236-5 x DAS-21Ø23-5 mandate¹³

The Working Group finalised the text of the GMO Panel statement.

5.10 Soybean 40-3-2 mandate¹⁴

The Working Group discussed the text of the GMO Panel statement. Further discussion is needed.

6. AOB

7. Next meetings

28 June 2022, TELE/WEB

¹³ <https://open.efsa.europa.eu/questions/EFSA-Q-2020-00796>

¹⁴ <https://open.efsa.europa.eu/questions/EFSA-Q-2021-00556>



SCIENTIFIC PANEL ON GENETICALLY MODIFIED ORGANISMS

MINUTES OF 136th MEETING OF THE WORKING GROUP ON MOLECULAR CHARACTERISATION

**Held on 8 April 2022, TELE/WEB
(Agreed on 12 April 2022)**

Participants

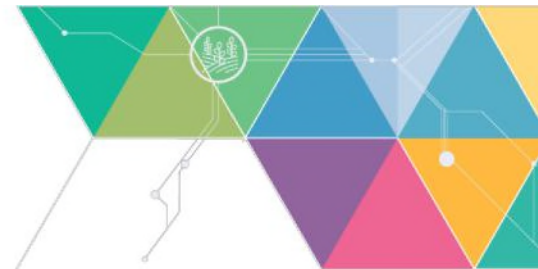
- Working Group Members:
 - Josep Casacuberta, Tamas Dalmay, Philippe Guerche, Jan Hejatko, Simon Moxon, Fabien Nogué, Nils Rostoks, and Jose Juan Sanchez Serrano
- EFSA:
 - NIF Unit: Giuseppe Condorelli, Silvia Federici, Dafni Maria Kagkli, Aleksandra Lewandowska, Nikoletta Papadopoulou
- Others:
 - none

1. Welcome and apologies for absence

The Chair welcomed the participants.

2. Adoption of agenda

The agenda was adopted without changes.



3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence¹ and the Decision of the Executive Director on Competing Interest Management², EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process.

4. Agreement of the minutes of the 135th Working Group meeting held on 14-15 March via TELE/WEB.

The minutes of the 135th Working Group meeting held on 14-15 March 2022 were agreed.³

5. AOB

5.1. Raw data for sequencing experiments

The working group discussed the submission of raw data for DNA sequencing quality checks in accordance with EFSA's Technical Note.

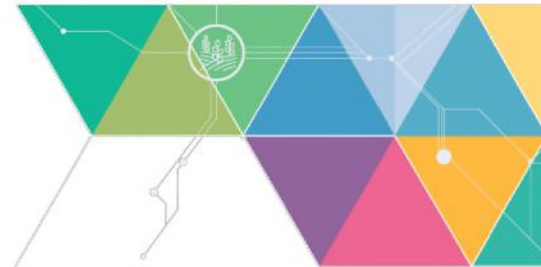
6. Next meetings

2-3 May 2022, TELE/WEB

¹ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

² http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf

³ <https://www.efsa.europa.eu/sites/default/files/wqs/gmo/wg-applications-molecular-characterisation-2018-2021.pdf>



SCIENTIFIC PANEL ON GENETICALLY MODIFIED ORGANISMS

MINUTES OF 135th MEETING OF THE WORKING GROUP ON MOLECULAR CHARACTERISATION

**Held on 14-15 March 2022, TELE/WEB
(Agreed on 1 April 2022)**

Participants

- Working Group Members:
 - Josep Casacuberta, Tamas Dalmay, Philippe Guerche, Jan Hejatko, Simon Moxon (items 5.4, 6.1), Fabien Nogu  , Nils Rostoks, and Jose Juan Sanchez Serrano
- Hearing Experts¹:
 - Pier Sandro Cocconcelli, Lieve Herman (item 5.4)
- European Commission and/or Member States representatives:
 - EC: Alexandre Huchelmann
- EFSA:
 - NIF Unit: Giuseppe Condorelli, Silvia Federici, Antonio Fernandez Dumont (items 5.3, 5.5), Dafni Maria Kagkli, Paolo Lenzi, Aleksandra Lewandowska, Nikoletta Papadopoulou and Tom maso Raffaello, Reinhilde Schoonjans (item 5.4)
- Others:
 - none

1. Welcome and apologies for absence

The Chair welcomed the participants.

2. Adoption of agenda

The agenda was adopted without changes.

¹ As defined in Article 17 of the Decision of the Executive Director concerning the selection of members of the Scientific Committee, the Scientific Panels, and the selection of external experts to assist EFSA with its scientific work:
<https://www.efsa.europa.eu/en/corporate/pub/expertselection>



3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence and the Decision of the Executive Director on Competing Interest Management, EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process.

Certain interests were declared orally by the members before the beginning of the meeting. For further details on the outcome of the screening of the Oral Declaration(s) of Interest made at the beginning of the meeting, please refer to the Annex.

4. Agreement of the minutes of the 134th Working Group meeting held on 24-25 January 2022 via TELE/WEB.

The minutes of the 134th Working Group meeting held on 24-25 January 2022 were agreed.²

5. Scientific topics for discussion

5.1 EFSA-G MO-NL-2020-171 (Maize DP4114xMON89034xMON87411xDAS-40278-9)³

The Working Group discussed the application and the MS comments. Further discussion is needed.

5.2 EFSA-GMO-NL-2020-172 (Maize DP-915635-4)⁴

The Working Group discussed the application. Further is needed.

5.3 EFSA-G MO-DE-2019-157 (LBFLFK canola)⁵

The Working Group discussed the application. Further discussion is needed.

5.4 EFSA-GMO-NL-2019-162 (Soy Leghemoglobin)⁶

The Working Group discussed the application. Further discussion is needed.

5.5 Cotton DAS-24236-5 x DAS-21023-5 mandate⁷

The Working Group discussed the mandate. Further discussion is needed.

5.6 Soybean 40-3-2 mandate⁸

The Working Group discussed the mandate. Further discussion is needed.

6. AOB

6.1. Raw data for sequencing experiments

The working group discussed the submission of raw data for DNA sequencing quality checks in accordance with EFSA's Technical Note. Further discussion is needed.

² <https://www.efsa.europa.eu/sites/default/files/wgs/gmo/wg-applications-molecular-characterisation-2018-2021.pdf>

³ <https://open.efsa.europa.eu/questions/EFSA-O-2020-00833>

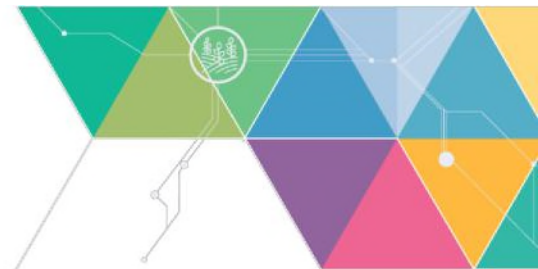
⁴ <https://open.efsa.europa.eu/questions/EFSA-O-2020-00834>

⁵ <https://open.efsa.europa.eu/questions/EFSA-O-2019-00394>

⁶ <https://open.efsa.europa.eu/questions/EFSA-O-2019-00651>

⁷ <https://open.efsa.europa.eu/questions/EFSA-O-2020-00796>

⁸ <https://open.efsa.europa.eu/questions/EFSA-O-2021-00556>



6.2. Sugar beet H7-1 mandate⁹

The Working Group discussed the mandate. Further discussion is needed.

7. Next meetings

8 April 2022, TELE/WEB

2-3 May 2022, TELE/WEB

⁹ <https://open.efsa.europa.eu/questions/EFSA-Q-2021-00135>



Annex

Interests and actions resulting from the Oral Declaration of Interest done at the beginning of the meeting

With regard to this meeting, Prof. Jose J. Sanchez Serrano declared the following interest: his appointment as Deputy Director General for Internationalisation of Science and Innovation has ended, and his position as Research Group Leader at the Centro Nacional de Biotecnología, a CSIC Research Institute has started. In accordance with EFSA's Policy on Independence¹⁰ and the Decision of the Executive Director on Competing Interest Management¹¹, and taking into account the specific matters discussed at the meeting in question, the interest above was not deemed to represent a Conflict of Interest for the expert concerned.

¹⁰ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

¹¹ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf



SCIENTIFIC PANEL ON GENETICALLY MODIFIED ORGANISMS

MINUTES OF 134th MEETING OF THE WORKING GROUP ON MOLECULAR CHARACTERISATION

**Held on 24-25 January 2022, TELE/WEB
(Agreed on 7 February 2022)**

Participants

- Working Group Members:
 - Josep Casacuberta, Tamas Dalmay, Philippe Guerche, Jan Hejatko, Fabien Nogué, Nils Rostoks, and José Juan Sanchez Serrano
- Hearing Experts¹:
 - none
- European Commission and/or Member States representatives:
 - EC: Alexandre Huchelmann
- EFSA:
 - NIF Unit: Giuseppe Condorelli, Andrea Gennaro (item 5.2), Silvia Federici, Antonio Fernandez Dumont (item 5.3, 5.4) Dafni Maria Kagkli, Paolo Lenzi, Aleksandra Lewandowska, Nikoletta Papadopoulou, Tommaso Raffaello, Reinhilde Schoonjans (item 5.4)
- Others:
 - none

1. Welcome and apologies for absence

The Chair welcomed the participants. No apologies were received.

2. Adoption of agenda

The agenda was adopted without changes.

¹ As defined in Article 17 of the Decision of the Executive Director concerning the selection of members of the Scientific Committee, the Scientific Panels, and the selection of external experts to assist EFSA with its scientific work: <https://www.efsa.europa.eu/en/corporate/pub/expertselection>



3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence² and the Decision of the Executive Director on Competing Interest Management³, EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

4. Agreement of the minutes of the 133rd Working Group meeting held on 29-30 November 2021 via TELE/WEB.

The minutes of the 133rd Working Group meeting held on 29-30 November 2021 were agreed.⁴

5. Scientific topics for discussion

5.1 EFSA-GMO-NL-2020-169 (Oilseed rape MON 94100)⁵

The Working Group discussed the application. Further discussion is needed.

5.2 EFSA-GMO-NL-2019-158 (RF3 Canola Quality Brassica juncea)⁶

The Working Group discussed the application. Further discussion is needed.

5.3 EFSA-GMO-DE-2019-157 (LBFLFK canola)⁷

The Working Group discussed the application. Further discussion is needed.

5.4 EFSA-GMO-NL-2019-162 (Soy Leghemoglobin)⁸

The Working Group discussed the application. Further discussion is needed.

5.6 Cotton DAS-24236-5 x DAS-21Ø23-5 mandate⁹

The Working Group discussed the mandate. Further discussion and clarifications from the applicant are needed.

5.7 EFSA-GMO-RX-022 (Soybean MON 87701 x MON 89788)¹⁰

The Working group finalised the Molecular Characterisation text of the opinion.

6. AOB

Update on new mandate on new information on genetically modified cotton MON 531¹¹

² http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

³ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf

⁴ <https://www.efsa.europa.eu/sites/default/files/wgs/gmo/wg-applications-molecular-characterisation-2018-2021.pdf>

⁵ <https://open.efsa.europa.eu/questions/EFSA-Q-2020-00749>

⁶ <https://open.efsa.europa.eu/questions/EFSA-Q-2019-00412>

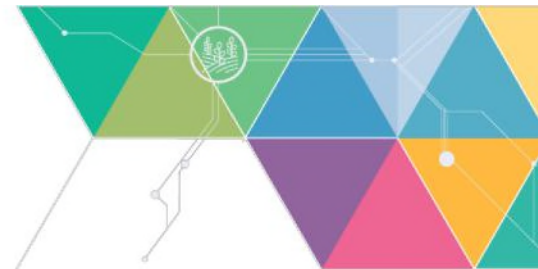
⁷ <https://open.efsa.europa.eu/questions/EFSA-Q-2019-00394>

⁸ <https://open.efsa.europa.eu/questions/EFSA-Q-2019-00651>

⁹ <https://open.efsa.europa.eu/questions/EFSA-Q-2020-00796>

¹⁰ <https://open.efsa.europa.eu/questions/EFSA-Q-2021-00062>

¹¹ <https://open.efsa.europa.eu/questions/EFSA-Q-2021-00793>



7. Next meeting

14-15 March 2022, TELE/WEB