



European Plant Science Organisation https://epsoweb.org

EPSO first reaction to the EU council decision to move forward the proposal regarding the regulation of New Genomic Techniques

Brussels, 24.03.2025

The European Plant Science Organization (EPSO) welcomes the decision by the EU Council to move forward and start negotiations with the EU Parliament and Commission on the legislative proposal for regulation of New Genomic Techniques (NGTs) in plants. EPSO sees the move towards a proportionate, more product-based regulatory environment as an important step into the future. It will enable Category-1 NGTs (NGT1), which cannot be distinguished from conventional plants produced by random mutagenesis, to make a substantial contribution to the Farm-to-Fork and Biodiversity Strategies under the EU Green Deal. These NGTs, when regulated like other breeding methods under current standards, will provide additional tools for breeding environmentally sustainable, future-climate-ready, healthful, and more diverse crops and foods, contributing to Food and Nutritional Security, helping to fulfil the UN Sustainable Development Goals.

EPSO is pleased that the EU Council will start negotiations based on the Commission proposal, having incorporated some aspects demanded by the European Parliament. EPSO offers to continue its support by providing scientific advice and state-of-the-art data for the negotiation process.

Consumer surveys in various European countries have documented increasingly positive attitudes towards NGT1 plant varieties delivering, e.g., improved nutritional qualities and environmental benefits. Disease-resistant, stress-tolerant, and nutrient-use-efficient NGT1 crops are important components of sustainable and climate change-proof agriculture. This is so for conventional farmers and, when given the choice, also for organic farmers. For example, from a scientific point of view, NGT-mediated fungal resistance in grapevines would be better for the environment and human health than the currently used copper sulphate, a chemical which is permitted for EU organic wine production. According to Jens Sundström, SLU (Sweden), "The methods will enable us to breed for late blight disease resistance, potentially reducing fungicide usage in potato cultivation by 90 %." Odd Arne Rognli, NMBU (Norway) adds "a publication from NMBU quantified the costs of fungicide treatment against late blight for Norwegian farmers at 125 mill NOK per year, which amounts to approximately 850 € per ha per year.

EPSO notes that standards for evaluating the equivalence between NGT plants and conventional crops as defined in Annex I may need to be clarified further based on scientific evidence. Alan Schulman, of the Natural Resources Institute Finland, observes

that "crop genomes in the breeders' pool are much more dynamic than understood at the time the proposal was developed, so the number and size of sequence changes that are considered equivalent to those of conventional plants must be re-evaluated."

EPSO looks forward to the advent of diverse, sustainable crops for healthful, diverse diets within Europe, developed in a timely way with methods that best suit the goals. Karin Metzlaff, EPSO Executive Director, affirms that "Improving the NGT regulation by broadening the original 20 x 20 base pair modification proposal by the European Commission in 2023 is both possible - taking into account recent research and publications – and necessary to address disease resistance, climate change, nutritional quality for future proof diverse crop varieties and thereby better contribute to the EU Green Deal.

This first reaction was developed by Jens Sundström and Alan Schulman (chairs EPSO Agricultural Technologies WG) with Odd Arne Rognli (EPSO President) and Karin Metzlaff (EPSO Executive Director) with all chairs of the EPSO Agricultural Technologies Working Group based on discussions of the EPSO General Assembly June 2024 and AgT WG meeting November 2024.

EPSO offers to collaborate with policy makers to develop appropriate future-ready regulations that enable the European public sector, small- and medium-sized companies and farmers to contribute more comprehensively to food and nutritional security and to use all available tools to reduce the environmental impact of agriculture. Notwithstanding the technical options retained, EPSO supports a science-based revision of the present European legislation establishing a more proportionate product-based risk assessment. EPSO is also willing to contribute to the societal debate on genome editing and to communicate in a fact-based and yet accessible manner about innovative plant science and its societal role.

Contacts

Jens Sundström, SLU Uppsala, jens.sundstrom@slu.se Alan Schulman, LUKE / FI, <u>Alan.Schulman@luke.fi</u> Odd Arne Rognli, NMBU / NO, <u>odd-arne.rognli@nmbu.no</u> Karin Metzlaff, EPSO, <u>Karin.Metzlaff@epsomail.org</u>

Useful links

EU Council

o New genomic techniques: Council agrees negotiating mandate, 14.3.2025

EC:

- EC <u>legal proposal for a Regulation of the European Parliament and of the Council on plants</u>
 obtained by certain new genomic techniques and their food and feed & Annexes, 5.7.2023
- Consultation on the <u>Horizon Europe interim evaluation (europa.eu)</u> (1.12.022 23.2.2023)
- Consultation towards the impact assessment of policy options on New Genomic Techniques (NGTs) (29.4.-22.7.2022)
- High level event on "New genomic techniques the way forward for safe and sustainable innovation in the agri-food sector", 29.11.2021
- o Sustainable food system framework initiative Inception Impact Assessment, 28.09.2021
- Roadmap (inception impact assessment) on new genomic techniques, 24.9.2021
- o Study on new genomic techniques, 29.4.2021
- JRC: https://publications.jrc.ec.europa.eu/repository/handle/JRC121847 29.04.2021

Court of Justice of the EU:

- o Judgment in Case C-528/16, 25.7.2018. EN Press Release; Ruling in EN:
- Advocate General's Opinion in Case C-528/16, 18.1.2018. <u>EN Press Release</u>: <u>Opinion in English</u>

EPSO (www.epsoweb.org) on EC strategies, Food and Nutritional Security:

- EPSO: Report and recommendations from the workshop 'Gene editing in plant resistance against pathogens and pests' of the EPSO Plant Health WG, 20.3.2025
- o EPSO 6th Workshop on Plants and Microbiomes Malaga / Spain, 3.11.2025, 10.2.2025
- EPSO: <u>The EPSO Plant Factories Working Group is relaunched</u> 6.3.2025 meeting, 29.01.2025
- EPSO first reaction to the Expert Group evaluation of Horizon Europe and guiding the evolution of the European Research and Innovation Framework, 31.10.2024
- EPSO etc.: We need much more MSCA! Joint statement by leading R&I organisations including EPSO urging the European Commission, Parliament and Council to recognise the MSCA's contribution by increasing its budget and maintaining its bottom-up character, 3.10.2024
- EPSO: Genome editing Improving legislation and starting flagships to better address climate, environmental, food and health challenges, 02.10.2024
- EPSO Horticulture Working Group 2nd online meeting 5.11.2024 Register by 18
 October and send two slides by 29 October, 2.10.2024
- <u>EPSO answers questions on Horizon Europe and FP10 by M Heitor / HLG</u> address FNS, strengthen ERC and MSCA, add Research Actions, invest in plant biology and crops improvement / adaptation ..., 17.7.2024
- EPSO signed the <u>declaration to Maintain open</u>, <u>free and fair access to <u>Digital Sequence</u> <u>Information (DSI)</u> advise to negotiators at COP 16 in October 2024, 11.7.2024
 </u>
- EPSO <u>feedback to the European Commission Horizon Europe</u> Work Programme 2025:
 Need to catch up with the Strategic Plan, 29.5.2024
- EPSO welcomes the European Commission's Horizon Europe Strategic Plan 2025-27 published 20.3.2024. 29.3.2024
- EPSO: <u>Comment on the European Parliament vote on the NGT legislation</u> proposed by the European Commission – Addition to the EPSO statement on the EC's legal proposal, 14.2.2024
- EPSO: <u>Must-protect components of the NGT legislation proposed by the European</u>
 <u>Commission</u> Annex to the EPSO statement on the EC's legal proposal, 19.01.2024
- EPSO <u>statement on the European Commission's legal proposal</u> for a Regulation of the European Parliament and of the Council on plants obtained by certain NGTs and their food and feed..., 06.11.2023
- EPSO's <u>Tree and Forest Biology and Biotechnology Working Group statement on Future</u> research needs, 25.9.2023
- EPSO: <u>Healthy Plants for a sustainable production</u> **Plant Health** WG statement, 11.7.2023
- EPSO <u>statement on Nutritional security</u> and <u>announcement 4th Workshop</u> 'Addressing the Nutritional Security goal in the context of climate change', 20.6.2023
- EPSO: <u>Contributions from plant research & innovation on the past, present & future of the European Research & Innovation Framework Programmes</u> 2014-2027, submission to the EC consultation on Horizon Europe, 21.2.2023
- EPSO submission to the EC's consultation on the roadmap regarding the legislation for plants produced by novel genomic techniques (NGTs), 25.10.2021
- Opinion paper: <u>Designing the Crops for the Future</u>; <u>The CropBooster Program</u> mobilize the European plant research community and all interested actors in agri-food research and innovation to face the challenge, 30.7.2021
- EPSO welcomes the European Commission's study regarding the status of novel genomic techniques (NGTs) under European Union law, 30.4.2021
- EPSO: <u>Statement on the Draft Strategic Research and Innovation Strategy by the</u>
 <u>Biodiversity Partnership Consortium</u>, 29.1.2021
- EPSO: Statement on the Farm to Fork Strategy by the European Commission, 2.6.2020

EPSO member institutes and universities: www.epsoweb.org/membership/membersh

- o The **Norwegian** Biotechnology Advisory Board (2020).
 - Norwegian consumers' attitudes toward gene editing in Norwegian agriculture and aquaculture. www.bioteknologiradet.no/filarkiv/2020/04/Report-consumer-attitudes-to-gene-editing-agri-and-aqua-FINAL.pdf
 - Questionnaire available upon request
- First outcome from the Swedish survey was presented at our meeting link to the report (in Swedish)
- Survey on NGTs in Finland report; Blog
- o ETH studies in Switzerland: Angela Bearth, ETH / CH
 - Bearth, A., Drummond Otten, C. & Segrè Cohen, Alex (2024). Consumers' perceptions and acceptance of genome editing in agriculture: Insights from the United States of America and Switzerland. *Food Research International*, 178, 113982. https://doi.org/10.1016/j.foodres.2024.113982
 - Bearth, A., Kaptan, G., & Kessler, S. H. (2022). Genome-edited versus genetically-modified tomatoes: an experiment on people's perceptions and acceptance of food biotechnology in the UK and Switzerland. *Agriculture and Human Values*, 39, 1117-1131.
 https://doi.org/10.1007/s10460-022-10311-8
 - Saleh, R., Bearth, A., Siegrist, M. (2021). How chemophobia affects public acceptance of pesticide use and biotechnology in agriculture. *Food Quality and Preference*, *91*, 104197 https://doi.org/10.1016/j.foodqual.2021.104197
 - The video of a workshop: https://geneticresearch.scnat.ch/en/events/uuid/i/4b5f727d-b532-5e04-8b79-02f4ad2fd78c-CRISPR and food production
- Barometer of the climate of trust in the agri-food sector. Monographs New Technologies for Plant Breeding. Spain (2024). Modelo Nota Interior +2p (mapa.gob.es)
- Ireland's public consultation on the EU Commission proposal for a Regulation on plants obtained by certain New Genomic Techniques (NGT's).
 https://assets.gov.ie/296389/1d66d5ba-93fe-4eee-bef0-788eea645099.pdf#page=null

Publications

 Forbes E, Wulff-Vester AK and Hvoslef-Eide T(AK) (2023) Will genetically modified late blight resistant potatoes be the first GM crops to be approved for commercial growing in Norway? Front. Plant Sci. 14:1137598. doi: 10.3389/fpls.2023.1137598

About EPSO

EPSO, the European Plant Science Organisation, is an independent academic organisation that represents about 200 research institutes, departments and universities from 30 countries, mainly from Europe, and 2.700 individuals Personal Members, representing over 24 000 people working in plant science. EPSO's mission is to improve the impact and visibility of plant science in Europe, to provide authoritative source of independent information on plant science including science advice to policy, and to promote training of plant scientists to meet the 21st century challenges in breeding, agriculture, horticulture, forestry, plant ecology and sectors related to plant science. https://epsoweb.org EU Transparency Register Number 38511867304-09