Greens/EFA media briefing
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GM crops and consumer rights

Summary: Under current EU rules, GM food must be clearly labelled. A new opinion survey shows that this is in line with consumers' expectations across all EU countries. But these rules are under attack from multinational seed companies like Bayer, Corteva and Syngenta. They demand that food produced from certain GM crops engineered with new gene technology be excluded from the scope of EU regulations governing GM organisms (GMOs), including GMO labelling rules. The Greens/EFA warn that this would deprive consumers of their right to know how their food is produced, and leave them no opportunity to avoid GM food.

GM crops 1.0 - GM crops made with older-style gene technology

Under EU legislation, a genetically modified (GM) organism is defined as "an organism, with the exception of human beings, in which the genetic material has been altered in a way that does not occur naturally by mating and/or natural recombination"[1]. GM organisms need to be authorised prior to their release into the environment or use as food and feed, based on a safety evaluation.[2]

Today, this concerns mainly agricultural crops such as maize and soya. Most of these GM crops are grown in the Americas.[3] In the EU, only one GM maize variety is authorised for cultivation. It is grown in small quantities in Spain and Portugal.[3] Most EU countries have banned the cultivation of GM crops in all or part of their territories.[4] But the EU has authorised many GM crops for use as food and feed, and it imports large amounts of them.[5]

Sales of GM seeds are dominated by the Big Four agricultural corporations Bayer, Corteva (former DowDupont), Syngenta and BASF.[6] These companies all produce agrichemicals as well, and the vast majority of GM crops that are grown today are engineered to survive spraying with herbicides that would normally kill them, and that are produced by the same company.[7]

GM crops 2.0 - GM crops engineered with gene editing

The GM crops grown today have DNA from other species introduced into their genome. The fact that they tolerate spraying with toxic herbicides, for example, is achieved by inserting a gene from a soil bacterium.[8] With so-called gene-editing technology, genetic engineers can introduce additional DNA or modify or knock out (i.e. delete the function of) existing genes. One of the gene-editing tools is the CRISPR/Cas 'gene scissors'.[9]

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[1] Directive 2001/18/EC
[2] European Commission. GMO legislation
[3] ISAAA, 2020, Brief 55-2019 - Executive Summary
[4] European Commission, Restrictions of geographical scope of GMO applications/authorisations
[5] European Commission, 2015, Fact Sheet: Questions and Answers on EU's policies on GMOs
[6] IHS Markit, 2020, Analysis of sales and profitability within the seed sector
[7] In 2019, 88% of the global GM crop area was planted to herbicide tolerant GM crops, according to ISAAA, 2020, Brief 55-2019 - Executive Summary
[8] Funke, T. et al, 2006, Molecular basis for the herbicide resistance of Roundup Ready crops
[9] Greens/EFA, 2021, Gene editing myths and reality. A guide through the smokescreen

So far, only two gene-edited GM crops are grown commercially in the US, one of them also in Canada.[10] In the EU, such GM crops are currently grown on test fields in Belgium, Spain and Sweden.[11] The Big Four agricultural corporations have not yet brought any gene-edited crops to the market. But most patent applications for such crops have been filed by Corteva (former DowDupont) and Bayer.[12]

Most Europeans have never heard of gene editing. A Eurobarometer poll of 2019 showed that only 21% of respondents had heard of gene editing.[13] In early 2021, 37% of those polled had heard of it. This number includes people who "know nothing" or "know a little" about gene editing. By contrast, 78% of respondents had heard of GM crops more generally, ranging from 61% in Portugal to 93% in Poland.

In the EU, gene-edited crops are covered by EU GMO regulations.[14] The European seed industry refers to gene editing as 'plant breeding innovation' and demands that a wide range of gene-edited GM crops be excluded from EU GMO regulations.[15] The Commission will communicate its views on the matter at the end of April 2021.

GMO labelling in the EU

EU legislation introduced in 2003 states that

- in the case of pre-packaged GM food/feed products, the list of ingredients must indicate "*genetically modified*" or "*produced from genetically modified [name of the organism]";*
- in the case of products without packaging these words must still be clearly displayed in close proximity to the product (e.g a note on the supermarket shelf).

Consumers are practically unaware of these labels since retailers do not usually stock GM food, and few GM food products are on sale.[16]

Products from animals fed with GM crops are exempt from GMO labelling. In some EU countries, "non-GMO" labelling schemes have been set up to close that gap, and the range of animal products labelled that way is rapidly growing.[17]

In early 2021, across the EU, 86% of those who had heard about GMOs believed that food made from such crops should be labelled accordingly. A similar proportion (81%) believed that food produced from animals fed with GM crops should be labelled this way. Around 68% of respondents who had heard about new GM techniques such as CRISPR/Cas wanted the products derived from those techniques labelled. An extremely low number of respondents (3%) agree with the industry's proposal to exempt these products from GMO safety testing and labelling.

[10] Friends of the Earth Europe, 2021, Generation 'unknown'. Exposing the truth behind the new generation of GMOs
[11] European Commission Joint Research Centre, Deliberate release into the environment of plants GMOs for any other purposes than placing on the market (experimental releases)
[12] Then, Christoph, 2019, Neue Gentechnikverfahren und Pflanzenzucht: Patente-Kartell für große Konzerne
[13] European Food Safety Authority, 2019, 2019 Eurobarometer on Food Safety in the EU
[14] European Court of Justice ruling in case C-528/16, July 2018
[15] Euroseeds, 2018, Position on Plant Breeding Innovation (updated 2019)
[16] European Commission, 2015, Fact Sheet: Questions and Answers on EU's policies on GMOs
[17] European Non-GMO Industry Association (ENGA), The Non-GMO sector in Europe

EU Green Deal

In the Farm-to-Fork Strategy, an integral part of the EU Green Deal, the European Commission has said the EU should better inform consumers about the food they are buying. The Commission aims to introduce food labelling that covers also environmental and social aspects of food production.[18]

At the same time, the Commission is considering industry demands to exempt certain gene-edited GM crops from the scope of EU GMO regulations, including GMO labelling rules. This would mean that consumers' right to know what is on their plates is restricted rather than broadened.[19]

The Greens/EFA group in the European Parliament insist that existing EU rules must be maintained and strengthened. We are asking that the labelling gap for products produced from animals fed with GM crops be closed.

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[18] European Commission, 2020, From Farm to Fork. Our food, our health, our planet, our future

[19] Greiter, A. and Heissenberger, A., 2021, New Genetic Engineering. A basis for the upcoming political debate