Advice on the renewal of import and processing of GM soybean MON 87705 × MON 89788

COGEM advice CGM/251218-01

COGEM has been requested to evaluate the environmental risks associated with the renewal of the authorisation for import, processing and food and feed use of genetically modified (GM) soybean MON 87705 × MON 89788 (MA 250018_001; GMFF-2025-35487), as submitted by Bayer Agriculture BV, on behalf of Bayer CropScience LP.

GM soybean MON 87705 × MON 89788 was produced by conventional crossbreeding of the genetically modified parental soybean lines MON 87705 and MON 89788. GM soybean MON 87705 × MON 89788 expresses the *FAD2/FATB* suppression cassette, derived from MON 87705, which is involved in the fatty acid metabolism. Suppression of expression of these enzymes leads to an altered fatty acid profile of the soybean seeds. MON 87705 × MON 89788 also expresses the *cp4 epsps* gene, derived from MON 89788, which provides tolerance to glyphosate-containing herbicides.

COGEM has previously advised positively on the import and processing of MON 87705 × MON 89788[1], and the GM soybean has been authorised for placement on the market in the European Union in 2016.[2]

Soybean (*Glycine max*) is cultivated worldwide, from equatorial to temperate zones. It is a predominantly self-pollinating species. Natural outcrossing rates are generally low.[3,4] For optimal growth, soybean requires temperatures between 25 °C and 30 °C. The crop is sensitive to frost and does not survive freezing conditions.[3,4] Although the Dutch climate is not optimal for cultivation of soybean, it is cultivated in the Netherlands on a small scale (101 hectares in 2025, preliminary data).[5] Soybean volunteers are very uncommon in the Netherlands and have never resulted in establishment of wild populations. To the best of COGEM's knowledge, there are no reports of feral soybean populations in Europe. Additionally, hybridisation with other species is not possible in Europe, as there are no wild relatives of soybean present.[3,4]

In the application for renewal, the bioinformatic analysis of the inserted elements and their 3' and 5' junctions in the genome of GM soybean MON 87705 × MON 89788 was updated to assess protein

1. COGEM (2013). Import and processing of the genetically modified soybean line MON87705xMON89788. COGEM advice CGM/130107-01
2. Commission Implementing Decision (EU) 2016/1217 of 22 July 2016 authorising the placing on the market of products containing, consisting of, or produced from genetically modified soybean MON 87705 × MON 89788 (MON-877Ø5-6 × MON-89788-1) pursuant to Regulation (EC) No 1829/2003 of the European Parliament and of the Council OJEU L 199/28
3. OECD (2006). "Section 2 - Soybean (GLYCINE MAX (L.) MARR.)", in Safety Assessment of Transgenic Organisms, Volume 1: OECD Consensus Documents, OECD Publishing, Paris
4. Andersson MS & de Vicente MC (2010). Soybean (*Glycine max* (L.) Merr.). In: Gene flow between crops and their wild relatives. Eds: Andersson MS et al., The Johns Hopkins University Press, Baltimore
5. Centraal Bureau voor de Statistiek (CBS). Landbouw; gewassen, dieren en grondgebruik naar regio. https://opendata.cbs.nl/#/CBS/nl/dataset/80780ned/table (visited: 26th November 2025) [In Dutch]

sequence similarities using up-to-date databases of allergens, toxins, and general proteins. No indications for potential environmental risks were identified.

In addition, the applicant performed a systematic literature search using a collection of bibliographic databases, covering the period from 2017 to 2025. No publications were identified that would invalidate the conclusions of the previous risk assessment. There is no indication that the introduced traits in GM soybean MON 87705 × MON 89788 will allow the GM soybean to survive or establish in the Dutch environment.

A post-market environmental monitoring (PMEM) plan is provided in the application. The applicant also supplied annual reports on the monitoring carried out between 2016 and 2024. The information in the annual monitoring reports gives no indication of adverse effects or incidents resulting from import and processing of soybean MON 87705 × MON 89788. The applicant did not propose any changes to the existing (PMEM) plan for soybean MON 87705 × MON 89788. COGEM has published several recommendations for further improvement of the general surveillance (GS) plan[6,7] – which is part of a PMEM plan – but considers the current GS plan adequate for import and processing of GM soybean MON 87705 × MON 89788.

COGEM is of the opinion that renewal of the market authorisation for import and processing of GM soybean of MON 87705 × MON 89788 poses a negligible risk to the Dutch environment. COGEM abstains from giving advice on the potential risks of incidental consumption, as a food/feed assessment is carried out by other organisations.

6. COGEM (2010). General Surveillance. COGEM report CGM/100226-01
7. COGEM (2015). Advice on improving the general surveillance of GM crops. COGEM advice CGM/150601-02