

This is provisional English translation of an excerpt from the original full report.

Safety Assessment Report

Maize enhanced grain yield and tolerant to herbicide glufosinate (DP202216)

(Genetically Modified Feed)

Food Safety Commission of Japan (FSCJ)
February 2022

ABSTRACT

The FSCJ conducted a safety assessment of “Maize enhanced grain yield and tolerant to herbicide glufosinate (DP202216)”, based on the documents submitted by the applicant.

This line was generated through the introduction of the *zmm28* gene from maize (*Zea mays*) and the *pat* gene from *Streptomyces viridochromogenes*. The insertions of these genes result in expressions of ZMM28 protein and PAT protein intended to enhance grain yield and be tolerant to glufosinate.

In accordance with “Stance on Safety Assessments of Genetically Modified Feed and Feed Additives”¹, the following possibilities were considered:

- i. new harmful substances derived from recombinants are generated in said genetically modified feed and transferred to meat, milk, eggs and other livestock products;
- ii. components in said genetically modified feed which are derived from genetic modification are transformed into harmful substances and accumulate in livestock products; and
- iii. components in said genetically modified feed which are the result of genetic modification interact with the metabolic system of livestock animals and produce new harmful substances.

As a result of assessing this line, none of these possibilities could be putative. Accordingly, the FSCJ determined that it is unnecessary to assess this line based on “Standards for the Safety Assessment of Genetically Modified Foods (Seed Plants)”².

The FSCJ concluded that there is no concern about human consumption of products derived from livestock fed this line.

¹ Decision of the FSCJ dated May 6, 2004

² Decision of the FSCJ dated January 29, 2004