

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

Safety Assessment Report

Maize resistant to coleopteran insect pests and tolerant to herbicide glufosinate (DP51291)

(Genetically Modified Feed)

Food Safety Commission of Japan (FSCJ) January 2025

ABSTRACT

The FSCJ conducted a safety assessment of "Maize resistant to coleopteran insect pests and tolerant to the herbicide glufosinate (DP51291)."

This line was developed through introducing the *ipd072Aa* transgene derived from *Pseudomonas* chlororaphis, the pat transgene derived from *Streptomyces viridochromogenes*, and the pmi transgene derived from *Escherichia coli*. The expression of the IPD072Aa protein confers resistance to coleopteran insect pests, the expression of the PAT protein confers tolerance to the herbicide glufosinate, and the expression of the PMI protein confers selection markers for transformants.

The assessment, conducted referring to the "Stance of Safety Assessments of Genetically Modified Feed and Feed Additives¹", indicated that no additional harmful substances were produced in this line, leading to the conclusion that such substances could not transfer into meat, milk, eggs, or other livestock products. Furthermore, it is also deemed highly unlikely that components resulting from this genetic modification could be converted into or accumulated as harmful substances in livestock products, or that additional harmful substances could be generated by these components interacting with the metabolic systems of livestock.

Considering the above, it was deemed unnecessary to reconduct a safety assessment in reference to the "Standards for the Safety Assessment of Genetically Modified Foods (Seed Plants)²". It has been concluded that livestock products derived from animals fed this line are unlikely to pose concerns relevant to human health.

¹ Decision of FSCJ dated May 6, 2004

² Decision of FSCJ dated January 29, 2004