

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

## Safety Assessment Report

### **Maize resistant to lepidopteran insect pests and tolerant to herbicide glufosinate (DP910521)** (Genetically Modified Feed)

Food Safety Commission of Japan (FSCJ)  
February 2024

#### ABSTRACT

The FSCJ conducted a safety assessment of “Maize resistant to lepidopteran insect pests and tolerant to the herbicide glufosinate (DP910521).”

Maize line DP910521 was developed by introducing the *cry1B.34* transgene derived from *Bacillus thuringiensis*, the *pat* transgene derived from *Streptomyces viridochromogenes*, and the *pmi* transgene derived from *Escherichia coli* into the dent maize line PH184C (*Zea mays* ssp. *mays* (L.) Iltis) as a host. The expression of the Cry1B.34 protein confers resistance to lepidopteran 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 Additives,<sup>1</sup>” indicated that no additional harmful substances were produced in this line, leading to the conclusion that such substances could not be transferred 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 considered unnecessary to reconduct a safety assessment in reference to the “Standards for the Safety Assessment of Genetically Modified Foods (Seed Plants)<sup>2</sup>”. It has been concluded that livestock products derived from animals fed this line are unlikely to pose concerns relevant to human health.

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<sup>1</sup> Decision of FSCJ dated May 6, 2004

<sup>2</sup> Decision of FSCJ dated January 29, 2004