

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

## Safety Assessment Report

### Sugar beet tolerant to herbicide glyphosate, glufosinate and dicamba (KWS20-1 line) (Genetically Modified Feed)

Food Safety Commission of Japan (FSCJ)  
September 2025

#### ABSTRACT

The FSCJ conducted a safety assessment of “Sugar beet tolerant to herbicide glyphosate, glufosinate and dicamba (KWS20-1 line).”

This line was developed by introducing the modified *cp4 epsps* transgene derived from *Agrobacterium* sp. CP4 strain, the *pat* transgene derived from *Streptomyces viridochromogenes*, and the modified *dmo* transgene derived from *Stenotrophomonas maltophilia* DI-6 strain into the breeding line 04E05B1DH05 of sugar beet (*Beta vulgaris* L. ssp. *vulgaris* var. *altissima*) belonging to the genus *Beta* in the family *Amaranthaceae*, as a conventional variety. The expression of modified CP4 EPSPS protein, PAT protein, and modified KWS20-1 DMO protein confers tolerance to herbicide glyphosate, glufosinate, and dicamba, respectively.

The assessment conducted referring to the “Stance of the Safety Assessment 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 additional harmful 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 harmful substances could be generated by these components interacting with the metabolic system of livestock.

Considering the above, it was deemed unnecessary to reconduct a safety assessment in reference to the “Guidelines for the Safety Assessment of Genetically Modified Foods (Seed Plants)<sup>2</sup>”. The FSCJ 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 the FSCJ dated May 6, 2004

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