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

Safety Assessment Report

Cotton 1910 line, tolerant to aryloxylalkanoate and glufosinate herbicide

(Genetically modified food)

Food Safety Commission of Japan (FSCJ)

April 2015

ABSTRACT

FSCJ conducted a risk assessment of cotton 1910 line, tolerant to aryloxylalkanoate and glufosinate herbicide, based on the documents submitted by the applicant.

This line is generated through the introduction of a modified aryloxyalkanoate dioxygenase-12 gene derived from *Delftia acidovorans* MC1 to express aryloxyalkanoate dioxygenase-12 protein in the host line, and thus is tolerant to aryloxylalkanoate herbicide. Modified phosphinothricin acetyltransferase gene, derived from *Streptomyces viridochromogenes*, was also introduced as a selection marker.

Based on the "Standards for the Safety Assessment of Genetically Modified Foods (Seed Plants)[1]", this line was evaluated on the safety of the inserted gene, toxicity and allergenicity of the protein produced from the inserted gene, post-insertion analysis of the nucleotide sequence, stability of the inserted gene in the successive generations, influences on metabolic pathways in the plants, comparative characterization of nutrients and toxic ingredients in the plants and others. Consequently, newly produced adverse effects on humans derived from this cotton line are unlikely from the comparison of this line with the conventional counterpart.

In conclusion, no concern relevant to human health is raised on the cotton 1910 line, tolerant to aryloxylalkanoate and glufosinate herbicide.

[1] Decision of the Commission dated 29 January 2004.