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

Safety Assessment Report

Short stature maize MON94804 line

(Genetically Modified Food)

Food Safety Commission of Japan (FSCJ)
April 2025

ABSTRACT

The FSCJ conducted a safety assessment of "Short stature maize MON94804 line." This line was developed by introducing the *GA20ox*_SUP sequence into the dent maize line HCL301 (*Zea mays subsp. mays (L.) Iltis*) as a host. This sequence consists of a 21-base pair sequence derived from the coding regions of the maize genes *ZmGA20ox3* and *ZmGA20ox5*, its inverted repeat sequence, along with three Osa-miR1425 fragments from rice (*Oryza sativa*). The *GA20ox*_SUP RNA, transcribed from the *GA20ox*_SUP sequence, undergoes RNA interference (RNAi), thereby suppressing the expression of the endogenous *ZmGA20ox3* and *ZmGA20ox5* genes in maize. This gene suppression reduces gibberellin levels in the stem, resulting in shorter internodes and reduced culm length, thereby conferring a reduced plant height trait.

Referring to the "Standards for the Safety Assessment of Genetically Modified Foods (Seed Plants) [1]", evaluations were made regarding the safety of the donor of the inserted gene, the base sequence analysis of the inserted gene, the stability of the inserted gene in successive generations, the effects on the metabolic pathway of plants, and the results of comparison of nutritional and toxic components of plants. From these results, there were no additional factors that could impair safety in this line compared with non-recombinant maize.

Therefore, it has been concluded that "Short stature maize MON94804 line" is unlikely to pose concerns relevant to human health.

[1] Decision of FSCJ dated January 29, 2004