

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

Risk Assessment Report Maize 1507 x NK603 (Genetically modified food)

Food Safety Commission of Japan (FSCJ)
February 2004

Name: Maize 1507 x NK603

Property: Lepidoptera-resistant, herbicide-tolerant (glufosinate, glyphosate)

Applicant: Du Pont K.K

Manufacturer: Dow AgroSciences, Pioneer Hi-bred International Inc. (U.S.)

I. General Description of the Product

The maize 1507 x NK603 was produced by conventional crossing between two transgenic lines of maize which are resistant to Lepidoptera and tolerant of herbicide. Risk assessment was already conducted for each parent maize line 1507 and Roundup Ready Maize NK603 by the Food Safety Commission of Japan (FSCJ), which concluded that there is no concern about health hazards in humans caused by the consumption of either of them.

II. Results of the Risk Assessment

- (1) The product was derived by crossing the two lines of maize both containing inserted genes that confer resistance to Lepidoptera and tolerance of herbicide without affecting host plant's metabolic systems.
The gene *cry1F* introduced to maize 1507 expresses protein Cry1F, which has been identified as not having any enzymic activity. The PAT protein, an expression of the modified *pat* gene introduced to maize 1507, is an enzyme to acetylate glufosinate to atoxic Acetyl Glufosinate. The protein CP4 EPSPS, an expression of the gene *CP4 EPSPS* introduced to Roundup Ready Maize NK603, confers tolerance to glyphosate herbicide, acting as catalysts in the shikimat-3-phosphate pathway under the existence of glyphosate. These respective traits act independently of each other in mechanism, thus having no influence on each other in the crossed maize 1507 x NK603.
- (2) The crossing was conducted between congeneric species.
Both maize 1507 and NK606 belong to *Zea Mais L.*, the congeneric species.
- (3) No difference exists in amount of consumption, edible parts or processing methods.
There is no difference between maize 1507, NK603 and 1507 x NK603 as to their intended uses or application, such as the amount of consumption, edible parts and processing methods.

According to above (1) to (3), on the basis of Safety Assessment for Cross-Breeding of Genetically Modified Plants (January 29, 2004; determined by FSCJ), FSCJ concluded that there is no need for conducting safety assessment of maize 1507 x NK603, and that there is no concern about health hazards in humans caused by the consumption of the genetically modified maize 1507 x NK603.