



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

Safety Assessment Report

Glucoamylase produced using NYZM-BE strain

(Genetically Modified Foods and Feeds)

Food Safety Commission of Japan (FSCJ)

May 2017

ABSTRACT

FSCJ conducted a safety assessment of glucoamylase produced using NYZM-BE strain, based on the documents submitted by the applicant.

The NYZM-BE strain was generated through introduction of glucoamylase gene into *Aspergillus niger* BO-1 strain in order to enhance the glucoamylase productivity. The glucoamylase gene is originated from *Rasamsonia emersonii* CBS759.71. This glucoamylase, an enzyme hydrolyzing polysaccharides such as amylose and amylopectin at the 1,4- α glycosidic linkage from the non reducing ends to form β -D-glucose, is used for saccharification in the process of starch sugar production.

The safety of the inserted gene, toxicity and allergenicity of the protein produced from the inserted gene, and others were evaluated based on the “Standards for the Safety Assessment of Food Additives Produced Using Genetically Modified Microorganisms¹”. None of the newly generated safety concerns were detected in comparison with conventional additives without genetical modification.

Consequently, FSCJ concluded that the glucoamylase produced using NYZM-BE strain has no concern relevant to human health.

¹ Decision of the Commission Dated 25 March 2004.