

29 February 2016

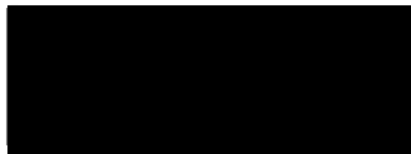
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Dear Sir/Madam

Attached are the comments that the New Zealand Food & Grocery Council wishes to present on the ***Call for Submissions – Application A1116 Food derived from Herbicide-tolerant & Insect-protected Corn Line MZIR098.***

Yours sincerely



Katherine Rich  
Chief Executive

**Food Standards Australia New Zealand**

**CALL FOR SUBMISSIONS – APPLICATION A1116 FOOD DERIVED  
FROM HERBICIDE-TOLERANT AND INSECT-PROTECTED CORN  
LINE MZIR098**

**29 February 2016**

The New Zealand Food & Grocery Council (the “NZFGC”) welcomes the opportunity to make a submission on the *Call for Submissions – Application A1116 Food derived from Herbicide-tolerant & Insect-protected Corn Line MZIR098*.

### **New Zealand Food & Grocery Council**

NZFGC represents the major manufacturers and suppliers of food, beverage and grocery products in New Zealand. This sector generates over \$34 billion in the New Zealand domestic retail food, beverage and grocery products market, and over \$31 billion in export revenue from exports to 195 countries – some 72% of total merchandise exports. Food and beverage manufacturing is the largest manufacturing sector in New Zealand, representing 44% of total manufacturing income. Our members directly or indirectly employ more than 400,000 people – one in five of the workforce.

### **Application A1116**

The NZFGC understands that the Corn line MZIR098 (also known as SYN-00098-3) is tolerant to the herbicide glufosinate ammonium and protection against key corn coleopteran pests. This is achieved through expression of the enzyme phosphinothricin acetyltransferase (PAT) encoded by the *pat* gene derived from the common soil bacterium *Streptomyces viridochromogenes*. MZIR098 is also insect protected by the expression in the plant of a modified Cry3Aa2 protein designated mCry3Aa2 (based on sequence from the *cry3Aa2* gene from *Bacillus thuringiensis* ssp. *tenebrionis*) and eCry3.1Ab (encoded by a chimeric gene comprising selected sequences of the *mcry3Aa2* gene, and the *cry1Ab* gene from *B. thuringiensis* ssp. *Kurstaki*).

### **Comments**

FSANZ has previously assessed the expression of both the enzyme phosphinothricin acetyltransferase (PAT) encoded by the *pat* gene and mCry3Aa2 and has found these to be as safe as conventional foods.

The Australia New Zealand Food Standards Code contains the references to previously approved herbicide-tolerant and insect-protected corn lines (in Standard 1.5.2).

The safety assessment of corn line MZIR098 conducted by Food Standards Australia New Zealand (FSANZ) concluded that there were no concerns regarding the potential toxicity or allergenicity of the expressed proteins. Previous safety assessments of eCry3.1Ab, mCry3Aa2 and PAT indicate that the proteins would be rapidly degraded in the digestive system following ingestion and would be inactivated by heating. Additionally, updated bioinformatic studies considered in this assessment confirm the lack of any significant amino acid sequence similarity to known protein toxins or allergens.

Detailed compositional analyses were also conducted to establish the nutritional adequacy of grain from MZIR098.

NZFGC supports choice in the market place and for manufacturers. NZFGC also notes that all safety assessment reports of GM products are independently peer reviewed. On this basis, NZFGC therefore supports the approval of MZIR098. This does not infer its use in New Zealand nor is this intended to influence the current process for environmental release of GM organisms in New Zealand which is an entirely separate process.