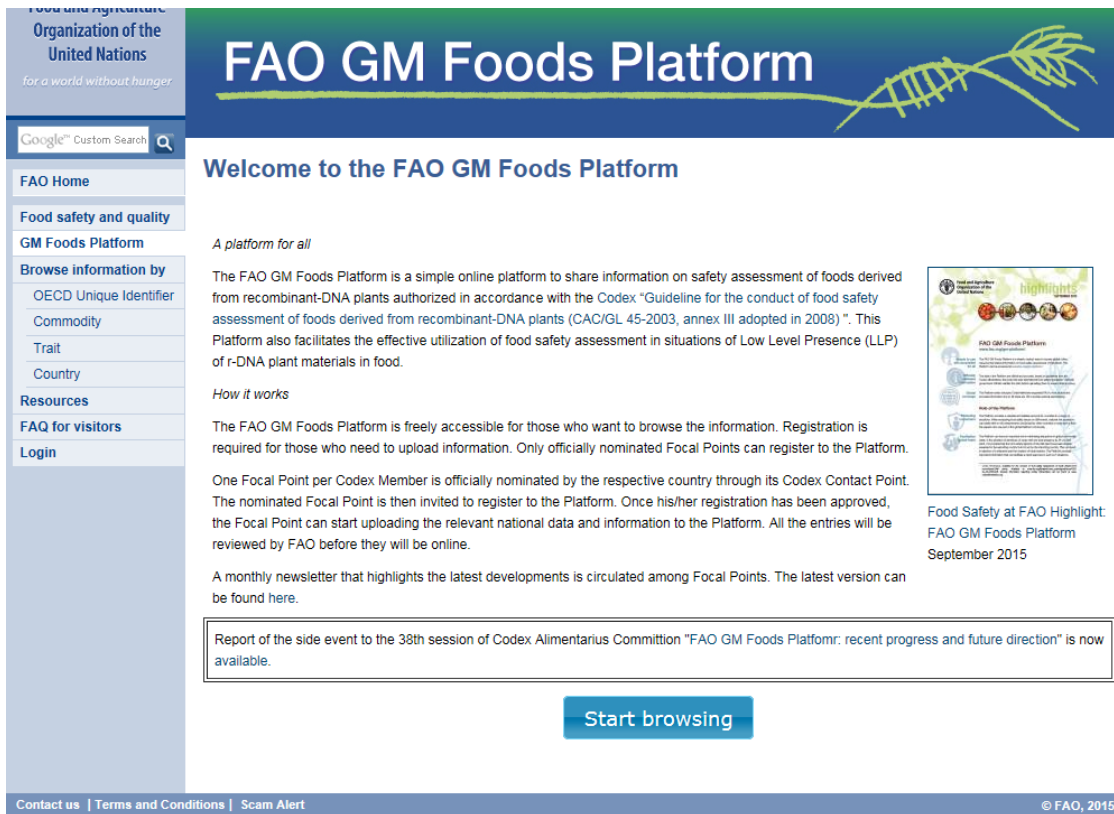


Effective use of data on the FAO GM Foods Platform: Canada



The screenshot shows the homepage of the FAO GM Foods Platform. At the top left is the FAO logo with the text "Food and Agriculture Organization of the United Nations" and "for a world without hunger". The main header features the title "FAO GM Foods Platform" in white text on a blue background, accompanied by a stylized green plant graphic. Below the header is a navigation menu with links for "FAO Home", "Food safety and quality", "GM Foods Platform", "Browse information by" (with sub-links for OECD Unique Identifier, Commodity, Trait, and Country), "Resources", "FAQ for visitors", and "Login". A search bar is located at the top left of the main content area.

Welcome to the FAO GM Foods Platform

A platform for all

The FAO GM Foods Platform is a simple online platform to share information on safety assessment of foods derived from recombinant-DNA plants authorized in accordance with the Codex "Guideline for the conduct of food safety assessment of foods derived from recombinant-DNA plants (CAC/GL 45-2003, annex III adopted in 2008)". This Platform also facilitates the effective utilization of food safety assessment in situations of Low Level Presence (LLP) of r-DNA plant materials in food.

How it works

The FAO GM Foods Platform is freely accessible for those who want to browse the information. Registration is required for those who need to upload information. Only officially nominated Focal Points can register to the Platform.

One Focal Point per Codex Member is officially nominated by the respective country through its Codex Contact Point. The nominated Focal Point is then invited to register to the Platform. Once his/her registration has been approved, the Focal Point can start uploading the relevant national data and information to the Platform. All the entries will be reviewed by FAO before they will be online.

A monthly newsletter that highlights the latest developments is circulated among Focal Points. The latest version can be found [here](#).

Report of the side event to the 38th session of Codex Alimentarius Commission "FAO GM Foods Platform: recent progress and future direction" is now available.

[Start browsing](#)

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- Luc Bourbonnière
- Section Head
- Health Canada
- Canada

The way how to find the country information

Food and Agriculture Organization of the United Nations
for a world without hunger

FAO GM Foods Platform

Google™ Custom Search

FAO Home

Food safety and quality

GM Foods Platform

Browse information by

- OECD Unique Identifier
- Commodity
- Trait
- Country

Resources

- FAQ for visitors
- Login

Browse information by Country

Select a country from the Codex Regions below. Please note that the list does **not** contain all Codex member countries because the list is automatically generated with the names of county that have already registered to the platform. Therefore, even if some countries are not listed below, it does not mean they do not conduct food safety assessments of foods derived from rDNA plants.

Browse information by country

- Africa region - CCAFRICA
- Asia region - CCASIA
- Europe region - CCEURO
- Latin America and Caribbean region - CCLAC
- Near East region - CCNEA
- North America and South West Pacific region - CCNASWP
 - Australia
 - Canada
 - Cook Islands
 - Kiribati
 - Micronesia
 - New Zealand
 - Papua New Guinea
 - Samoa
 - Solomon Islands
 - Tonga
 - United States of America

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Available information/data on Canada's page

The screenshot displays a web browser window with the URL <http://www.fao.org/food/food-safety-quality/gm-foods-plat>. The page content is as follows:

Relevant links to documents and information prepared by the competent authority responsible for the safety assessment	Health Canada Novel Foods Webpage
	Canadian Guidelines for the Safety Assessment of Novel Foods
	CFIA's Novel Feeds Webpage
Relevant documents	

Information on stacked events

Stacked events:	Food: Consistent with the definition of "novel food" in Division 28 of the Food and Drug Regulations, the progeny derived from the conventional breeding of approved genetically modified plants (one or both parents are genetically modified) would not be classified as a novel food unless some form of novelty was introduced into such progeny as a result of the cross, hence triggering the requirement for pre-market notification under Division 28. For example, notification may be required for modifications observed in the progeny that result in a change of existing characteristics of the plant that places those characteristics outside of the accepted range, or, that introduce new characteristics not previously observed in that plant (e.g. a major change has occurred in the expression levels of traits when stacked). In addition, the use of a wild species (interspecific cross) not having a history of safe use in the food supply in the
Contact details of the competent authority(s) responsible for the safety assessment and the product applicant:	Luc Bourbonniere, Section Head Novel Foods

Country information last modified: 04/09/2015

[Link to this country's profile under the Biosafety Clearing House \(BCH\)](#)

Page footer: Contact us | Terms and Conditions | Scam Alert © FAO, 2015

Example: MON-87705-6

Canada [View Country Profile](#)

Name of product applicant: Monsanto Canada Inc.

Summary of application: Monsanto has developed Improved Fatty Acid Profile Soybean MON 87705 using recombinant DNA techniques to selectively down regulate two enzymes, FATB and FAD2, involved in the soybean seed fatty acid biosynthetic pathway. The genetic modification results in RNA suppression of FATB1-A and FAD2-1A transcripts which leads to a change in the fatty acid profile in the soybean seed. MON 87705 has an improved fatty acid profile similar to that of canola oil and olive oil, consisting of increased monounsaturated and reduced polyunsaturated and saturated fatty acid levels relative to conventional soybean

Upload:

Date of authorization: 29/09/2011

Scope of authorization: Food and feed

Links to the information on the same product in other databases maintained by relevant international organizations, as appropriate. (We recommend providing links to only those databases to which your country has officially contributed.): [BioTrack Product Database](#)

Summary of the safety assessment (food safety): Please see decision document weblinks.

Upload:

Where detection method protocols and appropriate reference material (non-viable, or in certain circumstances, viable) suitable for low-level situation may be obtained:

Relevant links to documents and information prepared by the competent authority responsible for the safety assessment: [Novel Foods Decision](#)
[Novel Feeds Decision](#)

Upload:

Authorization expiration date (a blank field means there is no expiration date)

Brief Summary of Application

Date of Authorization

Link to BioTrack Product Database

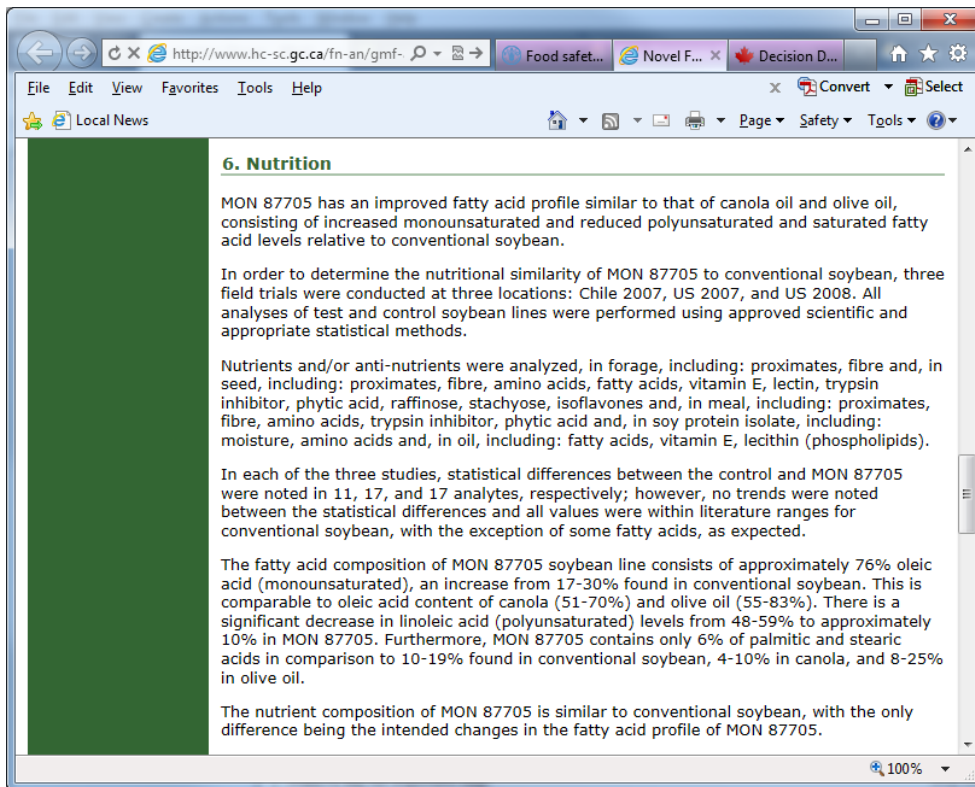
Traits	Latest entry uploaded on
Acetolactate synthase (ALS) inhibitors tolerance, Glyphosate tolerance	26/06/2013
Glyphosate tolerance	02/04/2015
Glyphosate tolerance	02/04/2015
Glyphosate tolerance	25/07/2013
Lepidoptera resistance	25/07/2013
Drought tolerance, Kanamycin resistance	24/07/2013
High steandon...	02/04/2015
Lepidoptera resistance	02/04/2015
Glyphosate tolerance, High oleic acid content, Low level of fatty acids	02/04/2015
Dicamba tolerance	13/05/2015

Links to HC and CFIA Decision Documents

Novel Food and Novel Feed Decision Documents for MON-87705-6

Novel Food

Novel Feed



6. Nutrition

MON 87705 has an improved fatty acid profile similar to that of canola oil and olive oil, consisting of increased monounsaturated and reduced polyunsaturated and saturated fatty acid levels relative to conventional soybean.

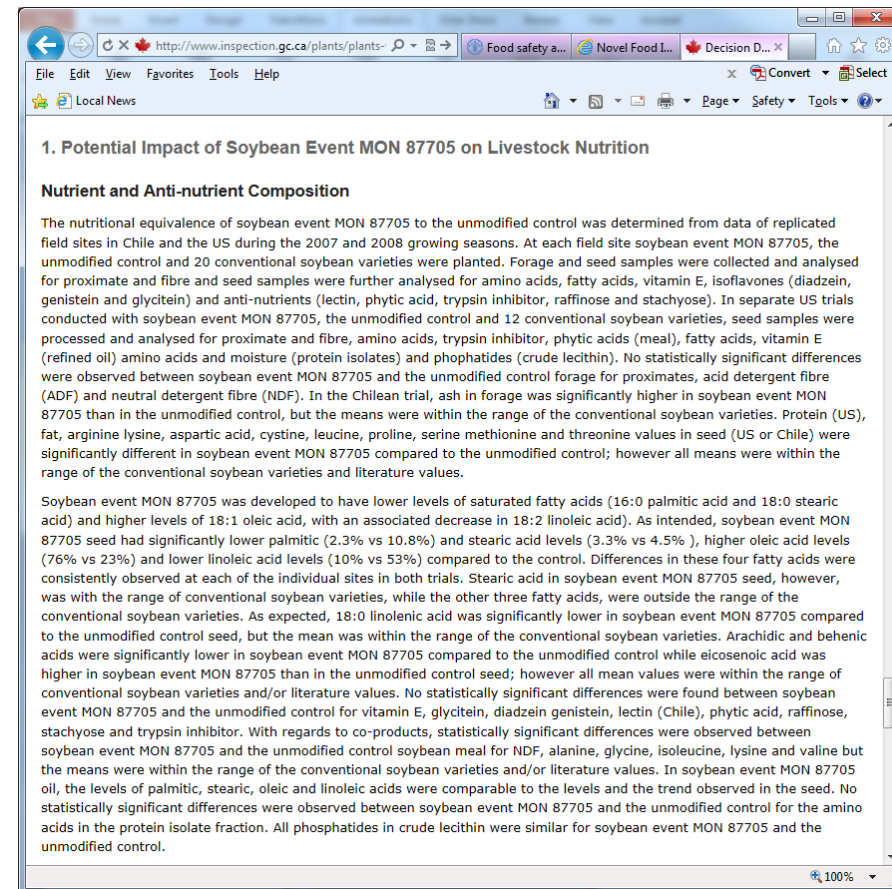
In order to determine the nutritional similarity of MON 87705 to conventional soybean, three field trials were conducted at three locations: Chile 2007, US 2007, and US 2008. All analyses of test and control soybean lines were performed using approved scientific and appropriate statistical methods.

Nutrients and/or anti-nutrients were analyzed, in forage, including: proximates, fibre and, in seed, including: proximates, fibre, amino acids, fatty acids, vitamin E, lectin, trypsin inhibitor, phytic acid, raffinose, stachyose, isoflavones and, in meal, including: proximates, fibre, amino acids, trypsin inhibitor, phytic acid and, in soy protein isolate, including: moisture, amino acids and, in oil, including: fatty acids, vitamin E, lecithin (phospholipids).

In each of the three studies, statistical differences between the control and MON 87705 were noted in 11, 17, and 17 analytes, respectively; however, no trends were noted between the statistical differences and all values were within literature ranges for conventional soybean, with the exception of some fatty acids, as expected.

The fatty acid composition of MON 87705 soybean line consists of approximately 76% oleic acid (monounsaturated), an increase from 17-30% found in conventional soybean. This is comparable to oleic acid content of canola (51-70%) and olive oil (55-83%). There is a significant decrease in linoleic acid (polyunsaturated) levels from 48-59% to approximately 10% in MON 87705. Furthermore, MON 87705 contains only 6% of palmitic and stearic acids in comparison to 10-19% found in conventional soybean, 4-10% in canola, and 8-25% in olive oil.

The nutrient composition of MON 87705 is similar to conventional soybean, with the only difference being the intended changes in the fatty acid profile of MON 87705.



1. Potential Impact of Soybean Event MON 87705 on Livestock Nutrition

Nutrient and Anti-nutrient Composition

The nutritional equivalence of soybean event MON 87705 to the unmodified control was determined from data of replicated field sites in Chile and the US during the 2007 and 2008 growing seasons. At each field site soybean event MON 87705, the unmodified control and 20 conventional soybean varieties were planted. Forage and seed samples were collected and analysed for proximate and fibre and seed samples were further analysed for amino acids, fatty acids, vitamin E, isoflavones (diadzein, genistein and glycitein) and anti-nutrients (lectin, phytic acid, trypsin inhibitor, raffinose and stachyose). In separate US trials conducted with soybean event MON 87705, the unmodified control and 12 conventional soybean varieties, seed samples were processed and analysed for proximate and fibre, amino acids, trypsin inhibitor, phytic acids (meal), fatty acids, vitamin E (refined oil) amino acids and moisture (protein isolates) and phosphatides (crude lecithin). No statistically significant differences were observed between soybean event MON 87705 and the unmodified control forage for proximates, acid detergent fibre (ADF) and neutral detergent fibre (NDF). In the Chilean trial, ash in forage was significantly higher in soybean event MON 87705 than in the unmodified control, but the means were within the range of the conventional soybean varieties. Protein (US), fat, arginine lysine, aspartic acid, cystine, leucine, proline, serine methionine and threonine values in seed (US or Chile) were significantly different in soybean event MON 87705 compared to the unmodified control; however all means were within the range of the conventional soybean varieties and literature values.

Soybean event MON 87705 was developed to have lower levels of saturated fatty acids (16:0 palmitic acid and 18:0 stearic acid) and higher levels of 18:1 oleic acid, with an associated decrease in 18:2 linoleic acid). As intended, soybean event MON 87705 seed had significantly lower palmitic (2.3% vs 10.8%) and stearic acid levels (3.3% vs 4.5%), higher oleic acid levels (76% vs 23%) and lower linoleic acid levels (10% vs 53%) compared to the control. Differences in these four fatty acids were consistently observed at each of the individual sites in both trials. Stearic acid in soybean event MON 87705 seed, however, was with the range of conventional soybean varieties, while the other three fatty acids, were outside the range of the conventional soybean varieties. As expected, 18:0 linolenic acid was significantly lower in soybean event MON 87705 compared to the unmodified control seed, but the mean was within the range of the conventional soybean varieties. Arachidic and behenic acids were significantly lower in soybean event MON 87705 compared to the unmodified control while eicosenoic acid was higher in soybean event MON 87705 than in the unmodified control seed; however all mean values were within the range of conventional soybean varieties and/or literature values. No statistically significant differences were found between soybean event MON 87705 and the unmodified control for vitamin E, glycitein, diadzein genistein, lectin (Chile), phytic acid, raffinose, stachyose and trypsin inhibitor. With regards to co-products, statistically significant differences were observed between soybean event MON 87705 and the unmodified control soybean meal for NDF, alanine, glycine, isoleucine, lysine and valine but the means were within the range of the conventional soybean varieties and/or literature values. In soybean event MON 87705 oil, the levels of palmitic, stearic, oleic and linoleic acids were comparable to the levels and the trend observed in the seed. No statistically significant differences were observed between soybean event MON 87705 and the unmodified control for the amino acids in the protein isolate fraction. All phosphatides in crude lecithin were similar for soybean event MON 87705 and the unmodified control.

Effective use of the data in Canada

- In the event of a Low Level Presence (LLP) issue in Canada, the Platform could serve as a potential resource to review safety assessments conducted by other countries (including origin of LLP source)
- The platform is a source of intelligence for GM events that may not have approval in Canada (Events for Canada to observe)

Insights/tips on the effective use of the data on the database for people outside

- For countries facing a Low Level Presence (LLP) issue, the Platform serves as a resource to review safety assessments conducted by other countries (including origin of LLP source)
- Database provides countries a venue to place their regulatory decisions online, facilitating easier comparison of decisions/approvals between countries