

## GE Animal feed is sneaking into the food chain

### Consumers say "No"

When it comes to Genetically Modified Organisms (GMOs) in their food, Europeans made a clear choice: "No thanks!". Subsequently, all major supermarkets and food producers in Europe stopped using GMOs in their products. However, millions of tons of soya beans and maize products which contain GMOs are still exported to Europe from the USA and Argentina. How come? These genetically engineered (GE) soya beans and maize enter the food chain via animal feed. Chances are high that meat and poultry, milk, eggs and fish from aquaculture we eat come from animals raised with feed containing GMOs.

Polls from several European countries show that consumers reject GE animal feed just as strongly as GMOs in their food. In some cases the rejection is even stronger. The ongoing BSE (mad cow) scandal, the dioxin-contaminated animal feed recently found in some European countries, and the use of hormones and antibiotics in animal feed clearly show that what animals eat has a major impact on consumers. In particular, the BSE case has taught consumers in Europe that precaution is the appropriate approach and that safety assurances from scientists and government authorities cannot always be trusted.

### Warning Signs

There are warning signs on the safety of GMOs in animal feed. For instance, some of the GMOs contain antibiotic resistance genes, which could transfer their resistance to micro-organisms in the animals. Physicians around the world have objected to the use of genes conferring antibiotic resistance - once spread to human or animal pathogens they will render these antibiotics useless for therapeutic purposes. Independent scientific research recently found that GE "Roundup Ready" soya sprayed with Monsanto's "Roundup" herbicide appears to be different from the conventional soya as it shows a specific and significant reduction in phytoestrogens.<sup>1</sup> Only this year, four years after commercialisation, agrochemical giant Monsanto notified government authorities that its "Roundup Ready" soya actually contains two additional inserts of foreign DNA which had previously not been identified.

In November 2000, at a hearing about a GE maize ("Aventis Chardon LL") in the UK, it was revealed that chicken experimentally fed with the GMOs had a significantly higher death rate than the control group. At the same hearing Professor Bob Orskov, director of the International Feed Resource Unit in Aberdeen, Scotland, said: "If the GM maize was approved for commercial growing in the UK then people would be justified in turning their back on consuming milk derived from it. As a scientist I wouldn't drink milk from cows fed GM maize with the present state of knowledge." Meanwhile, the UK government has postponed the approval process of Aventis Chardon LL "indefinitely".

In addition to the massive environmental risks linked to the release of GMOs into the environment, the examples above indicate that even their safety for animal and human consumption has not been assessed properly.

<sup>1</sup> Marc A. Lappé, E. Britt Bailey, Chandra Childress, Kenneth D.R. Setchell, (1999), Alterations in Clinically Important Phytoestrogens in Genetically Modified, Herbicide-Tolerant Soybeans, Journal of Medicinal Food, Vol 1., no. 4

## Lessons from "Starlink" contamination

The recent scandal around genetically engineered "Starlink" maize, which is suspected to have an allergenic potential and hence is not allowed for human consumption world-wide, shows that it is almost impossible to keep GMOs out of the food chain once they are grown commercially. "Starlink" maize, which was supposed to be used only in animal feed, was found in tortilla chips and other maize products. A major product recall in the United States affected over 300 products and millions of tons of maize. According to Aventis, the company selling "Starlink", the damage to farmers, grain traders and food producers it will have to compensate amounts to just "below one billion dollar". Still, the US Department for Agriculture (USDA) has cleared further exports of "Starlink" maize from the USA.

## Irresponsible Lack of Regulations

A growing number of major supermarkets, fast-food chains and producers of meat and other animal products have committed themselves to eliminate GMOs from their entire production chain, including animal feed (see list of companies rejecting GE animal feed in the annex). However, this proves to be a difficult task, especially for smaller companies and farmers, because major US feed exporters, as well as the USDA, are still doing everything they can to sneak GMOs into the European food chain.

Unlike the case of GMOs in food, there still are no European regulations on labelling GMOs in animal feed or meat, milk and eggs derived from animals fed on GMOs. The European Commission has just drafted a "Novel Feed Regulation" that will require at least labelling of GE feed. However, its implementation may take two more years. As long as consumers and farmers are denied the right to know which products contain GMOs, a few multinational commodity traders, who actually control the world feed market, can still force feed Europeans with GMO contaminated soya beans and maize. In fact, these companies are making an extra profit out of this situation by demanding unjustified extra premiums for GE-free feed of up to 30 to 50 %.

But the situation is changing rapidly. While commodity traders such as Cargill or Archer Daniels Midland (ADM), as well as the USDA claimed until last year that segregation and GE-free supply was practically impossible, all of them have now started to segregate and offer GE-free certification. For the first time, the USDA was forced to start in November 2000 an official certification programme for maize exports to Japan to guarantee Starlink-free deliveries.

## World Market Dynamics

Intensive, industrialised livestock rearing for cheap meat production in Europe is only possible thanks to gigantic movements of protein-rich commodities between continents. The main commodities involved are soya beans, maize, and their processed products such as maize gluten and soya meal. Around 13 million tons (mio t) of soya and 19 million tons of soya bean meal were imported into the EU in 1999. These imports account for more than one third of globally traded soya beans (45 mio t) and soya bean meal (38 mio t). Exporters are land-rich countries such as the USA, Brazil and Argentina; importers are EU countries like France, the Netherlands, Germany, Belgium and Spain, as well as Asian countries (20 mio t) and Mexico. For a detailed overview on soya beans production and trade see "Soya bean statistics" (file Soybeanstats.xls).

## The Main Players

This market, worth about 14 billion US\$ annually for soya beans and soya bean meal alone, is dominated by two US based multinational companies: Cargill (which recently bought Continental, the

second largest grain trader) and ADM. These grain traders are estimated to control more than 50% of the international feed market. Other major players are ConAgra (US), Erdiania Beghin SA (France) and Bunge (Brazil). Cargill, ADM and ConAgra also own most of the storage, transport and processing facilities and they are major meat, oil, starch and ethanol producers themselves.

In 1999, Cargill decided to start a strategic partnership with the US GMO, pesticide and seed giant Monsanto. Monsanto bought all of Cargill's non-US seed business and started a joint venture (a company called Renessen) with Cargill to develop genetically engineered seed varieties for animal feed purposes. ADM has similar strategic alliances with Syngenta (a joint venture of Novartis and AstraZeneca) and Dupont/Pioneer. Grain traders "push" the products of their strategic partners.

In an attempt to help Monsanto's ailing Roundup-Ready soya in the US and Argentina, Cargill obstructs segregation and labelling of genetically modified commodities like maize and soya.

## **Farmers loose twice**

Between 1996 and 1999 US farmers lost around 3 million tonnes of soya exports to the European Union. These exports have been picked up by Brazil, a country where planting GMOs is not allowed. Such shift may not hurt Cargill (the company is also strongly represented in Brazil), but it does hurt US farmers, who are presently experiencing the lowest soya prices since decades. Supermarkets and large fast food chains in Europe have started guaranteeing that their animal products are derived from animals fed on GE-free feed (see list of companies rejecting GE animal feed in the annex). Because of their market weight, they can enforce certification even when there are no legal provisions for GMO labelling of animal feed and they can also negotiate reasonable prices for GMO-free supply. But Cargill's and ADM's less mighty clients, feed producers and co-operatives that supply farmers, are confronted with steep extra charges for GMO-free supply.

Farmers on both sides of the Atlantic suffer from this situation: US farmers lose attractive European market shares and European farmers are faced with extra costs if they want to address their customers' demand for GE-free feed. Farmers are also denied the right to know if the feed they buy contains GMOs.

This situation would change if the European Union's Commission filled the current legal vacuum: an EU regulation on "novel feed" is planned and drafted but has not yet made it through the legislative machine in Brussels. This legislation would require at least labelling of genetically engineered animal feed. The current lack of regulation is being exploited by Cargill and Monsanto who still ask unjustified surcharges for non-GE animal feed in Europe and dump increasing amounts of GMO-contaminated soya beans and maize in Asia (including China, Korea and Taiwan) and Mexico.

In Japan too consumers demand GE-free food and feed, and GE-free soya beans are now traded as a separate item at the Tokyo Board of Trade. Even though non-GMO soya bean prices in Japan are about 10% above non segregated soya beans, the volumes have switched within only a few months: The volume of non-GMO soya bean futures is already twice the volume of non-segregated soya beans. No such free market exists as yet in the USA or Europe.

## **Greenpeace demands**

- As long as there are GMOs planted, all GE and non-GE crops must be segregated at source and farmers must have the right to know if the feed they use is GE or non-GE
- Consumers have the right to know if the animal products they buy come from animals raised with GMOs or not and they have a right to GE-free supply
- Multinational commodity traders, such as Cargill and ADM, must stop abusing their quasi monopolistic position and stop ignoring the clear demand for GE-free animal feed supply in Europe and elsewhere

# GREENPEACE

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- The European Commission must take immediate action to protect European farmers and consumers. It must enforce mandatory labelling of animal feed and animal products
- The precautionary principle must be strictly applied when assessing risks associated with animal feed ingredients
- Irreversible releases of GMOs into the environment must be stopped

## Annex:

### List of Companies Taking Action on Genetically Engineered (GE) Animal feed In Europe<sup>1</sup> as of Nov 24, 2000

#### Belgium

##### *Retailers:*

Delhaize le Lion 16.6%<sup>1</sup>  
Carrefour Belgium (a) 27.3%<sup>1</sup>  
Colruyt 9.55%<sup>1</sup>  
Farmed fish companies:  
Saumon Sodial

##### *Fast food Companies:*

McDonalds (a) (chicken)  
Burger King (a) (chicken)

#### Denmark

##### *Fast food Companies:*

McDonalds (a) (chicken)  
Burger King (a) (chicken)

#### France

##### *Retailers:*

Carrefour (for poultry products ) 9.3%<sup>1</sup>

##### *Poultry companies:*

Volailles Bodin  
Volailles Duc volailles de Bresse  
Volailles LDC (Lambert Dodard  
Chancereul)  
Poulet blanc "le Favori" de chez Auchan  
Volailles de la ferme de la table au Roy  
Canards "graines de saveur" de Procanar  
Volailles de la bastide gourmande  
Volailles de Elie Freslon  
Volailles de la table du fermier  
Volailles fermières de Janzé  
Volailles de Licques de Synbolic  
Produits de la ferme du chateau de  
Rambouillet  
Volailles fermières de la Drôme (SDVFD)  
S.A. Caillor  
Volailles Chaillotine  
Volailles Douce France  
Volailles Le Gaulois  
Volailles Loué

##### *Farmed-fish companies:*

Pisciculture d'Aquadis  
Pisciculture Aqualand

#### Finland

##### *Fast food Companies:*

McDonalds (a) (Chicken)  
Burger King (a) (chicken)

#### Germany

##### *Poultry companies:*

Wiesenhof 45%<sup>2</sup>  
Stolle 20%<sup>2</sup>  
Noelke (a)

##### *Pig and cattle producers:*

Neuland (no use of crushed soya allowed)  
Thönes Natur  
Schwäbisch-Hällische Erzeugergemeinschaft  
(a)

##### *Animal feed companies:*

Reco Kraftfutterwerk  
Mega Kraftfutterwerk  
Emsmühle Papenburg  
Wackertrapp  
Deuka  
Cremer Futtermuehlen  
Moehlenkamp GmbH  
Broering Dinklage  
Bela Muehle

##### *Fast food companies:*

Mc Donalds (a)  
Burger King (for poultry products) (a)

#### Italy

##### *Retailers:*

Carrefour Italia, including Gruppo GS) for  
the labels GS and Filiera Qualita' Carrefour  
di Versano.  
Esselunga for its Naturama label  
(chicken/fish/beef) 2.6%<sup>1</sup>  
COOP for own-brand chicken and fish, and  
(a) for own-brand beef and pork 9.0%<sup>1</sup>

##### *Fast food companies:*

Burger King (a) (chicken)

## **Luxembourg**

Egg producers:

Domaine du Chateau de Bettange

Jean Mathay (a)

Leon van Roesgen (a)

*Poultry companies (French origin):*

Doux

Les fermiers landais

*Pig and cattle producers:*

Federation des Herd-Books

luxembourgeois (60% of the Lux. Market,  
produce for supermarket chain Cactus)

(a)

*Fast food companies:*

Burger King (a) (chicken)

## **Norway**

*Fast food Companies:*

McDonalds (a) (Chicken, beef)

## **Sweden**

*Poultry companies:*

Chicken brand Kronfågel

*Fast food Companies:*

McDonalds (a) (chicken)

Burger King (a) (chicken)

## **Switzerland**

*Retailers:*

Coop 30.7%<sup>1</sup>

Migros 37.8%<sup>1</sup>

Volg 1.4%<sup>1</sup>

*Producers:*

Swiss Farmers Association (SFA)

(representing more than 90% of the swiss  
farmers; the rest is already GE free).

Swiss Milk Producers (SMP)

*Poultry companies:*

SEG Freiland Poulets

*Oilmills/Animal feed producers:*

Florin AG

SABO

Sais-Unilever

*Fast food Companies:*

McDonalds (a)

## UK

### *Retailers:*

ALDI (a) 1.1%<sup>1</sup>  
ASDA (a) 9.1%<sup>1</sup>  
CWS / Co-op (a) 1.6%<sup>1</sup>  
Iceland Foods 2.2%<sup>1</sup>  
Marks & Spencer (a) 4.0%<sup>1</sup>  
Sainsbury's (a) 16.1%<sup>1</sup>  
Waitrose (a)  
Tesco (a) 19.0%<sup>1</sup>

### *Food manufacturers:*

Brake Bros Foodservice Ltd (a)  
Heinz (a)  
McCain (a)  
KP Foods(a)  
Cow & Gate baby food  
Findus  
Benecol  
New Zealand Milk (Anchor butter)

### *Poultry companies:*

Bourgoin UK  
Deans Farm  
Moy Park Poultry Ltd (part of the production)  
Sun valley Foods (A Cargill Company)  
GW Padley Poultry Ltd  
Peter Thomson Group PLC  
Wignall Poultry Ltd  
Lloyd Maunder  
Grampian Foods (a) (Buxted chicken)  
O'Kane

### *Egg producers:*

Framptons  
Humphry farms (part of the production)  
South Western Egg Products  
HM Venn and Sons Ltd  
Stonegate Farmers Ltd (a)  
Deans Farm (part of the production)  
Thames Valley Foods (a)

### *Fish feed company:*

Trouw Aquaculture (A Nutreco company)

### *Fast food Companies:*

McDonalds (a)  
Wimpy Fast Foods (a)  
Burger King (a) (chicken)

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<sup>1</sup> Market share food turnover, M+M eurodata 1998

<sup>2</sup> Market share, Landwirtschaftsblatt Weser-Ems No. 44 Nov. 1996, confirmed in company interviews

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(a) = aspire to quickly use/require exclusively GE-free feed