

Chapter 7

THE CZECH REPUBLIC

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Background and History

The Czech Republic was the first country in central and eastern Europe to adopt legislation on GMOs harmonized with EU directives; GMO field trials started very soon after. As early as 1998, Association BIOTRIN launched the first public debate on the science of genetic modification.

In the Czech Republic, Act No. 153/2000 Coll. on the *Use of Genetically Modified Organisms and Products* together with amendments of some related acts came into force on January 1st, 2001.

Act No. 78/2004 Coll., on the *Use of Genetically Modified Organisms and Genetic Products* came into effect on February 25th, 2004, thereby repealing Act No. 153/2000.

After the accession of the Czech Republic to the EU, an amendment to Act 78/2004 was adopted to bring Czech legislation into with EC regulations 1830/2003 (traceability and labelling) and 1946/2003 (transboundary movements); it became effective on September 13th, 2005 (Act No. 346/2005 Coll.):

- (a) the competent authority under the Act is the Ministry of the Environment with Co-operating Authorities the Ministries of Health (MoH) and of Agriculture (MoA);
- (b) the Czech Commission for the Use of GMOs and Products serves as an expert advisory body to the Ministry of the Environment;
- (c) the competent authority on state supervision is the Czech Environmental Inspectorate.

An amendment to Act No. 110/1997 Coll. on *Foods and Tobacco Products* concerning the approval and labelling of GM food, which included the provisions of the EU Regulation on Novel Foods and Novel Food Ingredients, came into force in January 2001; the obligation to label such products was effective as from January 2002.

EU Regulation 1829/2003 on genetically modified food and feed as well as other EU regulations is directly applicable so that Act No. 110/1997 Coll. on Foods and Tobacco Products was amended accordingly. The competent Authority is the Ministry of Agriculture.

The Present

Political Landscape

In the period following June 2006, the Czech Republic had no stable government; in those circumstances, matters such as GMO acceptance were not and are not yet major concerns of government policy.

Three political parties form the Government:

- Citizens Democratic Party (CDP) is very positive towards GMOs;
- The second most influential is the Social Democratic Party (SDP), always supportive on GMO issues and voted with CDP against the participation of NGOs in the decisions on GMOs.
- The Green Party, a small group forming part of the coalition, are represented for the first time in the Czech Parliament. In the recent election campaign, issues involving GMOs were not raised by them. The party is for the moment seemingly little interested in GMOs as they perceive other, more pressing matters demanding their attention. There is an influence of Czech “green” NGOs but their present priorities, too, are directed elsewhere. As a consequence, there are ongoing disputes over nuclear power plants with other issues, such as GMOs, sidelined and not in play. Nor have most of the Czech “green” NGOs taken up the GMO issue so that the opposition to GMOs is almost entirely in the hands of Greenpeace.

In general, public concern about food safety is focused on BSE, bird flu and contamination of certain food products by *Listeria*. In general, Czech consumers did not and do not boycott GM foods.

A specific issue is represented by organic (“ecological”) farmers who have stated plainly that their slogan “zero content of GMO” is a marketing tool; they do not emphasise any supposed health risk to consumers. Ecological farmers nevertheless oppose the EU 0.9% limit, arguing they will lose “the confidence of their consumers.”

The major player on GMO issues is the Ministry of Environment (<http://www.env.cz>).

Hitherto, the following 11 GM varieties of crops have been approved for deliberate release (field trials or commercial cultivation) in the Czech Republic:

potatoes:	6 strains (two with altered sugar or starch contents, increased content of amylopectin or amylase enzyme, improved resistance against mycosis)
maize:	3 (one hybrid, two new lines)
plum trees:	1
flax:	1

The Agrarian Chamber of the Czech Republic (AK CR) was established in 1992 as an association of agricultural, forestry and the food industry interests and thus an influential voice on agricultural matters. The president of the Agrarian Chamber has made several media statements about GMOs. He supported the introduction of Bt corn as an opportunity for

farmers, saying “There are no indications that they (GMOs) would be harmful. The struggle against GM-food seems to me similar to the struggle against nuclear power plants. The growing of GMO-crops definitely improves the quality of harvest, e.g. decreases the contamination by mycotoxins. We must also keep in mind that it improves quality of the environment, particularly reduces the application of pesticides and saves fuel.” He is also critical of the conservative EU approach.

AGRObase, the official magazine of Agrarian Chamber, published items very positive to GM-crops and explains the nature of genetic modification. As a result of this positive political landscape the area of GM-crop cultivation as well as the number of farmers involved both increase every year.

Bt corn plantings in the Czech Republic

Year	Area	Number of farmers
2005	270 ha	52
2006	1,250 ha	85
2007	ca 5,000 ha	131

The *Federation of the Food and Drink Industries* of the Czech Republic (<http://www.foodnet.cz>) is active with regard to the labelling of GM-foods; BIOTRIN was invited by the Federation to help support GMOs in the Czech food industry and trade by organising the section “Food and Consumer” in the framework of EU programme *Platform Food for Life*.

Two NGOs are primarily involved with informing the Czech Republic about GMOs and their presence and role in the Czech Republic:

Greenpeace is well known for its rejection of GM technology. Less insistent in the Czech Republic than they were some years ago, they mounted a protest in 2000 when the Ministry of Environment and BIOTRIN jointly organised an International Conference on Biotechnology for representatives of the central and eastern European countries. Greenpeace also protested against Bt-corn and damaged field trials. Representatives of the organisation publish and debate in the media from time to time but their impact on public opinion is not strong.

Association BIOTRIN is a civil, non-profit organization established by the academic community for the dissemination of information on modern biotechnology. Publications, articles, seminars, workshops or conferences and web page (<http://www.biotrin.cz>) are used to explain genetic engineering and all aspects of GMOs to public. The web page provides a monthly media monitor followed by journalists, and provides news on biotechnology, mainly on GMOs.

Survey of GM foods and sales

Interviewing retailers

At start of the survey, attempts were made to discuss the issues with retailers and to obtain

from them details of products on sale. Formal requests were made to the managements of the major retailing chains Ahold Czech Republic a.s., Tesco Praha s.r.o, Makro Cash & Carry ČR s.r.o and KAUFAND ČR v.o.s, in each case requesting a short interview and co-operation with the CONSUMERCHOICE project. No response were received from any of them nor did their internet pages yield any relevant information. Their stores offer no information on GMOs to consumers. In short, the issue does not appear to be important to them.

Products on sale

Our survey of products on sale was therefore confined to personal investigations of the GM-foods on the market and how they were labelled.

Store visits were made in 10 towns in 6 regions: in Prague, central, south and west Bohemia, and in north and south Moravia. Only the north and east of Bohemia were not investigated. Food stores for personal visits were chosen in 3 large cities, 3 middle sized towns and 4 small towns or villages (Fig. 1, Table 1).

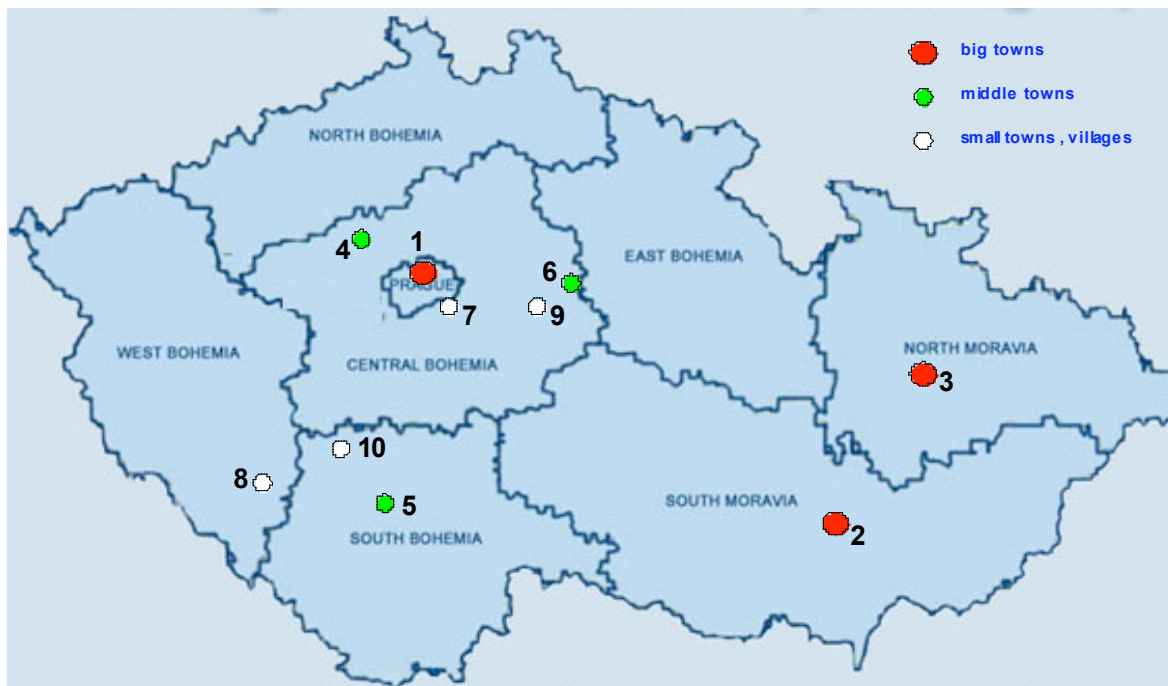


Fig. 1. Locations of store visits

Table 1. Towns selected for food shop surveys of GM-foods

no	category of town	amount of inhabitants/ region	type of market / shop	number investigated
1	large cities ●	1,180,000 / Central Bohemia, Prague	Supermarket Self-service Small shop	3 3 3
2	●	370,000 / Southern Moravia, Brno	Supermarket Self-service Small shop	3 3 3
3	●	100,300 / Northern Moravia, Olomouc	Supermarket Self-service Small shop	3 3 3
4	medium-sized towns ●	71,000 / Central Bohemia, Kladno	Supermarket Self-service Small shop	3 3 1
5	●	29,800 / Southern Bohemia, Písek	Supermarket Self-service Small shop	2 2 2
6	●	30,200 / Central Bohemia, Kolín	Supermarket Self-service Small shop	2 2 2
7	small towns ○	11,800 / Central Bohemia	Self-service Family shop	2 3
8	○	1,600 / Western Bohemia	Self-service Family shop	2 1
9	○	1,800 / Central Bohemia	Family shop	2
10	○	900 / Southern Bohemia	Family shop	1

Stores visited:**hypermarkets**

PLUS
TESCO
BILLA
COOP
PENNY

supermarkets

Kaufland
Hypernova
Albert
Delvita
Lidl

The following information was recorded for each product:

- product type (e.g. oil, milk, margarine, hardened fat, soya, etc.)
- product name, brand
- producer
- distributor
- location and details of label (main label, side label, type and size of letters)
- is shelf labelled? if yes: where and how?

- in what position is the product placed on the shelf?
- position of similar conventional products, their brands and other information (volume, etc.)
- percentage of GM-labelled product among similar ones non-GM?
- price of labelled product compared with analogous conventional products

In summary, we undertook 57 shop visits to hyper- and supermarkets as well as to corner shops. Data were collected twice during the project, once during the period July 2006 – March 2007 and again between October 2007 and February 2008. Analysis of the data sets showed that the size of the town, type of shop, placing of products on shelves or price of GM- compared with analogous non-GM-products were not significant so they were eliminated from the second round of sampling.

From July 2006 – March 2007 we found 19 brands of labelled GM-oil products (mainly produced by Czech manufacturers), 1 brand of GM-margarine (imported) and 1 brand of GM-popcorn (from the US). All were labelled “product contains raw material which was genetically modified”.

Examples of labelling

GM-products are labelled according to Czech laws but using a variety of wordings:

- *Vyroběný z geneticky modifikované sóji*
(produced from genetically modified soy)
- *Výrobek obsahuje geneticky modifikovanou sóju*
(product contains genetically modified soy)
- *SO + RE: SO – sojový olej vyrobený z geneticky modifikované sóji MON-04032-6*
(SO – soy oil produced from genetically modified soy MON-04032-6)

A total of 41 food products were labelled as GMO-free, usually with the rubric “Product does not contain genetically modified raw material “. Among such products were sunflower and rapeseed oils (Czech products), margarines, spelt, wheat, buckwheat, millet, soybean products (meat, meal, flakes, biscuits) and fish fingers. Note that the labelling of products as “non-GMO foods” is not restricted in the Czech Republic.

Manufacturers began labelling non-GM-foods, mainly oils and soya foods, during the last two years. A number of rubrics are employed:

- *Vyroběno ze surovin, které nebyly geneticky modifikovány*
(produced from raw material that was not genetically modified)
- *Vyroběno z genově neošetřených surovin*
(produced from gene non treated raw material)
- *Výrobek neobsahuje geneticky modifikované organismy*
(product does not contain genetically modified organisms)
- *Výrobek neobsahuje GMO*
(product does not contain GMO)
- *Ohne Gentechnik* (imports from Germany)

(GM-free)

- *Je vyrobeno jen z negeneticky modifikovaných kukuřičných semen*
(produced only from non-genetically modified maize seeds)
- GMO-Free (imports from various countries)
- *Použito geneticky nemodifikovaných surovin*
(uses genetically non-modified raw material)
- “GMO – Free” – *výrobce garantuje maximální obsah transgenní DNA do 1,0 %*
(“GMO-Free “ producer guarantee maximal content of transgenic DNA to 1,0 %)
- “GMO-Free” – *produkt ekologického zemědělství*
(“GMO – Free “ – product of ecological agriculture)

Sampling between October 2007 and February 2008 revealed 25 brands of labelled GM-oils, 1 margarine and 1 popcorn (the last two were the same as had been found earlier).

There had been a clear change of practice by the main Czech manufacturers of soya products. Both SETUZA (oil food products) and Pragosoja (the main soybean products manufacturer) had decided to highlighting their GM-free products. Thus, between October 2007 and February 2008 we found 75 brands of foods labelled as GM-free. Among them were various vegetable oils, margarines, corn products, soybean products, rice, buckwheat, wheat, oat, barley, spelt, red lentil, chickpea, raisins, apricots, banana (dry imported foods).

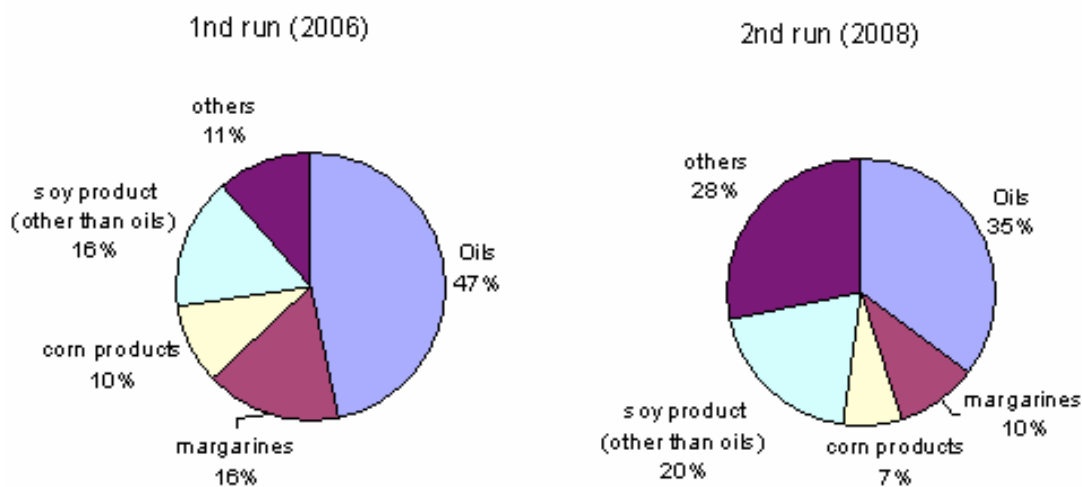


Fig 2. Labelled GM-foods found in the earlier and later sampling periods

The numbers both of GM- and non-GM-labelled food items increased during the project period, the latter by more than the former.

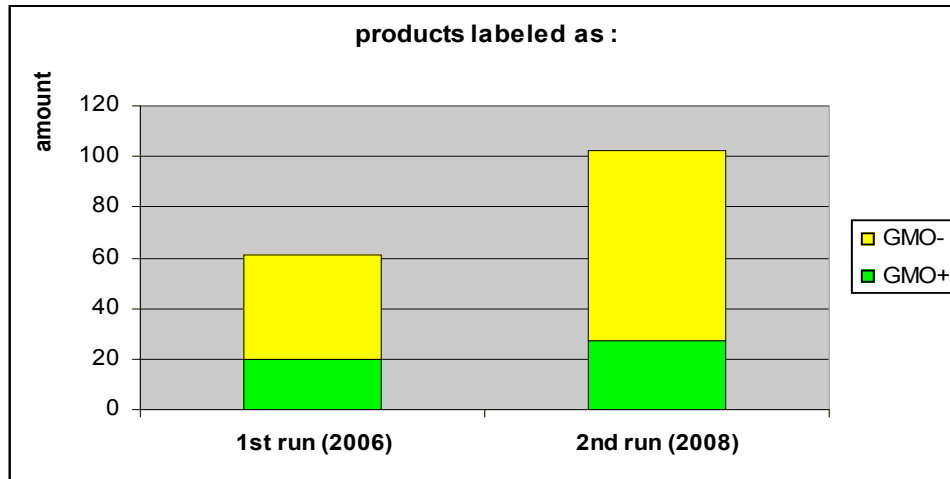


Fig. 3. Number of labelled products in two project periods of investigation

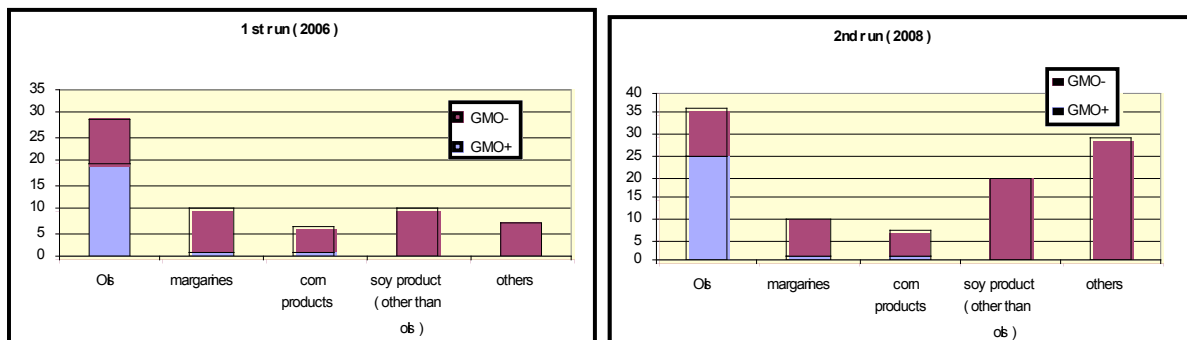


Fig 4. Comparison of numbers of GM- and non-GM-labelled products during the two sampling periods

Conclusions

Retailers were not willing to co-operate with the CONSUMERCHOICE project but a few discussions with employees in shops showed that they are not aware either of genetic engineering or of the legal requirement for GM-labelling. Retailers appear not to have any general policies against GM-foods and carry no statements on their websites about the matter. Most retailers import goods (mainly soya oil) from their headquarter countries; these are appropriately labelled as containing GMO-ingredients or being derived from GMO-sources. Some chains sell GM-foods (again mainly oils) produced by a Czech manufacturer under their own brand name.

Particular chain stores all contained the same brands: thus Tesco stores in the towns Písek and Kladno, and Albert shops in all the towns visited had practically same GM- and non-GM-foods on sale in all of them. Any differences were very minor.

SETUZA, a Czech manufacturer changed their labelling strategy of during the project. GM-food labels earlier printed in large letters were replaced by ones with smaller fonts. Some foods previously unlabelled acquired a notice of their being “non-GM” or “free from GM ingredients” and the number of non-GMO-items (mainly soy products other than oils)

increased significantly. There was little change during the survey in the number of oil brands offered.

A summary of all the labelled GM- and non-GM-foods is shown in Appendix 1 (page 7-13).

Media, opinion polls and politics

In identifying relevant items the key word "GMO" was used: only items referring to GM-foods, GM-crops, GM-feeds and animals fed GMO fodder were included in the analysis. Many items discussing co-existence and biofuels were excluded. Each month 75 media titles/outlets were monitored, comprising:

- 12 national newspapers incl. press agency
- 15 regional newspapers
- 16 magazines
- 2 TV channels
- 5 radio stations
- 23 internet news
- 2 tabloid newspapers

Media items were classified as follows:

- total number of items = 33
- average number of articles per month = 1.65
- news reports = 28 (85% of all items)
- comments and debate items = 4 (12% of all items)
- other items = 1 (3% of all items)

Attitudes of media items to GM-technology:

- favourable = 9 (27.3%)
- unfavourable = 11 (33.3%)
- neutral = 13 (39.4%)

A detailed listing of media items is provided in Appendix 2 (page 7-17) .

Comment articles and debates amounted to 33 items published in the press, on the internet or broadcast on TV or radio: items favourable to GM technology represented 67% of the total, those unfavourable 33%.

Media interest in GM issues waxed and waned as the following graph shows:

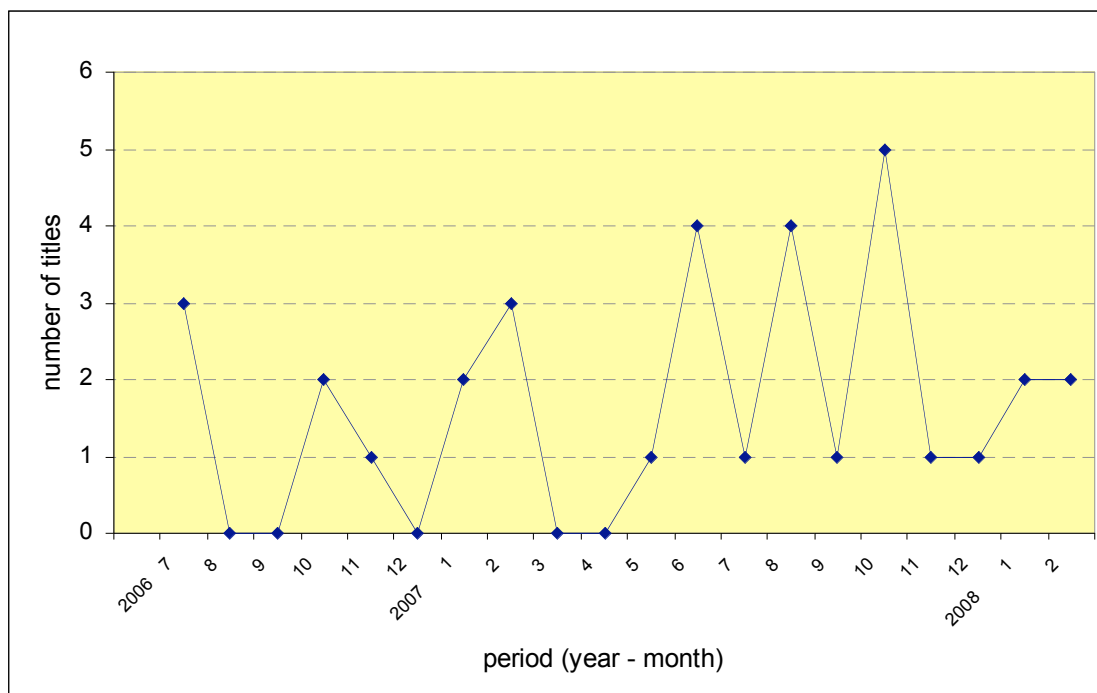


Fig. 5. Number of titles per month dealing with GMOs (July 2006 – February 2008)

The following themes were discussed in the media:

- present situation;
- certain GMO phobia of Europeans;
- labelling of GMO containing foods (requirement for labelling, how to label);
- analysis and control of potential risk;
- quality assurance – certification.

A few articles were clearly recognised as resulting from some specific event:

- a conference of biotechnology
- the detection of higher content of GM ingredients in non labelled sausages
- Anheuser Bush’s problem with GM rice as raw material for production of beer.

Articles dealing with GM-crops – and consequently with GM-foods – tended to be either negative or doubtful. They focused mostly on problems of GMO versus BIO foods, or on conventional versus organic agriculture.

In general, articles and reports dealing seriously with evidence and with issues were very rare. Most dealt with anti-GM activist activities such as press releases, letters to the Ministry of the Environment and a gathering near the field where TouchDown maize was being tested. Several discussions on TV and radio were devoted to Bt-maize when commercial planting was first introduced in the country. The discussions were well designed and organised; if an activist objector was present a scientist was always invited to offer an explanation.

Other reports mentioning GMOs come from organic farmers’ statements that their products “are free from GMO”. Several organic farmers said that an “absence of GMO is necessary to retain the confidence of consumers”.

The Czech media reflect the fact that the population in general are little concerned about GMOs and hence it is not a very appealing subject for journalists.

We therefore conclude that in the Czech Republic the GMO question is marginal for the public at large.

Consumer research

Although not part of the work programme of CONSUMERCHOICE, Association BIOTRIN has permission to use consumer research data gathered by Agriculture University in Prague.

One of the aspects dealt with consumer's opinions on GMOs and GM foods. Researchers addressed 180 consumers of whom 116 responded (43% men, 57% women):

- a) To the question "What is your attitude towards GMO?", 30% of consumers were positive, 27% negative, 43% were neutral. There was no statistically significant dependence on age or education. Men were more positive than women (49% versus 13%)
- b) Asked about trust in institutions/organizations and products, consumers placed most trusted in the Czech Agricultural and Food Inspection Authority and least in Greenpeace.
- c) With respect to products, consumers expressed most confidence in traditional Czech food products and to Bio-products. They rejected chemically treated products.
- d) Price differentials were investigated as follows: Two food products (a plant oil and potatoes) of three different origins – organic, conventional and biotech. – were offered to respondents through photographs which included labels and prices. Biotech products were made cost-advantageous compared with the other products (the highest price differentials were in the case of plant oil). Under these test conditions, 26% of consumers chose the plant oil derived from GM soybeans compared with 65% who chose conventional products and 9% organic. With potatoes, the choices were 19% for GM, 58% for conventional and 19% for organic.
- e) A further question probed information availability: 22% of the respondents had "never heard" about GMOs while 80% had heard something but thought there was not enough information available. The perception of available public information did not depend on age or education; 45% of respondents obtained their information from the media, 26% from school or work and 29% only from other people.
- f) 36% of the consumers questioned were afraid of GMOs, 64% were not. A statistically significant difference was found between men and women: 48% of women but only 23% of men expressed fear of GMOs. The reasons for fear were mainly: unexpected impacts on the human body, feelings that GMOs are unnatural or unexamined and that consumers did not have enough information.

References

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2. Čěřovská, Marie (2006). *Technology and socio-economic impacts of planting GM crop and risk assessment in the conditions of CR*. PhD Thesis, Department of Agroecology and Biometeorology, Czech University of Agriculture, Prague.

APPENDIX 1: LABELLED FOODS ON SALE

Table 2. Labelled foods on sale July 2006 - March 2007

type of good	no	name	producer	labelled as	found in *			
					sm	ss	fs	
Cooking Oils	1	Lukana - vegetable oil	1 - CZ	GMO+	X	X Y	X	
	2	Lukana - table oil	1 - CZ		X Y	X Y S	X Y	
	3	Lukana - fritting oil	1 - CZ		X Y	X		
	4	Ceresol	1 - CZ		X Y	X Y S	X Y S	
	5	Ceresol - fritting oil	1 - CZ			Y		
	6	Vegetol - vegetable oil	1 - CZ		X Y	X Y S		
	7	Vegetol Gold	1 - CZ			Y S	Y	
	8	Vitae d'Oro – rape oil	1 - CZ		Y			
	9	Lando oil	2 - Germany		X Y	X	X	
	10	Oilio	3 - Belgium		X Y			
	11	Soy oil	4 - CZ				X	
	12	Carotino	5 - Malaysia		X	X		
	13	Soy oil – Forte – aOP BVBA	6 - Belgium			Y S	X Y S	
	14	Vegetable oil - Karolina	7 – ?		X Y			
	15	AVE	1 - CZ				X S	
	16	oil - Ahold	10 - ?			X		
	17	Bohemia – table oil	13 - CZ		Y			
	18	COOP classic	1 - CZ			Y S		
	19	FROL – table oil	14 - CZ			S		
	20	Lukana - Sunflower oil	1 - CZ		GMO -	X Y	X Y S	X S
	21	Lukana - fritting rape oil	1 - CZ			Y	X S	
	22	Lukana Gold	1 - CZ			Y		
	23	Ceresol - rape table oil	1 - CZ			X	X	
	24	Vegetol - Sunflower oil	1 - CZ			X Y	X S	X
	25	Brolio – table oil	8 - Germany			X Y	X Y S	X Y S
	26	Brolio – fritting oil	8 - Germany			Y		
	27	Giglio oro – maize oil	9 - Italy			X Y		
	28	Rapso - rape table oil	11 - Austria			X		
	29	Sunflower – for LIDL	12 - Germany				Y	
Vegetable Solid Fats (margarines)	1	Bianka fit	1 - CZ	GMO -	X	X		
	2	Alfa vital	1 - CZ		X	X		
	3	Alfa optima	1 - CZ		X	X		
	4	Diana light	1 - CZ		X			
	5	Ceres soft	1 - CZ		X	X	X	
	6	Ceres soft – for frying	1 - CZ		X	X		
	7	Ceresol soft	1 - CZ		X			
	8	Omega –for frying	1 - CZ		X	X	X	
	9	Lukana – for frying	1 - CZ		X	X	X	
	10	Rela – Plus Discount	15 - ?		GMO+	X		
Corn products	1	Popcorn – Orville Redenbacker's	16 - US	GMO+	X	X		
	2	Popcorn – Hopi Popi	17 - US	GMO -	X	X Y	Y S	
	3	Popcorn – Jolly time	18 - US			X		
	4	Popcorn - special	20 - CZ					
	5	Pukance – ProBio (spelt, wheat, buckwheat,	21 - CZ			X		
	6	Biofoods – Pro.Bio –(sunflower, buckwheat, millet, spelt)	21 - CZ		X Y	X Y	X Y	

Soya products	1	soya meal - Paleta	22 - CZ	GMO -	X	X	
	2	soya meat – cubes, strips, granules	23 - CZ			X	X
	3	soya meat – cubes,	24 - CZ			X	
	4	soya meat – soja cereal	29 - CZ			X	
	5	soya meat – Big steak	25 - CZ			X	
	6	soya drink (instant) – Zajíc –	26 - CZ		X	X	X
	7	soya milk	27 - CZ			X	X
	8	soya milk – soya mini	28 - Slovakia			X	X
	9	soya granules	30 - CZ				X
	10	Soya Coffee creamer	27 - CZ				X
Others	1	maize drink	27 - CZ	GMO -	X		X
	2	corn flakes Bio	31 - CZ			X	X
	3	corn meal	32 - CZ		X		
	4	chicken salami with soya protein	33 - CZ				S
	5	sausages with soya protein	34 - CZ			Y	
	6	biscuits	35 - CZ				S
	7	fish fingers – pre fried – with soya in cover	36 - Estonia			Y	

Note : in column „ found in“ symbols mean : **sm** : supermarkets, **ss** : selfservice stores, **fs** : family shops,
X : big size towns (1 – 3), **Y** : middle size towns (4 – 6), **S** : small size towns and villages,
? : producer was not identified

Table 3. Labelled foods on sale October 2007 - February 2008

type of good	no	name	producer	labeled as	found in sm category in town *
cooking oils	1	Lukana - vegetable oil	1 - CZ	GMO+	
	2	Lukana - table oil	1 - CZ		2 - 3 - 4
	3	Lukana - fritting oil	1 - CZ		2
	4	Ceresol	1 - CZ		1 - 2 - 3 - - 5
	5	Ceresol - fritting oil	1 - CZ		
	6	Vegetol - vegetable oil	1 - CZ		5
	7	Vegetol Gold	1 - CZ		1 - 2 - - 4
	8	Vitae d'Oro - rape oil	1 - CZ		
	9	Lando oil	2 - Germany		2 - - 4
	10	Oilio	3 - Belgium		
	11	Soy oil	4 - CZ		
	12	Carotino	5 - Malaysia		
	13	Soy oil - Forte - aOP BVBA	6 - Belgium		2 - 3
	14	Vegetable oil - Karolina	7 - ?		
	15	AVE	1 - CZ		
	16	oil - Ahold	10 - ?		
	17	Bohemia - table oil	13 - CZ		
	18	COOP classic	1 - CZ		
	19	FROL - table oil	14 - CZ		
	20	Lukana - Sunflower oil	1 - CZ		GMO -
	21	Lukana - fritting rape oil	1 - CZ	1 - 2 - 3 - - 5	
	22	Lukana Gold	1 - CZ		
	23	Ceresol - rape table oil	1 - CZ		
	24	Vegetol - Sunflower oil	1 - CZ	1	
	25	Brolio - table oil	8 - Germany	2 - 3 5	
	26	Brolio - fritting oil	8 - Germany		
	27	Giglio oro - maize oil	9 - Italy	2 - 3	
	28	Rapso - rape table oil	11 - Austria	1	
	29	Sunflower - for LIDL	12 - Germany		
	30	COROLI - soyabean oil	37 - Belgium	GMO +	1
	31	COROLI - Soya oil	38 - Holland		1
	32	EuroShopper - vegetable oil	1 - CZ		1
	33	Bohemia - table oil	50 - CZ		2 - 3 5
	34	Vegetol - sun flower oil GOLD	1 - CZ		3 5
	35	Vitae d'oro - oil for Kaufland	1 - CZ		3 - 4
	36	Lukana - table oil for Penny	1 - CZ	GMO -	
vegetable solid fats: margarines	1	Bianka fit	1 - CZ	GMO -	
	2	Alfa vital	1 - CZ		
	3	Alfa optima	1 - CZ		
	4	Diana light	1 - CZ		
	5	Ceres soft	1 - CZ		
	6	Ceres soft - for frying	1 - CZ		
	7	Ceresol soft	1 - CZ		1
	8	Omega -for frying	1 - CZ		
	9	Lukana - for frying	1 - CZ		
	10	Rela - Plus Discount	15 - ?	GMO+	
Maize products	1	Popcorn - Orville Redenbacher's	16 - US	GMO+	
	2	Popcorn - Hopi Popi	17 - US	GMO -	
	3	Popcorn - Jolly time	18 - US		
	4	Popcorn - special	20 - CZ		
	5	Pukance - ProBio (spelt, wheat, buckwheat,	21 - CZ		
	6	Biofoods - Pro.Bio -(sunflower, buckwheat, millet, spelt)	21 - CZ		

	7	Doma Popcorn	23 - CZ		2 - 3
Soya products other than oils	1	soya meal - Paleta	22 - CZ	GMO -	
	2	soya meat – cubes, strips, granules	23 - CZ		1 – 2 – 3 - 4
	3	soya meat – cubes,	24 - CZ		1
	4	soya meat – soja cereal	29 - CZ		
	5	soya meat – Big steak	25 - CZ		
	6	soya drink (instant) – Zajíc –	26 - CZ		1 – 2 – 3 – 4 - 5
	7	soya milk	27 - CZ		
	8	soya milk – soya mini	28 - Slovakia		
	9	soya granules	30 - CZ		
	10	Soya Coffee creamer	27 - CZ		
	11	soya meal – Blansko – Pro Bio	39 - CZ	GMO -	1
	12	soya meat – strips,	23 - CZ		1 - 3
	13	soya granules	40 - CZ		1
	14	soya granules with ham	23 - CZ		1
	15	soya noodles – china type	23 - CZ		1
	16	soya slices	23 - CZ		1 - 3
	17	soya – cubes	41 - Holland		1
	18	soya – cubes special for goulash	42 - CZ		1
	19	soya - cubes	42 - CZ		1
	20	Soya drink : classic, capucino, Waldbeere	51 - Germany		2 – 3 – 4 - 5
Others	1	corn drink	27 - CZ	GMO -	
	2	corn flakes Bio	31 - CZ		
	3	corn meal	32 - CZ		
	4	chicken salami with soya protein	33 - CZ		
	5	sausages with soya protein	34 - CZ		
	6	biscuits	35 - CZ		
	7	fish fingers – pre fried – with soya in cover	36 - Estonia		
	8	Rice long grain	43 - Italy	GMO -	1
	9	Rice pied	43 - Italy		1
	10	Rice Basmati natural	43 - Italy		1
	11	Buckwheat - blanched - broken	44 - China		1
	12	Buckwheat - blanched - groats	44 - China		1
	13	Buckwheat cereals	44 - China		1
	14	Buckwheat grain meal	44 - China		1
	15	Oat flakes	45 - Germany		1
	16	Wheat flour	46 - Slovakia		1
	17	Wheat pastes - mix	47 – CZ		1
	18	Wheat pastes - special	47 - CZ		1
	19	Wheat pastes with spirullina	47 - CZ		1
	20	Barley flakes	48 - Turkey		1
	21	Millet	44 - China		1
	22	Spelt biscuit	47 – CZ		1
	23	Spelt flakes	47 – CZ		1
	24	Red lentil - blanched	48 - Turkey		1
	25	Pumpkin seeds - blanched	44 - China		1
	26	Chickpea	48 - Turkey		1
	27	Raisins	48 - Turkey		1
	28	Apricots dried	48 - Turkey		1
	29	Banana slices	49 - Philippines		1

Note : Newly registered products are in each category under bold line

In column “producer” is also country of origin (mainly in category “Others”)

In column “found in” numbers are related to town number in map, **sm** : supermarkets.

APPENDIX 2: MEDIA ITEMS RECORDED

Table 4. Media analysis in 2006

no	date of publication	media	source	headline	issue	opinion driven	issue driven	national regional
1	14.7.2006	Publication	PRÁVO	Science and Technology	GM foods	X		national
2	18.7.2006	Internet	blisty.cz	Nelze odlišit potraviny ze zvířat krmených GM plodinami	GM crops,meat	X		national
3	18.7.2006	Internet	blisty.cz	Jak je to opravdu s GM potravinami?	GM foods	X		national
4	4.10.2006	Publication	Moderní obchod	Certifikace jako potvrzení vlastních kvalit	GM foods	X		national
5	7.10.2006	Publication	Zlínský deník	Máte strach z GM plodin?	GM crops	X		regional
6	9.11.2006	Publication	Květy	Geny na talíři	GM foods	X		national

Table 5. Media analysis in 2007

no.	date of publication	media	source	headline	issue	opinion driven	issue driven	national regional
1	11.1.2007	Publication	SONDY	GMO: hrozba nebo záchrana lidstva?	GMO	X		national
2	22.1.2007	Publication	EURO	Nerovné soužití	GMO	X		national
3	5.2.2007	Publication	Zprávy ČTK	GP: Živočišné produkty s GMO by se měly označovat	GMO	X		national
4	5.2.2007	Publication	Rytmus života	Klonovaný jídelníček	GM animals	X		national
5	8.2.2007	Publication	SONDY	Reklamní finty klamou zákazníky	GM labelling	X		national
6	7.5.2007	Publication	PROFIT	Česko bude nízkouhlíkovou zemí	GM potato	X	X	National
7	11.6.2007	Publication	REGAL-GP	GM potraviny pod kontrolou	GM food-Bio	X		National
8	16.6.2007	Publication	Mf DNES	Evropa je bohatá, i tak potřebuje "lepší" potraviny	GM food-Bio	X		National
9	19.6.2007	Radio	Greenpeace	Dialog	GMO	X		National
10	25.6.2007	Publication	Zemědělec	GM plodiny žádané i zatracované	GM crops	X		National
11	27.7.2007	TV ČT1	Dobré ráno	Co jsou geneticky upravené potraviny?	GM foods	X		Regional
12	27.8.2007	Publication	NGO - GP	Kdo potřebuje rajčata s prodlouženou trvanlivostí?	GM tomato	X		National
13	27.8.2007	Publication	Literární nov	GMO, naše průmyslová budoucnost	GM for industry	X		National
14	26.8.2007	Internet	aktualne.cz	Ukončí Evropané svou nechuť ke genet. Inženýrství	GMO, GM food	X		National
15	24.8.2007	Publication	TREND-GP	BIO vs. GMO	GMO, Bio-food	X		National
16	12.9.2007	TV ČT1	Dobré ráno	V Praze probíhá konference o biotechnologiích	GMO, biofuel	X	X	National
17	4.10.2007	Publication	SONDY	O škodlivosti GM potravin aneb za vším hledej politiku	GM foods	X		National
18	10.10.2007	Internet	blisty.cz	Bush vaří pivo z GM rýže	GM rice-beer	X	X	National
19	11.10.2007	Publication	SONDY	Je spotřebitel skutečně pokusným králíkem bioprůmyslu?	GMO	X		National
20	23.10.2007	Publication	ČTK zprávy	GP: Některé testované uzeniny na trhu obsahovaly GMSóju	GM foods	X	X	National
21	30.10.2007	RadioČRo1	Radiožurnál	Geneticky modifikované organismy	GMO	X		National
22	19.11.2007	Publication	Zemědělec	V Senátu se hovořilo o transgenech	GM crops	X	X	National
23	27.12.2007	Internet	super.cz	Opravdu víte, co jíte?	GMO, GM food	X		National

Table 6. Media analysis in 2008

no.	date of publication	media	source	headline	issue	opinion driven	issue driven	national regional
1	17.1.2008	Internet	iHNed.cz	EU rozhoduje o potravinách z klónů	GM food, clones	X	X	National
2	25.1.2008	Publication	Svět	Válka o kukuřičné pole	GM corn	X		National
3	22.2.2008	Publication	IBZ	Geneticky modernizovaný obchod	GMO, trade	X	X	National
4	25.2.2008	Publication	Weekly	GM brambory jsou stále ve hře	GM potato		X	National