GE-free seed production and GMO thresholds

Report on practical experience

GE-free seed production

means

Breeding,

Maintenance Breeding,

Multiplication,

Conditioning,

Trade,

Farm-saved seeds,

Conservation,

Seed saving for self-sufficiency

Foto: Sevendust powered by fotocummunity

Approaches to enforcement in cases of authorized adventitious GM presence

Member State	Level allowed to be marketed without labelling			
	Maize	OSR	Soya	Other crops
AT	0,1% in enforcement control			
BE	Zero tolerance policy			
BG	-	-	-	
CY	Zero tolerance policy			
CZ	0,5%	0,5%	0,7%	
DE	<0,1%	<0,1%	<0,1%	<0,1%
DK	<0,1%	<0,1%	<0,1%	<0,1%
EE	-	-	-	
EL	<0,5%	<0,5%	<0,5%	<0,5%
ES	<0,5%	n/a	n/a	Zero tolerance
FI	Zero tolerance policy			Zero tolerance
FR	<0,1%	Zero tolerance policy		
HU	ban	only maize	only maize	
IE	<0,5%	<0,5%	<0,5%	n/a
IT	?	?	?	
LT	-	-	-	
LU	Zero tolerance policy			Zero tolerance
LV	Policy was not established in 2007			
MT	Zero tolerance policy			
NL	<0,5 but legal basis to require <0,9%			
PL	Zero tolerance policy			
PT	-	-	-	
RO			<0,7%, <0,9%?	
SE	<0,5 (seems now: zero tolerance policy)			
SK	<0,1%	<0,1%	<0,1%	
UK	<0,1%			

CSL 2007: Adventitious traces of genetically modified seeds in conventional seed lots: current situation in member states; 59ff., adapted.

Problems with contamination

Current data of experimental seed monitoring
in EU countries (if available)

MS	Year	Maize	Canola	Sugar beet	Potato	Soybean	Mustard	Other Species	% of tested seed lots
DE	2012	419/11	324/5	6/0	56/0	11/4	7/0	no findings	?
DE	2011	442/29	313/0	6/0	10/0	5/0	22/0	no findings	Maize < 5%, winter OSR app. 10%
NL	2011	30/0	15/2	-	-	-	-	-	Maize, Canola app. 3-5%
CH	2001-2011	app. 190/0	app. 54/0	app. 60/0	-	8/0	-	Tomato: 14/0, Cichorium 25/0, Sunflower: 170	Maize app. 5%
AT	2011	87/1	11/0	-	20/0	18/1*	-	-	app. 5% of seed lots
PL	2011	149/10	101/0	-	-	-	-	Sunflower 1/0	Maize app. 18%, Canola app. 12%

*** Not withdrawn from market**

Data from the European Enforcement Project EEP 2011, compiled by Hans Georg Starck, complemented

Problems with contamination

Seed contamination from 2001 until 2006,

Results of a survey on behalf of the EC (2007):

- 208 incidents with authorised events
- 43 incidents with unauthorised events
- on average 3,2 % of the seed lots per year were positive

Source: Hugo et al. (2007): Adventitious traces of genetically modified seeds in conventional seed lots: Current Situation in Member States

IG Saatgut
Interessengemeinschaft für gentechnikfreie Saatgutarbeit

Possible negative Impacts of GMO thresholds in seeds for GE-free seed producers

IG Saatgut Report
Author: Siegrid Herbst

Handling risks of contamination

1. All organic and conventional seed producers take precautions.
2. Costs for tests of internationally operating seed companies up to six-digit Euro per specie and year

„We cooperate with about 250 multipliers. Just the testing of the multiplied maize seed costs 100.000 Euro per year. 3 subsamples would increase the costs up to 300.000 Euro. This we could not bear."

(Breeder of maize)

"In the case of soy, a seed sample contains 50 to 100 seeds. We have to sow them in a greenhouse of safety level 1. Than we take samples of the leafs of each single plant. That makes up to 100 tests."

(Conventional breeder)

Handling risks of contamination

1. All organic and conventional seed producers take precautions.
2. Costs for tests of internationally operating seed companies up to six-digit Euro per specie and year
3. Even in countries without GMO cultivation companies test species with high contamination risks and have an extra risk management.

"We get seeds from 70 multipliers. If necessary we agree with them on special precautions. In the current situation we can allocate our costs on seed prices. The costs become Incalculable in case of increasing GMO cultivation. They are unforeseeable and possibly precarious in case of GMO detection."
(Trader of organic vegetable seeds)

"As long as we assume that the probability of contamination is close to zero, we do not take additional [technical] measures."
(Breeder, multiplier, conditioner and trader of organic seeds)

Handling risks of contamination

1. Organic and conventional seed producers take precautions
2. Costs for tests of internationally operating seed companies up to six-digit Euro per specie and year
3. Even in countries without GMO cultivation companies test species with high contaminaiton risks and have an extra risk management.
4. Local seed producers in regions without GMO cultivation have to assess contamination risks and try to reduce them.
5. Dilemma for all: no measure can protect at a hundred per cent.
6. An increase of the cultivation of GMOs would extend the risks of GE-free seed producers.

"I try to avoid seeds from companies that use GMOs. But… The seed drill I still have together with a conventional neighbor." (multiplier of organic agricultural seeds)

"If I cope with the statutory minimum distances and the minimum purity in seed, my seeds get certified. Still, I can not exclude cross-pollination, and that's the problem with GMOs." (multiplier)

"My breeding lines for beet root count together 100 to 120 plants. If I had to test single plants or breeding lines of 1 to 5 plants it would blow my budget." (breeder / maintenance breeder of organic vegetables)

Conclusions & political demands

1. … a moratorium on field trials and cultivation of GMOs, even better a ban.

2. … Further approvals of GMOs shall be stopped.

3. … enforce the polluter pays principle.

4. … The EU shall strictly implement the existing zero tolerance & stop its plans of LLP resp. thresholds for GMO in seeds.

5. … effective GMO controls by the Member States before sowing.

6. … as long as points 1 and 2 are not met:

- no seeds in which GMOs are detected shall be sown but destroyed.
- continuous institutional controls + transparent and public notification of results on time.

Thank you!


BUNDESVERWALTUNGSGERICHT
GE-free
Seeds!
power to the Bauer