



Session 1

Freedom of choice: Approaches for a consistent and fully protection of conventional and organic agriculture



European
GMO-Free
Regions
NETWORK

Coexistence in Europe: Overview & perspectives



Premise

- Introduction (5 slides)
 - Coexistence: why?
 - Which crops?
- Coexistence in Europe (4 slides)
- General considerations (2 slides)
- Perspectives (1 slide)
- Conclusion (1 slide)



Why do we talk about a coexistence in Europe?

- Scientific doubts (technology itself – risk assessment)
- Consumers and Market appreciations
- European legislation:
 - **EC Directive 18/2001**
art. 22 “*free circulation*” and
art. 26a “*measures to avoid the unintended presence of GMOs*”
 - **EC Recommendation 556/2003**
Guidelines for the development of national strategies and best practices to ensure the coexistence of genetically modified crops with conventional and organic farming
 - *Coexistence is only an economic issue (environmental and health aspects are excluded)*

Which level of coexistence?

- The coexistence level in Europe is set on the “*adventitious or technically unavoidable presence*” concept:
 - **Food & Feed:** 0,9% (EC Regulation 1829/2003)
 - **Seeds:** ?? (LOD - 0 - 0,1 - 0,9 % or something else?)
- Every species has a different coexistence attitude. It's based on:
 - Species characteristics
 - Environmental interactions (Climate, morphology, etc.)
 - Human interactions (production processes)



Which crops? (1)

- Only 1: MON 810 maize, that means:
 - **67** varieties registered in the European Common catalogue of varieties of vegetable species — third supplement to the 26th complete edition (February 2008)
- How to find out a GM maize in the European catalogue?
 - It's marked with a **(34)**



Which crops? (2)

Abrego BT – ES 2021	DKC6041YG – ES	PR31N28 – ES 5096
Aliacan BT – ES	DKC6531YG – ES	PR32P76 – ES 5052
Anjou 277 YG – CZ 1136	DKC6550YG – ES	PR32R43 – ES 5052
Aristis BT – ES 2431	DKC6575YG – ES	PR33B51 – ES 5096
Asturial BT – ES 2022	Elgina – FR 8309, PT 457	PR33P67 – ES 5052
Azema YG – ES	ES Limes YG – CZ 1133	PR34N44 – ES 5052
Bacila – ES 5052	Eurostar YG – CZ 1133	PR38A25 – CZ 409
Beles Sur – ES	Evolia YG – ES	PR36R11 – ES 5052
Benji YG – ESx	Foggia – ES 2099	PR38F71 – CZ 409, DE 1357
Bolsa – FR 8309	Gambier BT – ES 2431	PR39F56 – DE 514, CZ 409
Campero BT – ES 3022	Helen BT – ES 3022	PR39V17 – DE 514, CZ 409
Cuartal BT – ES 2022	Jaral BT – ES 10	PR39D82 – CZ 409
DK513 – FR 8317	Levina – FR 8309	Riglos BT – ES 2022
DKC3421YG – DE,CZ	Luson BT – ES 2012	Rocco YG – ESx
DKC3946YG – CZ 1114	LG3233 YG – CZ 1136	SF1035T – ES 10
DKC6419YG – ES x	Koffi YG – ESx	SF1036T – ES 10
DKC6451YG – ES 5072	KXA5491 – ES 3528	SF1112T – ES 10
DKC6667YG – ES	MAS 60YG – ES 2099	SF4801T – ES 10
DKC6844YG – ES	Novelis – FR 8309	Thurro YG – ES 2021
DKC4442YG – ES	Olimpica – FR 8309	Tonic YG – ES
DKC5784YG - ES	Plácido YG – ES x	Venici YG – ES 2030
DKC5018YG – ES	Poncho YG – ES 2021	Viriato BT – ES 2021
	Protect – ES 5011	



Which crops? (3)

- Commercial GM crops in third Countries
 - **North America:** maize, cotton, soy, rice, rapeseed, chicory, papaya, alfalfa, potato, sugarbeet
 - **South America:** soy, maize, cotton
 - **Africa:** soy, maize, cotton
 - **Asia:** rapeseed, cotton, alfalfa, (*poplar, rice*)
 - **Australia:** rapeseed, carnation

Sources:

<http://www.agbios.com/main.php> - GM database

<http://www.gmo-compass.org/eng/home/> - GMO planting

Coexistence in Europe (1)

European Commission

- **Latest update:** COM(2006) 104 final: “Report on the implementation of national measures on the coexistence of genetically modified crops with conventional and organic farming”
- **COEXNET:** EC Decision 2005/463/CE
 - 4 meetings (<http://circa.europa.eu/Public/irc/agri/Home/main>)
- **3 GMCC Conferences:** research in the coexistence field (the 4th will be in Australia)
- **1 Consultation Conference** (Vienna 2006)
- **ECoB:** European Coexistence Bureau in Seville
- **3 research programmes:** Sigma, Coextra & Transcontainer



Coexistence in Europe (2)

Member States

14 notified coexistence acts under the procedure of the Directive 98/34/EC.

General provisions:

- *Notification / authorization*
- *Registers (institutional + on farm)*
- *Training*
- *Cleaning of machineries*
- *Information to neighbour farmers*
- *Isolation distances (25-800mt, maize)*

Source: <http://ec.europa.eu/enterprise/tris/pisa/app/search/index.cfm?lang=EN>

Coexistence in Europe (3)

MS	Particular provisions
AT	Special provisions for seed production zones 8 Landers – special provisions for protected areas, no distances
DK	Training for workers, distributors register, annual tax/ha, 150mt, 225mt for information
DE	Removal of ground residues, 150-300mt , 300mt information
LU	No GM crops in protected areas, 800mt, private insurance needed
CZ	70mt (200mt organic), 1lines=2mt (max 100mt replacing for organic crops)
PT	GM zones, user guide in seed bags, GM-free areas, compensation, 200- 300mt
HU	provisions for protected areas, min.buffer zone 400m

Coexistence in Europe (4)

MS	Particular provisions
NL	farmer association proposal – information in buffer zone (25-250mt maize)
LV	No GM crops in protected areas, 200-400mt
LT	Inform beekeepers (3Km) + farmers (buffer), 2-4y to sow conventional
SK	Weed control (destroy non-GM varieties), 200–300mt or barrier: 6 lines=2mt
BE	2 Regional acts - GM farmers could buy contaminated production, annual tax, compensation schemes (no distances in draft acts)
SI	written consent, distributors register, GMfree & GM agreements, national compensation for adventitious contamination, buffer zones to be determined
SE	information to neighbours within 100mt, tax for inspection and registration

General considerations (1)

Scarce technical experience

- EC stated “*We are in a learning process, and we will have to start to develop measures on the best available knowledge, and revise them in the light of practical experience*” (Vienna final declaration, 2006)
- Current technical provisions are generally based on models

Seed contamination threshold

- EC made no progresses; MSs are using different approaches

Cross border: which behaviours?

Liability & compensation schemes

Monitoring tools

- on-farms (but also in production processes)

General considerations (2)

Proportionality: a “short circuit”?

- Measures for co-existence **shall not go beyond** what is necessary in order to ensure that **adventitious traces** of GMOs stay below the tolerance thresholds set out in Community legislation
- EC Legislation: 0,9% threshold is valid when GMO presence is adventitious or technically unavoidable

What does “*adventitious or technically unavoidable presence*” mean in practical terms?

Regional scale vs Farm scale measures

- EC view:
 - the decision to produce GM or non-GM crops should be with the individual farmer or with groups of farmers that voluntarily and collectively decide to use one of these production types.
 - in areas where agricultural structures and farming conditions are such that farm-level co-existence can not be achieved for a given crop, other sustainable solutions should be explored.

Short term

- No Community legislation until Member States have gained more experience
- European Guidelines for Maize in about 1½ years
- Cultivation concerns few crops
- Increment in contamination cases
- Few independent research
- Additional costs to implement/maintain coexistence

Medium/long term

- Generally difficult to determine
- Increment in GM cropped surface

Conclusions

- **Coexistence rules** → still room for the definition of technical provisions at regional & local level (also an exclusion for certain crops: oilseed case)
- **Seeds contamination thresholds** → stricter rules to protect seed production zones
- **Research needed** → both at genetic/metabolic level and environmental level (e.g. interaction with bees)
- **Monitoring tools** → common standards and network of laboratories
- **Voluntary agreements** → important tool to be further explored
- **Protected areas / quality products** → gain & produce economic data to support an exclusion of GM crops in particular zones