

# Questions not solved – Promises not kept

## Ten arguments against the use of genetically modified plants in food and agriculture

A joint Position Paper



**Arbeitsgemeinschaft der Umweltbeauftragten  
der evangelischen Kirchen in Deutschland (AGU)**  
(Commissioners for Environmental Questions  
in the Protestant Regional Churches in Germany)



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**Katholische Landvolkbewegung (KLB)**  
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## **Introduction**

The working group of the commissioners for environmental questions in the Protestant Regional Churches and in the Roman Catholic Dioceses of Germany have committed themselves, together with the other undersigned, to a responsible stewardship of God's creation. Therefore, they have closely followed the development of genetically modified (GM) plants since many years. The church commissioners refer to the present situation in European agriculture – where a general authorisation of genetically modified plants is expected shortly – to point to the hazards and misjudgements of this technique.

Respect for life created by God has priority over what is technically feasible!

On the basis of the following ten arguments, the undersigned reject the growing and processing of genetically modified plants. They direct corresponding recommendations to politicians and to church parishes.

### **1. Consumers' autonomy at stake**

Recent EU regulations spell out compulsory labelling and traceability along the whole chain of food production and processing. Consumers are given a choice between products which are genetically modified and those which are not. Yet this choice will become meaningless if conventional and genetically modified products get inadvertently mixed, as is to be feared.

### **2. Health risks**

Genetic modification may lead to the production of additional proteins in the plant cells. This may affect the wholesomeness of food and cause new allergies. Until now, new allergenic substances in genetically modified food have been avoided because of tests during the authorisation procedures. However, present testing methods are not foolproof. Additional genes inserted into the plant genome could lead to "position effects" by interacting with the plants' own genes in unpredictable ways by disturbing or changing the effectiveness of plant genes.

### **3. Ecological risks**

The growing of plants which are made insensitive to a herbicide (herbicide resistant plants), or plants containing a toxin against insects (insect resistant plants) will necessarily mean that ecological risks of unknown scope and consequences are ignored. An adequate risk assessment is possible only over a long term. There are already indications that resistant weeds and insects occur, and that soil microorganisms are adversely affected.

### **4. Biodiversity in danger**

The growing of herbicide and insect resistant plants interferes with the food chains and the biodiversity of the field ecosystem in a way which makes it difficult to assess the consequences for agriculture. Natural ecological balances between beneficial and pest organisms are disturbed. Genetic erosion due to homogeneous seeds and large size field management will also prove dangerous.

## **5. Genetic engineering advances the concentration process in agriculture**

The present concept of genetically modified plants to be used in agriculture has not been developed to meet the needs of small-scale farming. The global spread of these techniques fuels worldwide competition between farmers and endangers the existence and the marketability of locally adapted, site-specific land use systems.

## **6. Hazards for GM-free agriculture**

If genetically modified plants spread in an uncontrollable way, any co-existence between farmers using genetic engineering and farmers refraining from genetic engineering becomes difficult. The draft EU seed directive is part of the problem. It fixes a threshold of up to 0.7% contamination with genetically modified seeds in conventional seeds without labelling. The existence of ecological farming, seeking to guarantee GM-free products, is especially at risk. No compensation of financial losses due to contamination of its products is foreseen. No regulatory liability framework for damages caused by genetic engineering in agriculture and environment is provided for. On the contrary: ecological and conventional farmers will have to bear the costs of measures to keep their products GM-free and of the corresponding tests.

## **7. Economic misjudgements**

The biotechnology industry points to the economic advantages of GM varieties, as these are based on higher yields and lower production costs. Such advantages are, however, not obvious if we consider the examples of genetically modified maize and soybeans in the USA. Occasional higher yields are, in most cases, more than outweighed by higher input costs and the breakdown of markets. Whereas the prices for genetically modified food and feed drop worldwide, costs for additional management measures rise considerably.

## **8. Decrease of insecticide and herbicide use less than expected**

The promised drop in the use of agrochemicals against insect pests and weeds is often only of short duration. One of the problems is that the target organisms may develop resistance. Another problem is that non-target pests increasingly invade the fields. The application of additional expensive and environmentally damaging agrochemicals often annihilates the original decrease in the use of pesticides.

## **9. Monopolisation of food production**

The spread of genetic engineering coincides with widening legal possibilities to patent plants and their genes. Patents on food bear the intrinsic danger that a few transnational corporations obtain exclusive control over the whole chain of food production, from the gene to the dish. Initial conflicts over patent rights in Northern America show how, in the future, farmers may lose some of the rights concerning their crops. Patents on life are not compatible with the concept of intellectual property rights. They confer rights which go far beyond what the "inventor" has really accomplished.

## **10. The myth of fighting world hunger**

The promise to overcome worldwide hunger with the help of genetic engineering is not credible. Research and development of genetically modified plants are organised privately and lie in the hands of only a few big corporations in the North, which protect their products

through patents. This development is addressed to the needs of intensive industrialised farming in the earth's temperate zone. The genetically modified plants don't yet contribute to the solution of agricultural problems in the tropics. Patents and technology fees prevent the transfer of technology from North to South.

Deficient nutrition is not a problem of food quantity, but of power and distribution. There is no scarcity of food in the world, but grave deficiencies in access to food and distribution.

### **Recommendations to politicians**

The church commissioners for environmental questions and the other undersigned request the political decision-makers to implement legal regulations for the use of genetically modified plants and products thereof that protect consumers and farmers and which meet the following concerns:

- In order to give farmers the freedom of choice between growing crops with or without genetic modification, conventional seeds must not be contaminated with genetically modified seeds. The draft of the EU seed directive should be changed accordingly.
- The commercial growth of genetically modified crops must not impact GM-free agriculture. Therefore, a clear regulation for co-existence, uniform throughout all present and future EU member states, should be put in place.
- A legal liability framework based on the Polluter Pays Principle must be introduced which covers damages caused by genetically modified plants and products thereof.
- Life is not a human invention, it is not patentable. Therefore, a revision of the EU biopatent directive and of the WTO's TRIPs agreement is necessary.
- In regulating genetic engineering trade interests must not have priority. The pressure from the USA and the WTO has to be resisted.

### **Recommendations for action by churches**

The church commissioners for environmental questions and the other undersigned ask those, who bear responsibility in church congregations, institutions, offices and services, to consider the following concerns for action by the churches:

- To provide information about genetically modified plants and food, and opportunities for public discussion about the questions they raise.
- To exclude the growth of genetically modified plants on church farmland by modifying the rental contracts.
- To buy food produced without genetic engineering.

### **This position paper has been signed by:**

Arbeitsgemeinschaft der Umweltbeauftragten in der Ev. Kirche in Deutschland (AGU)  
(Commissioners for Environmental Questions in the Protestant Regional Churches in Germany)

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