

## Position on Genetic Engineering and Genetically Modified Organisms

### Introduction

The introduction of Genetic Engineering into agriculture has confronted the organic movement with new challenges. The purpose of this paper is to provide IFOAM and its internal bodies with the Federation's position on Genetic Engineering; and to guide IFOAM members in the development of their own positions. The position has a twofold perspective:

- A political focus on what IFOAM wants.
- A practical focus on what is feasible. (This is especially relevant in relationship to standards. Organic agriculture operates according to set requirements and it is critical that those requirements are practically achievable.)

Based on this position, strategies will be developed. Public materials and statements by IFOAM shall follow this position.

### Scope

This position does not set detailed standards for organic production, inspection, certification or accreditation. That is the function of the IFOAM Norms (the IFOAM Basic Standards and the IFOAM Accreditation Criteria). Nevertheless, this position provides general guidance on the development of appropriate standards and criteria.

### Definitions and terminology

IFOAM uses the following definitions:

#### Genetic engineering (GE)

Genetic engineering is a set of techniques from molecular biology (such as recombinant DNA) by which the genetic material of plants, animals, micro-organisms, cells and other biological units are altered in ways or with results that could not be obtained by methods of natural mating and reproduction or natural recombination. Techniques of genetic modification include, but are not limited to: recombinant DNA, cell fusion, micro and macro injection, encapsulation, gene deletion and doubling. Genetically engineered organisms do not include organisms resulting from techniques such as conjugation, transduction and natural hybridization.

#### Genetically Modified Organism (GMO)

A plant, animal, or microorganism that is transformed by genetic engineering.

A product that is the result of Genetic Engineering is called a “product of Genetic engineering” or a “derivative of GMOs” depending on the circumstances.

IFOAM insists on precise definitions and terminology regarding genetic engineering and opposes any effort to divert the GMO debate by introducing terms such as “modern bio-technology”.

### Genetic Engineering in agriculture

IFOAM is opposed to genetic engineering in agriculture, in view of the unprecedented danger it represents for the entire biosphere and the particular economic and environmental risks it poses for organic producers. IFOAM believes that genetic engineering in agriculture causes, or may cause:

- Negative and irreversible environmental impacts
- Release of organisms which have never before existed in nature and which cannot be recalled
- Pollution of the gene-pool of cultivated crops, micro-organisms and animals

- Pollution off farm organisms
- Denial of free choice, both for farmers and consumers
- Violation of farmers' fundamental property rights and endangerment of their economic independence
- Practices which are incompatible with the principles of sustainable agriculture
- Unacceptable threats to human health

Therefore, IFOAM calls for a ban on GMOs in all agriculture.

While IFOAM is advocating a total ban on GMOs in all agriculture, we cannot ignore the fact that GMOs are already in use, in some countries even in wide-spread use. Therefore IFOAM must develop positions that are dealing with this.

### **Labelling of Genetically Engineered agriculture products**

IFOAM urges the introduction of mandatory and comprehensive labelling for genetically engineered agricultural products for two main reasons:

1. A rapidly growing number of consumers throughout the world do not want to consume genetically engineered agricultural products. Mandatory and comprehensive labelling is necessary in order to secure the right of consumer choice.
2. The labelling of genetically modified/engineered food is of particular importance to producers and consumers of organic food, as well to organic inspection and certification bodies. This is because certain products from conventional agriculture or of non-agricultural origin are still permitted in organic production. In order to ensure that genetic engineering does not enter the organic production chain through such compounds, reliable and comprehensive labelling is needed.

Labelling should not be limited to those agricultural products which contain or consist of genetically modified organisms; it should also cover agricultural products which are produced with genetically engineered products.

IFOAM does not support the concept of "substantial equivalence". IFOAM does not consider this method to be a sound determinant of food safety. Further, IFOAM does not feel it is a valid criterion for determining which genetically engineered agricultural products should fall within the scope of products to be labelled. The "substantial equivalence" approach only tells consumers something about the composition of the end product. It does not disclose the 'history' or production method of the product, which is of greater interest to consumers.

### **Genetic Engineering is excluded in organic agriculture**

IFOAM is opposed to the use of Genetic Engineering in organic agriculture, and in the processing of organic products. This prohibition of genetic engineering applies to genetically engineered plants, animals, and micro-organisms. It also applies to products of genetically engineered organisms such as enzymes and amino acids, irrespective of whether or not they are detectable in the final product.

IFOAM accepts the reality that organic producers operate in the world and cannot be completely isolated from environmental pollution or the effects of global development. Therefore it is IFOAM's position that we need to find a realistic balance between the rejection of GE in organic production and the practicalities of avoiding a distant link between organic production and genetic engineering.

A few examples of this are: some inputs used in the organic production system may be indirectly affected by genetic engineering, e.g. composted household waste can come from households where some people have consumed GE food; animal manure can come from farms that have used GE products as feed stuffs; or a food processing aid can have been produced with the use of a GE processing aid or enzyme. There may also be unforeseen problems arising in animal keeping.

### **GMO contamination and testing**

The only true guarantee for avoiding GMO contamination is a ban on GMOs, which IFOAM strongly advocates. IFOAM also supports the establishment of GMO-free zones and countries, where possible.

IFOAM advocates a total ban on Genetic Engineering. At the same time IFOAM recognises that some GMOs have already been released for commercial use and others are used in field trials. In these situations the emphasis shall be on reducing the risk for contamination by containing the genetically engineered product.

IFOAM is opposed to any approach that forces organic producers to bear the burden of problems caused by others. It is IFOAM's position that the responsibility for GE gene contamination lies with the polluters. The producers and the users of GMOs must be held fully responsible for preventing the spread of the GMOs and their properties. Organic farmers should not have to prove their crops are uncontaminated. Governments are urged to pass legislation that makes GMO companies liable for all genetic pollution caused by the products they own, and to establish satisfactory buffer zones between GMO crops and any other crops.

This approach is not predicated on the de-certification of organic producers due to contamination, but rather on the right of **all** farmers not to have their farms contaminated by genetic pollution.

The potential of GMO contamination does not alter the traditional approach of certifying organic as a "production method" rather than an end-product guarantee. Organic products are not defined or certified as being "free" of unwanted pollution. Just as organic farmers cannot guarantee zero contamination from pesticides they do not use themselves, there is no way for them to guarantee that organic products will not be polluted by traces of GMOs.

Contamination that results from circumstances beyond the control of the operator will not necessarily alter the organic status of the operation. The level of such unavoidable contamination will range from non-detectable to very low, depending on a number of factors, most of them outside the control of the producers. Any defined threshold will be chosen arbitrarily and does not reflect adherence to organic principles. Therefore IFOAM does not support the introduction of *de minimis* thresholds for genetic contamination. Because of this, mandatory testing for genetic contamination should not be introduced for the verification of organic production. However, testing is a tool available to certification bodies to utilise in certain specified situations, such as when negligence or fraud is suspected or to assess if established safeguards are sufficient.

Nevertheless, organic producers and operators shall take all reasonable measures to minimise and manage the risk of contamination. This is especially important for seeds, because if the seeds used by organic producers are contaminated it has an impact on future production. Special efforts shall be made by organic producers to ensure that the seeds they use are not contaminated. Organic certification bodies shall assure that all operators implement the necessary precautionary measures, and if needed, assist operators with generic advice and information. Organic sector associations shall assist their members to obtain uncontaminated seeds. IFOAM should in turn assist with this on the global level.

There may be those in the organic market, who wish to impose more stringent contamination requirements that will vary in different countries, and possibly also for different products. This is not generally supported by IFOAM, as it is confusing and may exclude organic producers from market access. It also undermines efforts to create a coherent position. Nevertheless, IFOAM recognises this may be unavoidable and is in line with the consumers right to choose. It is also a more dynamic and flexible approach than establishing compulsory standards. Therefore IFOAM maintains a neutral stance to such initiatives.

### **Marketing of organic products and information about organic agriculture**

Organic certification shall not imply it is a "GE-free" certification. Rather it shall be presented as guaranteeing "production without GE/GMOs". As there is no guarantee that organic products are 100% free from any GMO pollution, organic products shall not be marketed as "GE-free", unless there are specific safeguards and certification procedures for that specific product. Organic producers and associations shall actively inform the consumers of this fact to ensure fair marketing claims and to avoid future debates about consumer deception.

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