

**The Irish Bio Industry Association (IBIA) submission to
Department of Agriculture concerning Member State
Co-existence guidelines**

August 2004

Background

The European Commission has recently published a set of guidelines (2003/556/EC) which are based on the principle that co-existence is about providing farmers and consumers with a practical choice between conventional, organic or GM good and feed production. These guidelines have three significant guiding principles:-

Economics

The concept of co-existence is concerned with the economic impact of the admixture of GM and non-GM crops and is not founded on any environmental or health concern.

Proportionality

Measures for co-existence should be efficient, cost effective and proportionate. They should avoid any unnecessary burden for farmers, seed producers, co-operative and other actors associated with any production type.

Subsidiarity

Co-existence measures should be Member State specific, because of the diversity of farms, conditions and practice across Europe. Commenting on the guidelines, Frans Fischler, Commissioner for Agriculture and Rural Development said, "What is an efficient and cost effective best practice is specific to national and regional or local conditions. This makes an EU wide "one size fits all" approach unworkable.

The guidelines are intended to set out farm management practices to follow when growing GM and non-GM crops. It is the view of the IBIA that Member State guidelines should be scrutinised and challenged as to whether they meet the above three main principles.

Status of Co-existence Guidelines

Member States are at differing stages of developing a co-existence policy. Denmark recently became the first country to pass legislation on this subject. The German Government's Bundestag has also approved a bill regarding co-existence. In England a public consultation process is underway. It is likely that each Member State will take different approaches to the subject of co-existence, possibly based on their differing views of the importance and benefit on biotechnology at national level.

Biotechnology in Ireland

Biotechnology has been identified by the Irish Government as a key industry of the future for Ireland. Evidence for this comes from :-

1. The Technology Foresight Report (1999)
“Ireland should focus its investment in two main technologies, Information and Communications Technology and Biotechnology”
2. Government Inter-Departmental Group on Modern Biotechnology Report (2000)
“On the basis of the best knowledge available to us, the development of world class competence in biotechnology on a basis compatible with the protection of human health and the environment is essential, not optional, for Ireland and Europe”
3. Launch of Science Foundation Ireland (2000)
Largest single investment in Science Research in the history of the State. Investment focused on Biotechnology and Information Technology.

Additionally, agricultural biotechnology has been identified as a key component.
4. Teagasc Agri-Food Report (2000)
“Biotechnology will be one of the core technologies of the 21st century and agri-food has been identified as one of the sectors that will benefit significantly from biotechnology’s tremendous potential”.

Biotech crops are increasingly becoming the norm in world agriculture. Sixteen countries representing more than half the world population have now adopted agricultural biotechnology, with the total number of hectares growing rapidly.

As of 2003, 7 million farmers grew 167 million acres of biotech crops globally, an increase of 15% from 2002. Similar increases are expected for 2004.

Existing biotech crops and those in the pipeline have relevance to Irish agriculture. Co-existence policy should allow Irish farmers to avail of the benefits of these technologies without hindrance or unfair restrictions.

Recommendations

The IBIA supports and reiterates the position of the European Association for Bio industries (EuropaBio) on the subject of co-existence, namely:-

1. Co-existence means choice, not prohibition

The IBIA supports a practical approach that offers true choice to Irish farmers and consumer, and that does not impose disproportionate standards that would in practice equate to a prohibition.

2. Co-existence is not a new issue

Farmers have practiced co-existence for generations so as to meet demands for different types of products. Good Agricultural Practices and active dialogue and agreements among neighbouring farmers and stakeholders in the supply chain allow quality standards to be met in different ways in the varied agricultural environments in different parts of Europe.

3. Thresholds for “Adventitious or Technically unavoidable presence” of GM

The issue of co-existence of different production systems is closely linked to the 0.9% labelling threshold for “adventitious or technically unavoidable presence” of GM in non-GM products. It is particularly important to establish thresholds for GM seed in non-GM seeds. Again, labelling thresholds are not a new concept. Indeed, standards for organic production permit substantial (5%) presence of non-organic ingredients; without this, many “organic” products would be practically impossible to produce. In terms of conventional crop practices almost all traded agricultural commodities accept some degree of adventitious presence in supplies and hence have threshold set for the presence of unwanted material. For example in most cereals, the maximum threshold for the presence of unwanted material is 2%.

4. Co-existence is about economics not safety

The Em’s very stringent GM authorisation procedures deal exhaustively with safety of GMOs for human health and the environment. Co-existence guidelines should focus on the feasibility and costs of management practices that aim to avoid the unintended presence of GM in non-GM produce and thus respect the 0.9% labelling threshold set in the Gm Food and Feed and GM Traceability and Labelling Regulations for the “adventitious or technically unavoidable presence” of GM in non GM crops.

Growers who will benefit from a specific quality standard should not expect their neighbours to bear the special management costs of meeting that standard; to do so would reverse fundamental concepts of freedom of economic activity and would establish a dangerous precedent. To allow

specialty operators to formulate unrealistic standards for GM in their own produce would impose impossibly high on other activities and would effectively bar competition and impose a ban on the choice of other producers.

On the other hand, the question of compensation for economic loss in case of admixture must be considered. In fact, such admixture might involve a high-value GM field “contaminated” by an organic production that did not follow guidelines for good agricultural practices. In all such examples, EuropaBio believes that existing national law on civil liability already offers abundant possibilities to seek such compensation and that additional Community legislation in this field is not necessary.

5. A pragmatic approach is needed

The IBIA welcomes the Commission’s commitment to publish guidelines providing a general framework built on the co-existence of different agricultural practices that already exist. This will allow local measures to be adapted to local conditions on a case by case basis with the close participation of farmers and supply chain, while at the same time ensuring that the internal market is not contravened, so that freedom of choice is available for all European Farmers and consumers. A pragmatic co-existence scheme is already achievable without additional national or EU legislation.

6. EU farmers and citizens must be able to share in the proven benefits of GM

Today, genetically modified crop varieties are grown by millions of farmers on many millions of hectares around the world. The evidence is clear that farmers choose to grow these GM crop varieties as they offer benefits to themselves, to their rural communities, to their rural environment and to consumers. Recorded benefits are:

- Food security for small scale growers through insect and disease resistances
- Increased efficiencies of production
- Reduction in farm inputs (sprays and energy consumption)
- Improved quality of harvested product
- Improved nutritional value of harvested crop
- Increased options for diversification of agricultural and rural economies

Crops now in the research and development stages will continue to offer a wider variety of field and horticultural crops providing these same benefits.

It is crucial that Irish producers and consumers are able to choose to experience these same benefits.

Conclusions

In North America, where the greatest concentration of GM crops exists, GM, conventional and organic crops have co-existed for several years without economic or commercial problems. In Europe evidence from the only current example of where GM crops are grown (Bt maize in Spain⁰) shows that GM,

conventional and organic maize production also have co-existed without economic or commercial problems.

Spain, interestingly, is one of the largest organic producers in the EU.

Finally, it is important to emphasise the issues of context and proportionality. For the future, if highly onerous GM crop stewardship conditions are applied to all EU farmers who might wish to grow GM crops even though the vast majority of such crops would not be located near to organic-equivalent crops or conventional crops for which the non GM status is important, this would be disproportionate and inequitable. In effect, conventional farmers, who account for 99.59% of the current, relevant EU arable crop farming area could be discouraged from adopting a new technology that is likely to deliver farm level benefits and provide wider environmental gains.



ICSA Submission on Co-Existence between GM and GM Free Production Methods

December 2004

Further Details:

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Section 1

Background to ICSA and its policy on GM production

1.1 The Organisation

ICSA is a representative organisation for farmers involved in beef, suckler or sheep production. It currently has 9,000 members and membership is growing. It led the way in the debate on CAP reform, campaigning for full decoupling from the very start.

1.2 The Decision

The ICSA national executive voted in favour of a GM free island policy in May 2004, following extensive internal consultation.

1.3 The Motivation

ICSA is preoccupied with the future of Irish farming, which it sees as being inextricably linked with our ability to sell our produce on the higher value EU markets. Before decoupling, the focus was on subsidies, intervention and export refunds- this is no longer tenable. Decoupling means that success in the market is everything.

1.4 The Policy

ICSA has observed the controversy surrounding GMOs. Irish beef farmers are only too painfully aware of the problems that arise when the confidence of the consumer is lost- as was experienced through the BSE era. We are now putting that behind us and the image of beef is improving. Grass fed beef is in a particularly good position. For example, it is higher in conjugated linoleic acids, which have beneficial properties that counteract heart disease and cancer. (Teagasc National Food Centre)

Section 2

Introduction

2.1 General Statement

ICSA is opposed to the use of genetically modified seeds in Irish farming. ICSA believes that GM technology offers no benefit and several disadvantages to Irish farmers. The interests of Irish farmers and the wider agri-food sector would, in our

view, be better served by developing the clean, green image of the island. This should encompass the concept of Ireland- The GM free food island, which would be a logical progression of the existing Bord Bia strategy to market “Ireland-the food island” Therefore, ICSA is opposed to legislating for co-existence of GM and non GM production methods in Irish agriculture.

2.2 Outline

In this document, ICSA opposition to legislating for co-existence in Ireland is explained under the headings:

- Democratic Deficit
- Market Opportunities
- Consumer Choice
- Scientific Uncertainty
- Difficulties with Enforced Co-Existence Regimes
- Cost/Benefit analysis

The document then addresses specific practical questions relating to co-existence under the following headings:

- GM Buffer zones
- Liability
- Practical difficulties

Section 3

Why ICSA Opposes Provision for Co-Existence in Ireland

3.1 Democratic Deficit

ICSA does not accept that there is any democratic mandate for the introduction of GM technology in European agriculture. In fact, it seems that GM production methods are being foisted upon European farmers and European consumers in the absence of any clear desire for them.

For example, the typical process in the last 12 months under EU procedures, has been that the member states, in the form of regulatory committees or the Council of Ministers, have voted against GM technology or products, but not in sufficient numbers to achieve a qualified majority. This then leaves the way clear for the Commission to introduce the GM technology against the wishes of the majority.

The most recent example of this relates to oilseed rape GT 73, which was opposed by a vote of 135 to 78, with 108 abstentions. On the five individual member state bans on various GM products, the Commission sought a mandate to force the member states to lift their bans, and failed in all five cases.

Table 1

Product banned	In favour of lifting ban	Against lifting ban
Syngenta BT176 Maize	54	221
Bayer T25 Maize	54	221

Mon 810 Maize	73	178
Bayer Topas 19/2 rapeseed	54	178
MS1xRF1 rapeseed	54	178

However, as table 1 shows, even though there was a clear majority against lifting the bans, the failure to reach the qualified majority leaves the way open for the Commission to prevail over the wishes of the majority. This can only be described as a perverse system of democracy.

Against this backdrop, it is highly suspect for the Commission to impose a dictat on member states to draft rules on *how* co-existence should be facilitated rather than *whether* co-existence should be permitted at all.

3.2 Market Opportunities

It is clear that very many consumers across Europe are worried about GM technology and hostile to GM foods. For example, a 2001 Eurobarometer survey of 16,000 respondents showed that 71% did not want GM food (Table 3). Opposition to GM is especially strong in Italy, and this has been confirmed to an ICSA study tour of Italy in October 2004, where the issue of GM is very current. Italy, as a country with an import requirement for over 400,000 tons of beef and veal, as well as 1.4 million live cattle, is a critically important market for any country aiming to export significant levels of beef. Ireland has potential to do much better than at present- accounting for just 7% of the total 317,000 tons of fresh, chilled beef imported by Italy in 2003.

It is therefore axiomatic that Ireland must make a major effort to achieve greater penetration of this market. ICSA believes that there is potential to do this, especially if Ireland could be marketed as GM free island. The Italians themselves have legislated for the possibility of GM cultivation, but have allowed individual regions to ban GM, and 13 out of 20 regions have already done so.

ICSA objects to co-existence because it undermines the potential benefits from having a GM free island policy as part of a strategy to develop a clean, green image. In a post de-coupling environment, Ireland needs to pay closer attention to innovative new ways of increasing market share, and moreover, to increase the proportion of product sold to higher value, more discerning niche markets.

3.3 Consumer Choice

If the consumer is to have a real choice, then there must be provision for regions of Europe to remain GM free. In our view, the best way to provide this is the preservation of the island of Ireland as a GM free zone.

Recommendation 2003/556 states, “The ability to maintain different agricultural systems is a prerequisite for providing a high degree of consumer choice”. This is a

paradoxical statement, unless it is interpreted as allowing whole regions or member states, within the European Union, the option to remain GM free. This is because the consumer will not have confidence in a co-existence regime whereby neighbouring farmers are GM and non GM. Admixture can occur through the smallest accident in such circumstances, and even a small incidence of admixture will completely undermine consumer confidence. When this happens, it is nonsensical to claim that the co-existence regime has provided for a “high degree of consumer choice”

The best way for to ensure a high degree of consumer choice is by taking advantage of the island status of Ireland to create a genuine, GM free zone, where admixture is not a worry. This would attract real consumer confidence and a feeling that there was a bona fida choice between food and agricultural products produced in a GM free environment and non-GM food products.

In relation to the EU position, there remains a lack of clarity on where it stands in relation to GM. While this submission is in response to a call for submissions on how co-existence should be facilitated in an Irish context, the EU also seems to accept that there should be room for GM free zones on a voluntary basis. Former agriculture commissioner, Franz Fischler suggested that, “regulating the co-existence of GM and traditional farming is a typical example of the subsidiarity principle in action: taking decisions at the most efficient and sensible level. A catch-all, EU level approach makes no sense here”

He goes further and argues that “*I favour voluntary grouping farmers into GM free or organic zones. This would be both profitable and attractive from the marketing point of view*”

(Speaking Note for Franz Fischler, Press Conference 23/7/2003)

The difficulty with the voluntary approach is that it only takes one farmer insisting on growing GM to undermine the whole strategy. Clearly, it is not possible to have an entirely voluntary regime based on complete individual freedom. Therefore, it will be necessary for a higher authority to decide. But this is nothing new in European agriculture- while an individual farmer may feel entitled to produce milk, in reality, (s)he is totally limited by the milk quota regulations.

In practice, the island of Ireland is the ideal location for a GM free policy in order to vindicate consumer demand for GM free and in order to guarantee real consumer choice.

3.4 Scientific Uncertainty

There is no clear, unanimous agreement amongst the scientific community about where GM technology will eventually lead us. While ICSA opposition to GM technology is primarily based on the belief that Ireland should respect widespread consumer concerns, nonetheless, there is too much uncertainty at present to happily move irrevocably towards GM production methods. The problem is that while Ireland can easily switch over to GM technology at a later date if it is appropriate to do so, it is impossible to reverse a hasty and possibly damaging decision to embrace the technology in the near future.

This uncertainty is illustrated by the Rapporteur's report on Maize co-existence at the EU Roundtable Discussion on Co-Existence 2003 *“Thus, it is still difficult to predict what will happen when GM oilseed rape is grown as high proportion of the rape crops in a farm or region”*

ICSA submits that the precautionary principle should apply here, and until such time as we are very sure that GM is as close to 100% beneficial as possible, then we should proceed with caution. Irish farmers paid a very high penalty when embracing meat and bone meal technology and we must ensure that Irish farmers are not exposed to the downside of any further consumer scares in the future.

3.5 Difficulties with enforced co-existence regimes

Where co-existence has been provided for, various problems have arisen. The most notorious of these is perhaps the case of Percy Schmeiser, who was sued by Monsanto for using Monsanto GM seed without licence, even though the GM seed inadvertently contaminated his crop.

ICSA cannot propose or be associated with any regime where the possibility exists of non-GM farmers being sued by a multinational corporation.

3.6 Cost/ Benefit Analysis

ICSA is concerned that GM technology is being pushed through with little or no analysis of the costs and benefits to farmers associated with its adoption across Europe or in each individual member states.

Apart from the cost of GM seed, which clearly is going to be priced at a premium to conventional seed, there are potential costs associated with monitoring systems, with traceability and associated bureaucracy, with restrictions on machinery use and contractor requirements and of course, with the potential damage to Ireland's natural, clean green image.

For example, the rapporteur's report on Oilseed rape co-existence at the EU Roundtable Discussion on Co-Existence 2003 admitted that, "Little information has been provided on the economic costs of co-existence"

ICSA submits that there should be a major independent economic cost/ benefit analysis carried out for Ireland before any decisions are taken on GM co-existence. This would also be useful in informing how Ireland should vote on GM votes at EU level.

Section 4

Specific Practical Questions Relating to Co-Existence

4.1 GM buffer zones

The appropriate buffer zone is the Irish sea.

4.2 Liability

The EU has stated that the question of liability is best left to member states. As former agriculture commissioner Franz Fischler said, “the EU has no competence when it comes to issues of private liability law.”

Fischler expands on this liability question with a justification for what seem like incomplete EU rules on GMOs when he says “*This is precisely why the Commission is in favour of making recommendations on adopting guidelines at EU level, but then leaving it up to the member states which measures they transpose into their national law and how they actually do it*”

(Speaking Note for Franz Fischler, Press Conference 23/7/2003)

Germany seems to be using the liability question as a probably effective way of discouraging any GM cultivation. The German approach to co-existence makes farmers who adopt GM methods liable for damage to non-GM produce, grown by neighbouring farmers.

The rapporteur’s report on Oilseed rape co-existence at the EU Roundtable Discussion on Co-Existence 2003 stated that the “(While) costs of co-existence measures and the liability associated with the consequences of exceeding thresholds were only briefly discussed... there was a general feeling that costs and liability should be allocated appropriately to the beneficiaries of the co-existence schemes”

ICSA believes that those who benefit from GM technology should carry liability for any economic costs associated with admixture. This means that the manufacturers of the GM technology would be equally liable with the farmers who use the GM production method.

Under no circumstances should any farmer who continues to farm in the traditional or conventional way, or who is engaged in organic agriculture have any responsibility for admixture.

4.3 Practical Difficulties

Recommendation 2003/556 makes reference to possible modes of contamination. From this, it is evident that permitting co-existence throws up a whole series of practical difficulties which would be impossible to deal with in typical field operating conditions. For example, paragraphs 3.2.1 and 3.2.2 refer to the difficulties posed by the “sharing” of seed drills and harvest machinery, suggesting that thorough cleaning processes would be required between GM and non GM crops.

In practice, in Ireland, much of this work is now being carried out by contractor. In difficult harvesting or sowing conditions, there is very little likelihood that a typical agricultural contractor is going to stop work between two farmers in order to thoroughly clean out a combine harvester, when rain is threatened. Moreover, it is will be impossible for any competent authority such as the Department of Agriculture to monitor this, or to provide any realistic guarantees that controls can be put in place to ensure that correct procedures are followed.

Recommendation 2003/556 also suggests that co-existence is especially problematic in regions where field sizes are small and farms are fragmented. (Paragraph 2.2.6) The Rapporteur’s report on Maize co-existence at the EU Roundtable Discussion on Co-Existence 2003 said, “Several speakers have pointed out that in some countries farms are very fragmented with small strip shape fields interrupted with other farmers’ fields... co-existence in such farming systems may not be achievable because of the disproportionate size of fields and their juxtaposition”

ICSA submits that such conditions exist throughout Ireland, and therefore co-existence is impossible under Irish farming conditions.

Section 5

Conclusion

ICSA is opposed to legislating for co-existence under Irish farming conditions. Consumers across Europe are entitled to real choice and this is best guaranteed by having genuine and credible GM free regions in Europe. The island of Ireland has a unique opportunity to provide such a GM free region.

This must be the basis for developing Irish agriculture as a source of high value, high quality food. ICSA believes that there is a real future for a viable and prosperous farming sector in Ireland.

We firmly believe that our future lies in the utilisation of our unique natural environment and traditional farming expertise to produce the highest quality food available in Europe

IDEA

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Affiliated to International
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of Nuclear War – IPPNW
(Nobel Prize Winner 1985)

Charity No. 14368

11/11/4

Dear Dr. O'Reilly,

Please find enclosed the submission of the Irish Doctors' Environmental Association to the Working group on co-existence of GM crops with conventional and organic farming. It is our considered position, that in view of the concerns outlined in our submission, the distances between GM crops and conventional or organic crops should be such that the growing of GM crops in Ireland is prohibited.

Kind regards

Yours sincerely

Elizabeth Cullen

Genetic engineering places in human hands the capacity to redesign living organisms, the products of three million years of evolution". George Wald
Nobel Laureate in Medicine

Background:

Each of us is unique and part of our uniqueness comes from our genetic material, called DNA. DNA is found in the nucleus of the cell, in long structures called chromosomes. Genes are segments of DNA which specify the structure of proteins. Proteins include enzymes, hormones and body materials like muscle etc. which are vital for the normal functioning of the body.

Other stretches of DNA enable the proteins to interact with each other, to regulate the timing, the location and by how much each gene is expressed. Not surprisingly, this process is complex, poorly understood and, most significantly, it is not reflected in current genetic engineering techniques.

It has often been said that genetic engineering is simply doing what traditional breeding techniques have been done for centuries, but doing it more precisely. No honest scientist would make this claim.

The 'science' of genetic engineering claims that each gene codes for its own unique protein. There are approximately 100,000 proteins in the human body so it follows that, if the one gene corresponded to one protein and the assumption was correct, there would be 100,000 genes. But, there are only 30,000 genes in the human genome. This one fact: namely that one gene can give rise to multiple proteins destroys the theoretical foundation of genetic engineering.

In current techniques the process of gene insertion is random, imprecise and uncontrollable. It involves the random insertion of genes in the absence of normal regulatory genes, as described above; furthermore a specific site on the gene cannot be targeted. Proof of this haphazard technique is that, for every viable artificial mutation, anywhere between 5000 and 10,000 experimental gene insertions need to be undertaken. The viable cell is one that, in some form, has managed to integrate the new gene into its chromosomes. From there, it needs to be cultivated and bred traditionally to allow assessment so as to ascertain whether or not it actually fulfills the intended function, such as herbicide resistance.

Inserted genes are inserted in such a way that they are continually operating.

However, most of the genes in our cells are in an inactive state, for example, the genes in the iris that make the protein to give the eye colour, do not appear to be active in the white of the eye. We cannot speak the language of the cell, and instruct the gene to 'get active' or 'rest'. In current genetic engineering techniques, a controlling piece from a virus is added to the new gene. Viruses, of course, can overcome the cells' natural barriers to infection and can also invade the nucleus where the DNA is found. The virus most commonly used is the Cauliflower Mosaic Virus. The new genetic material in the infected cell then works continually, putting the cell under increased strain. This operates independently of the cell's own harmonic system of self-regulation. Concern has been expressed about this process. Dr. Mae Wan Ho has stated that "The CMV virus has the potential to reactivate dormant viruses or create new viruses in all species to which it is transferred". Others have argued that

gene transfer via these techniques resembles viral infection far more closely than

traditional breeding techniques.

Safety and Testing

According to the FDA (the US Food and Drugs Administration) Foods need not be tested for safety if they are deemed to be 'substantially equivalent' to conventional foods. There is no scientific basis for this position, which claims that gross similarity is a sufficient criterion for establishing food safety. To decide if a food is substantially equivalent, only a limited set of characteristics, (selected by the manufacturer) need to be compared. If superficial testing reveals no significant difference between the GM food and its natural counterpart, no further food safety testing is required. Substantial equivalence has been criticized by many concerned scientists. The concept is profoundly flawed and scientifically unsupportable. If the genetically modified products were meaningful equivalent, nobody would pay for the modified variety. If there were differences, however minimal, and the difference was achieved outside the normal regulatory set-up of the plant species, we are dealing with an unknown entity that requires rigorous testing.

A review of all the tests carried out on GM food to detect possible adverse health effects was undertaken in 2003. No human studies were undertaken, and a total of ten animal studies were identified. It may not be significant that five of these were undertaken in collaboration with private companies, none of which reported adverse health effects. What is significant however, is that in the independent tests, the remaining five reported (but did not explain) adverse effects, after feeding to animals for only 10-14 days. Changes noticed included thickening of the lining of the stomach and an increase in the number of white cells indicating possible immune involvement.

Food need not be labelled if it contains less than 1% of genetically modified plant material but allergies and other problems could well be caused by lower amounts than this.

A survey undertaken by the Food Safety Authority in Ireland in May 2001 found that 19 out of 26 products tested positive for GM ingredients. None were labelled as they all contained less than 1%, however one was labelled 'No genetically modified corn used'. A survey the following year found that 18 of 37 soya samples tested positive, again all contained less than 1% GM ingredients. However, 5 out of 6 stated that they were 'GM free' and one was labelled 'organic'.

Children are particularly vulnerable to allergies, and infants under the age of two have the highest incidence of reactions to allergens in the diet.

If humans develop adverse reactions to GM foods, it may take years for them to be diagnosed. If thalidomide caused a birth defect that already was common, it would have been a lot longer on the market. In March 1999, in the US, allergy to soya entered the top ten list of substances that commonly caused allergies and intolerances, along with the well-known hazards such as nuts. The link with soya was confirmed by antibody testing. At present, no allergy tests are carried out on GM foods and

these foods may well contain allergens never before found in food.

In the context of the FDA's declaration that GM foods need not be tested, it is disturbing to note that over half of the drugs approved by the Food and Drugs Administration in the USA had severe or fatal side effects that had not been detected during the agency's review and testing, and these drugs were either withdrawn or needed major label changes. These drugs had of course been tested.

In the absence of labelling in the US and the pervasive presence of GM foods in Ireland (see above) we have no epidemiological method of surveillance for adverse health effects from GM foods.

Environmental Concerns

It has been found that, of all the environmental concerns expressed at the beginning of the GM experiment: resistance development, spread of genes in the environment, transfer of genes to other species and overuse of pesticides every single one has been proven to be a reality.

Apart from the loss of biodiversity, the contamination of worldwide seed banks, the loss of organic varieties, the spread of resistance to wild species and the impoverishment of traditional farmers in competition with large-scale GM operators it has been found that increased herbicide and insecticide use is a major problem: After a honeymoon period where, indeed, farmers were able to grow successfully with reduced amounts of spraying, herbicide and insecticide use - after about 5 years of GM crops - are spiralling. This raises immediate, traditional toxicological questions, quite apart from the risk inherent in GM crops.

Conclusion

The Irish Doctors Environmental Association demands an immediate moratorium on the growing and selling of GM foods in Ireland.

This experimental technology has not proven to be safe. It raises the risk of poisoning through herbicide and insecticide contamination. It endangers traditional crops, foods, health and the environment.

It provides none of the claimed benefits that would make it worthwhile to take the incalculable risks.

Irish consumers are not being asked for their informed consent. Instead, they are unwitting guinea pigs in a giant global experiment in which nobody is monitoring the results.

As things stand, precaution seems by far the better option, and therefore it is the considered position of the Irish Doctors' Environmental Association, that in view of the concerns outlined in our submission, the distances between GM crops and

conventional or organic crops should be such that the growing of GM crops in Ireland is prohibited.

Dr. Elizabeth Cullen
11 November 2004



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Dear Barry,

Thank you for your consultation on the issue of co-existence of GM crops with conventional and organic farming.

As you are aware we run the Irish Grain Assurance Scheme, which currently has almost 6,000 grain growers as members. We estimate the scheme has over 70% of grain growing units signed up to our Code of Practice and, as all of the bigger growing units are in the scheme, we estimate we cover up to 90% of all traded grain. All of our members are audited on a regular basis to ensure that the crop is produced in line with our Code of Practice. Our membership also includes almost all of the Grain Merchants/Assemblers in the country.

The scheme is owned by the Cereals Association of Ireland (CAI), which comprises of IGFA, IFA, Dept. of Ag., and Teagasc. The CAI is responsible for formulating policies for IGAS and for our Code of Practice.

While we would have no particular stance on the GM crops issue, we feel it is very important that we are kept informed of any developments or regulatory changes in this area as it would have implications for IGAS. If you wish to meet me to discuss any area of mutual interest do not hesitate to contact me.

Yours Sincerely,

Tom Kelly
Director

