

FoEE Biotech Mailout

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EU BAN STAYS ON NEW GM CROPS

The biotech industry and several prominent politicians had argued for months that the 17 th October would be the ideal date to lift the de-facto-moratorium on authorizations of new GMOs. Not only would the new Directive 2001/18/EC on the deliberate release of GMOs into the environment enter into force on this day, but also it was expected that Environment Ministers would take an important step in the direction of tougher labelling rules.

In September 2002, European Commissioner for Health and Consumer Protection David Byrne said that "we cannot continue forever with this moratorium" and "we are now getting to the point very soon where we have enough legislation ", aiming at the new Directive on deliberate releases. The remarks by Commissioner Byrne and others led to speculative newspaper headlines: "New EU rules to end ban on GM food" and "EU may open door to new GM crops". Messages like these alarmed green campaigners and triggered several actions to prevent lifting of the moratorium. The result has been that the moratorium survived the 17 th October and may last for at least another year.

Obviously allowing commercialisation of even more GMOs in Europe would be an irresponsible act, since the EU legislation is still full of loopholes and far from sufficient to protect the environment against the risks of GMOs and to guarantee the right of consumers to choose GM-free food. Several legislative proposals are still in the pipeline to improve EU legislation with regard to GMOs and it could take at least two years until all these proposals will be adopted. Moreover, these proposals are not always adequate and some need dramatic improvement :

■ The Council has not yet reached a common position on the proposals to improve traceability and labelling of food and feedproducts derived from GMOs. This decision was expected to be taken on the 17 th October, but in the Council there was still disagreement with regard to the level of genetic pollution that is to be allowed in food and animal feed. Some countries advocate –in line with the position of the European Parliament- a 0.5 % threshold, but others want to go up to 1 %. When the Council agrees on labelling rules (a political agreement is now expected in December), the proposals need to go back to the Parliament for a second and possibly a third reading. Then another hot debate can be expected, since the Parliament has already clearly stated that it wants stricter labelling rules for GMOs than the Council is currently proposing. Notably the Parliament is against allowing traces of unauthorised GMOs in food and animal feed, whereas in the Council there appears to be a qualified majority that is willing to allow unauthorised GMOs for a transitional period of three years.

■ In the beginning of 2003 the European Parliament will vote in first reading on a proposal for a new Directive on Environmental Liability. This Directive, that covers various kinds of environmental damage, is heavily criticised by environmental NGOs and other onlookers for not covering sufficiently damage to the environment as a result of the release of GMOs.. Two of the articles that make the Directive soft on GMOs are articles 9.1 c and d. These articles exclude liability for those operators who possess a permit or who can demonstrate that an emission or activity was not considered harmful at the time the emission or activity took place. However, the key problem of GMOs is that they behave unpredictably, so environmental damage could also occur as a result of GMOs that were considered "safe" at the time of release. *(continue reading on page 2)*



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■ A draft Directive that regulates the presence of GMO seeds in seed lots of non-genetically varieties has been presented by the Commission, but is highly controversial. The draft Directive would allow the presence of GMO seeds up to a level of 0.3 % to 0.7 % (depending on the crop type) without labelling. Such provision would clash with the wish of the European Parliament to label all food and feed when more than 0.5 % GMOs are present. Also the draft seeds Directive could lead to problems for conventional and organic farmers, since it is still unclear who would pay the damage if conventional or organic products cannot be sold because GMOs are present above the aforementioned thresholds. The Liability Directive (see above, bulletpoint 2) does not cover any economic damage, and additional legislation on co-existence is needed to protect organic and conventional agriculture against (the financial implications of) genetic contamination. In spite of all the problems who have not been settled, European Commissioner Wallström issued a press release on the 17 th October in which she said that : "The Commission considers that it has fulfilled its commitment to create the conditions to re-start the authorisation procedure for GMOs. It is ready to play its role in managing the new procedure".

However, to be able to do so, the Commission needs the go-ahead from a qualified majority of the Member States, as is laid down in article 30 of the new Deliberate Release Directive 2001/18/EC. However, none of the Member States that support the moratorium (Austria, Belgium, Denmark France, Greece, Germany, Italy and Luxembourg) has so far indicated that they agree with the Commission on the issue of the moratorium. For them the entering-into-force of the Deliberate Release Directive 2001/18/ EC obviously was not enough to restart new authorisations. The main reason: although the new Directive has improved risk assessment and monitoring of GMOs, it does not address labelling of food and animal feed derived from GMOs. French Farm Minister Herve Gaymard told Reuters on 15 th October that it could take another year to reach a satisfactory labelling deal and added that France will not change its position on the moratorium as long as regulations on labelling and traceability have not come into force.

Friends of the Earth believes that not only tough labelling rules need to be implemented, but also major problems such as liability, seed purity and the co-existence of GM and non-GM crops need to be resolved before the moratorium is lifted.

Key GM Legislation in the EU's Pipeline

- ➔ Genetically modified food and feed (COM (2001) 425), awaiting Council decision (see page 1)
- ➔ Traceability of GMOs, GM food and feed (COM (2001) 182) , awaiting Council decision (see page 1)
- ➔ Liability with regard to the prevention and remedying of environmental damage (COM (2002) 17), awaiting first reading in European Parliament (see page 1)
- ➔ Thresholds for GM contamination of conventional seeds (SANCO/1542/02-July 2002), awaiting comitology decision (see page 4)
- ➔ Transboundary movement of genetically modified organisms (COM (2002) 85), awaiting second reading in European Parliament (see this page and page 3)

TOUGHER EXPORT RULES FOR GMOs

On 17th October 2002, the Council of Environment Ministers reached a political agreement on a Regulation concerning the transboundary movement of GMOs. The Regulation – which poses rules for the export of GMOs from the EU- was proposed by the European Commission in February 2002 (COM(2002) 85) and shall implement the Cartagena Protocol on Biosafety, adopted on 29th January 2000 in Montreal. The new export Regulation will close an important gap of the EU biosafety framework. Even though the contained use as well as the deliberate release/marketing of GMOs are covered

by EU legislation, the export of GMOs to non Member States is not. The Ministers decision means a strengthening of the proposal by the European Commission. The most important change the Ministers introduced in the new rules is that European companies who want to export GMOs to countries outside the EU will have to get express consent from the importing country. Commenting on the Council's decision the Belgian Environment Minister Jef Tavenier said : *'This is an important signal to developing countries. These rules will prevent that these countries are*

confronted with unwanted GMOs through foodaid'. European Commissioner Wallström was less positive, but had to bend for the Ministers decision. She said that the changes introduced by the Council - some of which were adopted against the Commission's advice - *"went further than the Biosafety Protocol and may create problems...notably in terms of world trade"*. The political agreement by the Ministers is an important step, but not the final one. The common position still needs to be formally adopted. (continue reading on page 3)

This might take place at the next Environment Council meeting in December. Subsequently the European Parliament will have to give another go ahead and might table new amendments in a second reading. A third reading in Parliament and another decisionmaking round in the Council could possibly follow before the Regulation can finally enter into force.

The Council's Common Position

In the first reading, on 24th September, the European Parliament (EP) demanded major changes to the Regulation proposed by the Commission and adopted 45 amendments. The Council accepted a considerable number of Parliament's key amendments, but other amendments were rejected or only partially taken on board. These are the main issues on which the Council decided:

· ***No export without express consent of the country of import***

In line with Parliament's amendment 60, the Council accepted that no GMO exports should take place without express consent of the country of import. However, Art. 5 (3) still states, that where a country of import does not reply to a notification, the exporter may proceed with the movement determined by the law of the country of import. This would still leave exporters the option to proceed with transboundary movements where the country of import has not replied or has no legislation on GMOs in place. So on this point further clarification is still needed. It should also be clarified that the export notification procedure applies not only to "first" exports, unless the country of import has indicated otherwise.

· ***No unintentional transboundary movements***

The Council also accepted EP amendments 38 and 59 which require Member States to take appropriate measures to prevent unintentional transboundary movements. This is an important improvement and at some stage the European Commission will have to answer the question why unintentional transboundary movements within the Community are still unregulated.

Although the Council's text still contains loopholes, the Environment Ministers have substantially improved the Commission's proposal for export rules concerning GMOs.

· ***The exporter is responsible for notification***

In line with the Biosafety Protocol, the Council supported EP's amendment 15 to delete the category of "notifier". The consequence is that the exporter (instead of the "notifier" which could also be an importer) will have the obligation to notify the country of import and will be responsible for the accuracy of information provided.

· ***Export of GM pharmaceuticals should be in line with international agreements***

The European Commission proposal excluded "pharmaceuticals for human use". In line with the Protocol and Parliament's amendment (EP amendment 10), the common position in the Council excludes "pharmaceuticals for humans that are addressed by other relevant international agreements or organisations".

· ***Exporters should respect countries of import in case of GMO food and feed import***

The Council did not follow Parliament's proposal (EP amendment 29) to apply the export notification procedure also to GMOs destined for feed, food or for processing (GMOs FFP). The notification procedure will therefore only apply to GMOs destined for deliberate release into the environment. However, for GMOs destined for feed, food or processing, the Council accepted at least that exporters shall respect any decision of countries of import (Art. 8a).

· ***No EU authorisation as export requirement***

The Council did not accept Parliament's proposal (EP amendment 29) that exports of GMOs destined for food, feed or proc-

essing should only take place if the GMOs have been approved for that purpose by the EU. The common position in the Council now includes a reference to Art. 12 of the European Food Safety Authority (EFSA) Regulation 178/2002 which requires in those cases express consent of the country of import.

· ***Labelling of GMOs destined for food and feed to be decided later***

The Commission had proposed (in line with the Biosafety Protocol) that in the case of GMOs destined for food, feed or processing (GMOs FFP) operators would only have to indicate "that the product shall only be used as food or feed, or for processing, together with the unique codes for the GMOs that the product may contain." The Council decided that GMOs FFP do not have to be accompanied by unique identification codes. However, the decision whether the GMOs have to be clearly identified or whether a "may contain list" is sufficient has been left for decision by the GM food & feed regulation (COM (2001) 425 final).

Conclusion

Although the Council's text still contains loopholes, the Environment Ministers have substantially improved the Commission's proposal for export rules concerning GMOs. Some people (like Commissioner Wallström) even argue that the Council has pushed the limits too far and that the Regulation, as adopted by the Council, goes beyond the obligations the Community has under the Biosafety Protocol. What these people overlook is the fact that the Biosafety Protocol only sets minimum standards and allows explicitly for more far reaching measures. Friends of the Earth believes that the EU has its own responsibility - apart from international treaties- to protect biodiversity, including biodiversity outside its borders. Even more importantly the EU should very carefully avoid forcing GMOs (including food- and feed products derived from GMOs) upon third countries, notably countries in the developing part of the world. If looked upon from this point of view, the new EU export rules on GMOs could still be substantially improved. Hopefully, the European Parliament and the Council will again strengthen this Regulation before it finally enters into force.

SAVE OUR SEEDS

Government agencies slam Commission proposals for GM contamination

For months and even years, the contentious issue of GM contamination of seeds has been simmering away on a back burner in Brussels. As previously reported in FoEE's Biotech Mailout (1), these crucial questions do not fall under the responsibility of the European Parliament or the EU's Council of Ministers. Instead they are dealt with under the 'comitology' rules, a system little known to those outside EU bureaucracy according to which a committee (2) comprising a small group of so-called experts make decisions concerning changes in EU legislation. Citizens are increasingly worried about these procedures, judging them to be both non-transparent and undemocratic. In the case of GM seed contamination, for example, as reported in the previous Biotech Mailout (*Volume 8 Issue 4 August 2002*), decisions currently being considered under these comitology rules could undermine and conflict parallel decisions yet to emerge from the European Parliament and the Council concerning traceability/labelling and authorisation procedures for GM food/feed.

Can Parliament and others delay the seeds decision?

Fortunately, it seems like more and more people are waking up to this situation and reacting against it. Although the European Parliament technically has no say in the matter, Members are concerned about developments concerning seeds legislation, particularly as they affect the future GM Traceability/Labelling and GM Food/Feed Regulations which have not even reached the stage of a second reading by the Parliament. The EP therefore held a debate regarding GM seed contamination on 24th October, during which EU Environment Commission Margot Wallström was grilled by MEPs concerning the Commission's proposals. All the political groups in the Parliament agree that no contamination

thresholds for seeds should be adopted under comitology rules until the above two Regulations, which include contamination thresholds for food/feed, have been agreed by the EP and the Council. This is unlikely to be before spring 2003 at the earliest, whereas the Commission has been intending to push through a decision on seed contamination before the end of the year.

"Farmers could unknowingly sow many thousands of GM seeds in each field".

The Commission is also coming under considerable pressure from other quarters to back down on any decisions concerning permissible contamination thresholds for GM seeds. On Monday 14th October, a delegation representing more than 300 European environmental, farming and consumer organisations with more than 23 million members (3) handed a petition to EU Agriculture Commissioner Franz Fischler and EU Consumer Affairs Commissioner David Byrne, demanding that the future EU Seed Directive guarantees seed purity instead of tolerating GM contamination. The groups warned that if the Commission's current proposals are accepted - allowing between 0.3 - 0.7% presence of GM seed in conventional seed without labelling - it would result in large-scale growing of GM crops in European fields. Based on the number of hectares in Europe used to grow oilseed rape and maize, and the number of seeds sown per hectare, the groups say that up to 7000 million GM seeds could be planted every year by farmers without them having the possibility to know and to avoid the unwanted planting of GM crops.

Conservation agencies criticise Commission proposals

" It is essential that legislative measures aimed at setting standards to minimise gene flow from transgenic crops into seed production fields are put in place before commercial production of such crops is permitted in the EU "

Meanwhile, government agencies in the UK invited to comment on the Seeds Directive proposals have been pretty scathing in their criticism. In their response to the Commission, the British Statutory Nature Conservation Agencies (comprising English Nature, Scottish Natural Heritage and the Countryside Council for Wales) (4) warn that the ecological impacts are "poorly understood" and could lead to the creation of GM super-weeds which "may lead to farmers using more herbicides ... potentially resulting in increased damage to biodiversity". This long-standing concern comes as no surprise, nor does the agencies' observation that GM crops could outcross with wild plant relatives which "could lead to disruption of native ecosystems or the gradual development of weediness in native species". The agencies are concerned that even small quantities of GM seed in conventional seed could lead to cumulative gene stacking, leading to multiple herbicide-tolerance or combination with other GM traits which could become uncontrollable in volunteer populations. According to the agencies, risks of novel combinations resulting from cross-pollination between GM crops are "not fully assessed in EU regulatory systems" and risk assessment is conducted on a case-by-case basis and "does not yet extend to cumulative effects of gene stacking". (This despite the hundreds of thousands of Euros that the Commission's DG-Research is always boasting have been spent on assessing the safety of GM crops!)

The agencies calculate that, in the case of oilseed rape which is sown at a ratio of 8 Kg seed per hectare, "farmers could unknowingly sow many thousands of GM seeds in each field". If the Commission's proposed tolerance threshold of 0.3% were to be adopted, "up to 10,000 seeds per hectare could inadvertently be sown". The UK should aim for "transgenic impurities in conventional

seed that are near zero", say the agencies. Even though this may seem unattainable until genetic isolation mechanisms are developed which would prevent cross-pollination, "the levels set in the Commission's proposals are far too high"; "they are derived solely from the target levels in food with no obvious regard to the implications for environmental and agricultural impact". "We see the proposed tolerance thresholds for transgenic impurities covered by a Part C (market release) authorisation as unacceptable."

The agencies further criticise the Commission for dropping measures aimed to ensure genetic isolation, i.e. separation times between crops and separation distances between fields. These have apparently been replaced by a general requirement for "good practice" which is not defined. The agencies are unconvinced that codes of good practice either for cultivation of transgenic varieties or for the avoidance of adventitious presence of GM seed in conventional seed, as out-

lined in the proposals, would be effective.

Back to the drawing board?

Will the above convince the Commission not to push through a new Seeds Directive under comitology rules? The vote on the Commission's proposals by the Standing Committee on Seeds and Propagating Material for Agriculture, Horticulture and Forestry was originally scheduled for September, after which the proposals were to be sent to the WTO for comment by other countries during a 60 day period, then a final vote in Brussels. The pressure building on the Commission from all sides to (a) hold off on the vote because it is politically inopportune, given the decision yet to emerge from the Parliament on traceability/labelling and GM food/feed, and (b) to review its proposals because they are untenable, may be enough to stall the decision until next year. On the other hand, the Commission has been known in the past to push through unpopular decisions regarding GMOs, and is certainly under enormous pressure from the biotech

industry to do so.

- (1) *For background, see articles in previous FoEE Biotech Mailouts: Volume 8 Issue 4 August 2002 page 1 "Proposal to regulation GMO contamination in seeds"; Volume 8 Issue 3 June 2002 page 9 "No seeds safe from GM contamination?"; Volume 7 Issue 4 1.08.2001 page 6 "GMO contamination in seeds too"; Volume 7 Issue 2 1.04.2001 page 1 "Seed wars"; Volume 7 Issue 1 1.02.2001 page 10 "Adventitious contamination by GM seeds".)*
- (2) *The EU Standing Committee on Seeds and Propagating Material for Agriculture, Horticulture and Forestry*
- (3) *The petition and related information is available on www.saveourseeds.org*
- (4) *See FoEE press release and download to the British Statutory Nature Conservation Agencies' report on http://www.foeeurope.org/press/GR_14_10_02_UK_Wildlife.htm*

AUSTRIAN SEEDS STAY GE-FREE

Thanks to a tough law

During the planting season of 2001, test results showed for the first time, that Austrian maize seed was partly contaminated with GE varieties. Gradually it emerged that almost 180 tons of GE contaminated seeds, affecting an area under cultivation of around 6,000 hectares, had been released into the environment. About 2,000 hectares of it were eventually destroyed, the Austrian State paying 2.67 million euro in compensation. After an intense public dispute over the issue, which involved GLOBAL 2000 (Friends of the earth Austria) as well as Greenpeace pushing for political consequences, the government came up with the proposal of a new seed purity regulation. The government draft at first foresaw a contamination threshold of 0.5% for conventional and 0.1% for organic seed. For unauthorised GE seed, the draft foresaw a threshold "below the detection limit". In its comment on the draft, GLOBAL

2000 criticised the high threshold for conventional seed as well as the fact that on the one hand the draft foresaw a tolerance threshold at the detection limit of 0.1% for organic seed while assuming that unauthorised events can be treated even more strictly. GLOBAL 2000 consequently called for the strictest possible level for all three types of seed, that is a "technical zero tolerance" of GMO contamination. Successfully, as it emerged.

Regulation on GE Seed Contamination

Eventually, the Regulation on GE Seed Contamination came into effect on 1st January 2002. This regulation states that every batch of seeds sold in Austria must be tested by the seed company (either producer or retailer) for contamination with GMOs,

applying specified sampling and testing methods. Only if no contamination is detected is the company allowed to put the seeds on the market. This regulation is applicable to both conventional and organic seeds without distinction, nor does it distinguish between contamination with authorised GMO and those not authorised for release.

Compliance with this regulation is monitored firstly within the framework of control measures for imported seed. Secondly, certificates of analyses are required and random samples are analysed within the framework of the seed authorisation proceedings for seeds produced in Austria. Furthermore the applicant has to confirm that he had taken appropriate measures to avoid GE contamination. The authorities take action if contamination exceeding 0.1% is detected in test samples. Sanctions include seizure of seed and fines of up to

14.500 euro and up to 21.800 euro in case of recurrence. The 0.1% threshold for taking action is due to statistical variation in the testing methods applied for initial testing - if the seed tests in the initial tests conducted by the seed company show no contamination, this means that 95% of further tests will show results of between 0 and 0.1%. The testing methods are based on concepts developed by the international organisations OECD, ISTA and EU. The costs for initial testing and quality management including GE avoidance measures are met by the seed company, those for control testing are met by the authorities.

Experiences confirm Austrian approach

The final results of sample testing for crops grown in 2002 have now been published. This is the first year in which the regulation has been in force. This year, samples have been taken of a total of 148 batches, 112 of which were maize samples (56 of them tested were Austrian produce, and 56 were imported batches), 31 soy bean samples (28 Austrian and 3 imported) and 5 swede oilseed rape samples (all imported). Con-

tamination could not be detected in any of the samples! Additionally, the company records of 31 seed producers or retailers were audited. Even the seed company Pioneer has now confirmed to its customers that the seeds it sells in Austria have been tested and no GE contamination has been detected. Austrian seed production has also been controlled by field monitoring in order to combat seed contamination at the root of the problem. Samples of 12 maize and 8 soy bean seed batches intended for seed production were tested, all with negative results. The only positive findings made were one maize plant and two soy plants that were in the field identified as GMO and they were removed from the field.

In light of these results the Austrian Minister of Agriculture, Wilhelm Molterer, assesses the Regulation very positively. He has pointed out in particular that the production of maize seeds has climbed from 2,100 hectares in 1999 to 4,200 hectares in 2002 and that all this produce is now certified as GE-free by the Austrian Seed Certification Authority. The Austrian Regulation on GE seed contamination also has its weak points. If,

for example, test controls done by the Seed Authority detect unapproved GMO, the authority does not take any action, so long as the 0.1% limit is not exceeded. This is true even if the seed has not yet been sown in which case avoiding the release of these unassessed GMOs into the environment would be very easy. Compared to the proposals of the EU Commission in this matter, however, it is an exemplary piece of legislation. According to the EU proposals, contamination in seeds would not need to be labelled up to 0.3, 0.5 or 0.7% (depending on the plant variety). Furthermore it does not include any upper limit for contamination exceeding which the marketing of the seed would be illegal. The "purity requirement" laid down in the Austrian regulation on GE seed contamination is therefore an example to be followed by the EU. Experience in the first year has confirmed that imposing the principle of zero tolerance does work in Europe.

This article is based on an article by **Thomas Fertl of Greenpeace CEE**. See also: <http://www.greenpeace.at/umweltwissen/genotech>

GM CROPS ARE "AN ECONOMIC DISASTER"

Another crippling blow to the future of GM crops was dealt by the UK's Soil Association in September with the publication of its report "Seeds of doubt: experiences of North American farmers of genetically modified crops". The report is based on information gathered during interviews with conventional and organic farmers in the American mid-west during January and February this year, as well as evidence from independent academics, advisers and industry analysts in both the US and Canada. According to the Soil Association, which is the UK's major organic farming body the report demonstrates that alleged benefits of GM crops have proven untrue and that their introduction in the UK would undermine both the competitiveness of British agriculture and the govern-

ment's promised expansion of organic farming.

A catalogue of economic and environmental disasters

Since commercialised growing began in North America some 6 years ago, GM crops have become both a financial liability and an environmental hazard, according to the report. From an economic perspective, the Soil Association reckons that transgenic soya, maize and oilseed rape could have cost the American economy as much as US\$ 12 billion during the period since 1999 in farm subsidies, lower crop prices, loss of exports and product recalls. Farmers are not achieving increased profits promised by the biotech industry. Contamination by GM crops at all levels of food and farming is high-

lighted as the major cause of the problem. The main findings of the report are summarised as follows:

Lower profits: Growing herbicide-tolerant soya and insect-resistant Bt maize is less profitable than growing non-GM crops because of higher (up to 40%) costs of GM seed, lower market prices paid for GM, and reduced soya yields.

Collapse of export markets: Following public opposition to GM crops, almost all the annual US maize exports and Canadian oilseed rape exports to the EU, worth US\$ 300 million each, have collapsed. On top of that, the US share of the world soya market has gone down whereas non-GM soya producing countries have seen their markets increase. (*continue on p. 7*)

More government subsidies: Although US farm subsidies were supposed to decrease over the past few years, in fact they rose dramatically in parallel with the commercialisation of GM crops. The collapse of export markets caused by GM crops is thought to have led to a fall in crop prices, hence the need for increased government subsidies estimated at an extra US\$ 3-5 billion/year.

Lower yields: Despite the promises of the biotech industry, increased yields have not been achieved overall from GM crops except for a small increase in insect-resistant Bt maize. Herbicide-tolerant Roundup Ready soya in fact yields 6-11% less than non-GM varieties. A Mississippi farmer was awarded more than US\$ 165,000 in damages by Monsanto for low GM soya yields.

Contamination of non GM-crops:

In just a couple of years, contamination has caused major problems throughout the food and farming chain, including the loss of nearly all the organic oilseed rape sector in the Canadian province of Saskatchewan. Non GM-seeds are hard to find and even those may turn out to be contaminated (see *Biotech Mailout Volume 8, Issue 1, 1.02.2002, page 4-5 "American farmers warn of GMO contamination"*). Farmers who managed to get non-GM seed still risk having their fields contaminated by neighbouring GM fields. As a result of contamination, many organic and conventional (non-GM) farmers have either lost sales or got lower prices for their crops, at a potential cost of over US\$ 90 million/year.

Litigation: Biotech companies are taking legal action against many farmers for patent infringement, claiming that they have unlicensed GM plants on their land. In one famous example, a non-GM farmer was sued by Monsanto to the tune of US\$ 400,000. Farmers are turning to the courts to compensate loss of earnings as a result of contamination. The organic farming sector in Saskatchewan, Canada, has taken legal action because

they can no longer guarantee being able to supply organic non-GM oilseed rape. If successful, their action could cost the biotech companies millions of dollars.

Increased herbicide use: Despite all the claims of the biotech industry that GM crops are "environmentally-friendly" since they require less pesticides, farmers are, in fact, now more reliant on herbicides. Although it was alleged that only one application of herbicide would be needed for GM crops, the reality is that several applications are being made. In addition, weeds have quickly developed resistance to these herbicides and rogue GM plants or "volunteers", in particular oilseed rape, have spread widely. Some have acquired multiple resistance to several herbicides through cross pollination. Farmers are therefore not only using herbicides more frequently but also reverting to older and more toxic chemicals.

Product recalls: Contamination of non-GM by GM crops has led to product recalls, the most expensive and sensational to date being the Starlink scandal where GM maize not authorised for human consumption entered the food chain (see *Biotech Mailouts Volume 6, Issues 6 & 7, 15.09.2000 and 31.10.2000*). The product recall resulting from Starlink is estimated to have cost Aventis up to US\$ 1 billion.

A warning for Europe's farmers

In publishing its report, the Soil Association calls on the UK government to think long and hard before allowing the commercialisation of GM crops, in order both to prevent the mistakes made in the US and Canada, and to avoid disrupting future organic and GM-free crop production. The report, which is the most comprehensive review to be produced from a non-biotechnology industry perspective, should result in a better informed debate, says the Soil Association, and a more independent, less pressurised decision about possible commercial growing of GM crops in the UK.

<http://www.soilassociation.org/gm>
Mail Order department, T. 00-44-117-929 0661, or mtrowell@soilassociation.org, price GB£ 12.00

A GM free Bio Region

The Austrian province of Carintia, the Italian province Friulia and Slovenia want to create a joint 'GM-free Bio Region' to safeguard organic agriculture.

Caritian Agricultural counsellor Georg Wurmitzer and his Italian colleague Danilo Narduzzi have reached an agreement to create such region, and it should grow. The Republic of Slovenia will join the initiative as soon as it becomes a member of the EU, which is bound to happen in 2004. Slovenian Minister But has already committed to participate in the GM free zone.

Moreover, Carintia wants to adopt a law that forbides the commercial growing of genetically modified crops and the keeping of genetically modified animals. The fact that this idea might meet resistance from Brussels, is taken for granted. According to Agricultural counsellor Wurmitzer "The production of organic food is incompatible with the growing of genetically modified plants and the keeping of GM animals". His Italian colleague Narduzzi adds: "To create a joint Bio Region, a GM free zone is a precondition."

The establishment of one joint Bio Region in the three countries is possible because the agricultural structure in all these areas is quite similar. Moreover, with the threat of new EU legislation that would allow genetic contamination in seeds (see the articles in this Mailout on page 4 and 5), the Region is hoping for a substantial rise in sales of their products throughout Europe.

According to the Agricultural counsellor of Carintia the authorities in the three regions see their initiative as a "active lobby for a GM free foodproduction throughout Europe. We want to be Europe's guiding countries in this area."

The project will focus on the production and promotion of farmmade specialities such as cheeses and "airdried" hams. " This is a big chance for many small farmers to conquer a position on the market for foodspecialities", says Wurmitzer.

Source: Standard, 25th October 2002

FARM SCALE TRIALS CONTAMINATED IN THE UK

The credibility of the farm scale trials in the UK was once again brought into question by NGOs this August when it was announced that Aventis' GM oilseed rape used in some of the trials was found to be contaminated with another GM variety.

In a letter from Aventis to the UK Government advisors, the Advisory Committee on Releases to the Environment (ACRE), the company admitted that oilseed rape seed being grown on 14 farm scale evaluation (FSE) sites in spring 2002 contained additional GM elements to the ones notified in the consents. The same seed batches were used on a further 9 FSE sites in 1999 and 2000 and at small scale research trials at the Scottish Agricultural College in 2001 and 2002. ACRE immediately advised against any new plantings of GM winter oil seed rape until firm assurances could be made with regard to the purity of the seeds. The Government's GM Inspectorate has since given the go ahead for the winter oilseed rape seeds and Aventis received authorisation to proceed with the autumn sowings.

Despite the strict regulatory and monitoring systems in place environmental releases, the contamination of these seed batches remained undetected for a number of years by Aventis **and** the Government's own GM Inspectorate. It was left instead to be discovered by the Scottish Agricultural College. This incident is further evidence of the failure of the monitoring system supposedly in place for these trials and just one of a catalogue of mistakes by Aventis. In December 2001, after Friends of the Earth notified the Government, Aventis were ordered to destroy GM oilseed rape weeds that had started flowering near a FSE site in Lincolnshire. (See Biotech Mailout Vol 7 Issue 6 p11).

The question of whether Aventis breached their consent for the latest incident remains and the possibility of prosecution is still being discussed. The maximum penalty for breaching a GM consent are 5 years imprisonment or unlimited fines. This latest incident does however illustrate the increasing problem of contamination of seeds by GMOs. New proposals from the European Commission on thresholds for the adventitious presence of GMOs in seeds have recently been heavily criticised by the UK government's wildlife watchdogs. (See article in this Mailout, *page 4*).

The British Statutory Nature Conservation Agencies have stated that the Commission's proposed thresholds for GM contamination are unacceptable and warned that the threshold for oilseed rape (0.3%) would mean that up to 10,000 GM seeds per hectare could be inadvertently sown. If neighbouring farmers also unknowingly plant GM-contaminated seed, the report warned, the two GM crops may cross, leading to gene stacking and weed control problems. The Agencies also reported that the adventitious presence of GM varieties in seeds may require changes in agricultural practice which could result in adverse impacts on farmland biodiversity. Despite these criticisms of the Commission's proposals to undermine seed purity, the controversial rules are set to be given the go-ahead in the next few weeks. This will not only be bad news for farmers but for consumers too. The proposals would lead to GM contamination of the food chain and therefore eventually remove people's right to choose GM-free food.

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