

# Thin Ice



the GM Freeze Campaign newsletter

Issue 7, April 07

## Crops at risk – new GM Freeze research

**G**M contamination of food and animal feed has always been a possible back door way for biotechnology companies to gain reluctant acceptance of their products in Europe. Recent contamination incidents by several GM traits highlight the ease with which GM can get into the system unless tight controls are in place. This month GM Freeze publishes new analysis of the food and feed imports most at risk of GM contamination, together with a set of proposals for the European Commission (EC) to minimise the prospects of future contamination.

Contamination can arise from all forms of GM cultivation. For example:

- in 2006 US rice was contaminated with Bayer GM traits from test sites grown five years previously but never approved for human consumption;
- the illegal Bt10 maize that arrived on European shores in animal feed in 2005 was also experimental - it never made it to the commercial approval stage;

- illegal cultivation lead to the 2006 discovery of GM Bt rice in specialist Chinese products.

In all 172 crops and species have been genetically engineered and field tested somewhere in the world. GM Freeze examined the food and feed crops amongst these, including those already in commercial cultivation alongside food crops exported to the UK. We also looked at food crops modified to produce pharmaceuticals like vaccines, antibodies and therapeutic proteins. The “pharma” crops producing proteins are already in commercial production in the US, and test crops of others have already contaminated the food chain. In 2002 Prodigene’s experimental GM maize, which produces a pig vaccine, got mixed up with a soya bean crop. The company was fined \$250,000 by the FDA and also required to pay for the destruction of the soya beans, which amounted to \$3.5 million.

The report aims to alert people to both the risks of GM contamination and the fact that Europe and the UK are wide open to major contamination incidents unless the EC and Food Standards Agency (FSA) take it seriously. An action alert will request Freeze supporters to lobby the EC and MEPs on developing and enforcing a strong system to prevent GM contamination. Our key demands include:

- negotiating a new clause in the Cartagena Protocol on Biosafety (BSP) to establish an international register for all GM traits that have ever been field tested or commercially grown anywhere on the planet;
- negotiating a ban on the GM for pharmaceutical production in food crops at the BSP’s next meeting;
- financial and expert assistance from the EC to all BSP Parties to enable them to monitor incoming cargoes for any GM trait included on the international register.

## Fighting GM spuds in the UK

Our last edition reported that a Derbyshire farmer pulled out of GM potato trials due to start this Spring.

German biotech giant BASF initially wanted to grow the GM potatoes in Ireland, but the criteria set to protect the environment were too tough. The UK Government approved the application on weaker conditions.

The Financial Times reported that BASF “did not expect too much opposition”, and at a 14 April public meeting BASF Corporate Communications Officer Chris Wilson reiterated their position that GM is the technology of the 21st century.

Local people aren’t following the script. Hedon Town Council recently

voted unanimously to against the proposed GM trials, and the potential knock-on effects are becoming clearer. Local borage growers are now deeply concerned about the impact of the tests on their livelihood since bee keepers have declared they will not follow their normal practice of bringing bees in to pollinate the borage if there is GM pollen in the area – they are worried that any GM pollen in their honey will ruin their businesses. Local people held a rally on 21 April and are now calling on the farmer due to host the trials to withdraw.

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Busy bees versus BASF

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## Mexican wave against US GM rice

In our last edition we reported on the polluter pays principle – this is why. A wave of concern generated by the GM contamination of US long grain rice continues to ripple across the world as consumers insist they don't want GM in their staple foods and farmers don't want their businesses and seed lines wrecked.

In the US rice farmers have launched 15 class action suits to recoup their losses from the slump in exports following the August 2006 announcement that the non-GM rice variety Cheniere was contaminated with Bayer's experimental GM trait LL601. It is estimated that around 40% of US 2006 rice exports were affected. Japan closed its borders to US rice soon after the contamination was announced, as did Russia.

Then the US Department of Agriculture's early 2007 report that another popular non-GM rice, Clearfield 131, was also contaminated with several Bayer GM traits, deepening concern for farmers trying to decide which rice to plant. The trail of woe for US farmers worsened in March when Mexico closed its borders to US rice unless it was proved to be free from LL601. The Mexican market was worth \$205 million in 2006, over 60% of all US rice exports.

March also brought bad news for the biotech companies when the Californian Rice Commission voted for a moratorium on GM rice field trials pending agreement of a new set of cultivation rules. Thai and Vietnamese rice growers are already exploring ways to fill gaps in the EU market with promises of GM-free rice.

The uproar caused by this series of rice contaminations by three different GMs and a fourth that is yet to be identified may well have scuppered plans to make rice the next commodity crop genetically modified on a large scale. US rice farmers are already rueing the day Bayer managed to contaminate their nation's foundation seed with GM. How far the wave of concern will travel, and its impact on plans for the commercial marketing of other GM crops, remains to be seen.

## UK and international news

### GM Watch appeal

GM Watch, a key player in the campaign on GM foods, are appealing for donations. They are experiencing serious problems with their web site, which they believe to be interference from unknown sources, but you can normally donate to them at <http://www.gmwatch.org/donate.asp>. If that doesn't work, you can send a check or money order (made out to 'NGIN') to: 26 Pottergate, Norwich NR2 1DX.

### Down on the Animal Farm

Channel 4's offering Animal Farm is causing controversy. Many feel the programme promotes GM and cloning animals for food without fully presenting the facts or the drawbacks. You can put your views directly to Channel 4 at their forum: <http://community.channel4.com/eve/forums/a/tpc/f/9250037634/m/4580090067>.

### Update on liability EDMs

The Early Day Motions on environmental liability need support. EDM 692 has 68 MPs signatures and EDM 693 has 74. If you can't see your MP's name on them at <http://edmi.parliament.uk/EDMi/> please do ask her/him to sign.

### Defra cuts organic seed funding

Defra funding for organic vegetable and potato trials, running since 1991, was due to end in March. The trials were the only way growers could access data on performance of organic seed varieties in Britain. Cutting the trials threatens to further disadvantage organic farmers, already facing fewer choices of seed.

### International

#### Lack of demand for GMOs

Five GMOs will be withdrawn from the market in line with a 2003 regulation giving GMOs on sale before the law came into force a grace period ending 18 April. Continued sale requires approval, but no reapplications are expected due to lack of commercial interest. One of the varieties, Bt176 maize, is banned in Austria, Germany and Luxembourg for insect damage and resistance. While the biotech industry report that there are no stocks of these GMOs, it is possible that traces may still be on the market. The Commission therefore requires the companies involved to identify and withdraw all relevant seeds, permitting the standard 0.9% "adventitious presence" for the next 5 years.

### Blow to Commission's GM plans

Strong complaints led MEPs to vote down a pro-GM report, sending it back to the Agriculture Committee for redrafting. The report called for an end to "discrimination" against GM technology in advance of a June Ministerial meeting the Commission hoped would set new targets for using GMOs. The second largest grouping in Parliament said: "[The report] needs more debate to be better balanced and flexible."

### France: Caving in to pressure?

The Agriculture Ministry authorised 13 field trials for GMOs in 2007 (12 for maize and one for tobacco), down from 17 in 2006. A 14th application to field test a GM potato was rejected. The Ministry will also begin the process of bringing national legislation into line with EU law.

The Commission requested France be fined for continuing to balk at a 2004 Court of Justice ruling on GMOs – the bill is over 42 million euros, recalculated daily. The Government delayed complying under intense public opposition to GMOs. Meanwhile, Greenpeace activists dumped a truckload of maize outside the Paris HQ of Presidential candidate Nicolas Sarkozy urging him to back a GM moratorium, as done by all the other candidates.

### Brazil: GM millionaire New Ag Minister

Odilio Balbinotti, president of Brazil's largest soya seed company and owner of one of Latin America's most modern biotech labs, is tipped to become Agriculture Minister. This despite being under investigation for falsifying documents and consumer fraud – charges he denies. Meanwhile, Greenpeace protesters stormed the closed-door meeting forcing a postponement of a Government vote to approve GM corn seeds.

### Australia/NZ: Rejecting biotech spin

Citing a French study (see above\*) showing the potential harm of GM crops and a "lack of independent data" as support for Western Australia's GM moratorium, Australia's Agriculture and Food Minister said both countries should "stop relying on the data supplied from the GM companies". Meanwhile Australia's national scientific research agency CSIRO sacked one of the country's foremost organics experts for explaining personal criticisms of GM after a public forum.

## New doubts about GM safety and approvals

**A**n independent peer reviewed re-assessment of the data on the safety of Monsanto's GM maize Mon863 by a team at the University of Caen has fuelled the debate over both the safety of this variety and the whole EU approvals system.

Mon863 is genetically engineered to resist the insect pest corn root worm by producing the Bt toxin Cry3Bb1. The European Food Safety Authority's (EFSA's) GMO Panel said, "sufficient data were provided to address all outstanding questions raised by the Member States and concluded that the placing on the market of MON863 maize is unlikely to have an adverse effect on human and animal health or the environment in the context of its proposed use". In August 2004 the European Commission (EC) followed

this advice and approved Mon863 for import into the EU despite failing to obtain a qualified majority in the Council of Ministers and disregarding the safety concerns of several Member States.

In marked contrast to this official line, Professor Gilles Eric Seralini, head of the team at the Committee for Independent Research and Genetic Engineering (CRIIGEN), said, "Our counter-evaluation show that there are signs of toxicity and that nobody can say scientifically and seriously that consumption of the transgenic maize is safe and good for health."

The CRIIGEN team looked afresh at Monsanto's own toxicology data and concluded that there were signs of toxicity in the livers and kidneys of the rats fed the GM maize, as well as differences in body weight

gains between males (negative) and females (positive), elevated levels of Triglycerides (a component of body fat in females) and lowered sulphur and phosphorus excretion in males.

As a consequence of the work by Seralini's team, the EFSA GMO panel have been asked to re-visit the safety data on Mon863 and assess whether they need to change their previous view that the GM maize was safe to eat.

While the EFSA and the EC continue to ignore the serious doubts about the safety of GM foods and crops, the role of consumers and farmers taking a principled stance against the reckless introduction of GMOs remains vital.

## GM rice legal challenge - FSA in court

**F**riends of the Earth brought a legal challenge against the Food Standards Agency's (FSA's) failure to ensure that imported rice was tested and withdrawn from sale where found to be contaminated with Bayer's unapproved (and therefore illegal) GM LLRICE601, as required under EU emergency legislation. Contaminated

rice has been widely exported from the US since it was discovered in the food chain last year. Friends of the Earth found contaminated Tilda rice still on shop shelves as late as January this year, five months after the incident first came to light and more than two months after the FSA claimed no contaminated rice remained on the market.

local authorities about what to do, and;

- failing to publish batch codes of withdrawn rice to enable everyone to take appropriate action.

These failures meant that virtually no enforcement action was taken by local authorities, who seek guidance from the FSA.

The Judge made it clear that a thorough review of how the FSA dealt with this incident, promised by their lawyer, would be crucial in addressing these mistakes and others, such as FSA reliance on limited risk and health data in deciding that LLRICE601 did not pose any health threat and its failure to prevent potentially contaminated rice entering the catering sector, some 60% of the market according to the FSA's own estimates.

GM Freeze, Friends of the Earth, GeneWatch UK and others are calling on the Chair of the FSA board to ensure that the promised review is thorough and transparent, includes input from external stakeholders and is fully open to the public.



On 22 February a High Court Judge ruled that while the FSA had not acted unlawfully, it had made a number of mistakes including:

- failing to issue Food Alerts to local authorities about the contamination;
- delaying communications with and not giving advice to

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## UK supporting GM in Africa?

**D**espite the hype about GM crops expanding around the world to bring their benefits to smaller farmers, commercial growing of GM crops in Africa remains at a very low level. However, the structures to facilitate a rapid expansion of GM are being put in place, and the UK may be helping.

Projects to genetically modify Africa's staple crops, such as cassava and sweet potato, have not yet met with success. GM cotton and maize are much further ahead in the race to commercialise, and GM cotton field tests have been conducted in Tanzania, Tunisia, Zimbabwe, Egypt, Burkina Faso and Kenya.

South Africa is the only country on the continent growing GM crops commercially. Cultivation is confined to three crops: maize, cotton and soya. Bt cotton has been heralded by biotech proponents as an example of the benefits to small farmers from GM technology. However, studies of the rapid adoption of GM cotton on the Makhathini Flats beginning in 1998 found that it was not the technology that drew farmers in, but the privileged access to credit and markets that accompanied GM seed sales, both obviously very attractive to poor farmers.

In Kenya and Tanzania, the agrochemical industry established an organisation called Farm Inputs Promotions (FIPS) Africa to provide

small farmers with appropriately-sized packs of fertilisers. Dow, Bayer and Pioneer Hybrid are providing small packs of seed as well. Monsanto is providing seed and 100g packs of RoundUp – their internationally best selling herbicide. This project is backed by USAID (the US Federal Agency for overseas aid) and the UK Department for International Development (DfID).

In the future FIPS Africa, or similar schemes, could be used to deliver GM seed to poor farmers regardless of whether such seed is wanted or provides any long-term benefits. Domination of global seed markets has always been a prime objective of biotech corporations. Finding ways to penetrate the tricky small farmer market offers potentially rich rewards, especially if Terminator technology can force farmers to seek new supplies each year by preventing seed saving.

Yet Africa's environment, especially the soils and water supply, are more vulnerable to the rigours of intensive farming than the more temperate north. The spread of intensive farming techniques (and later GM) without a very close examination of the potential risks would be folly on a continent where groundwater is such a vital resource. The genetic diversity of the continent's agricultural seed may already be under threat as hybrids (GM or non-GM) displace traditional

open pollinated varieties. Poor nations have precious few resources for risk assessments and monitoring of agricultural developments like these. Only a handful of African countries have any GM regulations in place, although most have signed the Biosafety Protocol, so can put controls in place on imports of live GMOs.

In the past, DfID funded many research projects that would help avoid dependency on GM and argochemicals, but their 2005 "Policy for Agriculture" moved to a strongly pro-intensification stance. GM Freeze is conducting research into what projects DfID is currently funding so we can monitor the impact of this new approach on people and the environment

### Changes at the Freeze

Warm wishes for Carrie as she goes off on maternity leave. Eve Mitchell is Co-ordinating the GM Freeze while she's gone. Eve joins us after running FOE's trade campaign and heading up the Bite Back campaign about the US complaint at the WTO over the EU's cautionary approach to GM. Previous to that she lead ActionAid's food rights campaign after working with Amnesty International's East Africa team. You can contact Eve at [eve@gmfreeze.org](mailto:eve@gmfreeze.org)

### GM Spuds Continued from cover

Pressure continues to grow as GM Freeze exposed the mismatch in information from DEFRA and BASF about the purpose of the trials. We also exposed BASF's revelation that the engineered gene did not come from a wild potato as originally stated in their application to trial, but from a wild relative of potatoes, raising concerns about possible toxicity in the GM spuds. You can see that story and all the most up-to-date information at <http://www.gmfreeze.org/>.

Stay in touch! If you don't normally receive this bi-monthly newsletter and would like to, please send £5 (to cover costs, made payable to Five Year Freeze) to Five Year Freeze, 94 White Lion Street, London N1 9PF

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### The GM Freeze campaign is calling on the Government for a Freeze on:

The growing of genetically modified plants and the production of genetically modified farm animals for any commercial purpose

Imports of genetically modified foods, plants, farm crops and farm animals, and produce from genetically modified plants and animals

The patenting of genetic resources for food and farm crops