

Reflections on the Pusztai Affair

Andy Rowell
Author

18 July 1998 – Guardian

Monsanto Public Relations - “Food – health – hope”

FOOD LABELLING.
IT HAS MONSANTO'S
FULL BACKING.



BEFORE you buy a potato, or any other food, you may want to know whether it's the product of food biotechnology.

Monsanto is a leading biotechnology company. Our potato, corn and soybean seeds are adapted to produce better yields through better control of pests and weeds. In a step on from traditional cross-breeding, a naturally-occurring beneficial gene has been inserted into the plants' genetic make-up.

Rigorous tests have been undertaken throughout Monsanto's 20 year biotech history to ensure our food crops are as safe and nutritious as the standard alternatives. We have complete confidence that they are. So do the government regulatory agencies of 20 countries (including the UK) who have approved them.

Recently you may have noticed a label appearing on some of the food in your supermarket. This is to inform you about the use of biotechnology in food.

Monsanto fully supports UK food manufacturers and retailers in their introduction of these labels. We believe you should be aware of all the facts before making a purchase.

We encourage you to look out for these labels. And, if you'd like to know more, please ask for a leaflet at your supermarket, call our consumer information line on 0800 092 0401, or visit our website at www.monsanto.co.uk.

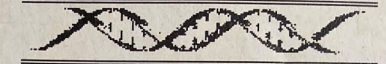
(POTATOES PRODUCED BY BIOTECHNOLOGY ARE NOT YET AVAILABLE IN THE UK)

GeneWatch

“Can GM Feed the world”

GENETIC ENGINEERING: Can it Feed the World?

GeneWatch



Briefing Number 3
August 1998

This briefing examines how genetically engineered foods are being promoted as essential to feeding the world's growing population and discusses whether such claims are valid.

The proponents of genetically engineered (GE) foods argue that biotechnology is essential to feed the world's growing population and build a sustainable agricultural system¹. The population, which is currently 5.8 billion, is expected to reach 8 billion by 2020 and 11 billion by 2050^{2,3}. The advocates of genetic engineering believe that the increasing demand for food must be met without expanding the amount of land used for agricultural purposes (to protect biodiversity) and by addressing issues of soil erosion, salinisation, overgrazing and pollution of water supplies^{3,4}. However, many organisations in less developed countries, aid agencies and environmental groups are less positive about the role genetic engineering can play in solving problems of hunger and tackling environmental degradation.

Who Is Behind GE Foods?

The development of GE foods is not being driven by farmers, consumers or less-developed countries but by large multinational chemical companies who have recognised a business opportunity. Six major companies now dominate the production of GE foods worldwide: Monsanto, DuPont, Hoechst, Novartis, Rhône Poulenc and Zeneca. These now style themselves as the 'Life Sciences' industry with activities which may span food, food additives and pharmaceuticals as well as their more traditional roles of chemical and

Science Research Council (BBSRC) was formed to replace the Agriculture and Food Research Council in Britain, reflecting a change in emphasis in agricultural research. Many representatives of large corporations sit on Research and Strategy Boards of the BBSRC⁵, giving them the ability to influence the research programme. In sharp contrast, consumer and public interest groups (other than the Country Landowners' Association) are given no such opportunity for input.

The European Commission also finances the promotion of GE crops and foods. For example, they have granted £1 million to the so-called 'FACTT' project⁶, with a similar amount being contributed by Hoechst and other partners. In effect, the project has become a sales promotion for the GE oilseed rape developed by Hoechst subsidiaries AgrEvo and Plant Genetic Systems to bring about "... the creation of familiarity with and acceptance of transgenic crops for farmers, extension organisations, processing industry, regulatory organisations, consumer groups and public interest groups"⁶.

What GE Foods Are Being Developed?

Looking at the products which are being developed should give some clues as to their role in meeting global food needs. The United

31 July 1998 Guardian

Analysis Genetic engineering

Crashing the crops

by John Vidal

Patrick Whitefield is a lecturer with no history of civil disobedience. After hearing that five women had test field and pulled up some genetically modified plants being tested for the US chemical firm Monsanto, he phoned a Manchester-based group called Genetix Snowball and offered to do the same. Should Whitefield do so, he risks being sued, fined and given a criminal record. Within weeks of his offer, a Manchester community workers Welsh lawyer and at least 250 others including the television chef Antony Worrall-Thomson had phoned to support or to join others taking "non-violent direct action" against the controversial crops.

Hardy eco-warriors in the road-protest style, their concern ranged across health, environment, consumer choice and the concentration of the food chain into very few hands. The peace movement used similar "accountable" tactics in the 1980s when more than 2,000 women were fined for publicly snipping the wire at Greenham Common in protest at the introduction of cruise missiles. More recently activists left their calling cards when they smashed the nose of a warplane bound for Indonesia. The organisers of Genetix Snowball, trying to be "respectable" and "principled" by telling the farmers and the police their plans in advance, hope to gather hundreds of people prepared to offer themselves to the courts.

They face competition in the fields. Widespread grassroots action against GM crops is intensifying. All 325 test fields in Britain have been identified and at least 25 have been destroyed by ad hoc and uncoordinated groups. Some firms are not reported attacks for fear that it will increase the chances of copyright crimes. Monsanto are seeking criminal damages in the High Court against the five women from Genetix Snowball and prevent them from "encouraging others". Monsanto's case was turned yesterday. But the corporate lawyers can expect a lot of new business every week or more fields are being hit. Earth First! and other groups have a back seat in the road protest, anti-nuclear movements, many are new-comers. Some give themselves names like the "Lincolnshire

Pros and cons

For

- Genetic engineering can make food last longer and taste better.
- Higher nutritional content and reduced levels of fat.
- Improved yields and reduced costs.
- Fewer pesticides and herbicides will be needed.

Against

- Scientists cannot predict the potential risks, as BSE shows.
- Crop monoculture potential.
- Susceptible to disease in the hands of agricultural chemists.
- Potential loss of biodiversity.
- Consumers are being given no choice, without knowing the consequences.
- The technology poses fundamental ethical questions about life forms.
- New toxins and allergies have been reported.

hunger. The National Trust, Britain's biggest landowner which is increasingly involved in organic farming, is studying the issues. The National Farmers' Union is uneasy. The Gardening Green is worried. Meanwhile a House of Lords select committee on agriculture is conducting a wide inquiry into GM crops to report later this year.

Opposition MPs claimed last night in a Commons adjournment debate that the Government's approach to trials was illegal, that the test crops were poorly regulated and monitored, and that organic farmers received no protection.

Add the supermarket chains which are watching the situation closely and the general public, which in poll after poll expresses unease, and no one can remember such a broad consensus of concern about any one issue, let alone agriculture. There is anger that no one was consulted; parliament barely debated the issues and it was imposed by international or European law.

The concern is now spilling over into town halls and schools as local lobbyists call for the safeguarding of food meals. A "citizen's jury" which spent weeks recently listening to evidence from all sides rejected the technology.

THE Government has set up a working group drawing on four departments - the Ministry of Agriculture, the environment department, the Ministry of Health and the Department of Trade and Industry - to head off what may become a crisis. Damage to trial crops is said to be putting back the programme of commercial growing and costing the companies thousands of pounds. Although the DTI and MAFF are enthusiastic backers of the technology, Defra and the Ministry of Health are less enthusiastic.

Last week, Julie Hill, the only non-scientist member of the Government's own wildlife advisers English Nature, advises the companies on genetic releases into the environment called for much broader consents to be taken into account before approval is given. So far, they have refused one application out of more than 400.

Britain is not alone. The leaders of France's second biggest farm unions have

become folk heroes after being given suspended prison sentences for destroying GM grain. There have been seven arrests in Ireland and a high profile court case.

Greenpeace claims to have mobilised 200,000 consumers in Germany and there is wide spread disapproval in Holland and Denmark. Switzerland recently had a referendum on the future of biotechnology. It was approved but only after massive lobbying by the Swiss-based drug and chemical companies who threatened to leave.

Last week European activists flew to the Missouri home town base of Monsanto, the industry leaders, to join the first meeting of global

activists against the crops. In India, there are expected to be trials and when the new technology is introduced. Several years ago more than 750,000 small farmers rallied against the World Trade Organisation and American companies planting seeds. The massive Greenpeace bank based in Pakistan which pioneered the philosophy of credits for the poor, pulled out of a joint venture with Monsanto this week.

Monsanto, moreover, has taken its own industry by going "too far, too fast". With more than 100 million acres of GM crops now under cultivation on four continents after just four years' planting, the company admits it underestimated the

European culture. It has now opened an office in London, engaged Tim Bell for its press advertising campaign. But the Advertising Standards Authority has already received more than 20 complaints ranging from the Green party to the Countryside Restoration Trust. Monsanto corporate communication chiefs have meanwhile visited newspaper editors, journalists, and critics. The company has set up webpages, and runs a telephone information line.

The seed and chemical companies, research institutes and universities growing the patented crops feel increasingly threatened, and regret

that their message of scientific responsibility is not being heard. They insist that the people's fears are groundless. They make no distinction between those who are openly and those who are secretly calling the crop-rejecting vandalism and destruction of the very evidence they will need to monitor safety. The Earth University of Osnabrueck Photo Library, Greenpeace Photo Archive, Suzanne Hallan, Researcher, Jane Cronin, John Vidal is the Guardian Environment editor.

Sources: (1) Genetix Snowball, One World Centre, 6 Mount Street, Manchester, 0161 834 0295; (2) English Nature GM position statement July 9, 1998; (3) House of Lords Select Committee on Agriculture; (4) Hansard July 30, 1998; (5) Citizen's Jury, University of East London Department of Environmental Science June 1998; (6) Guardian July 15, 1998; (7) Monsanto annual report, website, www.monsanto.co.uk; (8) Tel: 0171 495 8455; (9) Friends of the Earth, University of Osnabrueck Photo Library; (10) Greenpeace Photo Archive; (11) Suzanne Hallan, Researcher; (12) Jane Cronin, John Vidal is the Guardian Environment editor.

For more information visit the guardian website at <http://www.news.guardian.co.uk/news>



Bentley: victim of official callousness
18

Green but how pleasant?

Some of the 120 British sites where Monsanto are testing genetically-modified crops



- 1 Mibrig Farm, Kirkstun, Lothian
- 2 Edge House Farm, Beagay, Newcastle upon Tyne
- 3 Manor Farm, Edlesham, Malton, N Yorks
- 4 Pullington Grange, Pullington, Goole, Humberside
- 5 Barr Farm, Edington, Horncastle, Lincs
- 6 Top Brackendale, Cropwell Butler, Eglinton, Nottinghamshire
- 7 Wilson Hall Farm, Glade Lane, Wilson, Mableourne, Derbyshire
- 8 Tib Hall Farm, Kingsbury, nr Tamworth, Staffordshire
- 9 Byton House Farm, Telford, Shropshire
- 10 Instock Grange Farm, Pretoria Road, Instock, Leicestershire
- 11 Wood Farm, Mollie Research, Wymondham, Norfolk
- 12 Rosedale Farm Buildings, Cowling, Newark, Suffolk
- 13 Warwick Farm, Ramsey, Cambs
- 14 Fyfield Farm, Flitghery, nr Coventry, Warwickshire
- 15 East Lodge Farm, Stanton, nr Broadway, Worcester
- 16 The Moat, Antony's Cross, Newent, Glos
- 17 More Farm, Shrubum, Walsington, Oxford
- 18 Throes Farm, Sibbing, Great Dorset, Essex
- 19 Wye Agricultural College, Bark Lane, Alington, nr Andover, Kent
- 20 Haycombe Hill Farm, Sutton Veroy, Wiltshire, Wilt

Other firms and organisations testing GM crops on a total of 325 British sites include:

- AgEvo UK Crop Protection
- Centre for Plant Biotechnology & Biotechnology, University of Leeds
- National Institute of Agricultural Botany
- Novartis Seeds Ltd
- Pioneer Genetics
- Plant Genetic Systems
- Scotts Crop Research Institute
- Syngenta International Seeds

Around Britain

Met Office report for 24 hours to 6pm yesterday

Area	Min	Max	Wind	Weather
London	12	18	SW 10-15	partly cloudy
Manchester	10	16	SW 10-15	partly cloudy
Birmingham	11	17	SW 10-15	partly cloudy
Cardiff	10	16	SW 10-15	partly cloudy
Edinburgh	10	16	SW 10-15	partly cloudy
Belfast	10	16	SW 10-15	partly cloudy

The world

Reports for noon yesterday

City	Temp	Wind	Weather
London	18	SW 10-15	partly cloudy
Manchester	16	SW 10-15	partly cloudy
Birmingham	17	SW 10-15	partly cloudy
Cardiff	16	SW 10-15	partly cloudy
Edinburgh	16	SW 10-15	partly cloudy
Belfast	16	SW 10-15	partly cloudy

Air quality

City	Index	Category
London	1	Good
Manchester	1	Good
Birmingham	1	Good
Cardiff	1	Good
Edinburgh	1	Good
Belfast	1	Good

4 August 1998

Western Morning News

Western Morning News
Regional Newspaper of the Year

VOICE OF THE WESTCOUNTRY • DEVON • TUESDAY • AUGUST 4 1998 • 32p

Coast path marathon
Intrepid walker Jo Bishop reaches Dorset - Pages 20,21

Military might
Elite troops take part in massive exercise - Page 4

Half-time favourite
Top soccer clubs sign up Cornish pasty - Page 3

MP demands: Who is paying for this ridiculous charade?

Security guards in watch on GM crop

CHRIS FERRIS

SECURITY guards have been deployed in a Westcountry field to defend genetically modified food crops from attack.

The 24-hour patrols have been introduced to the site in South Devon after test crops were pulled up in a recent unsuccessful attempt by activists to stop the trials.

Local MP Anthony Steen attacked the development as a "ridiculous charade" and promised to confront the Government to discover whether taxpayers' money was being used to pay for the guards.

A local company provides two people to patrol the field at night and another to monitor it during the day.

The maize crop has been at the centre of a national campaign to challenge the testing of genetically modified crops in the open countryside.

Organic farmer Guy Watson was unsuccessful in a legal bid to halt GM crop testing at the site - he feared that pollen would contaminate his own organic maize being grown nearby.

The field at Dartington, near Totnes, was attacked by anti-GM activists several days ago. They pulled up maize plants but did not succeed in destroying genetically engineered examples.

Mr Steen, Conservative MP for Totnes, last night condemned the high security operation.

"I think it's outrageous and makes me very suspicious that the Government has something to hide," he said.

"I'm going to ask how much taxpayers' money is being spent on this ridiculous charade."

He has supported calls for the crop to be removed by legal means so that it does not contaminate Mr Watson's organic crop.

Tests at the site are being carried out by the National Institute of Agricultural Botany (NIAB) on behalf of the



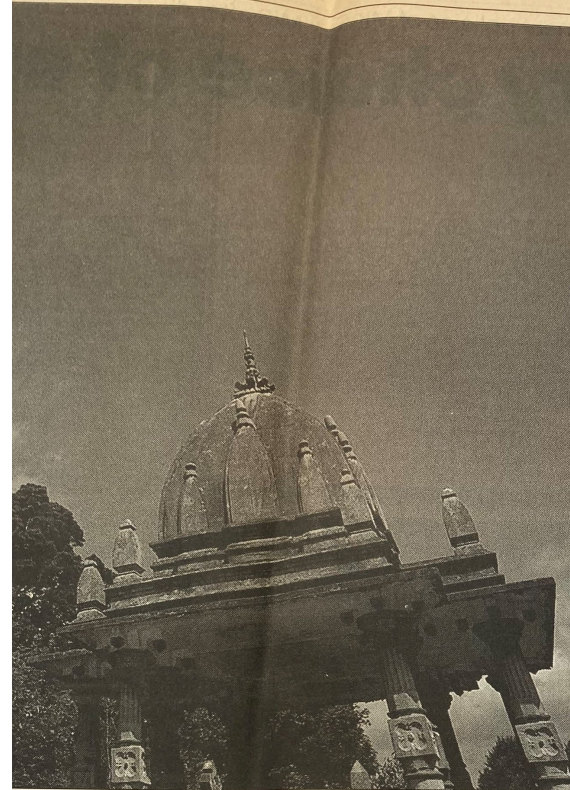
ON WATCH: Security guard Dave Tapper patrols the crop test site near Dartington recently targeted by opponents of genetically modified plants.

Turn to Page 3

ANIMAL CRACKERS ♦ COURSES ON PET STORE MANAGEMENT ♦ SEE

anything else," said Geoff Bailey, crop, thus preventing pollen from part of the trials process but extra material.

5 August 1998
Guardian



Other whose grave attracts people from all over the world

PHOTOGRAPHS: NICK RAY

in cemetery protest

...be impossible to distinguish between them and mourners. ...seems to me inconceivable that the court should be in a position of having to enforce an order to select those who should be evicted and those who should not be evicted. ...ruling delighted Arnos campaigners who gathered for the court steps to see the decision. ...y Jones, aged 48, in laughter's cremated remains were scattered at Arnos Vale, vowed to continue the fight to keep it open. ...e have ever wanted to see the law respects our rights. Surely this is not too much to ask. ...mer, who was not at the trial, said he was disappointed but declined to say what he would do now.



Campaigners celebrate at Arnos Vale after their victory

Devon crop destroyed by gene activists

Geoffrey Gibbs

ACTIVISTS protesting against trials of genetically modified cereals have destroyed a trials maize crop in fields close to Britain's largest organic vegetable farm. Twelve people were arrested on suspicion of criminal damage or conspiracy to cause damage after the attack on the south Devon site. Last night they were still being interviewed by detectives. Maize crops on the test site at Dartington, near Totnes, were damaged in a separate attack just over a week ago. But protesters missed their intended target and were said by scientists to have destroyed years of research into how foreign varieties of maize adapt to British growing conditions. The trial site was recently at the centre of an unsuccessful legal challenge by Guy Watson, a farmer who fears cross-pollination from the genetically modified crops could lead to him losing organic status for the sweetcorn he grows nearby on his 800 acre farm.

The Court of Appeal last month turned down Mr Watson's attempt to halt the experiment despite finding that the Government had breached the law in sanctioning the seed trials. Police were called to the site on Monday night after security guards employed to mount 24-hour patrols, in the wake of last week's attack, reported seeing up to 20 people in the field damaging the crops. Officers arrested eight men and four women. A statement issued by the Genetic Engineering Network said that "concerned citizens" had taken direct action "to prevent pollination of a genetically engineered crop". The protesters said they

hoped the focus on this site and others would push the Government to a moratorium on genetic engineering. John MacLeod, director of the National Institute of Agricultural Botany, which is carrying out the trials for the Government, criticised the protesters' actions, which, he said, had effectively destroyed the Dartington experiment. "I feel frustrated that people ... are destroying the very data that will allow discussion and decision." The NIAB said the protesters had pulled up or cut all the plants in the trial, which was comparing four conventionally-bred control varieties of maize with the genetically modified ones. It was too early to say what effect the destruction would have on national trials of the genetically modified crop, but the loss of one of the four trial crops was "very important". Mr Watson, who farms organically, said: "It is unfortunate and I wish that it hadn't come to this, but there are countless precedents through history. Look back to the Tolpuddle Martyrs — I think almost everybody today would think they had a very good case, yet they were deported to Australia. I think perhaps there are times, when, if you have really done your research and looked into it, an illegal act is justifiable." ● Environment Minister Michael Meacher yesterday sanctioned the growing of a different strain of genetically modified maize despite research showing it could kill beneficial insects. Mr Meacher said the crop would not be banned but more research was needed to see if lacewings, which eat crop pests, were killed by toxins bred into the maize. Friends of the Earth said that in permitting the crop Mr Meacher had abandoned the precautionary principle.

Westminster ban on modified food

Lucy Ward
Political Correspondent

department ban emerged in a written Commons answer last month from the committee chairman, Dennis Turner. Replying to a question from the Liberal Democrat MP

MPs are to launch an in-

10 August 98
Devon

WESTCOUNTRY NEWS
Hundreds of people attended a public meeting over the weekend for the launch of a campaign to make the Westcountry a genetically-modified free zone. CHRIS FERRIS reports

Farmers urged to pledge 'No GM'

WESTCOUNTRY farmers are to be asked to oppose the spread of genetically modified crops by signing a pledge to ban them from their land.

Campaigners say six farmers have already signed up and the programme is to be spread through Devon and Cornwall.

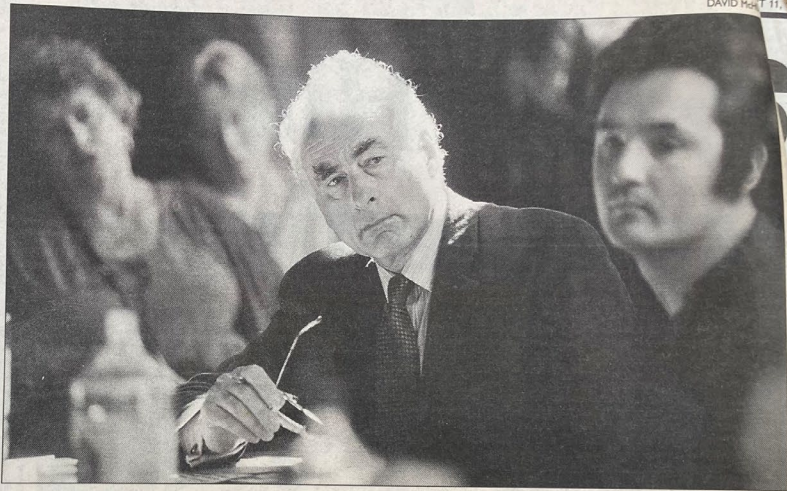
"We are asking farmers to sign to say they will have a moratorium for at least five years, so that they will not have GM tests or commercial crops on their land in that time," said Luke Anderson, co-ordinator of Totnes Genetic Engineering Group, set

which they blame for stocking genetically modified food.

They will also continue to press for local education authorities in the region to take GM food off school menus.

Campaigners say they have already distributed 20,000 leaflets in South Devon and new local groups are due to be set up in other parts of the region to increase publicity about the anti-GM cause.

Around 400 people attended a rally at Totnes Civic Hall at the weekend, five days after 12 people were arrested at a nearby



● ALL EARS: Totnes MP Anthony Steen listens to the concerns expressed by speakers at the protest meeting



Dimbleby and Norris say tests should be closed

... on test tube cro



Luke Anderson, of the Totnes Genetic Engineering Group, addresses the rally as local MP Anthony Steen looks on centre left. Also at the table are organic farmer Guy Watson and environmental author Andy Rowell.



Support grows for direct action

dangers of new genetic technology. He called for Devon to become a GMO-free zone, with farmers signing up to a moratorium on planting GM crops.

HERALD EXPRESS CO

Kid
Wha
and
Paignton this

The Herald Express has got together with channel for kids - and Telephone and Cable to celebrate the arrival of

10 August,
1998
World in Action
Eat up your
genes – 150
seconds that
changed
Arpad's life

- 'We're assured that this is absolutely safe. We can eat it all the time. We must eat it all the time. There is no conceivable harm, which can come to us. But as a scientist looking at it, actively working in the field, I find that it's very, very unfair to use our fellow citizens as guinea pigs. We have to find guinea-pigs in the laboratory
- 'If I had the choice, I would certainly not eat it till I see at least comparable experimental evidence which we are producing for our genetically modified potatoes.
- I actually believe that this technology can be made to work for us. And if the genetically modified foods will be shown to be safe, then we have really done a great service to all our fellow citizens.'

13 Aug, 99: Irish Times: Pusztai suspended



 **Sections**  **THE IRISH TIMES**  17° [Subscribe](#) 

Ireland

Scientist in food safety controversy suspended

The scientist who claimed his research had raised questions about the safety of genetically-modified (GM) food for consumption...

Kevin O'Sullivan
Thu Aug 13 1998 - 01:00

The scientist who claimed his research had raised questions about the safety of genetically-modified (GM) food for consumption by humans has been suspended for issuing "misleading information" based on incomplete research. The Rowett Research Institute in Scotland said yesterday that Dr Arpad Pusztai would no longer have responsibility

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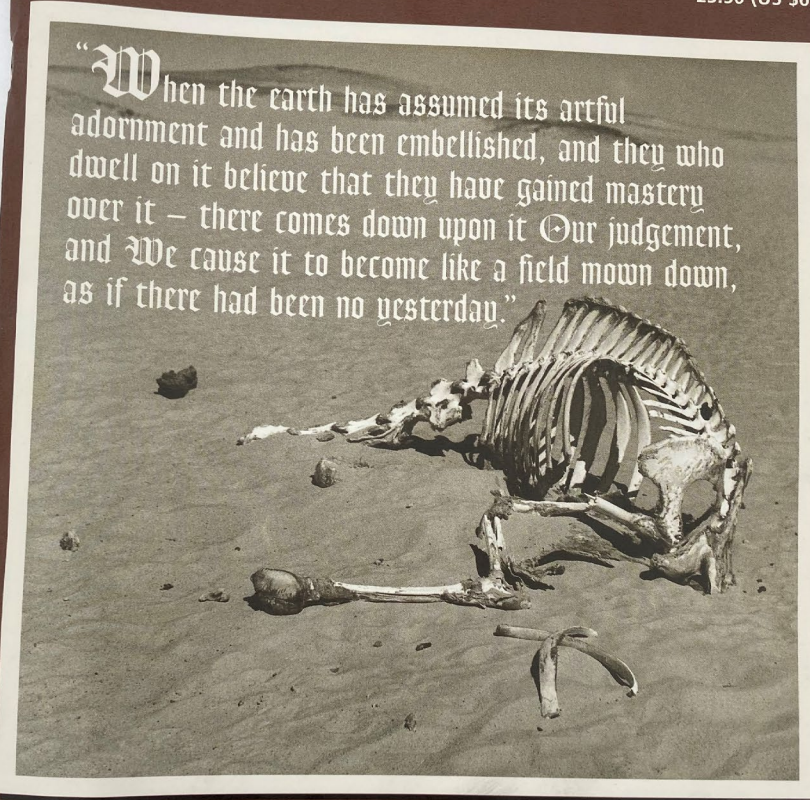
The Ecologist

The Ecologist

Rethinking Basic Assumptions

Vol 28 No 5
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£3.50 (US \$6)

“When the earth has assumed its artful adornment and has been embellished, and they who dwell on it believe that they have gained mastery over it – there comes down upon it Our judgement, and We cause it to become like a field mown down, as if there had been no yesterday.”



The Monsanto Files

Can we survive genetic engineering?

The following article by HRH the Prince of Wales appeared first in the *Daily Telegraph*. The editors of *The Ecologist* were moved by its depth and tone, and obtained permission to republish it as a contextual introduction to this special issue on the subject. We emphasize that the views expressed in this special issue should in no way be associated with those of the Prince. However, we thank him for his courage in speaking out on this vital issue.

Seeds of Disaster

by HRH the Prince of Wales

I have always believed that agriculture should proceed in harmony with nature, recognizing that there are natural limits to our ambitions. That is why, some twelve years ago, I decided to farm organically – without artificial pesticides or fertilizers. From my own experience I am clear that the organic system can be economically viable, that it provides a wide range of environmental and social benefits, and, most important, that it enables consumers to make a choice about the food they eat.

But at a time when sales of organic food are soaring, a development in intensive agriculture is actually removing a fundamental choice about the food we eat, and raising crucial questions about the future of our food and of our environment which are still to be answered. Genetically modified (GM) crops are presented as an essentially straightforward development that will increase yields through techniques which are merely an extension of traditional methods of plant breeding. I am afraid I cannot accept this.

The fundamental difference between traditional and genetically modified plant breeding is that, in the latter, genetic material from one species of plant, bacteria, virus, animal or fish is literally inserted into another species, with which they could never naturally breed. The use of these techniques raises, it seems to me, crucial ethical and practical considerations.

I happen to believe that this kind of genetic modification takes mankind into realms that belong to God, and to God alone. Apart from certain highly beneficial and specific medical applications, do we have the right to experiment with, and commercialize, the building blocks of life? We live in an age of rights – it seems to me that it is time our Creator had some rights, too.

seems to presume that unless a GM crop can be shown to be unsafe, there is no reason to stop its use. The lesson of BSE and other entirely man-made disasters in the cause of “cheap food” is surely that it is the *unforeseen* consequences which present the greatest cause for concern.

We are told that GM crops will require less use of agrochemicals. Even if this is true, it is certainly not the whole story. What it fails to take into account is the *total* ecological and social impact of the farming system. For example, most of the GM plants marketed so far contain genes from bacteria which make them resistant to a broad-spectrum weedkiller available from the same manufacturer. When the crop is sprayed with this weedkiller, every other plant in the field is killed. The result is an essentially sterile field, providing neither food nor habitat for wildlife. These GM crop plants are capable of interbreeding with their wild relatives, creating new weeds with built-in resistance to the weedkiller, and of contaminating other crops. Modified genes from a crop of GM rape were found to have spread into a conventional crop grown more than a mile away. The result is that both conventional and organic crops are under threat, and the threat is one way.

GM crop plants are also being developed to produce their own pesticide. This is predicted to cause the rapid appearance of resistant insects. Worse still, such pesticide-producing plants have already been shown to kill some beneficial predator insects as well as pests. To give just two examples, inserting a gene from a snowdrop into a potato made the potato resistant to greenfly, but also killed the ladybirds feeding on the greenfly. And lacewings, a natural predator of the corn borer, and food for farmland birds, died when fed on pest insects raised on GM maize.

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I happen to believe that this kind of genetic modification takes mankind into realms that belong to God, and to God alone. Apart from certain highly beneficial and specific medical applications, do we have the right to experiment with, and commercialize, the building blocks of life? We live in an age of rights – it seems to me that it is time our Creator had some rights, too.

We simply do not know the long-term consequences for human health and the wider environment of releasing plants bred in this way. We are assured that these new plants are vigorously tested and regulated, but the evaluation procedure

seems to presume that unless a GM crop can be shown to be unsafe, there is no reason to stop its use. The lesson of BSE and other entirely man-made disasters in the cause of “cheap food” is surely that it is the *unforeseen* consequences which present the greatest cause for concern.

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Despite the vast acreages which are likely to be involved, there is no official requirement to monitor genetically modified commercial crops to see exactly what is happening. Think of the agricultural disasters of the past which have stemmed

from over-reliance on a single variety of a crop, yet this is what genetic modification will encourage. It is entirely possible that within 10 years virtually all of the world's production of staple crops, such as soya, maize, wheat and rice, will be from a few GM varieties, unless consumer pressure dictates otherwise.

English Nature and other official bodies have sounded warnings about the potentially damaging consequences for the environment of introducing GM crops on a wide scale. They have called for a moratorium on the use of at least one of these crops.

Once genetic material has been released into the environment it cannot be recalled. The likelihood of a major problem does go badly wrong, we will be faced with the problem of clearing up a kind of pollution which is self-perpetuating. I am not convinced that anyone has the first idea of how this could be done, or indeed who would have to pay.

We are also told that GM techniques will help to “feed the world”. This is a fundamental concern to all of us. But will the companies controlling these techniques ever be able to achieve what they would regard as a sufficient return from selling their products to the world's poorest people? Nor do I believe that the basic problem is always so simple. Where the problem is lack of food, rather than lack of money to buy food, there may be better ways of achieving the same ends. Recent research has shown, for example, that yields from some traditional farming systems can be doubled, and even trebled, through techniques that conserve natural resources while making the best use of labour and management skills.

Do we need to use GM techniques at all? Technology has brought massive benefits to mankind, but there is a danger, especially in areas as sensitive as food, health and the long-term future of our environment, in putting all our efforts into establishing what is technically possible without first stopping to ask whether this is something we *should* be doing. I believe we should stop and ask that question, through a wide public debate of the issues of principle which cannot be addressed effectively through science and regulation alone. Is it not better to examine first what we actually want from agriculture in terms of food supply and security, rural employment, environmental protection and landscape, before we go on to look at the part genetic modification might, perhaps, play in achieving

SEEDS OF DISASTER



those aims?

Obviously, we all have to make up our own minds about these important issues. I personally have no wish to eat anything produced by genetic modification, nor do I knowingly offer this sort of produce to my family or guests. There is increasing evidence that a great many people feel the same way. But if this is becoming a widely-held view, we cannot put our principles into practice until there is effective segregation of genetically modified products, backed by a comprehensive labelling scheme based on progress through the food chain.

Arguments that this is either impossible or irrelevant are simply not credible. When consumers can make an *informed* choice about whether or not they eat products containing genetically modified ingredients, they will be able to send direct and unmistakable messages about their preferences. I hope that manufacturers, retailers and regulators will be ready to take on the responsibility to ensure that this can happen.

This article first appeared in the *Daily Telegraph*. A contribution of the fee is to be made to the Prince of Wales Charitable Foundation.

27 December 1998
The Observer



Protests like this one in a Lincolnshire field of genetically modified sugar beet are helping US and Japanese companies. Photograph by Andrew Testa

Europe to lose gene harvest

Consumer suspicion has sown seeds of future agricultural collapse, biotechnologists warn

by Robin McKie
Science Editor

EUROPE'S biotechnology industry is in crisis. Consumer antagonism to genetically modified foods threatens to undermine its science and cripple farming production, researchers have warned.

This stark message was outlined at a recent meeting of the European Biotechnology Forum, held to discuss public attitudes to the field.

Researchers, senior EU officials and politicians all expressed deep gloom that public opposition had hardened so much over the past 12 months that European science and agriculture could be irrevocably damaged.

'It is not just a matter of people simply disliking biotechnology,' said one delegate at the Brussels meeting. 'People will happily take medicines and vaccines made by genetic modification tech-

niques — because they realise they bring benefits.

'But they don't see any advantage in growing or eating genetically modified food. The only obvious beneficiary seems to be Monsanto.'

Such remarks revealed a widespread irritation with the US biotechnology company, an antipathy that was almost as intense as that reserved for Green activists who have so successfully opposed gene crop growing.

Many scientists believe the seeds of their woes were sown when Monsanto tried to bulldoze its genetically modified soya into Europe last year mixed with standard soya products, thus confusing the issue of labelling and triggering the current battle against biotechnology.

'If you have oil that comes from a genetically modified plant, and it is chemically identical to the oil that comes from a standard plant, is there any need to label it as being

derived from a genetic crop?' asked Dr Julian Kinderlerer, of the Sheffield Institute for Bioethics and Law.

The answer is yes, because we label foods not just for safety but to allow people to make informed choices.

This choice was blocked by Monsanto when it brought modified soya mixed with standard soya into Europe, although in the past few months intense lobbying has led supermarkets to mark some foods — such as cake mixes and breadcrumbs — used on meat and fish — as 'possibly containing genetically altered foods'.

For gene crops, such action is too little, too late. Green groups, worried about the industrialisation of farming but lacking a focus for their anger, suddenly found the perfect battleground.

'Modified crops encapsulate many unpopular aspects of modern life — multinational companies, intense agricul-

ture and the despoliation of nature,' said Dr Bernard Dixon, one of the conference's conveners. 'That is why this storm has broken over the industry's heads.'

As a result, such plants are not yet grown commercially in Europe, though trial planting is being carried out. However, in the US, Japan and other countries they are grown widely — presenting a clear threat to Europe. If, as scientists predict, genetically modified plants prove to be cheaper and easier to grow, then prices will undercut those of standard varieties. European crops will become uncompetitive on world markets and our farms will require increased subsidies or have to close.

This problem is only intensified by the EU's 90/220 directive on gene crops, which delays the introduction of new, safer products, added Mark Cantley, head of the Organisation of Economic Co-

operation and Development's biotechnology unit. 'The directive undermines public confidence, needlessly duplicates existing regulations, generates pointless trade disputes and is causing grave and increasing damage to the competitiveness of European agriculture and industry,' he said. 'The huge opportunities offered by biotechnology are being squandered in Europe.'

Cantley said European biotechnology was now paralysed by self-perpetuating regulatory empires and Green groups with a talent for posing 'what if?' questions. This had induced chaos, a point backed by Dr Maurice Lex of the European Commission. 'We have spent £30 million and used the services of 260 laboratories across Europe on researching into the safety of gene crops.

'We have looked and looked and looked and have not seen any problems. How much more taxpayers' money are we supposed to waste?'

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property, interiors, design

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Friday Review



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Sport99



45p

Friday
February 12
1999

Published in London
and Manchester

NEWSPAPER OF THE YEAR

The Guardian

Food scandal exposed

International scientists back shock findings of suppressed research into modified food

Michael Sean Gillard,
Laurie Flynn
and Andy Rowell

TWENTY international scientists have signed an unprecedented memorandum supporting the controversial findings of suppressed research which found that rats fed on genetically modified potatoes suffered a weakened immune system and damage to vital organs.

In a report published for the first time today, the scientists, from 13 countries, also demand the immediate professional rehabilitation of the British scientist Arpad Pusztai, who discovered these preliminary findings last year and was forced to retire after speaking about his concerns.

Dr Pusztai's pioneering research into the effects of GM crops on animal nutrition and the environment included feeding genetically modified (GM) potatoes to rats to determine for the first time whether they

had any harmful effects on their guts, metabolism and immune system.

The unexpected results of the £1.6 million Scottish Office-funded research project showed that after 10 days of feeding trials the kidney, thymus, spleen and gut were adversely affected, and immune systems were weakened.

The Guardian can also reveal that the rats' brain size decreased. Dr Pusztai did not refer to this at the time because he felt the political repercussions would be too severe. A more recent piece of research on the same rats by the senior pathologist Stanley Ewen, of Aberdeen University Medical School, is understood to validate Dr Pusztai's preliminary findings.

Dr Ewen found that rats fed the GM potatoes used in Dr Pusztai's experiments suffered from an enlarged stomach wall.

The implications for the biotech industry, already suffering from a public backlash against GM foods, could be severe, says Vyvyan Howard,



Arpad Pusztai: forced to retire after findings

a foetal and infant toxicopathologist at Liverpool University, who also signed the memorandum. "They will have to do rigorous hazard assessment, and do it repeatedly."

Jonathan Rhodes, Professor of Medicine at Liverpool University, said: "One key problem that keeps coming back time and again is that regula-



tion of food is nothing like as strict as the regulation for drugs. And when you start tinkering around with the genetic structure of food you have to move towards thinking of food products as pharmaceuticals."

The Cabinet Office minister, Jack Cunningham, said last night that any new data would be examined by gov-

ernment scientists. Asked on BBC2's Newsnight if he thought GM foods were safe, Mr Cunningham replied: "There's no reason why they cannot be safely produced."

"The scientists' memorandum demands an immediate funding programme to research the effects further and determine the causes.

If it can be shown that the lectin, a naturally occurring insect-resistant protein inserted into the potato, was responsible, this could implicate GM crops containing other lectins, namely Bt toxin.

Last year there were approximately 7.7 million hectares of these crops, such as maize, worldwide. The maize is found in various forms, such as corn flour and tortilla chips, in British supermarkets.

However, some scientists believe that the problem may lie with one of the key genes that forms part of the genetic engineering process itself.

The so-called cauliflower mosaic promoter is used in most GM foods available in the UK, such as soya, present in an

estimated 60 per cent of processed foodstuffs.

It was these far-reaching implications for one of the world's most aggressively expanding industries that had put Dr Pusztai in the eye of the storm since last August when he spoke out on ITV's World In Action.

He said he would not eat GM potatoes and found it "very unfair to use our fellow citizens as guinea pigs".

Some of the scientists who have viewed the evidence believe the circumstances surrounding Dr Pusztai's removal and the closing down of his research team cannot be understood outside political and commercial parameters.

The Aberdeen-based Rowett Institute, where the research was done, said at the time of his removal that it was unhappy with his having made public the results of preliminary research which had not been subject to peer review. He was subsequently exonerated by an internal inquiry.

Food scandal, pages 6-7;
Leader comment, page 23

Clinton avoids impeachment

6 Food scandal

Ousted scientist and the damning research into food safety

Laurie Flynn, Michael Gillard and Andy Rowell on the tests on rats that raised serious questions about the effects of genetically modified food on internal organs



LAST WEEK in parliament, it was said that the Home Office will give the Government way the Government was ignorant of the environmental damage that could be done in three years on the basis of a commercial contract to produce GM crops until more research is done.

The Prime Minister, wary of mounting public concern about the safety of GM crops, ordered a special inquiry to be set up to investigate the safety of GM crops in the food chain.

The inquiry will be led by a panel of scientists, including Prof James Watson, who led the team that produced the world's first GM crop, insulin, in 1978.

The inquiry will also look at the safety of GM crops in the environment, including the possibility of gene transfer to wild plants and animals.

The inquiry will be held over several months and will involve a range of experts from the UK and abroad.

The other members of the panel will be Dr Paul Bragg, who led the team that produced the world's first GM crop, insulin, in 1978. He will be joined by Dr James Watson, who led the team that produced the world's first GM crop, insulin, in 1978. They will be joined by Dr Paul Bragg, who led the team that produced the world's first GM crop, insulin, in 1978.

The inquiry will also look at the safety of GM crops in the environment, including the possibility of gene transfer to wild plants and animals.

The inquiry will be held over several months and will involve a range of experts from the UK and abroad.

The scientists are asking for further funding to examine the problems. The Home Office has agreed to fund the inquiry but has not yet decided on the details. Dr Watson has expressed his concerns about the safety of GM crops and has called for a more thorough investigation into the safety of GM crops in the food chain.

Dr Watson has expressed his concerns about the safety of GM crops and has called for a more thorough investigation into the safety of GM crops in the food chain.

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'It is very unfair to use our fellow citizens as guinea pigs,' said Dr Pusztai. Two days later he was summarily suspended.

Chronology

- November 1986: Patent for Rowett research begins.
- December 1986: Pusztai begins to 'have proper expertise' on GM maize.
- March 1987: Tony Blair and Philip James to develop Food Standards Agency.
- January 1988: Pusztai is given 12 months' leave to work on his research.
- April 1988: Pusztai gives government inspectors preliminary findings.
- April 1988: Senior Rowett ministerial told of preliminary results.
- May 1988: World in Action informs British company of its intended programme.
- June 1988: Government inspectors' report criticises Rowett Institute findings.
- June 1988: Additional funding to continue Pusztai research.
- August 10 1988: World in Action tells British public that Pusztai's work would not be released unless Rowett Institute was satisfied.
- August 11 1988: Pusztai is given 12 months' leave to work on his research.
- September 1988: Pusztai is given 12 months' leave to work on his research.
- October 1988: Pusztai is given 12 months' leave to work on his research.
- November 1988: Pusztai is given 12 months' leave to work on his research.
- December 1988: Pusztai is given 12 months' leave to work on his research.

Food scandal

The key players

Arpad Pusztai
He was the scientist who first raised concerns about the safety of GM crops. He was suspended from his post at the Rowett Institute in 1988. He has since written several books and articles about the safety of GM crops.

Philip James
He was the Minister of Agriculture, Fisheries and Food at the time of the scandal. He has since become a prominent figure in the food industry.

Stanley Even
He was the Director of the Rowett Research Institute at the time of the scandal. He has since been replaced by Dr Paul Bragg.

The Rowett Research Institute
The Rowett Research Institute is a research organization that focuses on the safety of GM crops. It was founded by Dr Paul Bragg and Dr Stanley Even.



Top researchers back suspended lab whistleblower

SCIENTISTS: Speaking out against 'serious flaws in the conclusions arrived at' by the Rowett Institute.

The scientists have expressed their concerns about the safety of GM crops and have called for a more thorough investigation into the safety of GM crops in the food chain.

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Side Sels

There are serious flaws in the conclusions that the committee has arrived at.

Prof Joe Cummins

The Rowett Research Institute

Prof Joe Cummins is a leading expert on the safety of GM crops. He has expressed his concerns about the safety of GM crops and has called for a more thorough investigation into the safety of GM crops in the food chain.

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Prof Joe Cummins is a leading expert on the safety of GM crops. He has expressed his concerns about the safety of GM crops and has called for a more thorough investigation into the safety of GM crops in the food chain.

It is urgent that the full data from these experiments should be brought into the public area and debated. Your findings are of considerable importance in the current debate

Dr Vyron Howard, University of Liverpool

12 Feb 1999 – Guardian editorial

The Guardian

Friday February 12 1999
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Flaws in the food chain

We need a moratorium

THE PRESSURE for a moratorium on genetically modified food — at least until more rigorous testing has been done — is beginning to look like a tidal wave. It has produced an unholy alliance of William Hague, John Redwood, leftward-leaning lobbies and the European Parliament (which yesterday voted for legislation that could make biotech companies legally responsible for the adverse effects of releasing organisms). Yesterday, the Consumers Association urged the Government to block further GM products pending overhaul of the regulatory system — the first call for a ban in its 40 year history.

There is a case for calling a halt if only to allow time for the fog to lift. Let's be clear: genetically modified food *may* turn out to be one of the great achievements of the twentieth century that will enrich our lives and bring cheaper, pesticide-free produce. Talk of Frankenstein foods is completely misleading. In the much longer run it may help to feed the poorer parts of the world by producing crops that grow in conditions of drought or salt (though no one yet knows how to do such things). But because of its very nature — manipulating the life process itself — it involves a huge leap into the unknown that could have truly fearsome consequences.

It is for this reason that new products must be tested in a far more rigorous and independent way even than other food products. The understandable desire of

pioneering corporations to get an early return on the vast sums they have invested must not stand in the way of protecting the consumer. Memories of BSE are still too strong for new risks to be taken with the food chain when doubts remain.

There are several lessons to be drawn from the disturbing reports we published today of how suppressed research by Dr Arpad Pusztai linking genetically modified potatoes to health risks led an international group of 22 scientists to express their concern to the Guardian. The first is that if the safety of GM foods is a real issue — and it is — then the research on which it is based must be open and beyond contention. The results of studies on rats of the kind Dr Pusztai has conducted are notoriously difficult to transfer to humans. If they had been we would have cured cancer ages ago. But that's not the point. Animal studies are our first line of defence and if research fails that test there is no point in pursuing it for humans unless proved otherwise.

Second, we should be doubly on alert when an issue like this is complicated by the spectre of business, science and government forcing through an unwelcome and uninvited extension of the run of foods on the public when the question how dangerous they could be is unanswered. Proponents of GM foods would argue that it is a bit ironic that a public addicted to synthetic or junk foods should start worrying about tiny genetic alterations to staple crops that have been undergoing genetic alterations by random mutation, accident and natural selection for thousands of years. But, again, that's not the point. We can't rewrite the past, we can affect the future. And we simply don't know. The third lesson is to underline the necessity of labelling every food product that currently contains GM constituents in a clear way so

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Letters to the Editor

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13 Feb, 1999
The Express

THE NEWSPAPER FOR THE NEW MILLENNIUM

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WIN A MITSUBISHI AND DRIVE IT TONIGHT: PAGE 52

SHOPS IN FEAR OVER GM FOOD

EXCLUSIVE
BY NICK TOWNSEND AND JOHN INGHAM

AIN'S biggest retailers have already warned ministers that could lose billions of pounds if government continues to dither over genetically modified food. A clear and unequivocal statement saying that GM foods are safe, will face disaster as consumer confidence disappears.

with the biotech industry. The BRC, which represents 90 per cent of Britain's retailers, fears a substantial chunk of the £53 billion customers spend each year on food will

ued indecision could bankrupt up to 10,000 firms. The toughest warning came in a confidential letter from the deputy director-general of the BRC, Elizabeth Phillips, to


Sort out this chaos or we'll lose billions, top traders warn Blair in secret letter

statement on the safety of those GM foods and ingredients approved by Government." Scientists stoked up fears about the safety of GM crops yesterday by backing the findings of Professor Arpad Pusztai, who was sacked last year after revealing that rats fed GM potatoes became ill. Vyvyan Howard, a toxicologist from Liverpool University, said: "We found that his data is sound."

At the same time the *Times* called for

13 Feb 99
The Express

10



THE EXPRESS

We must give a lead over GM foods

THE Government is in serious trouble over genetically-modified food. The Cabinet minister in charge of GM food, Jack Cunningham, has been accused by English Nature of misleading Parliament over its call for a moratorium on the production of herbicide tolerant crops, and condemned by 20 leading international scientists for being "massively uninformed" about the threat to public health. The 20 scientists have backed the stifled findings of British scientist Dr Arpad Pusztai that rats which ate genetically-modified potatoes had suffered damage to their immune systems. Dr Pusztai was rubbished and then gagged by the publicly-funded Rowett Research Institute headed by the Government's favoured professor, Philip James, and the scientists are demanding his reinstatement.

And, from a surprising quarter, the supermarkets have added their voices to the growing chorus of discontent with the Government's do-nothing approach to GM food. The British Retail Consortium, which represents 90 per cent of the High Street including all the major supermarkets, has called on Agriculture Secretary Nick Brown to clarify the Government's position. The Federation of Small Businesses fears people are going to be forced out of business.

We have little sympathy for the supermarkets. The Express has led the way in questioning the safety of genetically-

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13 Feb, 99
The Express

THE EXPRESS, SATURDAY, FEBRUARY 13, 1999
EVEN AS TEAM OF EXPERTS BACK HIS FINDINGS, GOVERNMENT STOPS HIM TALKING

This scientist revealed the perils of GM food. Now he has been gagged for life

BY JOHN INGHAM AND LORNA DUCKWORTH

THE eminent scientist sacked for raising health fears about genetically modified foods is under a "lifelong" gagging order. The Express can reveal today. Professor Arpad Pusztai, whose shock findings were vindicated yesterday by 20 top scientists, is banned from speaking to the press without the permission of his former employers, the Government-funded Rowett Research Institute in Aberdeen.

The ban is being policed by one of Tony Blair's top food advisers, Rowett boss Professor Philip James, who is expected to head the proposed Food Standards Agency, even though Hungarian-born Professor Pusztai has been forced into early retirement. His wife is also subject to the order.

Details emerged as Mr Blair faced fears in the scientific community that biotech industry, Mr Blair's advisers are suspected of swallowing the industry line that Britain could be a world leader in lucrative GM crops.

Mr Blair yesterday declared that there was no justification for a moratorium on GM food. But top scientists have backed Professor Pusztai's research and demanded his reinstatement. Dr Vyvyan Howard, head of research and toxicology at Liverpool University, said: "We found that his

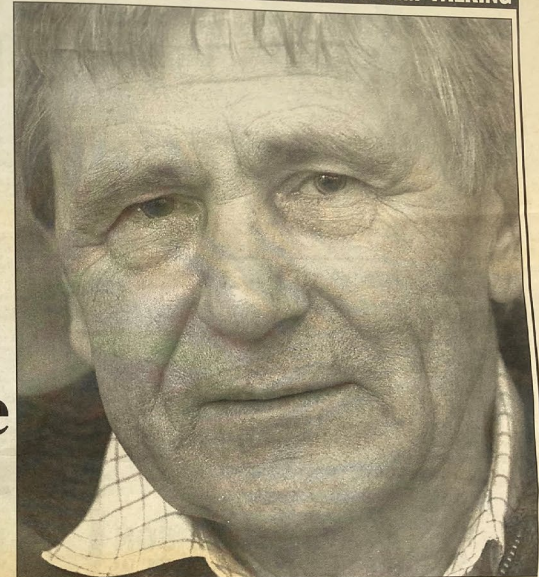


data is sound. We think it would pass peer review and be published. We are at a loss to explain why the Rowett Institute came to the conclusion it did."

They also savaged the Cabinet minister in charge of GM food, Dr Jack Cunningham, describing him as "massively uninformed" about the real dangers posed to public health.

The suppressed research suggested that GM food posed a threat to human immune systems. The scientists said that if the human immune system was damaged the number of people developing cancers could soar and deaths from illnesses such as influenza could rise "many many times".

They also criticised "the harshness" of the professor's treatment and the "impenetrable secrecy" surrounding it. Professor Pusztai, 68,



VINDICATED: GM food whistleblower Professor Pusztai outside his Aberdeen home yesterday

was forced to retire after revealing to The Express and World in Action that laboratory rats fed with GM potatoes had suffered damage to their immune systems and major organs. The institute claimed that he had been talking about the wrong potatoes.

But Dr Stanley Ewen, of Aberdeen University, has repeated the experiments and found similar conclusions. The biotech industry stresses that the potatoes are not in use anywhere.

At his Aberdeen home yesterday Professor Pusztai declined to discuss his vindication. He said: "My resignation has been shown on television. But I am not at liberty to talk about it now."

A friend said: "He is under a lifelong ban on talking to the press. He cannot talk without the permission of the Rowett." Instead all inquiries have to be directed to the man who sacked him, Professor James. Liberal

Democrat MP Norman Baker claimed last night that Professor Pusztai was facing Soviet-style controls.

He said: "It is outrageous for anyone to be subject to a gagging order. Professor Pusztai might have believed when he arrived from Hungary that he had left that sort of thing behind him."

MPs now want an inquiry by the Agriculture Select Committee into what political or commercial pressures were exerted to suppress research damaging to the food industry.

Mr Blair stopped in to the crisis by insisting there was no reason for a moratorium on GM foods. "There is no GM food that can be sold in this country without going through a very long regulatory process," he said.

"Let's proceed on the basis of genuine scientific analysis and inquiry, proceed with very great care and caution and not get the facts mixed up."



"I think this potato is perfectly safe to eat, but then my brain is getting smaller"

Chaos in store over lack of guidance on the shelves

FROM PAGE ONE

Tim Yeo hit out at Dr Cunningham's claim that the Government's wildlife advisers English Nature had not called for a moratorium on GM crops.

Mr Yeo intervened after an English Nature scientist said that the quo

markets fear a consumer boycott like that which hit the beef industry after the BSE crisis in March 1996. That cost £3.5 billion and an estimated 3,000 jobs.

A boycott of GM soya could decimate the ready-meals market. Some even predict the collapse of the entire processed food industry as shoppers turn to organic produce. Supermarkets stock GM foods

solely on Government assurances that they are safe. They argue that if the Government had ever implied they could harm consumers, shops would never have allowed the controversial products to go on sale in the first place.

The increasingly confused stance by ministers is now being viewed as a betrayal. Ann Grain said: "The public has lost confi-

dence in the Government as the ultimate guarantor of the food chain. First there was BSE, then the beef on the bone ban. This is yet another kick in the teeth."

Stephen Alambritis, of the Federation of Small Businesses, said: "It's another nail in the coffin of the independent food sector. Businesses could disappear because of Government inaction."

He estimated that further delay could cut

OPINION PAGE 10

13 Feb 99, Guardian Letters pagedate

...national landscape.
mediate impact is political. The
execution of President Clinton

Besides the Republicans, there are other
losers. The president may have retained his
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Letters to the Editor

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THERE must be a full and independent inquiry into the circumstances of the unfair removal of Dr Arpad Pusztai from the Rowett Institute (Food scandal exposed, February 12). We need to know why the institute decided to force out and gag such an eminent scientist for speaking out about the health risks of genetically modified foods.

It has been widely rumoured at the institute and in parliamentary circles that political pressure at the highest levels was brought to bear on the institute. The inquiry must ask what contacts, if any, there were between ministers or their officials and the senior management at the institute prior to Dr Pusztai's removal.

It is utterly unacceptable for politicians to seek to silence free scientific debate. If this has happened, those responsible must be exposed. **Charles Secrett**, Director, Friends of the Earth.

I WISH to introduce a note of cool reason into the affair of Dr Pusztai and the hot potato.

Although I write as an individual, I represent the Nutrition Society on the governing body of the Rowett Research Institute. Thus I know the plot in some detail. I am also chairman of the newly established Food Ethics Council. It follows that I believe absolutely that all genetically engineered foods should be ruthlessly screened for evidence of any harm to man, animals or the environment.

Dr Pusztai and his colleagues have been studying the effects of natural and genetically engineered plant lectins on the growth and health of rats. Most nutritionists will recognise lectins as anti-nutrient substances which damage the gut and impair digestion. These lectins occur naturally in high concentrations in some tropical seeds and beans where they act to protect the plant against pests and diseases.

What Dr Pusztai and his colleagues did was take

genetically engineer them into potatoes, raw, to growing rats. The growth of the rats was stunted (allegedly), their gut was damaged and their immune system compromised. Of course they were, this is what lectins do. African women have known of these effects for thousands of years. They do not panic. They cook their beans.

All this experiment has demonstrated is that you can genetically engineer lectin into a potato and it will continue to act like a lectin. What this experiment is not, is controversial. So far as it goes it is entirely predictable. **Prof John Webster**, University of Bristol.

SCIENTISTS must have the professional independence to be able to present their findings without fear of dismissal. Mrs Thatcher removed the protection of academic tenure, which did not apply to all scientists but made it difficult for many of them to be sacked just because their results might offend a major financial backer.

If this government has any intention of protecting the public interest against the financial priorities of food and agricultural industries, now is the time to show it by restoring some form of protection for scientists in positions such as that of Dr Pusztai. **Dr Roger Bayston**, Woodthorpe, Nottingham.

I WAS shocked to learn that Dr Pusztai was forced to retire. Surely he should have been fired — not for disclosing the effects on the development of the kidney, thymus, spleen and gut of the rats fed on GM potatoes, but for failing to disclose the effect on rats' brain size because he judged that the political repercussions would be too severe. **Alan Heslington**, Whitley Bay, Tyne and Wear.

WHILE we commend your call for a moratorium on GM foods and crops, Action Aid seriously questions your

ing "may feed the world". The single most important cause of world hunger is poverty. In 1994, for example, world food production could have fed 6.4 billion people — yet more than 1 billion did not have enough to eat. It is inequitable distribution of food that keeps millions hungry: the result of landlessness, unemployment, debt repayments, and poverty.

We fear that the multinational biotechnology industry's push to get its patented GM crops into the developing world will worsen this situation. Poor people may end up paying for seeds, where previously they had saved them to reuse year after year. **Isabel McCrea**, Action Aid.

MUCH of the opposition to modified food is based on the fallacy that what is natural is healthy and safe while man-made products are dangerous. Many plants are poisonous, some have harmful diseases and most drugs of addiction (cannabis, opium, cocaine and tobacco) are natural plant products. Nature has created and destroyed many and may well do the same to man unless science can intervene. **John Sutherland**, Croydon, Surrey.

SHEILA McKechnie (Food S fright, February 10) simply jumped on the fashionable industry-bashing bandwagon. Food and drink is the largest manufacturing industry in the UK. It employs 500,000 people, all dedicated to producing safe, wholesome, tasty food at affordable prices.

The GM issue is not as black and white as it is painted. The UK imports less than 1 per cent of the US soya harvest. However, UK manufacturers are committed to providing information for consumers.

The industry spends millions of pounds on consumer surveys, and our customers vote with their purses every week at the checkout. If people don't want our products, we find out the hard way. **Martin Paterson**



No room for h

IT HAS been estimated that the Millennium Dome will be visited by 70,000 people on peak days. Assuming it is going to be as good as the admission price suggests are likely to be there for several hours. It is therefore unreasonable to estimate during the busiest part of such days there could be people inside at any one

Junk mail fac

YOUR correspondent's letters, February 10) as "How much longer before junk faxes are criminalised?" The answer is months and 18 days. From May 1 it will be illegal to send unsolicited direct marketing faxes to a domestic line if the subscriber has given permission. It will also be illegal (in theory) to stop unwanted sales phoning that you don't want. Any salesperson who you without checking the number will be breaking the law. **Paul Ticher**, Leicester.

ALL my junk mail comes through the letterbox accompanied by prepaid envelopes are most welcome. With the addition of a charge purchased from a charity institution, I rarely need to purchase envelopes.

Guardian – 13 Feb 99

Stop the crops

Food scandal

George Monbiot



THE geneticist Dr Arpad Pusztai is a dangerous man. He has released into the environment a virulent self-replicating organism, which is already running riot across Britain. It's called the truth. Yesterday, the Government moved rapidly to round

it up and shove it back into the flask from which it spilt.

Jack Cunningham, the government's pest control officer, told the Today programme that the public had nothing to fear from Dr Pusztai's revelation that rats fed with genetically modified potatoes suffered damage to their immune systems and internal organs. Human health, he claimed, was the Government's overwhelming priority. Genetic engineering had only been deployed experimentally in Britain so far. Europe was introducing rigorous new labelling requirements for engineered foods. And no, English Nature had *not* called for a moratorium. The nation could breathe a sigh of relief. The verminous truth was on the retreat.

But, like all dangerous pathogens, it has a nasty habit of cropping up again, just when you thought it was

under control. It has even managed to infect English Nature's website. The agency, the website says, will "continue to recommend a moratorium on commercial releases". In fact, it's beginning to look as if the only place the bug has not re-infected is the well-guarded inner sanctum of the Government.

Dr Cunningham has used subtle tactics to shut it out. Yes, genetically engineered crops have only been deployed experimentally: in British fields. But they have been deployed wholesale in British food. Most processed food now contains genetically modified products.

Yes, there are new labelling requirements for engineered foods. But no, they are not rigorous. Thanks to lobbying by the British government, European regulations are now so weak as to be almost meaning-

less. The British delegation insisted that there need be no warning about the presence of food additives, refined and flavourings made of engineered plants.

And no, Dr Cunningham, the British government has not put human health of other priorities. Two weeks ago, it announced that it was giving £13 million to the biotechnology industry to help improve its profile and win public confidence. Last summer, both Jack Cunningham and Jeff Rooker, the deputy agriculture minister, held meetings with Monsanto, the world's most aggressive biotech company. The meetings were arranged by Monsanto's public relations consultants, Bell Pottinger. In October, Bell Pottinger, joined by Cathy McGlynn, previously Jack Cunningham's special adviser,

Monsanto's lobbying

George Monbiot



THE geneticist Dr Arpad Pusztai is a dangerous man. He has released into the environment a virulent self-replicating organism, which is already running riot across Britain. It's called the truth. Yesterday, the Government moved rapidly to round

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14 Feb, 99
Observer

January 1999 £1

The Observer

WIN A WEEKEND IN NEW YORK IN ESCAPE 

 What's wrong with our kids?
NICCI GERRARD, REVIEW FRONT

 FREE CINEMA TICKETS
SEE THE OSCAR-NOMINATED THE THIN RED LINE, IN SCREEN

 Sex and women in the Nineties
KATHRYN FLETT, THIS SECTION

Bomb alert as Irish terrorists slip MI5 net

Gang vanishes after selling car in London

by Henry McDonald and Yvonne Ridley

AN ACTIVE terrorist unit which is planning a 'spectacular' bombing campaign in mainland Britain has disappeared from under the noses of MI5 agents.

The security services mounted a round-the-clock surveillance operation on two cells of the Continuity IRA after intelligence reports indicated the rogue terror group was going to bomb a high profile target.

But it has now emerged that one of the cells has slipped the net, forcing heightened security

ing the suspects in London. The terrorists' car had been tagged in order that their movements could be monitored by the intelligence services from a safe distance.

However, the car was sold at an auction last week. When the surveillance team realised what had happened and returned to the unit's base in North London, its four operators, quartermaster, controller and driver had vanished.

Republican sources say they believe the CIRA will attempt to launch an attack in Britain close to the 10 March deadline for devolution of political powers to the new Northern Ireland assembly.

ship have sold out basic republican principles.

MI5 sources fear a terror campaign is 'imminent'. Yesterday there was evidence of heightened security around Westminster, government departments and military bases.

'Whoever was watching Continuity in London have messed things up, at least for now. They had them under 24-hour surveillance until last week and then they lost them,' said an RUC source yesterday.

Losing track of republican terror cells in Britain has led to disastrous consequences over the past 30 years.

In 1983 the British police IRA is the only republican terror group not on ceasefire. So far it has been unsuccessful in mounting any bombing attacks in Britain.

Since the first Provisional IRA ceasefire in August 1994 it has been responsible for a series of attacks on commercial and security targets in Northern Ireland.

These include bombings of Protestant-owned hotels in County Fermanagh and gun attacks on RUC stations in County Armagh and west Belfast and an army base in Derry. However no one has been killed in any CIRA attack over the past four years.

EXCLUSIVE: STEPHEN LAWRENCE'S MOTHER HITS OUT



Shops warning ordered on gene foods

by Patrick Wintour, Antony Barnett and Robin McKie

MANDATORY labelling of all genetically modified food sold in shops, takeaways and restaurants is to be introduced next month in an attempt to quell growing fear of the 'Frankenstein foods'.

Firms breaking regulations — to be policed by local authorities and government scientists — will face tough fines.

'We are going to be ruthless in enforcing this,' Food Minister Jeff Rooker told *The Observer* yesterday.

But attempts to clean up the reputation of genetically modified (GM) foods are likely to be undermined this week.

Monsanto, the American firm spearheading their production, is to admit illegally releasing modified oil-seed rape into the environment.

Campaigners fear such

14 Feb, 99
Observer

“genetic
food storm”

The Observer 14 February 1999

Focus Genetic food storm

public won't swallow

Buyers look to the labels for reassurance

FIONA SNOWBALL and Jackie O'Connell have just spent more than £200 on their weekly family shops at Sainsbury — with six kids between them there are plenty of biscuits, cakes and cereals packed into two large trolleys.

This weekend, though, they have read about 'Frankenstein foods' and for the first time paid particular attention to the tiny corner of the fruit and vegetable aisles reserved for organic produce.

'I am scared about what I'm giving the kids,' says Fiona. 'Their Nan says she ate everything in her day and she's all right, but they weren't injecting food with stuff then, were they? I've bought organic stuff a bit before but today I've bought everything they've got in there. It's a bit battered though and they've hardly got anything anyway.'

Her friend Jackie picks out a sauce packet. 'They could be poisoning us,' she says. 'They had to start labelling the food and make it more simple so we can understand. We don't know what all these letters mean. They should give us something at the beginning so we can check it.'

They the supermarkets should be more on information about food instead of advertising that's the point of giving this organic vegetables if just feeding them had...

ready-made meals to expand what is regarded as a finite market for groceries. These curries, pastas and noodle dishes are exactly the sort of products most likely to contain modified maize or soya.

At Sainsbury, the beef risotto, chow mein and chicken Buffalo wings had labels declaring they contain GM ingredients. Its own information sheet said that as few as 40 products contain genetically modified soya.

At Tesco many of the ready-made meals, including vegetable lasagne and lamb rogan josh, contained GM maize or soya — although the lasagne costing £1.25 was labelled GM, but the otherwise identical £2.29 bigger meal was not, implying that it was GM-free.

Although some, like Safeway, have found relatively little resistance to GM foods, such as tomato paste, they are preparing this weekend for a backlash following the publicity.

Only Iceland has announced it will ban own-brand GM ingredients in its own-brand food as from 1 May. The rest are at different stages of labelling and have different policy on reducing the range of produce containing modified ingredients.

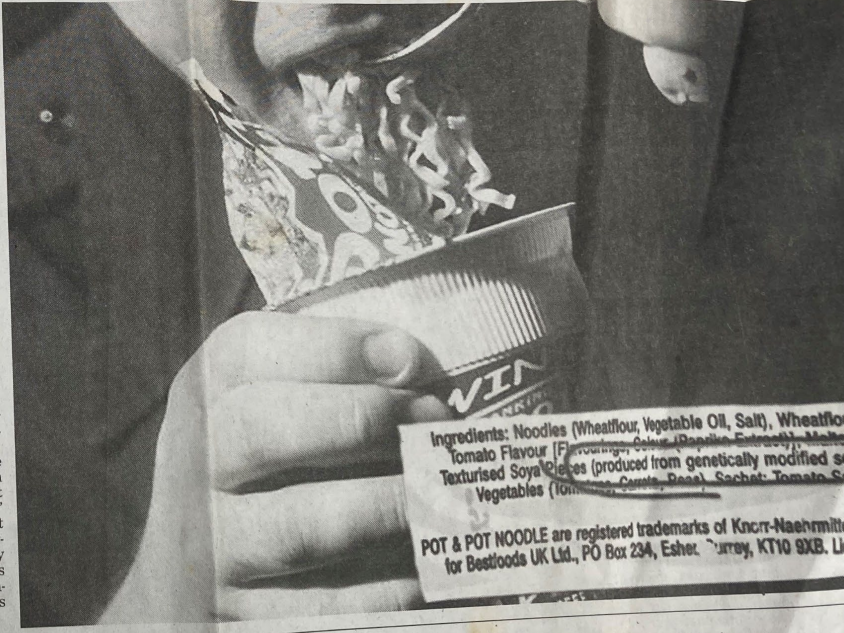
A Sainsbury spokesman said the supermarket identified 1,500 of its 10,000 own-brand products that contained

its own-brand medicines as a thickening agent, adding to the already enormous range of products that contain GM elements.

Some local authorities such as Leicester City Council have decided not to wait for the scientists and politicians to slug it out. They have taken genetically modified food off school menus.

The county's secretary and national vice-president of the Parent Teacher Association, Peter Ripon, accused the council of panicking. 'We have been eating genetically modified food of one sort or another for decades,' explained the former farmer.

Some shoppers outside Sainsbury's in north London yesterday agreed. 'I haven't got a clue what it's all about,' said Venice Kelly. 'I thought it was something to do with organic food. I don't see any reason to worry. At my age it's too late to worry about damage. I can't change the habits of a lifetime.'



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14 Feb 99
Independent
on Sunday - GM
foods campaign

The seeds of destruction



BY MARIE WOOLF
& GEOFFREY LEAN

Work is under way to target Third World farmers with a new form of genetically modified seed, nicknamed the Verminator because it contains a fat gene from a rat.

Agro-chemical giants have been patenting dozens of genetically engineered "terminator" seeds which are programmed to kill their own embryos so they cannot produce next year's crop. But the Verminator is the most dramatic example of the new science of genetic modification.

The patents have been condemned by scientists and Third World charities who say the technology will "enslave" the world's poorest farmers to businesses such as Monsanto.

Over 1.4 billion subsistence farmers and their families in the Third World rely on keeping back seeds from each crop to grow next year's harvest, ensuring that they can breed their own plants. Charities, which have been working to make poor communities self-sufficient, say that the new GM seeds could herald the demise of sustainable development.

"The whole concept of this invention is based around making the poor pay for seeds instead of saving their own. It risks damaging the seed base poor people depend on," said Isabel McCrea, of Action Aid.

Zeneca, a leading biotechnology spin-off of ICI, is working on the Verminator, a killer gene which can be switched on



Farmers in the Third World fear that GM crops will destroy their traditional methods of production

JENNY MATTHEWS

the brown adipose tissue of *rat-ratus*". Once inserted into the plant it acts as a killer of pollen cells by making them starve themselves to death. The energy function of pollen-producing cells is blocked.

"Terminator technology is dangerous because it puts an end to life," said Michael Antoniou, a molecular geneticist. "If you stop the energy factories in the cell from working it does not have any energy to keep it alive."

The controversial new terminator technology will be debated this week by politicians, ecologists and scientists at a 1999 convention on biological

controls on introducing GM crops - including suicide seeds - into the developing world.

"By peddling suicide seeds the biotechnology multinationals will lock the world's poorest farmers into a new form of genetic serfdom," said Emma Must, campaigns officer of the World Development Movement. "Currently 80 per cent of crops grown in developing countries are grown using farm-saved seeds. Being unable to save seeds from sterile crops could mean the difference between surviving or going under."

It may be years before the terminator seeds are being planted commercially, but al-

ready with the intention of "burning" the company out of their country. Fields of GM cotton have been set alight in Karnataka, and a government minister has expressed concern.

Professor N Najundaswamy, president of the 10 million-strong Karnataka farmers' association, says: "This is a terminator of food security. It is a damaging technology because pollination pollution can render indigenous varieties sterile. This gene will remove all characteristics of germination from our seeds."

At the end of last year Professor Najundaswamy and 200 of his farmers descended on

the fields of cotton with the intention of "burning" the company out of their country. Fields of GM cotton have been set alight in Karnataka, and a government minister has expressed concern.

Meanwhile, Babagouda Patil, India's minister for rural development, has warned that "the terminator gene will pose a serious threat to Indian agriculture". And the world's largest agricultural research institution has banned terminator technology. The Consultative Group on International Agricultural Research, which co-ordinates the research centres that spawned the Green Revolution, has announced it

WHEN Monsanto decided to fight growing resistance to its genetically modified foods, it adopted the advertising slogan "Food - Health - Hope". Its message to stropic European consumers was that our selfish concerns were holding back the means of ending world hunger. It is a seductive message. Those of us who campaign for more wholesome, safer food for ourselves are hardly likely to condemn others to continuing starvation. So could it be that what we consider bad for "us" is good for "them"?

The purported benefits of genetically modified crops include higher yields, resistance to pesticides and pests and delayed spoilage times - a combination of factors that would surely meet the needs of the hungry. This presupposes that shortage of food is the problem. It is not. More than enough food is already produced.

People starve because they are too poor to buy food, because they are denied access to land to grow it, or because they are displaced by civil unrest and war. Genetically modified crops are irrelevant where the structural issues of hunger are inequitable access to and distribution of food. Indeed, there is no evidence that current genetic engineering of crops is directed at solving Third World hunger. The two main crops being grown commercially in the US are soy beans and maize. The bulk of both crops is used as animal feed - providing meat for the well fed three worldwide, two out of three people have a primarily vegetarian diet. Claims of altruism may be misplaced, but this

COMMENT

organisms) are disinterested in the developing world.

Far from it. There are huge financial interests at stake, not least in supplying Western consumer markets. This linkage has profound implications for developing countries, their farmers and environment. Without any significant direct benefit to the host population, the growing of GM crops in developing countries will present social and economic burdens in addition to the environmental threat.

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Superficially the herbicide-resistant crop looks a better prospect for the developing world. Paradoxically it reinforces farmers' dependence on chemicals and undermines efforts to use more sustainable forms of agriculture. The same risks - of uncontrollable releases of GMOs, of creating superweeds or "natural" crop failures - are faced by developing countries.

These issues will be on the international agenda in Colombia

Monsanto's claim that GM crops will end Third World hunger is spurious, says Joan Ruddock

intended to regulate movement between countries of GMOs and their products. Public opinion is forcing European governments to act on GMOs at home, but even more critical is the stance we take internationally.

An effective protocol must give states the right to apply the precautionary principle when deciding whether or not to allow the import, introduction, transfer, handling or use of GMOs or their products within their territory. Similarly all states should be able to take full account of socio-economic impact within their territory when taking decisions on GMOs and their products.

These rights might seem obvious but they are directly opposed by the biotech industries and without them countries attempting to ban GMOs fall foul of free trade laws.

Also at issue in Colombia is the question of liability. No international legal framework exists to deal with these new technologies, and developing countries in particular are calling for a fair liability and compensation system.

Fears about the effect of GMOs on human health are reaching fever pitch. The re-evaluation of Arpad Pusztai's work on feeding GM potatoes to rats, will give even greater impetus to the campaign to freeze commercial production of GM crops for both human and animal consumption. It would be appalling if we who have the best science, regulatory regimes and resources were to take steps to protect ourselves but fail to hear the concerns of developing countries.

The writer is a botanist and Labour MP for Lewisham, Deptford

OUR READERS WRITE

Give us the facts and we'll decide



GM research on potatoes PETER MENZEL/SCIENCE PHOTO LIBRARY

KEEP UP THE PRESSURE



Are you worried about GM foods and think they should be stopped? Send us your letters and we will pass on your protests to Cabinet enforcer Jack Cunningham. Please also send us details of any foodstuffs which you have discovered contain GM products. Write to: GM Campaign, Independent on Sunday, 1 Canada Square, Canary Wharf, London, E14 5DL.

14 Feb 99 – Independent on Sunday – letters page

AS A consumer, given that GM foodstuffs are already on the market, I would press for easy identification. Few shoppers have the time or the inclination to read avidly the small print on the back of tins. There are alternatives:

The labels on the containers of GM foods could be coloured differently; or they could show a prominent "GM" sign on the front of the label; or (and in my view preferably) they could be stacked separately on shelves, which are clearly marked "GM Foodstuffs".

This would give consumers a sporting chance of buying ethically, if that is what they want. It would also give retailers reasonably accurate information about their customers' preferences and priorities. If the major supermarkets could be persuaded by such information that their customers preferred natural, unmodified goods then we would be a long way towards winning the battle.

LESLEY BROWNE
London, SW1

ALTHOUGH NOT strictly vegetarian, I eat a lot of "vegetarian" food. I will not knowingly buy food which has been genetically modified. In reality, this has meant buying nothing containing soya which has not been clearly marked as being free from GM.

I do not wish to eat GM foods, and am particularly concerned about such products being fed to animals in the food chain, and even more, about the effects of GM crops upon the environment. Assurances of safety are patently ridiculous – effects cannot possibly be predicted.

P M NOBLE
London E11

I AM rarely moved to campaign. However, on GM food I am extremely concerned. I am able to protect my family from beef and beef produce because it is labelled. I demand the choice to be able to protect my family from GM food.

with the way the Government is putting the interests and wishes of these companies above those of the British people.

We are concerned about the inherent unpredictability of GM crops with possible danger to both humans and animals; the spread of unwanted and possibly harmful genes into weeds, wild species and organic food; the impossibility of enforcing and policing the labelling of foods containing GM ingredients; and the effect on developing nations, where there are already food shortages through Western greed.

DR M ANTONIOU and J ANTONIOU
Edgware, Middlesex

GM FOODS are the thin end of a very dangerous wedge. Nature is a beautifully organised and complex system that can never be fully understood or predicted. Like similar complex systems such as the weather or the behaviour of the economy it is beyond prediction.

Unfortunately, this is not another topical issue that will eventually fade from public concern. It is a battle which must be continuously fought, for this technology isn't going to go away, no matter how much we wish it would.

KEITH RICHARDSON
East Berkshire Green Party
Slough, Berks

THIS PROCESS should be discontinued immediately and completely banned until further testing for safety of the consumer is carried out and until confidence can be expressed by all informed and disinterested bodies that the ecology of our planet are fully understood, and that all anticipatable consequences have been identified and deemed acceptable.

M J RUSSELL
Crief, Perthshire

THE BELIEF that Genetic Modification can provide a solution to the problem of world hunger is a fallacy. In the hands of the few, technology will concentrate the wealth, and the gene pool, in the hands of the few. Technology will not be able to solve the problem of world hunger. Genetic modification

paper seems keen to take a lead in this.

A much more positive reaction from your paper would be an in-depth review of the whole area of genetic modification, not merely the opinions of some badly informed people. Though the science of creating transgenic plants is new, the precision and scope of the science is increasing quickly, with the elimination of some of the previously cited problems, such as antibiotic resistance genes.

I am not advocating an all-out acceptance of genetic modification; however, in many cases the benefits far outweigh the risks involved. Instead of "Stop GM Foods", stop misrepresenting the scientific facts.

DR STEVE MILLAM
Dundee

I STRONGLY feel that GM food should be stopped. Will we have no choice in how we live our lives? Will the big food corporations run the world?

SANDRA BROWN
Consett, Co Durham

I FARM 450 acres of mediocre arable land in South Yorkshire. I wholeheartedly agree with you that GM crops should be banned, stopped and thrown out. I farm in a conventional system using agrochemicals as sparingly as possible. There is no way I could be described as a vegetarian yoghurt knitter but I do object to being a conduit for taxpayers' money being delivered to Monsanto to develop systems that are dangerous, untested and unwanted. Think of rabbits in Australia, grey squirrels in Britain and the numerous other incidents of humans tampering with nature. Let these be a lesson to all.

T G ELMHIRST
Barnsley, S Yorks

GENETIC ENGINEERING could be extremely dangerous, and all shops and supermarkets ought to indicate which foods contain genetically modified ingredients. This would enable customers who do not agree with genetic engineering to avoid them.

FRANCES J JONES
Exeter

sake a total ban is the only acceptable outcome of this debate. A freeze of three years is not long enough to determine what adverse effects GM foods will have on us. Organic farming is the only way forward.

M M H HOGESTUN
Radnage, Bucks

I FIND it interesting that companies like Monsanto are acting like farmers and treating consumers like domesticated animals. We're to be fed according to their requirements, and they will harvest the profits.

Give us the names of the products Monsanto and the other GM companies produce. We may not be able to stop the introduction of GM foods, but we could initiate a consumer boycott of all their other products so they learn not to hold consumers in such contempt.

K M MURPHY
Sittingbourne, Kent

I DO not wish to see the end of composting because of rot-proof tomatoes.

MICHAEL R MARTIN
Weymouth, Dorset

MY FEELINGS of abhorrence and disgust with both the Government and the food industry, that they should try to inflict their decisions without a forum after the BSE crisis, cannot be overstated. Unless food is properly labelled, the Government and industry will be force feeding the population on food that they may have very great concerns about. Food must remain a matter of choice determined by knowledge.

T WILCOX
London NW10

FIRSTLY, I fail to see how your political correspondent can describe a written Parliamentary Answer published in *Hansard* of 3 February, col. 691/2, as a "confidential briefing note from civil servants seen by *The Independent*". Secondly, at no time has the Government given its approval to Monsanto cotton for animal feed. Thirdly, MAFF has not yet completed the setting up of the Advisory Committee on Animal Feedstuffs. The Chairman will

GM TEST CASE

Monsanto pleads guilty to flouting rules on crops

MONSANTO, the controversial biotech giant at the heart of the growing row over "Frankenstein foods", will this week plead guilty to criminal charges of flouting rules over the planting of genetically modified (GM) crops.

In the first case of its kind brought in Britain the company will admit breaking the regulations at a test site for its crops in Lincolnshire. The development will be a huge embarrassment for the company, which has been aggressively promoting GM foods.

It could not have come at a worse time for the US multinational with the country in an uproar over the issue, and the *Independent on Sunday's* campaign attracting massive political and public support. Today Baroness Young, chairman of English Nature – the Government's official wildlife watchdog – calls on page 30 for tougher conditions for such test sites and a delay on commercial planting until thorough research has been carried out.

The case, which will be heard at Caistor Magistrates' Court on Wednesday, has been brought by the official Health and Safety Executive after a routine inspection of the site, at nearby Rothwell, last June revealed that control measures designed to prevent GM crops cross-pollinating with nearby plants had been "partially removed". Environmentalists fear that "escaped" genes from the crops may create superweeds, and that once out they could never be recaptured.

Monsanto (slogan "Food – Health – Hope") and another firm, Perrysfields Holdings, were supposed to leave a six-metre wide "pollen barrier"

found that the barrier was only two metres wide on one side of the test site.

The GM rape had already flowered by the time the inspection took place, and government advisers were informed that "pollination with the surrounding crop may already have taken place". The entire GM crop and all seed harvested within 50 metres of the site for at least two years.

Both firms face a maximum fine of £20,000 in the magistrates' court for breaching the Environmental Protection Act 1990 – and an unlimited one if the case is referred to the Crown Court. David Hill, a media consultant to Monsanto, confirmed late last week that the company will be pleading guilty. "It will be a very short court case," he said.

He added that, as things stood, there was little the company could do to stop a similar breach happening again. Monsanto had no direct control of the trials, which were done by third-party growers appointed by the Ministry of Agriculture, Fisheries and Foods (MAFF). The company says it is working closely with MAFF and the Department of the Environment, Transport and the Regions (DETR) to produce a standard set of operating procedures to avoid further breaches.

Both firms have been troubled before for a similar reason although no case was brought. Just over a year ago the DETR was in trouble because of a "isolation breach" at a test site for GM rape near Broadwater, Cotswolds. The crop

15 Feb, 99

Guardian

Sport

Cole ends the Fulham dream

A singular love triangle
Simon Callow

Results, reports, analysis



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The Guardian NEWS

Pressure mounts on Cunningham with calls to

GM food row splits Labour

Lucy Ward
Political Correspondent

THE government is facing pressure from within its own ranks to establish an independent ethics commission on genetically modified food amid growing evidence of deep divisions among ministers over the safety of GM products.

Proposals are being floated for a powerful new grouping along the lines of the Warnock Committee on embryology whose recommendations on cloning and other embryo research formed the basis of the 1990 Human Fertilisation and Embryology Act. A GM food commission could have powers to scrutinise and potentially filter out proposed experiments on GM crops, could make policy recommendations and would be designed to boost flagging public confidence that the Government is listening to all the arguments on the controversial subject.

Revelations that the Government offered genetic engineering companies, including Monsanto, millions of pounds in inducements to expand their UK operations, and that firms involved in GM food have met government officials or ministers 81 times since Labour was elected have fuelled Opposition claims, echoed by some Labour backbenchers, that the Govern-



Michael Meacher: won support from backbenchers

Sainsbury to be moved from his position and replaced with an "independent" minister, arguing that, though the minister's shares are held in a blind trust, his large holding in the family business was widely known.

The ethics commission scheme, floated by environment minister Michael Meacher, will highlight the widening rifts within the Government over GM food safety. Mr Meacher won backing from concerned Labour backbenchers at the weekend after acknowledging that the Government would have to "think again" over GM foods and possibly extend a moratorium on the commercial planting of some GM crops. But Cabinet "enforcer" Jack Cunningham insisted no halt would be

aged the vital organs of rats, he said: "Because there's been some dispute about some... experiments in the laboratory, that is no reason to suggest that we should bring the whole of our bioscience and GM technology and research grinding to a halt."

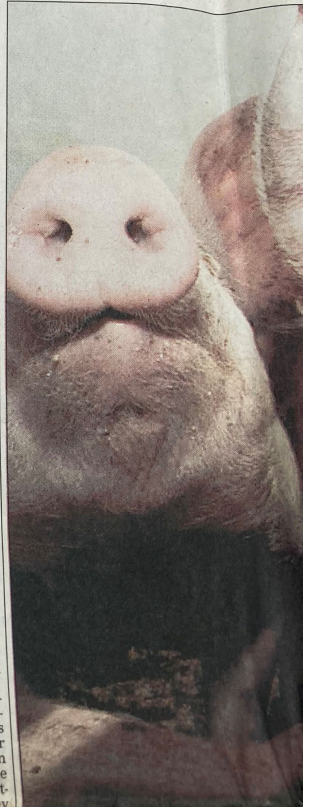
However, his statements provoked fierce challenges from political opponents. The Liberal Democrat leader, Paddy Ashdown, said the Government had "miscalculated" the public attitude to GM foods.

Dr Cunningham insisted to BBC TV: "David Sainsbury is a man of complete integrity. He has no financial interest in these or other interests while he's serving in the Government. He's a very valuable member of the ministerial team."

Shadow agriculture minister Tim Yeo pointed to revelations that David Hill, Labour's chief spin doctor until a year ago, now advises Monsanto on media strategy through the public relations firm Bell Pottinger, together with Stanley Greenberg, a business partner of Labour's polling guru Philip Gould.

Calls for a moratorium are also coming from Labour's backbenchers. Alan Simpson, of the leftwing Campaign Group, is canvassing fellow MPs' support for the move.

Dr Cunningham's assurances that only three GM food products were sold in the UK were also challenged by the pressure group Genewatch,



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Pig cell t

Secrecy row over to experiment or

16 Feb, 99

Guardian

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Cancel world debt, page 16

Education with all the best jobs

The Guardian

NEWSPAPER OF THE YEAR

Revealed: Lord Sainsbury's interest in key gene patent

UK Patent Application GB 2 199

The original patent application made in 1987

Laurie Flynn and Michael Sean Gillard

Lord Sainsbury of Turville, the billionaire supermarket tycoon and science minister, owned for 11 years the company which controls the worldwide patent rights over a key gene currently used in the genetic modification process, the Guardian can reveal. The holding was switched into a blind trust last July, three days after he joined the Government.

The same gene is at the centre of the food scandal revealed last week in the Guardian which has split the Government, led to calls for a moratorium on the release of genetically modified foods and provoked the resignation of the science minister.

The look at the whole issue. The controversy is focused on the suspension last year of Dr Arpad Pusztai, an eminent scientist, whose publicly funded research was terminated after he spoke out about the potential risk to human health from GM foods.

Dr Pusztai's suppressed preliminary research - funded by a £1.6 million Scottish Office grant - showed that rats fed GM potatoes suffered damage to their vital organs and a weakened immune system. He and his colleagues believe the harm, including shrinkage of the stomach thickening of the stomach wall, could have been caused by the cauliflower mosaic virus promoter, a conclusion the multi-billion pound GM industry is the cauliflower mosaic promoter which is owned by Lord Sainsbury's private company. The promoter is vital because it acts as an "on/off switch" to boost the growth of the GM product.

Lord Sainsbury's patented gene is used in most GM foods available worldwide and in the UK such as soya - which is found in some 60 per cent of processed foodstuffs.

The revelation comes in a week when the Government backed GM food safety despite mounting public concern and ignored opposition demands for Lord Sainsbury's resignation.

As Science Minister at the Department for Trade and Industry and a member of the cabinet biotechnology committee, Lord Sainsbury has interest with "his" DTI support for GM foods and business links to biotechnology companies.

His appointment to the cabinet committee was made soon after Dr Pusztai was suspended last August.

The Guardian can reveal that this patent is owned by Diatech Ltd, a London-based company wholly owned by Lord Sainsbury according to the 1987 annual return. Diatech director, Christopher Stone, said that the junior minister "indirectly owns" Diatech through his blind trust which was set up when he was appointed a DTI minister last July. He added: "It is important that Lord Sainsbury does not know what Diatech is doing. The company provides services to Lord Sainsbury and his immediate family and some of Diatech's work includes plant biotechnology."

Diatech applied for the world patent in June 1987, well before he was ennobled by Tony Blair and while he was finance director of Sainsbury plc. The application was granted in 1990 and has been held by his London-based private company since then. It has only recently transferred into the blind trust last July at the same time as he entered the Government.

Lord Sainsbury did not declare his shareholding in Diatech Ltd in the December 1997 Register of Lords' Interests, before he was made a minister. But he did declare that he was a "holder of licensed plant biotechnology patent". A DTI spokesman for Lord Sainsbury told the Guardian he would not comment beyond the information contained in a statement put out last July when he was appointed Science Minister.

The spokesman would not answer any questions about the nature of the patent other than to say it was not an unnamed blind trust when he became a minister. The July 1998 press release goes into detail about a substantial shareholding in Sainsbury plc, but does not mention Lord Sainsbury's lucrative private ownership of the patent for cauliflower mosaic promoter.

His blind trust was set up in order to avoid any "actual or potential conflict of interests" with his ministerial responsibilities. The junior minister is also the beneficiary of offshore trusts in the British Virgin Islands, a well-known tax haven.

turn to page 2, column 3

The man who spurned rock and roll for science, page 8; Leader comment and Letters, page 17



Lord Sainsbury: his patented gene is used in most GM food worldwide and in the UK in soya, found in 60 per cent of processed foodstuffs

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turn to page 2, column 3

The man who spurned rock and roll for science, page 8; Leader comment and Letters, page 17

Austin
IT'S THE SAINSBURYS THEY'RE WAITING FOR TO SUMMER.

The Prime Minister is of the view that this product is safe. He has no opinion at all about saving that

Tony Blair, on GM foods

U.S. superiority charges

18 Feb, 99

Daily Mail



19 Feb, 99
Guardian

Kevin Keegan:
My plans for England
Sport 99



Nora Ephron:
My life, the movie
Friday Review



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NEWSPAPER OF THE YEAR

The Guardian

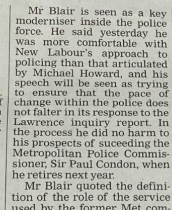
Police chief: this can't go on

Entire culture 'is in need of overhaul'

Alan Travis
Home Affairs Editor

A fundamental overhaul of the entire working culture of the police is needed in response to next week's expected damning Stephen Lawrence inquiry report, one of Britain's most senior police officers said yesterday.

restored in the police service. He indicated that the scale of reform of the police needed in the wake of the Lawrence inquiry had not been seen for more than 25 years.



'Even at its best, police culture is not fitted to handle the disparate and shifting requirements of modern society'

Ian Blair (left)



argued there was no better image for the current state of the police. "The anvil is a very striking image. It is solid, old-fashioned, if not quite obsolescent, and is something which things are done to but which does not change as a

result. There could scarcely be a better simile for the culture of the police. At its best, brave, sometimes heartstopingly brave - capable, imperturbable, offering equality of treatment before the law, a safe haven. We all know of

examples of police culture at its worst, but even at its best it is not fitted to handle the demands of modern society. Modernisation had to include the fundamental internal culture of the police which was mirrored in the way they treated those who came into contact with them. The failure of the police to change was on the scale of a sleeping industrial giant that had not noticed seismic changes in the market place - similar in scale to IBM refusing to accept the onset of personal computers, he said.

ethos. Only just now, in my force, are gay and lesbian officers feeling confident enough to come out. A recent forum for ethnic minority officers in Surrey revealed little about provisions or abuse inside the force but quite a lot about an unspoken requirement to adopt to the mores of a white culture."

Taking this on would be very difficult, as the internal culture had grown up "because of the dangers the police faced together", but it had to be changed and that included ways of "encouraging diversity in our staff".

Mr Blair's intervention came as the Police Complaints Authority published a report into deaths in police custody in which it promised full disclosure of all relevant evidence to the families of the bereaved. New guidelines are also to be issued to end the "agonising delay" suffered by families trying to find out how their loved ones died in police custody.

Meacher puts GM crops on hold

Paul Brown
Environment Correspondent

THE Government yesterday bowed to the intense pressure of the past week and declared a moratorium on the commercial growing of genetically modified crops.

Government's position signed by John Prescott, the Deputy Prime Minister, and the cabinet ministers with responsibility: Stephen Byers, Nick Brown, Frank Dobson and Jack Cunningham.



Met braced for report, page 3

The mad forces of genetic darkness

Amid the high comedy of ministerial confusion and the continuing public relations disaster that is Monsanto, one serious point has emerged. When it comes to genetically modified (GM) foods, nobody really knows what they are talking about.

Powerful forces have attempted to conceal this ignorance. Globalised business, genetic propagandists and their fellow-travelling philosophers, overambitious scientists, stock market speculators and harassed government officials have attempted to push through radical and uncertain technologies. They have chosen to ignore what all good scientists acknowledge — that the science of genetics is in its infancy. We know, just about, the genetic alphabet, but we have no idea how to speak the language.

This is not generally understood. Since the deciphering of the molecule of DNA by James Watson and Francis Crick in 1953, biology has made astonishing advances. We now have the complete DNA sequences — the code in which the genes are written — of some primitive organisms and we are within five or 10 years of having all 3 billion chemical letters of the complete human sequence. We have identified the genetic origins of many diseases and, speculatively, of certain personality traits. Since the early 1970s, the "recombining" of DNA has enabled us to shift genes around — the technology that now allows us to modify crops and animals.

Impressive as these advances may be, their primary impact has been to reveal the depths of our ignorance. Even when, for example, we have the complete human sequence, it may be another century before we can unravel its place within the human anatomy. Medically, genetics has so far achieved almost nothing apart from providing more justifications for abortion.

For the reality is that genes are parts of systems whose full complexity we are only now beginning to grasp. Genes

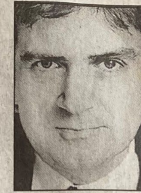
have clicable effects on the whole living environment. This complexity, this ignorance, is the true context in which the GM food debate should be seen.

Since recombinant DNA appeared, too many scientists have become overconfident. At first there was panic. There were fears of a biological weapon more terrible than the hydrogen bomb and of rogue organisms escaping from the laboratory to infect humans or crops.

As a result of a conference at Asilomar, California, in 1975, American scientists effectively called a halt to their work.

The anxiety rapidly subsided. As Watson has pointed out: "There is no evidence that anybody ever got sick from a recombinant DNA experiment." It was realised that wild organisms, with evolutionary resilience, would quickly overcome any laboratory escapees. Genetics appeared to be safe.

Since then the growth of biological hubris has been exponential. Now, we are told, genetics is on the brink of extending life, conquering disease, disseminating happiness and feeding the world. But this confidence is based on the false premise that it is as safe to shuffle genes in the world as it is in the lab. We do not know that because we know very little about the complex interactions



Bryan Appleyard

of genes and the proteins for which they provide the blueprints.

It is up to scientists to make this clear whatever the professional, financial or political implications. There have been far too many attempts to evade this responsibility.

It has been claimed, for example, that the BSE crisis was nothing to do with science. This is

absurd. Do these people think John Gummer, then minister of agriculture, dreamt up the idea of feeding sheep to cows? Probably he knew nothing about it or, if he did, he merely found a paper in one of his red boxes assuring him that "experts" said it was okay. What choice did he then have?

Similarly, in the current crisis what choice did the prime minister have but to endorse the expert finding that GM foods were safe? Somewhere at the root of all these incidents there is a figure clothed in the authority of science.

This complacency was detonated by the case of Dr. Arpad Pusztai, whose work appeared to show damage to rats caused by eating GM potatoes. The work was suppressed and Pusztai was suspended. A group of scientists subsequently said he was right. In reply the genetics lobby has said the work was irrelevant because the potatoes were deliberately made toxic. But why, in that

case, was it so ruthlessly and unjustly suppressed? Because, I suspect, the experiment showed that some genetic manipulations could be harmful, whereas industry propaganda is all based on the evident falsehood that none of it can be.

Since then, more doubts have appeared. Members of the Royal Society have demanded tighter control on genetic modification in a report that the government appears to have been trying to suppress. Sir Robert May, the chief scientific adviser, has warned of the extinction of wildlife species as a result of the widespread use of GM crops.

Since we are in the midst of a global species extinction rate that is in danger of matching that which destroyed the dinosaurs, and since biodiversity is an essential guarantor of our continued existence, this amounts to a very serious warning.

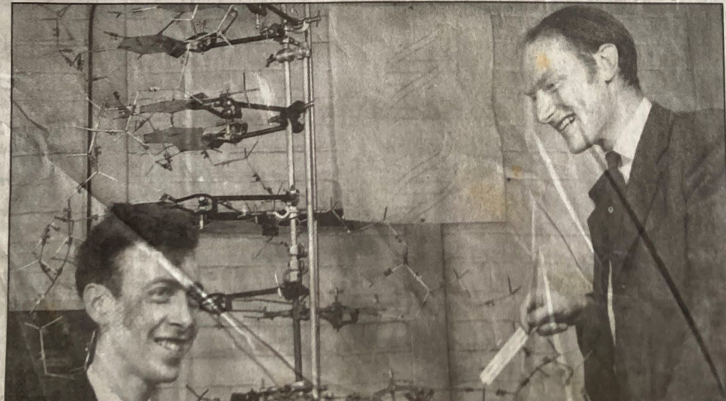
Hubris is the constant threat. No idea is more intoxicating than the one that we can take control of the processes of life. Scientists are human beings. Like the rest of us, they are prone to overambition. The problem is that, precisely because of the effectiveness of science, their mistakes tend to be catastrophic.

At this moment in science we must, above all, respect our ignorance. The crass lobbying of Monsanto — now, by its own laughable efforts, established in many peoples minds as the most sinister company in the world — and the economic pragmatism of politicians are not, in this context, to be taken seriously.

Above all, scientists should feel free to express their fears, whatever the pressures, and the rest of us should listen very carefully.

Anthony Barrington-Brown

In that sense, appalling as this episode has been for Monsanto and the government, it has been good for science and democracy. It has made us all aware of the true scale of this issue and increased healthy scepticism about the motives of some of the leading players. And it has emboldened many scientists to admit to their doubts, not an easy thing to do



21 Feb, 99

Sunday Times

26 Feb, 99 Financial Times leader

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FINANCIAL TIMES

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Friday February 26 1999

Genetic seeds of discord

The failure this week of talks in Cartagena, Colombia, on regulating trade in genetically modified (GM) crops and foods might, at another time, have elicited only passing interest. But the recent outcry in Europe about these products and the bitter recriminations at the meeting give the outcome greater significance. It not only shows how widely countries differ on this contentious issue; it could make solutions still harder to find.

The talks envisaged a treaty requiring exporters of GM products to obtain prior approval from importing countries. Developing countries, with European Union support, say they need such safeguards against health and environmental risks, which they lack the capacity to assess or control. But several farm exporting nations, led by the US, resisted the proposal, saying it could unduly restrict trade and conflict with World Trade Organisation rules.

Mutual mistrust among the participants helped turn discord into deadlock. The US suspected the EU of conspiring to use the talks to foment international opposition to GM products and justify closing its own market to them. The US, in turn, was widely accused of invoking world trade rules as a pretext to sabotage a plan which threatened the business of its biotech industry and farm lobbies.

The acrimony and polarisation

make still harder the task of reaching agreement when the talks resume in 18 months, and of bridging EU-US differences on GM products. Indeed, there is a risk that US obduracy in Cartagena will hand ammunition to those in Europe who claim its sole purpose is to promote the interests of American exporters.

The Cartagena debacle is the more regrettable, because at the core of the debate lie serious issues. International differences over GM foods are just one – admittedly glaring – example of growing tension between public concerns about health and environmental safety, on the one hand, and open markets and world trade rules on the other.

The problem arises, in part, from mutual misunderstanding and ignorance on both sides of the argument. Environmental and health policies increasingly affect, and are affected by, international trade and investment. Yet even in national governments, these policies are formulated with little reference to trade policy. The consequence is incoherence and conflict.

If the Cartagena talks have accomplished anything, it is to underline the need to narrow that divide. That task will not be easy, nor will it be achieved quickly enough to resolve current disputes over GM products. But tackling it now is the best way to reduce the risks of such discord in the future.

COMMENT
Irreparable
Alan Green

If the world survives the the past year's financial turmoil without collapsing into a recessionary heap, it might consider offering its prayer of thanks to that most caricatured of modern economic phenomena, the American consumer.

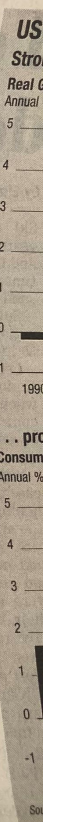
To the casual observer, she (and it is very often a she) makes an unlikely heroine. Blocking out two car-parking spaces in her gleaming new 5-litre sport utility vehicle; clutching the \$4 cup of steaming latte from the local coffee shop; shouting instructions to a broker on the mobile phone, or using up phone lines in airport lounges shopping electronically – this conspicuous consumption may not be socially and aesthetically pleasing.

But so far it has been the irrepressible exuberance of the US consumer that has kept the world economy going.

US spending on personal consumption rose by \$334bn in 1998, an annual increase equivalent to the total yearly output of one of the medium-sized economies of east Asia. Between the fourth quarter of 1997 and the fourth quarter of 1998, consumption expanded by almost 7 per cent in real terms, the fastest year-on-year rate of growth in 15 years. Spending on durable goods – all those fast cars and faster computers – rose by 13 per cent.

If US consumption had been flat rather than buoyant, the economy would have eked out a mere 0.7 per cent growth rate last year, rather than the 4 per cent-plus growth it achieved. And the global impact would have been to reduce world growth by almost half the already meagre 2 per cent it managed.

With the world still waiting for sure signs of recovery in Japan and anxiously watching indications of a renewed downturn in Europe, the American consumer may still hold the key. But as the consequences at home and abroad of such unbalanced consumption become ever more stark in the



1 March, 99
Financial Times

NEWS DIGEST

ADVERTISING

Monsanto criticised over modified food claims

Monsanto, the US group embroiled in the furore over genetically modified food, has been condemned for making inaccurate advertising claims in a draft report by the Advertising Standards Authority. The company was criticised for making "wrong, unproven, misleading and confusing" claims in its £1m advertising campaign. The draft report has still to go to the ASA's full council and could be amended, the authority said.

More than 30 complaints were filed by members of the public and groups including the Royal Society for the Protection of Birds and the Soil Association.

The ASA criticised Monsanto for wrongly giving the impression that genetically modified potatoes and tomatoes had been tested and approved for sale in Britain and for claiming the crops were more environmentally friendly than ordinary crops. Monsanto has seven days to challenge the draft before it is submitted to the full council. **Charles Batchelor**

ECONOMY

Confidence 'picking up'

The Bank of England's monetary policy committee will decide this week whether to cut interest rates for the sixth month running, amid evidence that business confidence is picking up. A survey by 3i, the venture capital company shows today that the businesses in which it has invested have become less pessimistic about the outlook for the economy.

plan

might undermine the global leadership role, to a gap between listed companies and the rest of the business, and reintroduce standards into UK reporting. There is an element of support for the suggestion that national Accounting Standards could allow some standards back into UK accounting - but the IASC need to develop its anti-avoidance mechanisms to deal with this," said Mr Hughes.

acle

terminating this data to the new one. While the ONS was able to make improvements to the old series, it was at times in the way it handled the process. When you produce a series that looks very different to the old one, you need a good explanation. The ONS did not provide that," says David Wallis, an economist at Goldman

2 March 99

Financial Times

“US threatens trade sanctions”

Remember this headline!

brush. It is particularly important to make the distinction between FTSE 100 trackers and those that follow the FTSE All-Share Index, comprising 828 companies.

I share the concerns being aired over the growing divide between FTSE 100 companies and the remain-

anyone who has the long-term health of the broader UK economy at heart.

It has been interesting to see how the investment establishment has responded to the explosion in demand for tracker funds over the last four years or so. Recent tracker launches, notably those from the big banks,

Once again it seems that our financial institutions are opting for the most sellable short-term past performance message, when the real long-term interests of customers (not to mention British industry!) surely lie in funds with the widest possible investment base.

The overall failure of fund managers to beat the index is no recent phenomenon.

within any index, until there is at least some evidence that active managers are equipped to turn the situation to their advantage.

Richard Branson,
chairman,
Virgin Direct Personal
Financial Service,
Discovery House,
Whiting Road,
Norwich NR4 6EJ

US has already threatened trade sanctions over GM ban

From Mr Barry Coates.

Sir, It is true that the breakdown of talks on the biosafety protocol could “have serious ramifications for international trade” – by calling into question the ability of governments to act in the public interest. (“Breakdown of UN talks on GM crop treaty threatens to heighten trade tensions”, February 26.)

The US has already threatened trade sanctions in response to bans on GM organisms. Take the example of Egypt, which in June 1998 tried to ban GM imports from the US unless they were properly labelled. The US threatened to ban all trade in soya beans and maize and, sure enough, Egypt reversed its decision.

Such threats to other

developing countries and to the European Union are likely in the forthcoming months. The potential for these threats to escalate into a bigger trade dispute has already been shown by the US reaction to the EU’s support for smallholder banana growers in the Caribbean.

The biosafety protocol is a precedent-setter. Either it will assert that the public

interest must come before free trade, or it will be used by US trading interests to hold the EU and developing countries to ransom. The US has made its position clear. It is time the EU did too.

Barry Coates,
director, World
Development Movement,
25 Beehive Place,
London SW9 7QR

Not permitted to act as promoter for City

From Mr Geoffrey Turner.

Sir, I fear Clive Sinclair-Poulton (Letters, February 17) misunderstands the role of the Securities Institute. We are a body of individual securities professionals. Our objects do not – and never

interest groups. Our ethics committee sets and promotes high standards for our members. We act as an authoritative body, researching and consulting in matters of education or public interest concerning investment in securities, and regularly consult

closely with bodies such as British Invisibles to help promote UK financial services and London’s competitive position. We also applaud the very valuable work carried out by the City of London Corporation in this area, and I would like to

Let’s not be off with the old...

From Lord Cobbold.

Sir, The prime minister is quoted on the front page of your paper as saying in respect of duty-free sales: “Until we have a proper regime, we should not get rid of what we have at the

9 March, 99
Financial
Times

COMMODITIES & AGRICULTURE

DEBATE OVER GENETICALLY MODIFIED CROPS IS NOT CONFINED TO EUROPE. THE FIRST OF A SERIES THAT EXAMINES THE CONTROVERSY

Concern widespread over bio-engineering

By Paul Solman

Genetically modified soyabeans could account for most of the crop in the US this year, according to the American Soybean Association. The acceptance of GM crops in the US contrasts starkly with the controversy surrounding them in Europe, especially in the UK.

The US is not alone. Almost 70m acres of genetically modified crops were planted globally last year, according to the biotechnology industry, and GM crops have been embraced from Australia to Latin America by farmers keen to protect their crops against insects. Cotton growers have been especially quick to buy GM

seeds. One third of Australia's cotton crop is genetically altered, while in the US the figure is 45 per cent. Biotechnology industry officials say GM crops can reduce substantially the need to use pesticides. "Insect resistant cotton has enabled American farmers to avoid spraying 48 railroad cars worth of pesticides

on their crops every year," said Val Giddings, vice-president of Bio, a US industry group. But it would be wrong to think Europe is the only continent on which governments and consumers are worried about the effects bio-engineering in agriculture. Even in regions such as India and Africa, which regularly suffer from food short-

ages, the use of GM crops is being debated because of fears about threats to biodiversity and human health. In its latest Foodcrops and Shortages report, the UN's Food and Agriculture Organisation highlighted serious food emergencies affecting a long list of countries in Asia, Africa and Latin America. "There is no doubt that

planting of GM crops has increased almost exponentially in recent years, and they have a huge contribution to make to food security throughout the world," an FAO official said. "However, many countries remain concerned about the long-term effects of genetic engineering on health and the environment."

India says it will let the market decide



Genes and crops

By Amy Louise Kazmin
in New Delhi

But their opponents claim hi-tech foreign seeds will inflict environmental damage, destroy farmers' self-reliance and push them deeper into debt. There is also deep distrust towards multinational groups and foreign technology.

ogy, which oversees both the public and private trials, is a staunch defender of the potential use of genetically modified seeds. "Our intention is to take it to the market. Let the farmer decide," he says.

But activists are challenging the move to start selling



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18 March 99
Financial Times

BY JACQUES SANTER

Prodi

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between 10 and 12 per cent of the vote at the European elections.
A performance on this scale would give it more than half the votes currently enjoyed by Mr D'Alema's party, the Democrats of the Left.

Some commentators entertained the possibility that such a result might force Mr D'Alema's government into a summer political crisis.

Mr Prodi, whose 28 month government collapsed last autumn, has been tight-lipped about his candidacy for Brussels and has virtually ruled himself out of the running on several occasions, saying he wants to concentrate on his domestic ambitions.

However, his aides admit he has been tempted by the Brussels job and would have to accept if offered.

Editorial comment, Page 21

scale'

French among equals, and does not have the power to fire incompetent colleagues. This lack of strength has also allowed the Commission's staff organisations to become powerful. A strike last April over reforms presented by Erkki Liikanen, responsible for personnel policy, terrified the upper echelons of the Commission into slowing down the reforms. The report also exposed disciplinary procedures as too lengthy and bureaucratic.

For some of the Commission's younger officials, this week's report was long overdue. "Now what we need is proper meritocratic promotion, external panels for appointments, real disciplinary procedures, a beefed-up

Supermarkets in move on modified food

By John Willman,
Consumer Industries Editor

Seven European supermarket chains have formed a consortium to eliminate genetically modified crops and derivatives from their own-label food products.

The initiative has been led by J. Sainsbury, the UK's second largest supermarket group, which has also signed up industry experts to help establish guaranteed sources of GM-free ingredients.

Public concern over the environmental and health impact of GM crops has been growing across the European Union. EU member states have become increasingly reluctant to approve new GM crops, recently blocking four applications in a row from life sciences groups.

Other members of the consortium include Carrefour, France's largest retailer, Migros of Switzerland, the country's largest food chain, and Delhaize of Belgium. They are joined by Marks and Spencer of the UK, Ireland's Superquinn and Effelunga of Italy.

The consortium will find non-GM growers and ensure that the crops are segregated from GM produce while being transported to processors and in the production process. It will also establish audit and testing procedures to ensure the foods produced are GM-free.

"We always wanted GM and standard crops to be separated," said Alison Austin, Sainsbury's environmental manager. "We were extremely disappointed when this did not happen with the US soya crop."

Iceland, the UK frozen food retailer, has established

and Brazil. But Sainsbury's said yesterday that a consortium was the only way to establish GM-free sources of both crops and derivatives.

Conventional testing of foodstuffs currently detects only protein from GM crops - such as tomatoes, maize or soya meal. The protein is removed in making derivatives such as soya oil and lecithin which cannot therefore be guaranteed GM-free unless controlled from the farm-gate.

"The consortium will give us the aggregate buying power to make it commercially attractive for suppliers and guarantee that this will be an ongoing need among supermarket chains," Ms Austin said.

She added that Sainsbury's had reduced the number of own-label food products with GM ingredients from 1,500 to less than 50 and will discontinue those if it cannot find GM-free alternatives.

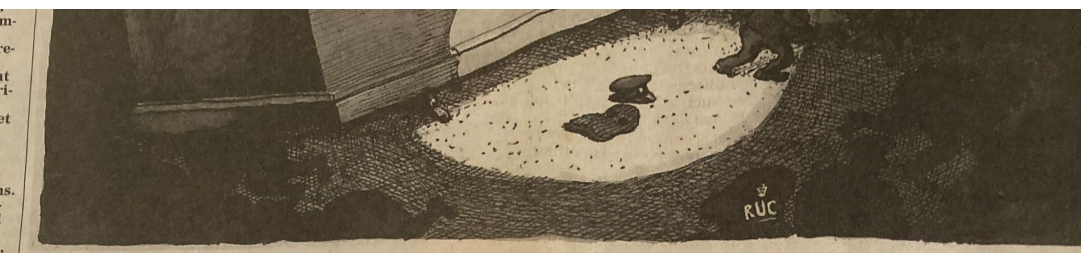
It will, however, continue to sell manufacturers' branded foodstuffs which contain GM ingredients - as do most of the supermarket chains which have moved to GM-free for their own products. Under European Union law, foods containing GM ingredients must be labelled as such, but this does not extend to derivatives.

Greenpeace, the environmental campaign organisation, welcomed the creation of the consortium. "The supermarkets are beginning to listen to what the public wants," it said.

It called on the supermarkets to ban all GM foods, citing poll evidence that 81 per cent of consumers wanted food producers to do more to develop organic foods.

19 March, 99

Guardian



We're gagging on GM. Monsanto must face up to meltdown



John Vidal

ANOTHER grand year for US life science corporation Monsanto's chairman, Robert Shapiro. This week, it was reported that his \$10 billion-a-year, Missouri-based company, champion of the GM food revolution, had made healthy profits, taken over more seed companies and increased earnings for shareholders. And, by the by, Mr Shapiro has cashed in \$18 million of his own shares on top of his \$US 1.7 million salary.

There was some veiled regret that Monsanto had failed to merge with the huge American Home Stores, but no word on its widely reported talks with chemical giant, Dupont. Should this happen, it would create a biotechnology powerhouse, well able to dominate global agriculture. There was no word, either, on the company's troubles in Europe. Here, Shapiro's troops are in the bunker, with the company, in PR terms at least, close to meltdown. What Blair and Clinton poll analyst, Stanley Greenberg, reported last year as a potential corporate crisis is worsening by the day.

In the past few weeks, Asda and Marks & Spencer joined Iceland in banning GM products from their own-brand food lines. Sainsbury, Waitrose and the Co-Op in the past few days. That leaves Somerfield and Tesco's. But consumer pressure now embraces many major environment, development, consumer and health groups, and it may be only time before they, too, retreat. The big question is which of the giant (but mostly anonymous) food processors like Unilever, Northern Foods or Nestle, breaks first and declares its own products GM-

free. In the past fortnight, scientific doubts have been expressed about Monsanto GM soya's links to allergies, the government's advisor on GM releases has condemned it (and other companies) for a "lamentable lack of consideration" for consumers; and the august Institute of Chartered Surveyors has advised that growing GM crops could threaten land values and put farm tenants at risk of legal action.

The National Farmers' Union of Scotland responded that it would now be "commercial suicide" for farmers to grow the crops if asked. Meanwhile, British Sugar, which controls all sales of sugar beet seed to British farmers, has said it has no plans to introduce genetically modified varieties, even if approved.

But the catalogue of corporate woe goes far beyond Britain. Irish, Swiss, German, Italian, French and Belgian supermarket chains have all started to exclude GM ingredients. In the past fortnight, New Zealanders have been uprooting crops, the Brazilian state environment agency has begun a case against the company, the Ukraine environment minister has declared his country should not be an experimental site for GM crops and Indian peasant farmers are revolting.

Meanwhile leading scientists this week declared BST, a Monsanto growth hormone engineered to increase the yield of cow's milk but so far banned in Europe, as harmful to animals with potential human health risks.

Monsanto can do little to resist the global wave of opposition. Instead it is using a legal weapon, a tactic that

may backfire and further damage its image. In 10 days' time, two women will be tried in a Plymouth court for "conspiracy to commit criminal damage" for pulling up one of their GM herbicide resistant maize crops and may have to pay £600,000 to the company in compensation. In April, defendants from Genetix Snowball face the company in the civil courts.

Monsanto is demanding that the small organisation which last year published a book on how to take open, (the activists will argue "responsible") direct action against GM crops, should be forced to hand over to it the names of everyone who bought the book from them or was sent a copy. It smacks of corporate policing and the next month will see large British demonstrations, marches and, inevitably, the public destruction of more GM trial crops. For the first time, MPs have indicated they may be prepared to be arrested.

With the popular press and several broadsheets now campaigning against Monsanto's products, what friends has the company got?

TONY Blair, who has several times spoken to President Clinton about the necessity to support new technologies like genetic engineering, is cooling. So far he, senior ministers and civil servants are falling back on the line that consumers should be able to exercise "choice". But, judging from the Cabinet committee report leaked to the Guardian a few weeks ago, government doubts that it can control the explosive situation are mounting. "How real is the risk of a trade war with America?" Jack Cunningham

asked his senior civil servants. "Why don't we have a pharmaceutical type of safety of the safety of the with proper trials? He dent are we that our li moratorium would b is accurate?"

Yesterday, gov announced a new regime aimed at enforcing regulations, with fin to £5,000. The control the trading standards ties may find unwor practice, will force rants, cafes, bakers a cateness to declare content of their foods.

The suppliers have escaped. It was dismissed herring and "alre dated" by opposition M can sense the gover inability to keep up w a dynamic situation.

But even as the EU Union is looking to in full labelling for GM a and flavourings, so Monsanto and the oth food companies might intolerable. British n have said they will go because government r ances are not enough.

What we are witness one of the greatest against a new techno history, dwarfing the pean protests agains over Brent Spar and NI

Whether this revolt judged by history as umph of new democri a significant step in th ing in of corporate pe as a backward resp inevitable "progress", poses a new relat between politicians, c tions and consumers.

Mr Shapiro's con that Monsanto will end ners might well prov placed.

Beware of claims that genes drive you to crime, drink and even compulsive shopping

17 April, 99

Daily Mail



9 June, 99
Financial
Times

FINANCIAL TIMES

http://www.ft.com

WEDNESDAY JUNE 9 1999

85p

FT Telecoms
No holds barred in battle
for size and influence
Survey, separate section



Water industry
The importance of
diversification
Page 31



Party Ashdown
Fatal attraction
of Labour
Page 11



UK entry to Emu
'Mr Blair's view
is doubly wrong'
Martin Wolf, Page 26

WORLD NEWS

**Jonathan Aitken sentenced
to 18 months for perjury**



Jonathan Aitken, the former Conservative cabinet minister, (pictured arriving at the Old Bailey) was jailed for 18 months for lying in court over who paid the bill for his secretive stay in the Paris Ritz hotel in 1993. 'Web of deceit' led to downfall, Page 10

Schröder backs Blair on EU reform
Tony Blair's ambition to turn the European Union away from tax rises and on to a course of market deregulation received powerful backing yesterday from Gerhard Schröder, the German chancellor. Page 28; Anglo-German initiative, Page 9; Martin Wolf, Page 26; Editorial Comment, Page 27

US delays N Korea policy review
A review of US policy on North Korea has again been delayed, heightening concerns of a shift in the Clinton administration's stance towards the

DECISION TO REJECT GENETICALLY-MODIFIED INGREDIENTS HAILED AS VICTORY FOR CONSUMERS AND RETAILERS FOLLOWING SAFETY FEARS

Northern Foods halts GM use

Growing opposition to GM crops



By Elizabeth Robinson and George Parker in London, and Michael Smith in Brussels

The genetically-modified food industry suffered a fresh blow yesterday with the announcement that Northern Foods, chaired by Lord Haskins, a close business adviser of the prime minister, is to stop using GM ingredients.

The decision follows other recent developments which have reduced the prospect of commercial growing of GM crops in Britain.

Last week, Prince Charles, who has long objected to the

new crops, published an article in the Daily Mail arguing that they were potentially harmful to the environment. Lord Haskins dismissed the prince's views as eccentric, and complained that he had "power without responsibility".

This week, a Wiltshire farmer destroyed an experimental crop of modified oil-seed rape.

Northern Foods' decision is a setback for Tony Blair, who last weekend insisted that GM products are safe and that Britain must maintain its lead in developing biotechnology.

that despite mounting public concern, his company was supportive of Mr Blair's position. "I'm ashamed at the way the retailers have wobbled. They should have given their customers choice," he said.

Northern Foods' chief executive, Jo Stewart, said the company was still a supporter of GM ingredients but had been forced to bow to pressure from consumers and retailers. He was speaking after Northern reported flat full-year pre-tax profits of £94.5m.

Northern is the latest in a long line of UK food producers and distributors to say it

would eschew GM ingredients. The movement has been led by retailers, starting with Iceland last year. Northern is the biggest food supplier to Marks and Spencer, which has declared its non-GM stance, and also supplies own-label products to other supermarkets as well as producing branded goods, such as Goodfellas frozen pizzas. A survey by Friends of the Earth last week found 24 out of 30 top UK food manufacturers had declared themselves GM-free or moving in that direction.

Mr Stewart said Northern Foods was now seeking

non-GM suppliers around the world but warned that as demand increased, such sources could become scarce and hit prices. He left the door open for a return to GM ingredients. "A return will probably be led by consumers, then retailers, then us. It isn't wise for us to say we know better than consumers."

He said the number of Northern's products currently known to contain GM ingredients was very small, but up to 40 per cent could contain them. Derivatives such as soya oil and lecithin, an emulsifier, do not have to be labelled as

containing protein with altered DNA. Friends of the Earth, the pressure group, welcomed Northern's stance. "This is a victory for consumers who have made it clear that they do not want GM food. The government should be helping British farmers to meet increasing demand for GM-free food."

The Northern decision reflects unease in Europe about GM crops. Consumer doubts are particularly strong in Germany and Scandinavia.

The power of consumers, Page 10
Northern Foods results, Page 30

C&W set for control of IDC
to higher offer

Book prices cut in internet sales war

20 June 99,
Guardian

SPAIN SPECIAL: 20 TOP HOLIDAYS, 20 TOP HOTELS See Escape
Sunday 20 June 1999

The Observer

WIN WIMBLEDON TICKETS PLUS 4-PAGE PREVIEW IN SPORT

THE REAL BASIL HUME
By Cristina Odone
THIS SECTION, PAGE 28

OH DEAR... IT'S A BOY
How to survive raising your son
EXCLUSIVE REPORT IN LIFE MAGAZINE

Earl formerly known as prince gets his Wessex girl

by Martin Bright

IT EXISTS only in the realm of fiction, Arthurian legend and England's distant past, but the Anglo-Saxon kingdom of Wessex has been revived, in name at least.

Prince Edward yesterday married Sophie Rhys-Jones at St George's Chapel, Windsor. Earlier in the day he had become the first Earl of Wessex for more than 900 years.

The last Earl of Wessex was the luckless King Harold — shot through the eye at the battle of Hastings by Edward's ancestor William of Normandy.

The mythical landscape of Wessex has long been familiar from the legends of King Arthur, the mythical king of the Britons, and the nineteenth century saw a Wessex revival, most notably with the work of Thomas Hardy, who set his novels in a fictional county of that name, roughly equivalent to Dorset.

Olive Blackburn of the Thomas Hardy Society said: 'It is wonderful that the name of Wessex is being brought back. It means England. To Hardy it meant a place that was in tune with the countryside and nature.'

Today the area is closely associated with 'New Age' religions and ancient British beliefs and customs. It is thought to be criss-crossed with mystic 'ley-lines' which link ancient sites such as Stonehenge, Glastonbury Tor and Cadbury Castle, a possible location for King Arthur's Camelot.

Constitutional experts yesterday criticised the fact that Edward had been made an Earl, a title usually only given to commoners who marry into the royal family. When the Queen married Prince Philip he became Duke of Edinburgh and when Prince Andrew married Sarah Ferguson he was made Duke of York.

Historian Dr David Starkey said last night: 'The title itself is a total fiction. There is nowhere called Wessex — it belongs to the novels of Thomas Hardy. The title has not been used for 1,000 years. Is it the right way to celebrate the third millennium by going back to the first?'

Harold Brooks-Baker, publishing director of Burke's Peerage, said the decision to make Prince Edward an Earl showed he would not play a prominent role: 'He is the first son of a monarch in this dynasty going back to George I not to be made a duke. He has been promised the title of Duke of Edinburgh, but we don't know if there will be a monarchy in the future.'

David Williamson, co-editor of Debrett's Peerage and Baronetage said the titles were 'imaginative'. The time for dukedoms, royal or otherwise, seems to have passed,' he said. 'Earl is a very traditional title so I think this is rather good.'

Royal wedding, page 3

Past... wanna be a countess?
Graham Turner

Britain faces 10 years of traffic chaos

by Joanna Walters and Patrick Wintour

BRITAIN'S cities and roads will still be clogged in 10 years' time regardless of radical plans to force people out of their cars and on to public transport, the Government has admitted.

Deputy Prime Minister John Prescott last week conceded to *The Observer* that Labour would need a second term of office before the public could expect 'real and substantial change to the whole transport system'.

Prescott, who is also Secretary of State for Transport and the Environment, is under fire

time, he said. 'There will still be congestion problems. I do not believe we will have a system where you get rid of traffic jams.'

Road traffic is forecast to rise by at least a third in the next 20 years and by half on the motorways — with almost no new roads being built to accommodate it. 'You cannot ban the vehicle in a democracy but I hope a greater priority for public transport will persuade people not to become two-, three- and four-car families,' Prescott said.

New powers to price people out of their cars and crack down on poorly performing bus and train companies will be central to the legislative

FIRST LADIES OF EUROPE FIND A PLACE IN THE SUN



by Andy McSmith and Denis Staunton
Cologne and Antony Barrett

THE WORLD'S most powerful leaders yesterday labelled genetically modified food, alongside Aids and the millennium bug, as one of the greatest threats facing the planet.

In a significant blow to Tony Blair and President Bill Clinton, both men were bounced into agreeing a new

GM food 'threatens the planet'

ance symbolises the growing opposition on the Continent to the controversial new technology which threatens to revolutionise the whole of the farming industry.

Two technical committees of the Organisation for Economic Co-operation and Development will now begin to collate information from around the world to ensure that every country has access to the best scientific research on the effects of genetic

gritted teeth, saying that Britain also believes that 'food standards and food safety are vital to communities'.

Yet the British Prime Minister has steadfastly refused to place a moratorium on the commercial release of GM foods in Britain.

There are farm-scale trials currently under way in the UK on GM oil seed rape. Ministers argue they will not give permission for commercial release of such crops

Some reflections

- The Pusztai GM scandal generated numerous front page stories and scandals – it was one of the dominant political and scientific news stories of 99;
- The issue exploded for weeks in the media, and rumbled on for nearly six months;
- It was across the media – from the FT to the tabloids;
- A scientific issue had become a political issue;
- A reflection of that is the political cartoons that were generated



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Managing Englan

Caretaker Keegan isn't right

THERE'S been a vogue on recently fo
Seventies, disco, boogie nights and all
anachronism can go too far. The Fo
Association seems intent on going b
the future by appointing Kevin K

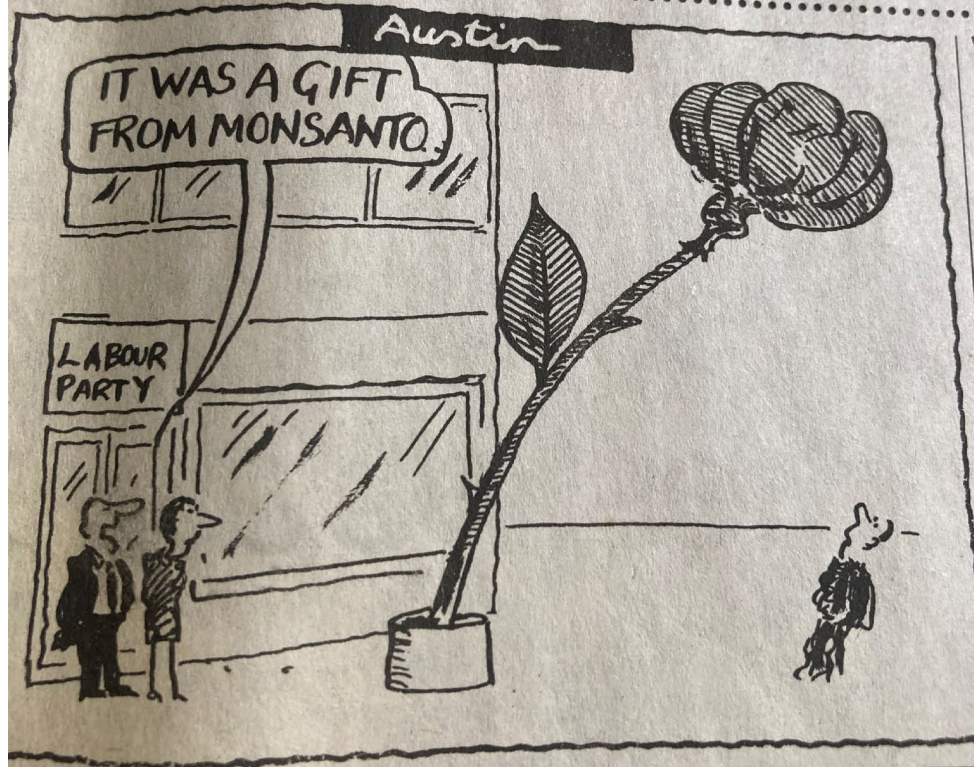


A page from Kurdish history

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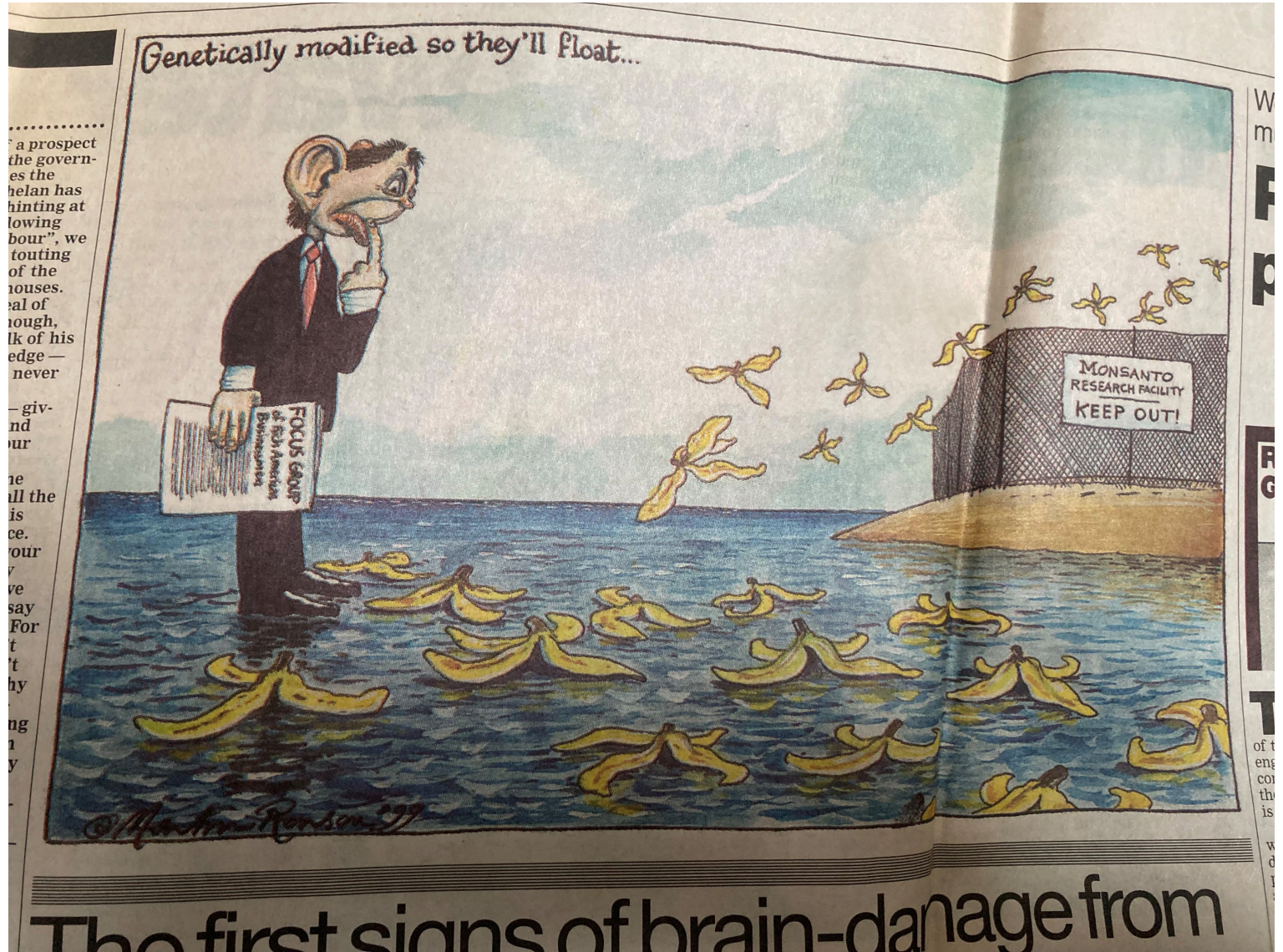
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n to page 3, column 1



**Ali and Bono
to promote
new 'Live Aid'**

Guardian



Observer

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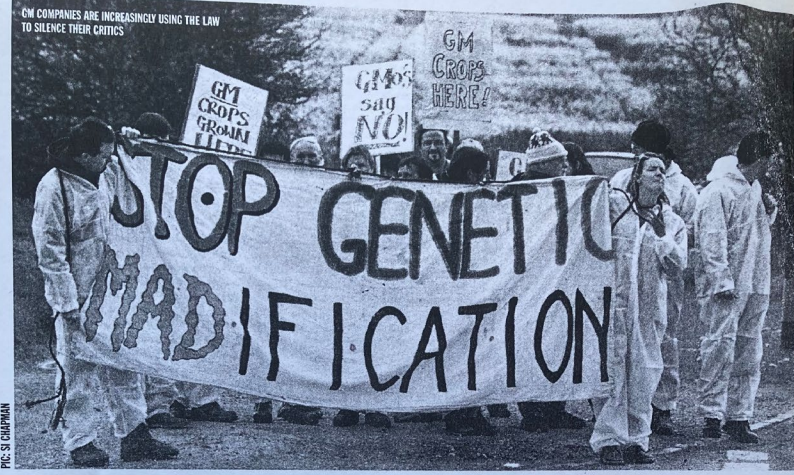
The issue never
went away



Nov, 1999

Big Issue

GM COMPANIES ARE INCREASINGLY USING THE LAW TO SILENCE THEIR CRITICS



GM FOOD ON TRIAL

MONSANTO SAYS IT IS NOW COMMITTED TO OPEN DISCUSSION OF GM FOODS WITH ALL INTERESTED PARTIES. BUT AT THE SAME TIME IT IS TRYING TO STOP CAMPAIGNERS TAKING THE ISSUES TO COURT. ANDREW ROWELL REPORTS

Five women from the anti-GM campaign group GenetiX Snowball were in the Appeal Court this month, defending their right to a trial. The protesters were served with injunctions by GM giant Monsanto in July/August 1998, after they dug up some of the company's crops. In April, the High Court ruled that the women had the right to have their defence heard and ordered a full civil court trial. Monsanto are appealing against that decision.

The ruling by three appeal judges is expected any day and will have serious repercussions for the British legal system. If it goes in Monsanto's favour, the activists could be served a life-time injunction, which if broken would result in imprisonment without trial. "This would be in breach of the European Human Rights Convention, which guarantees a fair hearing or trial," says Daniel Bennett of Leigh & Day solicitors, who represented three of the defendants.

The case started in July last year, when the five women openly and peacefully dug up Monsanto's genetically modified test crops at a site in Oxfordshire. Each pulled up a symbolic number of plants. One of the protesters, Kathryn Tulip, chose 64 for the number of experimental trials in the country. Another plucked just one plant as it was her first action.

The women were arrested and released without charge, but Monsanto later served temporary injunctions on them and issued a claim for "unquantified" damages, "conspiracy" and "unlawful interference with business and commercial interests". These damages could have run into thousands of pounds, but Monsanto dropped the claim in April at a summary hearing, arguing for a permanent injunction against the defendants, in order to avoid a trial. It also argued that anyone who had received a GenetiX Snowball handbook should be covered by the injunction, but this was rejected by the judge.

The legal action by Monsanto is a SLAPP (Strategic Lawsuit Against Public Participation) – a deliberate use of the law by companies and governments to silence their critics. "Monsanto's strategy is simply to silence protesters," says Tulip. SLAPPs are not necessarily designed to go to court, but to intimidate protesters into inaction. "They send out the message that there is a price for speaking out politically," says Professor George Pring of the University of Colorado in Denver, who initially coined the phrase.

Currently, both biotech companies and the Government are resisting at all cost the possibility of genetic engineering.

November 22 - 28 1999

Nov, 1999

Guardian

The screenshot shows the Guardian website's navigation bar with categories: News, Opinion, Sport, Culture, Lifestyle, and More. Below the navigation bar is a sub-menu for Environment, including links for Climate crisis, Wildlife, Energy, and Pollution. The main article is titled "Pro-GM food scientist 'threatened editor'" and is categorized under "Food". The authors are listed as Laurie Flynn and Michael Sean Gillard. The article text begins with "The editor of one of Britain's leading medical journals, the Lancet, says he was threatened by a senior member of the Royal Society, the voice of the British science establishment, that his job would be at risk if he published controversial research questioning the safety of genetically modified foods." A small "Advertisement" box is visible in the top right corner of the article area.

News Opinion Sport Culture Lifestyle More ▾

Environment ▶ Climate crisis Wildlife Energy Pollution

Food

Pro-GM food scientist 'threatened editor'

Advertisement

Top pro-GM food scientist threatened me, says editor

GM food: special report

Laurie Flynn and Michael Sean Gillard

Mon 1 Nov 1999 02.51 GMT

The editor of one of Britain's leading medical journals, the Lancet, says he was threatened by a senior member of the Royal Society, the voice of the British science establishment, that his job would be at risk if he published controversial research questioning the safety of genetically modified foods.

24-30 July, 2000

The Big Issue



8 Oct 2000,
Independent
on Sunday



April 2002, Big Issue

16 News Feature

SEEDS OF DISSENT

Anti-GM scientists are facing widespread assaults on their credibility. Andy Rowell investigates who is behind the attacks

Anti-GM scientists and activists are increasingly having their credibility attacked through a campaign orchestrated by the biotech industry. Now that campaign has seen a prestigious scientific journal become the latest casualty.

The attacks against the journal *Nature* culminated in the publication last week of an admission that it was wrong to print a scientific paper last year that was critical of GM. The admission was the first in the journal's history. It is apparently the latest example of biotech giants using front organisations and websites to discredit scientific research that criticises GM technology.

The saga started last November when *Nature* published an article by scientists from the University of California Berkeley that alleged contamination of native Mexican maize by GM. As Mexico has a moratorium on commercial GM planting, it raised crucial issues about genetic pollution in a centre of maize biodiversity.

The paper led to the researchers and *Nature* being attacked by pro-GM scientists and the biotech industry. *Nature* finally buckled under the pressure, issuing a statement saying "the evidence available is not sufficient to justify the publication of the original paper".

"It is clearly a topic of not interest", says Jo Webber from *Nature*, admitting that this story is not just "technical" but also "political".

The political context is that the biotech industry is trying to lift European, Brazilian and Mexican moratoria on genetically modified seeds or foods. It is desperate to open up Europe, having lost more than \$200 million due to the moratorium on growing of GM corn alone. *Nature* has refused to comment further about the row.

This week sees crucial negotiations at the UN Convention on Biological Diversity in The Hague. The *Nature* statement could not have come at a better time and the biotech industry is naturally gleeful. "Many people are going to need that (*Nature's* editorial) reference", says Willy De Greef from Syngenta, the world's leading agribusiness company, "not least those who, like me, will be in the frontline fights for biotech during the Hague negotiations".

Despite *Nature's* climb-down, the authors of the original study, David Quist and Ignacio Chapela, have published new evidence they say vindicates their original findings. They add that two other studies by the Mexican government confirm their research and believe *Nature* has been "under incredible pressure from the powers that be".

"This is a very, very well concerted, co-ordinated and paid for campaign to discredit the very simple statement that we made," says Dr Chapela.

The central co-ordinator of the attacks has been CS Prakash who is a professor of Plant Molecular Genetics at Tuskegee University, Alabama, and who runs the AgBioWorld Foundation. AgBioWorld was co-founded by an employee of the Washington-based right-wing think tank Competitive Enterprise Institute.

Prakash calls the Quist and Chapela study "flawed" and says the "results did not justify the conclusions." He adds that they were "too eager" and says the "results did not fit their agenda".

Prakash's pro-GM website has been the central discussion forum of the *Nature* article. He said: "I think it played a fairly important role in putting public pressure on *Nature* because we have close to 3,700 people on AgBioView, our daily newsletter, and immediately after this paper was published many scientists started posting some preliminary analysis that they were doing."

AgBioView has brought together those scientists and AgBioWorld provided a collective voice for the scientific community". These discussions led to a highly critical and influential statement attacking *Nature* that received more than 80 signatories.

Two letters signed by pro-GM scientists that criticised *Nature's* original publication were also printed in the same issue as the journal's retrac-

tion. The lead authors of the letters, Matthew Metz and Nick Kaplinsky, signed the pro-biotech statement on the website.

Both have or have had links with the Department of Plant and Microbial Biology at Berkeley that entered into a \$25 million deal with Novartis (now Syngenta), a deal that was opposed by Chapela. "It became a very big scandal and they cannot forgive that", says Chapela.

But most importantly it wasn't scientists but a PR company that works for GM firm Monsanto that started and fuelled the anti-*Nature* debate on Prakash's listserve. On the listserve the first attack was posted by someone called 'Mary Murphy' within hours of publication. She wrote: "It should be noted that the author of the *Nature* article, Ignacio H Chapela, is on the board of directors of the Pesticide Action Network North America, an activist group." Murphy accused Chapela of being "not exactly what you'd call an unbiased writer".

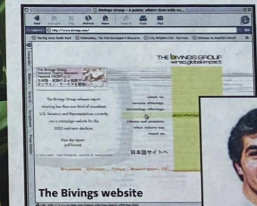
The next bulletin was from someone called 'Andura Smetacek' who claimed Chapela was in league with environmental groups and added, wrongly, that his paper was "not a peer-reviewed research article subject to independent scientific analysis". Smetacek and Murphy have between them posted around 60 articles on the Prakash list. So who are they?

Mary Murphy's email is mmrph@hotmail

.com, which hides her employer. On one occasion on an internet message board she used this address but also left a trail of other identifying details that showed she worked for the Bivings group, a PR company with offices in Washington, Brussels, Chicago and Tokyo.

Bivings, which has more than a dozen Monsanto companies as clients, has been assisting the GM firm's use of the internet since realising that it played a significant part in the company's poor PR image. Bivings says it uses the internet's "powerful message delivery tools" for "viral dissemination".

When asked about what they do for Monsanto, a spokesperson for Bivings said "We run their web sites for various European countries and their main corporate site and we help them with campaigns as a consultant. We are not allowed to discuss strategy issues and personal opinions". They declined to give any further information on their work for the company.



The Bivings website

However further insight can be gleaned from a recent report by Bivings which said: "Message boards, chat rooms and listservs are a great way to anonymously monitor what is being said. Once you are plugged into this world, it is possible to make postings to these outlets that present your position as an uninformed third party."

As a "third party" Bivings has covertly smeared biotech industry critics on a website called CFFAR.org as well as via articles and attacks on listservs under aliases. The attack on the *Nature* article was a continuation of this covert campaign.

Andura Smetacek is no stranger to such tactics. The *Big Issue* South West can also reveal that she was the original source of a letter that was published under the name of Tony Trevasas, a pro-GM scientist from the University of Edinburgh, in the *Herald* newspaper in Scotland. The letter became a source of legal action between Greenpeace, its former director Peter Melchett, and the newspaper. The case went to the high court and ended with Melchett receiving undisclosed damages and an apology from the *Herald*. Trevasas has always denied he wrote the letter.

In a letter written earlier this year, Smetacek said: "I am the author of the message which was sent to AgBioWorld. I'm surprised at the stir it has caused since the basis for the content of the letter comes from publicly available news articles and research easily found on-line".

Smetacek is also a "front email". In an early



Ignacio Chapela

"This is a very, very well concerted, co-ordinated and paid for campaign to discredit the very simple statement we made"

posting to the AgBioView list she gave her address as London, while in recent correspondence with *The Ecologist* magazine Smetacek left a New York phone number. However, after extensive searching of public records in the US, the *Big Issue* South West found no one in America with that name. Despite numerous requests by *The Ecologist* for Smetacek to give an employer or land address she has refused to do so.

A clue to her identity is that Smetacek's earliest messages to AgBioView consistently promoted the CFFAR.org website. CFFAR stands for the Centre For Food and Agricultural Research and describes itself as "a public policy and research coalition dedicated to exploring and understanding health, safety, and sustainability issues associated with food and fiber production".

In fact the website attacks organic agriculture as well as environmental groups, like Greenpeace, calling them "terrorists". The website is registered to an employee of Bivings who works as one of Monsanto's web gurus.

Even the AgBioWorld Foundation website is linked to Bivings.

Jonathan Matthews, a leading anti-GM activist, has researched the activities of Bivings. While searching the AgBioWorld archives he received a message that told him that an attempt to connect him to a Bivings database had failed. Internet experts believe that this message implies Bivings is hosting an AgBioView database. These experts also notice technical similarities between the CFFAR, Bivings and AgBioWorld websites.

Prakash, though, denies receiving funding or assistance for the AgBioWorld foundation and denies working with any PR company saying he is "pro-the technology not necessarily the companies".

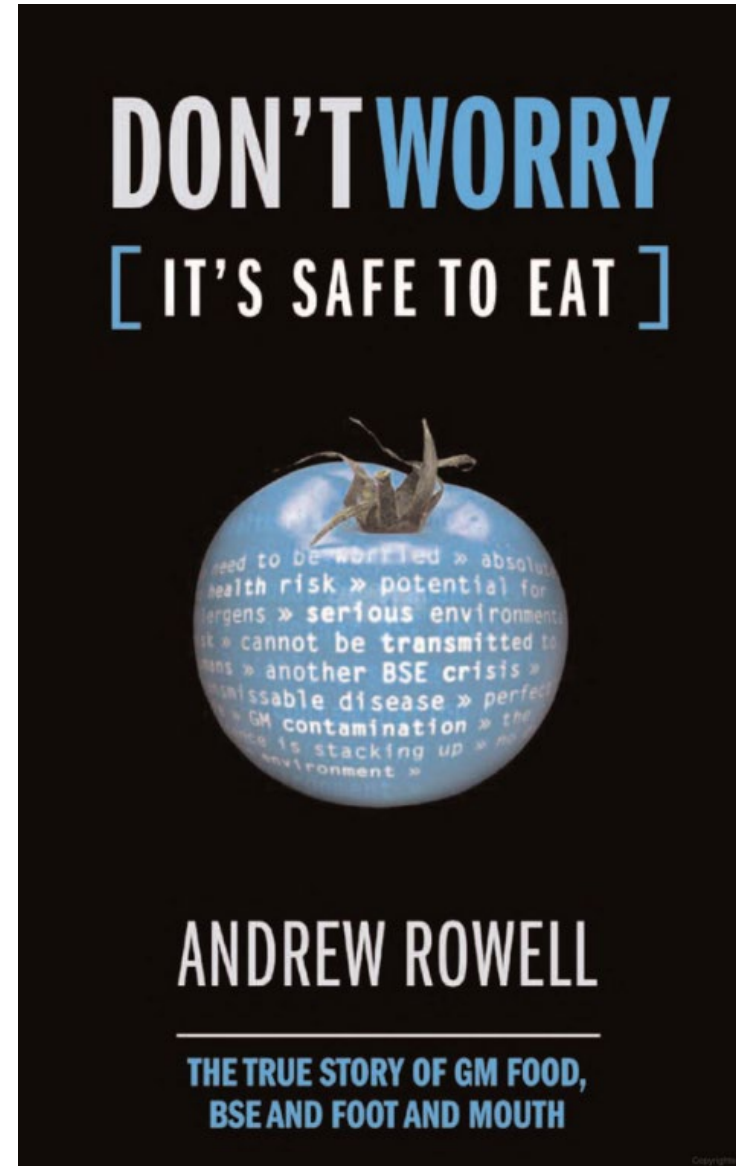
However Matthews said: "Via Bivings, Monsanto has a series of show windows with which to influence the GM debate. One of these is AgBioWorld. The chief mannequin seems to be Prakash who has been very influential in the whole *Nature*/GM corn contamination fiasco. But I wonder if *Nature* really knows who is behind the attacks."

Dr Sue Mayer from GeneWatch UK says: "It is quite extraordinary the lengths the biotech industry and the scientific establishment will go to discredit any critical science."

News Feature 17

2003, Don't Worry!

It's Safe to Eat



The sinister sacking of the world's leading GM expert and the trail that leads to Tony Blair and the White House

📅 Published: 07 July 2003

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by Andrew Rowell
The Daily Mail, July 7 2003

The following day he was fired. He says he was informed of the calls by two different employees at the Rowett. Dr Putsztai and his wife were also told by a senior manager at the institute that Blair's intervention followed a phone call to Downing Street from President Bill Clinton, whose administration was spending billions backing the GM food industry. To sceptical ears, this sounds scarcely credible. Would the Prime Minister really have had any influence over the position of a respected scientist?

And yet the story is supported by two other eminent researchers. Stanley Ewen, says another senior figure at the institute told him the same story at a dinner on September 24, 1999.

'That conversation is sealed in my mind,' Ewen says. 'My jaw dropped to the floor. I suddenly saw it all - it was the missing link.'

'Until then, I couldn't understand how on Monday Arpad had made the most wonderful breakthrough, and on Tuesday it was the most dreadful piece of work and immediately rejected out of hand.'


The second source to confirm the story is Professor Robert Orskov OBE, who worked at the Rowett for 33 years and is one of Britain's leading nutrition experts. He was told that phone calls went from Monsanto, the American firm which produces 90% of the world's GM food, to Clinton and then to Blair.

'Clinton rang Blair and Blair rang James,' says Professor Orskov.

2015: Fast forward a decade..

New Pro-GMO group formed with Mark Lynas and Owen Paterson and Matt Ridley





UK NEWS WEBSITE OF THE YEAR


The Telegraph News Sport Business Opinion Ukraine Money Life Style Travel Cu 

Owen Paterson: Economic growth is the key to saving the planet

A new idea is gaining ground, under the term 'Ecomodernism', which celebrates that economic growth and technology can go hand in hand with green living

By Owen Paterson
20 September 2015 • 8:30am



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Environment ● This article is more than 7 years old

Ecomodernism launch was a screw-up of impressive proportions

Mark Lynas

Our attempt to launch a new environmental political movement in the UK was certainly ill-timed but is hopefully not doomed

Wed 30 Sep 2015 13.46 BST



2019 - Boris Johnson speech

So I can imagine in the future of this wonderful museum there will exhibits recording not only the breakthroughs in bioscience, here in Manchester and elsewhere that allow the UK to lead the world in producing genetically modified crops - blight-resistance potatoes will feed the world.



May 2022 –
European
Commission
launches
new
consultation
on GMOs

Mute Schimpf, food and farming campaigner at Friends of the Earth Europe said:

“The debate on the deregulation of new GMO is a flagrant attempt to divert time, money and attention away from truly sustainable and already-proven solutions like agroecology.

We don't have time to waste with empty and dangerous promises that would only have us more dependent on dirty fossil fuels.

Our message to the Commission is clear: stop pushing for the deregulation of new GMOs and keep them strictly labelled and safety checked

Oct 2022 –
Birth of pro-
GMO
RePlanet with
Mark Lynas

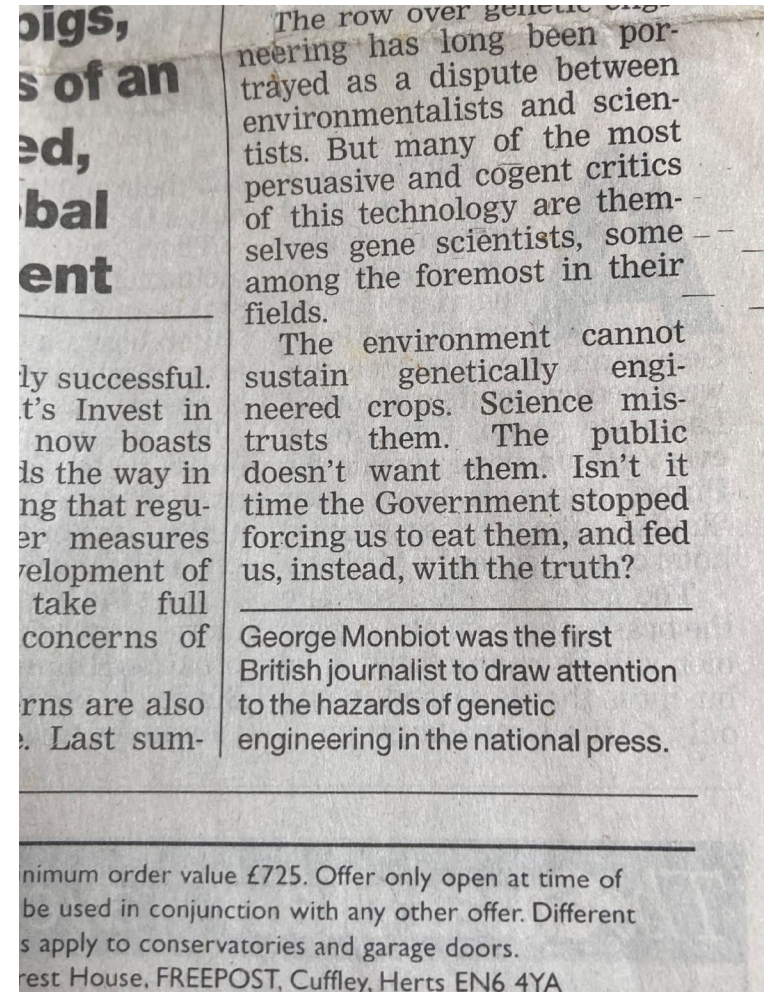
The screenshot shows the RePlanet website header with the logo and navigation links: Home, Vision, Written, Issues, Who we are, and Contact us. A prominent green 'DONATE' button is located in the top right corner. On the left side, there is a vertical sidebar with social media icons for Twitter, YouTube, Facebook, Instagram, TikTok, LinkedIn, and a mail icon. The main content area features a blog post by RePlanet, dated Oct 3, 2022, with a 10-minute read time. The post title is 'What defending science means when you're an environmentalist'. Below the title, it notes the post was updated on Oct 11, 2022. The introductory text reads: 'Mark Lynas, one of the driving forces behind RePlanet, kicked off our conference in Warsaw, Poland, A New Hope: The RePlanet Sessions 2022, by explaining how science has guided his beliefs about how to save nature. Here's the transcript of his talk:'. A video player is partially visible at the bottom of the post.

November 2022 – George Monbiot teams up with RePlanet to “Reboot food”



GMWatch
@GMWatch

George Monbiot teams up with Mark Lynas and the ecomodernists to Reboot Food. New campaign allies strange bedfellows in support of anti-organic, pro-#GMO and pro-synthetic food campaign gmwatch.org/en/106-news/la...



Feb 2023

News and comment on genetically modified foods and their associated pesticides



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Botched genetic technology bill will upend English agriculture

Published: 07 February 2023

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Peers' concerns echoed those of three government agencies - but the bill will likely pass into law unamended

What happens next?

According to Science Minister George Freeman, the UK will soon become “a global testbed” for agritech, gene-edited crops and synthetic biology, among other technologies.

March 23 Genetic Technology – Precision Breeding act

UK Parliament

Parliamentary Bills

UK Parliament > Business > Legislation > Parliamentary Bills > Genetic Technology (Precision Breeding) Act 2023 Bill feed

Genetic Technology (Precision Breeding) Act 2023

Government Bill

Originated in the House of Commons, Session 2022-23

Last updated: 27 March 2023 at 17:17

Commons ✓ — Lords ✓ — Final stages ✓

[See full passage](#)

GM FREEZE

for a responsible, fair & sustainable food system

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Genetic Technology Act

The Westminster Government's Genetic Technology Bill became law on 23 March 2023, setting up mechanisms that will impose untested – and unlabelled – GMOs on the entire UK food chain. The Genetic Technology (Precision Breeding) Act only applies directly to England but that won't stop it having an impact in Scotland, Wales and Northern Ireland.

Guardian April 2023

Fighting giants: eco-activist Vandana Shiva on her battle against GM multinationals



Shiva is scathing of this renewed push for GM organisms, arguing that much of the gene-editing process is still “dangerously unpredictable” and calling it “ignorance” to think climate-adapted crops can only come from industrial labs.

May 2023: Brussels:



↻ Dr. Vandana Shiva Retweeted

CEO @corporateeurope · May 22

Today @TimmermansEU is in @Europarl_EN to discuss #NewGMOs. They must remain:

- ✓ risk-assessed for human health & the environment
- ✓ traceable
- ✓ clearly labeled

✍️ 340 organizations signed a joint ✉️ to protect our right to choose what we produce & eat: corporateeurope.org/en/2023/05/tim...

**NEW GMOS
MUST REMAIN:**

- RISK-ASSESSED**
- TRACEABLE**
- CLEARLY LABELED**

Closing thoughts

- 25 years ago, the world was extremely worried about GMOs, but now
 - In the UK, no media interest;
 - Very little public scientific debate;
 - Little public awareness;
 - Even some originally opposed are now for it;
 - The industry, like oil and nukes, plays a long game – relies on public inertia or ignorance;
 - But much remains unknown of dangers and safety:
 - And the corporate control of key technologies;
 - In the words of Arpad: “I find that it’s very, very unfair to use our fellow citizens as guinea pigs.”
 - Lets not be those guinea pigs...
- 