

Thin Ice



the GM Freeze Campaign newsletter

Issue 36, June 2015

World Health Organisation says that glyphosate probably causes cancer

There was bad news for Monsanto in March when a new scientific review on pesticide safety classified the herbicide glyphosate as a probable human carcinogen [1]. The classification was made by the World Health Organisation's (WHO) International Agency for Research on Cancer (IARC) after a review of evidence by their panel of independent scientific experts.

Monsanto's Roundup Ready crops are genetically modified to withstand liberal use of the chemical to destroy weeds and leave their crops standing. When Monsanto first launched its product they claimed that glyphosate was safe, biodegradable and would lead to a reduction in chemical use. However, farmers growing GM crops have actually increased their use of glyphosate and other chemicals with devastating consequences for wildlife, not least through the massive decline in populations of the California red-legged frog [2] and the Monarch butterfly [3].

Monsanto has hotly denied the IARC's findings and is calling for a retraction, "We don't know how IARC could reach a conclusion that is such a dramatic departure from the conclusion reached by all regulatory agencies around the globe". However, the robustness of regulatory agencies, particularly the USA's Environmental Protection Agency (EPA) has been called into question.

1. <http://www.iarc.fr/en/media-centre/iarcnews/pdf/MonographVolume112.pdf>

2. http://www.biologicaldiversity.org/news/press_releases/2011/california-red-legged-frog-10-19-2011.html

3. Monarchs in Peril; Herbicide-Resistant Crops and the Decline of Monarch Butterflies in North America, Center for Food Safety, February 2015

WHAT IS A 'PROBABLE HUMAN CARCINOGEN'?

This category is used when there is limited evidence of carcinogenicity in humans and sufficient evidence of carcinogenicity in experimental animals. Limited evidence means that a positive association has been observed between exposure to the agent and cancer but that other explanations for the observations (called chance, bias, or confounding) could not be ruled out. This category is also used when there is limited evidence of carcinogenicity in humans and strong data on how the agent causes cancer. *WHO IARC, March 2015.*

Independent evidence, or smoke and mirrors?

Governments rely on regulatory agencies to analyse risks to human health and the environment but campaigners across the globe have expressed doubts about the rigour of their assessments. Last year ex-EPA staff member EG Vallianatos published *Poison Spring: The secret history of pollution and the EPA*. The book documents a culture of fraud and corruption and alleges that the EPA simply rubber-stamped industry summaries of safety tests without examining the raw data. The EPA relies heavily on test data from external sources and Carol Van Strum's 2014 book *A Bitter Frog: herbicides and human rights* describes



events at Industrial Bio-Test

Laboratories. Van Strum claims that 99% of long-term studies supporting some 483 pesticide registrations were invalid, having been faked with fraudulent or non-existent data [4]. Almost all of the products tested by IBT are still on the market today, including glyphosate.

The European Food Safety Authority (EFSA) is regularly challenged about its

4. <http://www.truth-out.org/news/item/30097-failure-to-regulate-pesticide-data-fraud-comes-home-to-roost>

WHOSE ASSESSMENT IS MORE RELIABLE: IARC OR EPA?

IARC is the world's leading authority on cancer. Its glyphosate determination was made by unanimous decision of 17 qualified scientists... IARC's assessment is up-to-date, analysing all the relevant available research, while EPA's last comprehensive assessment of glyphosate occurred in 1993. IARC considered a broad range of evidence, including human epidemiology and other peer-reviewed studies, while EPA did not assess epidemiology and relied almost entirely on unpublished industry studies. IARC is an independent agency whose sole mission is human health. While EPA is charged with protecting human health as well, it is also subject to considerable pressure from pesticide companies whose products it regulates. EPA is currently re-assessing glyphosate, and has said it will consider IARC's findings. *Centre for Food Safety*

practices. Germany's Federal Institute for Risk Assessment rubber-stamped a safety dossier for glyphosate renewal [5] – a dossier prepared by the Glyphosate Task Force, a consortium of chemical companies including Monsanto. South Africa's Department of Agriculture also claims that, "all glyphosate-based

5. http://www.i-sis.org.uk/Glyphosate_Probably_Carcinogenic_to_Humans.php

Opt outs bring threat of GM planting closer to home

A European Union (EU) directive adopted in March of this year allows EU countries to “restrict or prohibit the cultivation of genetically modified organisms (GMOs) in their territory”.

Germany and Austria are already looking at ways to implement the directive and restrict GM cultivation in their own territory, but, as reported in December (Thin Ice 35) there is little to celebrate here in the UK.

National opt outs are bad news for us because the Westminster Government is strongly pro-GM. It is generally expected that the option of imposing a ban at home will break the stalemate between anti-GM countries and their pro-GM neighbours, allowing GM crops to be approved more quickly. The directive encourages nations to negotiate with GM companies and restricts the reasons that can be given for

enacting a ban. Anti-contamination measures are required in border areas, but not within nations that choose to grow GM.

The Scottish and Welsh Governments have previously opposed GM crops so may prove key, but we all have a role to play. In 2006, a Department for Environment Food and Rural Affairs (Defra) consultation on measures to segregate GM and non-GM crops received comments from over 11,000 members of the public. We need to show that level of support again and work together to ensure that our elected representatives protect our right to grow and eat GM free.

GM Freeze is planning around a number of scenarios that could lead to GM planting in the UK. All need your help so please make sure we have your email address for action requests. You can email raoul@gmfreeze.org or call us on 0845 217 8992.

New GM imports

On 24 April, the European Commission authorised 19 different GMOs for import into Europe. None of the approvals are for cultivation – 17 are for food or feed use and 2 are cut flowers – but as most are new this represents a significant influx of GM products.

Among them is Monsanto's GM soyabean MON87708 which has been engineered to survive spraying with the weedkiller dicamba. Dr Helen Wallace, Director of GeneWatch UK said that “a pesticide arms race is underway. This will lead to yet more resistant superweeds, resistant to more weedkillers, and residues from spraying with dicamba will enter the food chain. The EU should not be importing crops that will damage the environment elsewhere and supermarkets should be requiring their meat and dairy suppliers

not to use them.”

The EU approvals process for imports does not consider harm caused where the crops are grown but GM Freeze will be working to raise the profile of these issues in a new campaign focused on GM animal feed. Please look out for more details in your email inbox or the next issue if Thin Ice.

Alongside the new authorisations, the European Commission published proposals to allow individual countries to ban imports of GM crops in a similar way to the new cultivation opt outs. Concerns have been expressed on all sides, with GM companies objecting to the fragmentation of the market and Mute Schimpf, food campaigner for Friends of the Earth Europe, describing the new draft law as “a smokescreen which fails to deal with the democratic deficit at the centre of the debate on GM foods.”

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products... have been through a robust chemical risk assessment process” on the basis of risks assessments done by US EPA, EFSA and others. However, none of these bodies has done as robust a risk assessment as IARC.

Science-led policy

When the new UK Government sets out to fulfil the Conservative manifesto pledge to ‘support a science-led approach to GM crops and pesticides’ [6], on

what science does it intend to rely? Old, flawed studies produced by an industry vested in its own interest or independent global experts in the WHO, whose sole mission is human health?

What next?

The future of glyphosate and the future of GM in our food and fields are closely linked so GM Freeze will continue monitoring the situation and campaigning to protect our right to grow and eat GM free.

New Co-ordinator



Raoul Bhambral

We welcomed a new GM Freeze Co-ordinator to the team in April. Working from Cardiff, Raoul Bhambral will be the first point of contact for supporters and will be organising lots of campaign activity. He is no stranger to GM campaigning as he explains himself.

“My first job in the environmental sector was as Friends of the Earth Cymru’s GM-free Welsh Environment Campaigner, where I lobbied the newly-formed National Assembly for Wales to adopt a strong, restrictive policy towards GM crops. At Friends of the Earth Europe I helped coordinate efforts to prevent the spread of GM crops. I am delighted to be focusing on GM again, at such a vital time, so please get in touch on raoul@gmfreeze.org if there is anything I can help you with.”

6. <https://www.conservatives.com/Manifesto>

INTERNATIONAL NEWS

● In February the American confectionary giant Hershey's announced that it will remove GM ingredients from its Milk Chocolate and Kisses products by the end of the year. We can't be sure whether the influx of GM Hershey's products on UK shelves is linked but GM Freeze continues to list sightings and encourage consumers to tell retailers that they do not want America's cast-offs www.gmfreeze.org/spotted.

● In April, Brazil's National Technical Commission on Biotechnology (CTNBio) approved the commercial production of GM eucalyptus trees as well as corn and soya engineered to be tolerant of the herbicide 2,4-D. The GM eucalyptus was developed by FuturaGene Brazil to be faster-growing but international groups pronounced

the decision dangerous and illegal as it violates the UN Convention on Biological Diversity (UN CBD) to which Brazil is a signatory. Geneticist Dr Ricarda Steinbrecher, who is co-Director of EcoNexus, said that "regulation of GE trees at a national level will not be sufficient. The large-scale dispersion of reproductive material means GE trees are likely to cross national borders, and even continents given the extent of human activity, trade and travel. A review of the scientific literature shows that currently there is insufficient data and understanding for meaningful risk assessments of GE trees. Both scientific literature and in-field experience show that contamination by and dispersal of GE trees will inevitably take place. The CBD decision was taken in the understanding of the risk

to global forest ecosystems – and this is an international matter, both scientifically and judicially."

● There are two pieces of good news to report on GM labelling in the USA. In April the US District Court ruled against an injunction brought by the Grocery Manufacturer's Association, Snack Food Association and others to try to halt the enacting of the State of Vermont's Act 120 which was signed into law a year earlier. The law, which is scheduled to take effect in July 2016, states that food offered for retail sale in Vermont must be labelled if it is produced with genetic engineering.

● Then in June, Jackson County Oregon's GMO ban was upheld by a Federal judge. 66% of Jackson County voters backed a ban on the planting of GM crops in November, but opponents tried to have the vote overruled.

● The journal Science published an article in May about research showing that bacteria living in the leaves of poplar trees fix nitrogen from the air, providing the tree with a natural form of nitrogen fertilizer. They also found that a number of crops grow better when doused with a broth containing the bacteria – a discovery considered radical because it has long been considered that nitrogen fixation happens primarily in nodules on the roots of legumes and a few other plants.

International responses to glyphosate cancer classification

Sri Lankan President Maithripala Sirisena announced in May that the import and release of glyphosate will be banned with immediate effect. The release of already imported stocks is also barred.

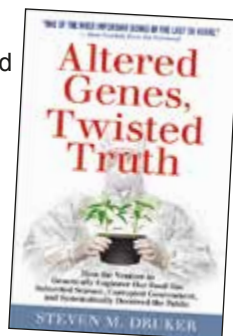
Late in 2014, the Dutch parliament voted to ban the sale of glyphosate-based herbicides to private parties – a ban that was initially proposed several years ago and will come into effect towards the end of 2015.

Colombia has announced it will stop using glyphosate to destroy illegal plantations of coca.

Glyphosate is now considered a carcinogen by Denmark's Working Environment Authority (WEA)

Controversial new book

On 4 March 2015, American lawyer Steven Druker launched his book *Altered Genes, Twisted Truth* in the UK at an open meeting of the All Party Parliamentary Group on Agroecology. Druker spoke to a packed audience about his assertions that there is no scientific consensus on GM safety; that evidence against GM has been systematically suppressed and distorted; that the American Food and Drug Administration (FDA) covered up warnings from its own scientists;



that both humans and animals have been harmed by consuming GM products and that comparisons with computer science suggest that GM is more "biohacking" than bioengineering. His assertions are controversial and Druker has challenged Monsanto's Chief Technology Officer to read the book and identify any inaccuracies within it.

Altered Genes, Twisted Truth is available in the UK through Amazon or Alibris.

"We know that glyphosate causes cancer in other mammals, but it has not been demonstrated in humans... because the effects are not investigated thoroughly enough in people yet. But when we see that other mammals get cancer from glyphosate, we must assume that people who are exposed to the substance can also develop cancer."

Philippe Grandjean, Professor of Environmental Medicine at the University of Southern Denmark

GM Freeze in the News

- EU opt outs on GM hit the headlines in January and February with comments from GM Freeze appearing in the Daily Mail, Farmers Guardian, Farmers Weekly and on air with the BBC World Service and RT (Russia Today).
- The Science and Technology Select Committee's inquiry into GM regulation (see Thin Ice 35) published its findings in February. We responded on the detail of the report and to challenge Andrew Miller MP's claim that concerns "based on values" are a distraction. Speaking on BBC 5 Live, RT and BBC Radio Wales as well as in the Daily Mail, the Telegraph and others, GM Freeze Director Liz O'Neill said "Surely the values of a nation lie at the very heart of how it chooses to take care of its countryside and feed its people?"
- Our work highlighting GM ingredients on sale in the UK (www.gmfreeze.org/spotted) was in the news in March, when we discovered that Domino's were selling GM pizza bases despite a GM-free claim on their website. The claim

was removed from the site's FAQs section a couple of hours before the Daily Mail went live with the story.

- In April, Liz wrote a blog about GM animal feed for New Internationalist (www.ow.ly/MhQsk) and on Monday 8 June she appeared fleetingly in a Panorama programme entitled *GM Food – Cultivating Fear* (www.bbc.co.uk/panorama). Rather than a balanced view of the whole GM project, the programme focused on two examples of "new GM" and a series of accusations against Greenpeace and Action Aid. In response, we highlighted the fact that the vast majority of GM in our food chain (and lining up for approval to grow in our fields) is from herbicide tolerant monocultures which have been proven to cause significant environmental harm.

You can find GM Freeze press releases, comments and details of press coverage featuring GM Freeze at www.gmfreeze.org/press

Maize pollen spreads further than previously thought

A research study, based on 10 years of monitoring and using the largest dataset of maize pollen to date, found pollen dispersed over much greater areas than previously thought.

The study, published in Environmental Services Europe in October, concludes that, "buffer distances in the kilometer range are required to prevent exposure of protected and/or sensitive species to Bt pollen, rather than ranges of tens of meters as proposed in the actual EU risk management ... [P]revious risk assessments and conclusions regarding distances, potential exposure, and effects on non-target organisms should be revised in the light of these findings". In response, the Chair of the European

Food Safety Authority (EFSA)'s GMO Panel wrote to the authority's Executive Director for permission to re-evaluate their previous assessments for several GM maize strains.

Friends of the Earth Europe and Testbiotech wrote to the European Commissioner for Health and Food Safety urging the Commission to review the overall risk assessments provided to date by EFSA and demand much more rigorous investigations before conclusions are drawn about the safety of GM plants.

They also called for a halt in cultivation and a rejection of authorisations for several GM maize strains whilst full consideration is given to the new research.

GET ACTIVE

Order a supply of our new leaflet *What is GM and why does it matter?* to share in your own community or take to events. Designed to help introduce people to the evidence-based case against GM, the leaflet is fully referenced online. Copies are free to order, though we always appreciate donations to help cover postage. Just email raoul@gmfreeze.org with your address and a note of how many you can use.



The new GM Freeze five year strategy is full of ambitious plans and we need your help to make them a reality. Please support us with a regular donation if you can, by returning the form enclosed with your copy of Thin Ice or visiting www.gmfreeze.org/donate

GM Freeze is working to help create a world in which our food is produced responsibly, fairly and sustainably. We consider and raise the profile of concerns about the impact of genetic modification. We inform, inspire, represent and support those who share our concerns. We campaign for a moratorium on GM food and farming in the UK. We oppose the patenting of genetic resources.



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We use an 0845 phone number to protect the privacy of our staff, who work from home. Calls to this number will cost 3p per minute plus your telephone company's Access Charge.

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