The Baroness Chisholm of Owlpen House of Lords

British journalists, politicians and farmers are being used as guinea pigs

On 21/03/2016 you replied to the Countess of Mar's question about glyphosate. You said the government supported EFSA's conclusions that glyphosate does not cause cancer. This was a little premature. The Commission was about to authorise glyphosate for a further 15 years, when 4 Members of the European Parliament asked for Freedom of Information to see the 14 unpublished carcinogenicity studies from the Glyphosate Task Force that IARC had been unable to see. Have the UK experts actually seen these studies or do they trust the Glyphosate Task Force (GTF), and the manufacturers of the chemical, implicitly?

The industry has much to hide: and the letter reveals some interesting information

- Monsanto Europe replied to Health Commissioner Andriukaitis on 04/04/2016 to say that the 24 GTF members were prepared to grant very limited access to the data.¹
- From this we learn that the current EU legislation is set up to "protect intellectual property and confidential information from public disclosure." "All confidential data ...shall be deleted or redacted (Regulation 1107/2009, Article 63)." Much of the industry data submitted to the German RMS was redacted. This EU regulation is set up for the industry to make money and to allow the EU citizens to be poisoned.
- There are at least 7 companies that manufacture glyphosate (each has a secret coformulant that is not tested by EFSA, but which is far more toxic to humans than glyphosate alone). So the industry has a lot of money to lose by even a partial ban.
- In the German Rapporteur Member State's Federal Institute for Pesticides Risk Assessment (BfR), the Glyphosate Task Force (whose data they used) had deleted all studies from South America that reported that glyphosate caused birth defects, infertility, cancers and DNA mutations in the Crop-sprayed rural communities. ²
- This is what is happening to the Crop-sprayed rural communities in the UK.³ The British Government has ignored the pleas of Pesticides Campaign UK just as the Argentinian Government has ignored evidence of Physicians for Crop-sprayed Towns of Argentina---purely for economic reasons.
- In that respect, Argentina is not a democracy and neither is Britain.

Protection of Monsanto by Government and Media

I wrote to the Director General of the BBC to ask him why the BBC had allowed the President of Monsanto to deny IARC's claim of carcinogenicity without permitting IARC right of reply. Lord Tony Hall failed to reply, but I had my answer when the complaints about the outrageous Panorama Programme on GM Crops were reviewed by the BBC Trust and dismissed outright. The Trust Editorial Standards Committee (ESC) Richard Ayre, Mark Damazer, Sonita Alleyne, Bill Matthews and Nicholas Prettejohn, actually apologised to Monsanto. "The programme had achieved due accuracy and due impartiality in the way it

https://dl.dropboxusercontent.com/u/6366131/letter%20to%20Commissioner%20Andriukaitis.pdf
http://www.amsi.ge/jbpc/31515/15-3-abs-2.htm

Cancer and detrimental reproductive effects in an Argentine agricultural community environmentally exposed to glyphosate.

http://www.theecologist.org/News/news_analysis/2848400/its_not_just_glyphosate_and_neonicotinoids_whywe_need_a_pesticidefree_future.html

⁴ http://downloads.bbc.co.uk/bbctrust/assets/files/pdf/appeals/esc_bulletins/2016/feb.pdf

reflected the role of Monsanto (an agricultural company). In accurately stating Monsanto's direct interest in the project and in reflecting the reporter's professional judgement that the exercise could sway the public argument over GM, Panorama gave the audience sufficient information to reach an informed view on the issue."

Richard Ayre the Chairman of the ESC of the BBC Trust was founder of the UK Food Standards Agency. He had conflicts of interest having previously worked with Monsanto.

Unanswered letters from the UK Government, Civil Servants, Media and Academic Bodies My Open Letters to the CMO England, The Wellcome Trust and Public Health England; The Director General of the BBC, former Defra Minister Lord de Mauley; and the Editor in Chief of the British Medical Journal (among many others) were unanswered. Surprisingly the President of the NFU <u>did</u> reply to my 13-page Open Letter to the NFU, but possibly he hadn't read it very carefully. Meurig Raymond wrote to defend the right of farmers to use chemicals to protect their crops even though I had informed him that they were damaging the brains of children in Britain.

"Dear Ms Mason

The NFU firmly believes that technologies such as advanced plant breeding, biotechnology and chemical crop protection are a positive and essential part of British farming and food production. There are significant challenges inherent in providing safe, affordable and high quality food in a sustainable way in the context of growing populations, pressure on resources, volatility and a changing climate. We must therefore have all the tools in the box to source solutions to these challenges. The NFU is committed to basing its policies on the most robust scientific evidence and expertise from scientists and regulatory authorities around the world.

Meurig Raymond President"

Who decided to substitute alcohol for glyphosate as the prime cause of human cancers? An article by Anne Gulland was published in the British Medical Journal on 9 April 2016⁶ that reported a survey commissioned by Cancer Research UK: 'People lack awareness of link between alcohol and cancer.'

The Report produced by researchers at the University of Sheffield 'comes ahead of the consultation closing on how well new drinking guidelines proposed by the UK's Chief Medical Officers in January 2016, are communicated.'⁷

"Almost 90 per cent of people in England don't associate drinking alcohol with an increased risk of cancer" Alison Cox, Cancer Research UK's Director of Cancer Prevention. She said: "The link between alcohol and cancer is now well established, and it's not just heavy drinkers who are at risk. Drinking alcohol is linked to an increased risk of seven different cancers - liver, breast, bowel, mouth, throat, oesophageal (food pipe), laryngeal (voice box) - but when people were asked "which, if any, health conditions do you think can result from drinking too much alcohol?" just 13 per cent of adults mentioned cancer." Dr Penny Buykx, a senior research fellow at The University of Sheffield and lead-author of the report, said: "We've shown that public awareness of the increased cancer risk from drinking alcohol remains worryingly low. People link drinking and liver cancer, but most still don't realise that cancers including breast cancer, mouth and throat cancers and bowel cancer are also linked with alcohol, and that risks for some cancers go up even by drinking a small amount."

⁵ https://www.academia.edu/17144792/Open_Letter_to_the_National_Farmers_Union

⁶ http://www.bmj.com/content/353/bmj.i1881

⁷ http://www.cancerresearchuk.org/about-us/cancer-news/press-release/2016-04-01-9-in-10-dont-link-alcohol-and-cancer

The CMO England blames lifestyle choices in people with liver damage and liver cancer Evidence of glyphosate residues and liver damage has been found in <u>Danish dairy cattle</u> fed GM soya and maize⁸ and <u>Séralini's rats</u>. That is not due to lifestyle choices but to glyphosate residues. Birth defects in piglets in Denmark correlated with glyphosate residues in organs.⁹

Cancers in pets have increased similarly over that time: is that due to alcohol?

The American Veterinary Medical Foundation notes that "Cancer is the leading cause of death in older pets accounting for almost half of the deaths of pets over 10 years of age." According to Samsel ¹⁰ mammary tumours are common in dogs and cats and the incidence is increasing. He analysed 9 brands of dog and cat food and found significant levels of glyphosate and AMPA in all of them. Séralini's group wrote a paper 'Laboratory Rodent Diets Contain Toxic Levels of Environmental Contaminants: Implications for Regulatory Tests'. We describe the contamination with environmental pollutants of 13 laboratory rodent diets from 5 continents. ¹¹ This was criticised by the industry-funded UK Science Media Centre. ¹²

Syngenta's founder was appointed Chairman of CRUK in 2010. He was former Chairman of CropLife International. Was it his idea to link cancer with alcohol to protect glyphosate or was it suggested by the UK Chief Medical Officer to whom I wrote in November 2015? "Anthony Samsel says there is no safe dose of glyphosate."

The UK Science Media Centre is hosted by the Wellcome Trust and is financed by industry Colin Macilwain, a science policy writer from Edinburgh who has worked as a reporter and an editor from both sides of the Atlantic¹³ wrote about plans to replicate Britain's Science Media Centre (SMC) in the United States, which he said was "fraught with danger." Extracts: "The London SMC was set up because UK scientific leaders were upset that environmentalists had successfully fought the introduction of genetically modified food; they felt that the UK media were too susceptible to environmental scare stories about new technologies.

Despite the fears of the SMC founders, the British press — led by the BBC, which treats the Confederation of British Industry with the deference the Vatican gets in Rome — is overwhelmingly conservative and pro-business in its outlook. It is quite unperturbed by the fact that SMC sponsors include AstraZeneca, BP, Coca-Cola, L'Oreal, Monsanto, Syngenta (as well as Nature Publishing Group) but not a single environmental non-governmental organization (NGO) or trade union.

Fiona Fox, the SMC's director, says that the centre operates independently of its sponsors and points out that none (except its host, the Wellcome Trust) accounts individually for more than 5% of its income." (However, examination of the Funding for 2014, 14 the total funding from industry and trade bodies (27% from 29 Organizations) exceeds any other source of funding apart from the Government & the Wellcome Trust). "She adds that no NGOs are involved because it was their public-relations skills that the founders of the SMC sought to match." Macilwain goes on to say: "But the perception that the environmental group Friends

3

⁸ Glyphosate in urine of cows in Denmark; metabolic changes in blood parameters including increased lipid profile marker cholesterol http://dx.doi.org/10.4172/2161-0525.1000186 This is the first study showing the extent of the exposure to glyphosate of Danish dairy cattle and its impact on different blood parameters.

⁹ http://orgina.com/company/data-stion.org/10.4172/2161-0525.1000186

 $[\]frac{9}{\text{http://omicsonline.org/open-access/detection-of-glyphosate-in-malformed-piglets-2161-0525.1000230.pdf}}{10}$

https://www.academia.edu/17751562/Glyphosate_pathways_to_modern_diseases_IV_cancer_and_related_pathologies

¹¹ http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0128429

http://www.sciencemediacentre.org/expert-reaction-to-study-investigating-content-of-and-contaminants-in-laboratory-rodent-diets/

¹³ http://www.nature.com/news/two-nations-divided-by-a-common-purpose-1.10224

¹⁴ http://www.sciencemediacentre.org/about-us/funding/

of the Earth constitutes a bigger threat to scientific truth-telling than some of the corporate names on the SMC's sponsorship list is not one the US media would accept. Some of those considering a US centre share these concerns. They think that their funding model will have to rely on charitable trusts, not companies or government agencies."

Monsanto scientists rally in the SMC to dismiss the GMO and Roundup study as fraudulent and it went largely unreported by the British Media

In September 2012 Prof Gilles-Eric Séralini and his team (France) published a 2-year rat feeding study with GMO Roundup®-tolerant maize and Roundup®. This diet provoked chronic hormone and sex dependent pathologies in rats; males developed tumours at 4 months and females at 7 months.

Highlights: "A Roundup®-tolerant maize and Roundup® provoked chronic hormone and sex dependent pathologies. Female mortality was 2–3 times increased mostly due to large mammary tumours and disabled pituitary. Males had liver congestion, necrosis, severe kidney nephropathies and large palpable tumours. This may be due to an endocrine disruption linked to Roundup® and a new metabolism due to the transgene. GMOs and formulated pesticides must be evaluated by long term studies to measure toxic effects."

The Séralini study was pronounced as fraudulent by the Industry-financed UK Science Media Centre. However, apart from John Vidal Environment Correspondent in the Guardian, it largely went unreported by the British Media. Vidal said: "But it was a triumph for the scientific and corporate establishment which has used similar tactics to crush other scientists... Vidal examined the credentials of the 'experts' and found that they were pro-GM activists and some had worked for Monsanto. However, the study had worldwide coverage particularly in France.

Prof Séralini won an award for his rat feeding studies on GMOs, glyphosate and tumours On 16 October 2015 Prof Gilles-Eric Séralini was awarded Whistleblower of the Year by German Scientists for his work on GMOs and Glyphosate. Citation: "He was the first to publish animal test results demonstrating the toxic and carcinogenic properties of the most commonly used herbicide worldwide, the glyphosate-based "Roundup" by carrying out a two-year feeding test on rats. After the research was published, Prof Séralini was attacked by a_vehement campaign by 'interested circles' from the chemical industry as well as the industry-financed British Science Media Centre." ¹⁷ It was a shared award.

Fiona Fox boasted that the UK SMC had prevented the British public from hearing adverse reports and studies concerning Monsanto and GMO technology

Ms Fox took this as evidence that the 10-year-old centre was fulfilling its remit to prevent a repeat of incidents such as the uncritical reporting in 1998 of the claim - heavily criticised by the scientific community - made by Árpád Pusztai, a former researcher at the Rowett Research Institute in Aberdeen, that rats fed on GM potatoes had stunted growth and a repressed immune system. She said that the relatively muted coverage in the UK contrasted with how the story was reported in other countries, particularly France, where it was "front-page news everywhere", prompting the French government to launch an inquiry into the study's findings. According to Ms Fox, the Science Media Centre's ability to gather a lot of expert comment quickly was particularly valuable in this instance because journalists who were shown the paper in advance of its publication were required to sign a highly

¹⁵ http://www.sciencemediacentre.org/pages/press_releases/12-09-19_gm_maize_rats_tumours.htm

¹⁶ http://www.theguardian.com/environment/2012/sep/28/study-gm-maize-cancer

http://neu.vdw-ev.de/wp-content/uploads/2015/10/Presseinformation-Whistleblower-Preisverleihung-2015_150917_eng.pdf

https://www.timeshighereducation.com/news/research/research-intelligence-shock-troops-check-poor-gm-study/421361.article

unusual agreement that prevented them from sharing it with third parties. Critics claimed that this minimised the time journalists had to gather potentially negative commentary.

Tony Blair, Monsanto and the Royal Society combined to discredit Dr Árpád Pusztai when he found that rats fed GM potatoes had complications. His lab was closed down

The Pusztai scandal mentioned above involved Prime Minister Tony Blair and the Royal Society. On 10 August 1998 in a Granada 'World in Action' broadcast Dr Árpád Pusztai (a GM expert leading the team at the Rowett Institute) explained his research that showed that rats fed with genetically modified potatoes had suffered immune damage. He raised questions about the safety of GM food in the human diet on the basis of the study. The news flashed around the world. Professor Robert Orskov OBE who had worked at the Rowett Institute for 33 years was told that phone calls went from Monsanto, the American firm that produces 90% of the world's GM food, to Clinton and then to Blair. "Clinton rang Blair and Blair rang James" (Professor James, Director of the Rowett Institute). "There is no doubt he was pushed by Blair to do something. It was damaging the relationship between the USA and the UK, because it was going to be a huge blow for Monsanto." As a result, Dr Pusztai lost his job and his Laboratory in the Rowett Institute was closed down.

ADAS recommended pre-harvest crop spraying with Roundup® in 1980²¹ and spraying on grassland in 1985. Researches showed two Monsanto scientists wrote the first papers

The CMO and Public Health England try to explain away all the diseases affecting the UK Many diseases in the UK and the US are spiralling out of control: obesity, diabetes, congenital anomalies, cancers, etc. The Government and the NHS blame the people, but chemicals and corporations are to blame. Increasing obesity, autism, Alzheimer's, Diabetes, liver failure, kidney failure, heart disease, mental disorders, depression, suicide, hypercholesterolaemia and cancers have been acknowledged. Diseases have been blamed on public lifestyle (such as overeating, lack of exercise, alcoholism and smoking), failures of GPs, isolation or global warming. The rest has been ignored. Congenital anomalies, Parkinson's, Motor Neurone Disease, Brain Tumours, Lymphomas, infertility, cataracts, inflammatory bowel disease are amongst the medical conditions that are increasing. Britain and the US whose farming systems depend on chemicals must be the only countries where the citizens haven't been told that glyphosate has been declared a probable carcinogen to humans, according to WHO International Agency for Research into Cancer (IARC).²²

Sugar contains glyphosate residues: glyphosate is used for ripening sugarcane 'to increase the sucrose content'

In the US and Latin America, glyphosate is used to ripen sugarcane.²³ "Chemical ripening of sugar cane is an important component to profitable sugar production in the United States as well as other sugarcane industries throughout the world." But the price paid for sugar cane to be profitable to the corporations is an alarming increase in renal failure in young male agriculture workers in Louisiana and South America. Louisiana's death rate per 100,000 from nephritis/kidney disease is 26.34 per 100,000 as compared with a US rate of 14.55.²⁴

¹⁹ http://www.psrast.org/pusztblair.htm

http://news.bbc.co.uk/1/hi/health/149882.stm

http://www.hgca.com/media/185527/is02-pre-harvest-glyphosate-application-to-wheat-and-barley.pdf

http://www.thelancet.com/pdfs/journals/lanonc/PIIS1470-2045(15)70134-8.pdf Carcinogenicity of tetrachlorvinphos, parathion, malathion, diazinon, and glyphosate.

²³ http://dx.doi.org/10.1614/WS-D-09-00001.1

²⁴ Network Coordinating Council (May 2013) 2012 Annual Report: Quoted in Samsel & Seneff

Costa Rica has a similar pattern of chronic renal disease. ²⁵ In 2005 Cerdas reported that: "in the north part of the country, in Guanacaste, in the last five years there has been an epidemic of chronic renal failure. The demographic features of patients are very interesting. All are young men, between the ages of 20 and 40 years, with a clinical and pathologic picture of chronic interstitial nephritis. The most interesting feature of these patients is epidemiologic—all of them are long-term sugar-cane workers. A specific study of their work environment is needed to determine what in their daily activities puts them at increased risk for chronic renal failure."

The European Glyphosate Task Force said there was no evidence for a link between glyphosate and chronic renal failure

It persuaded the Sri Lankan government to lift its ban on glyphosate after a research scientist showed an indirect link. ²⁶ This was what the Colombo Times wrote in May 2013. A European Glyphosate Task Force has concluded that there is no true link to the kidney disease. "The research study conducted by Dr. Channa Jayasumana of the Rajarata University (Sri Lanka)²⁷ found that while the weedicide itself is not nephrotoxic, when it combines with hard ground water containing metals such as cadmium and arsenic, either naturally present in the soil or added through fertilizer, glyphosate becomes extremely toxic to the kidney. However, since then the validity of Dr Jayasumana's research had come under question as the manufacturer Monsanto and other agrochemical producers have raised objections to the findings saying that there is no evidence to suggest the conclusion that glyphosate is responsible for Chronic Kidney Disease of unknown aetiology (CKDu)." "CKDu was first discovered among the rice paddy farmers in the Northern Central Province of Sri Lanka. Over the next two decades, the disease spread rapidly to the other farming areas. The prevalence of the diseases is estimated at 15% affecting a total of 400,000 patients with a death toll of around 20,000."²⁸

Proof that obesity is a problem related to glyphosate: a study showed that by 2025, the UK will have the highest obesity rates among both men and women in Europe, at 38%: in contrast in France women have had virtually no increase in BMI over 40 years

A study on obesity published in the Lancet in March 2016 says: "About a fifth of all adults around the world and a third of those in the UK will be obese by 2025, with potentially disastrous consequences for their health". "The Lancet Study says there is zero chance that the world can meet the target set by the UN for halting the climbing obesity rate by 2025. "Over the past 40 years, we have changed from a world in which underweight prevalence was more than double that of obesity, to one in which more people are obese than underweight," said senior author Prof Majid Ezzati from the School of Public Health at Imperial College London. "The English-speaking world is particularly badly affected. The UK will have the highest obesity among both men and women in Europe, at 38%.

In contrast: "Against the trend of steadily rising weight, women in some countries had virtually no increase in BMI over the 40 years – in Singapore, Japan, and a few European countries including Czech Republic, Belgium, France, and Switzerland."

Fiona Fox Director of the UK SMC boasted that the Séralini study went virtually unreported in the UK, but was highly publicized world wide, "particularly France, where it was "front-page news everywhere", prompting the French government to launch an

²⁵ http://www.nature.com/ki/journal/v68/n97s/full/4496413a.html

²⁶ http://www.colombopage.com/archive_14A/May13_1399920230CH.php

²⁷ http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3945589/

²⁸ http://www.i-sis.org.uk/Sri_Lanka_partially_bans_glyphosate.php

²⁹ http://www.theguardian.com/society/2016/mar/31/one-fifth-of-worlds-adults-will-be-obese-by-2025-study-predicts

inquiry into the study's findings." The French were the first to announce a ban on glyphosate, while the British Government agrees with EFSA and refuses to ban it. So the French citizens are aware, but the <u>British public has been kept in ignorance of Séralini's rat study</u> by the British Media and the fact that non-organic food is contaminated with pesticide residues, including glyphosate. The BBC has been actively promoting Monsanto and GMOs.

The Open Letter from America³⁰

An Open Letter from America was sent on 11 November 2014, warning countries in Europe and EU regulators not to authorize GM crops and glyphosate because of the devastating effects on human health and the environment. David Cameron ignored that advice on behalf of England. He and the then Defra Minister Lord de Mauley concealed the letter from the British public. The European Commission and the European Food Safety Authority ignored it as well and have continued to approve GM Crops for growing and for food and feed in the European Union.

Soil Association's campaign NOT IN OUR BREAD:³¹ the UK's position is anomalous Meeting on 15 July 2015 in London between the Soil Association and a Scientific Panel ³² The scientific panel included Professor Christopher Portier one of the co-authors of the World Health Organisation's International Agency for Research on Cancer's (IARC) recent report that determined Glyphosate's status as a probable carcinogen. Portier reiterated the IARC's conclusions, and said: "Glyphosate is definitely genotoxic. There is no doubt in my mind."

<u>Dr Robin Mesnage</u> of the Department of Medical and Molecular Genetics at Kings College in London, revealed new data analysis showing Round Up®, the most common brand of Glyphosate-based herbicides, is 1,000 times more toxic than Glyphosate alone due to the inclusion of other toxic chemicals in its mix. <u>Claire Robinson</u>, an editor at GMWatch.org gave the international perspective looking at moves by other countries to ban Glyphosate; "Outside the United Kingdom, the reaction to the WHO IARC report has been dramatic. Some retailers in Switzerland and Germany have removed Glyphosate products and France has committed to do so by 2018 and German states are calling for an EU-wide ban. The Danish Working Environment Authority has declared it as a carcinogen and El Salvador and Sri Lanka have banned it and the Colombia government has banned aerial spraying on coca crops."

<u>Peter Melchett</u>, Soil Association policy director said; "If Glyphosate ends up in bread it's impossible for people to avoid it, unless they are eating organic. On the other hand, farmers could easily choose not to use Glyphosate as a spray on wheat crops – just before they are harvested. This is why the Soil Association is calling for the immediate ending of the use of Glyphosate sprays on wheat destined for use in bread."

Public lack of awareness of pesticides in bread was not reported in the media: in fact the BBC 2 Trust Me I'm a Doctor, Dr Michael Mosley, said it wasn't worth eating organic food However, a Report by Pesticides Action Network- UK has shown that 46% of non-organic food in 2013 contained residues of one or more pesticides and this had increased from 25% in 2003. A further Report by PAN-UK: Pesticides in your daily bread showed that nearly

31 http://www.soilassociation.org/notinourbread

³⁰ www.theletterfromamerica.org

 $^{^{32}\,}http://www.soilassociation.org/news/newsstory/articleid/8110/soil-association-calls-for-ban-on-glyphosate-the-world-s-most-widely-sold-weedkiller$

³³ http://www.pan-uk.org/files/pesticides_on_a_plate_2013_final.pdf

two-thirds of bread contained one or more pesticides and the three most frequently found were glyphosate, chlormequat and malathion. ³⁴

UK farmers use more carcinogenic weed killer: The Times August 15 2015³⁵

"Farmers have sharply increased their use of a weed killer that has been classified as 'probably carcinogenic in humans.'" Ben Webster, The Times Environment Correspondent said. "More than 1,700 tonnes of glyphosate were sprayed on crops last year, up a third on 2012, according to the Department for Environment, Food and Rural Affairs (Defra). The total area sprayed with the weed killer grew by almost 500,000 hectares to 2.1 million hectares, an area the size of Wales." Guy Gagen, Chief Arable Adviser for the National Farmers' Union, said that glyphosate usage had probably increased to control black-grass, a weed that is resistant to weaker herbicides. He said: "No farmer would be wanting to put a chemical on a crop when he doesn't need to." He added that spraying wheat could result in traces of glyphosate ending up in bread sold in supermarkets but the amount was well below the maximum residue level set by the EU. A Defra spokesman said: "There are extensive regulations in place so that people and the environment are protected from pesticides. The approval of glyphosate for use across Europe is being reviewed by the EU Commission."

That is why there is an epidemic from cancers in the UK. This was predicted by the Séralini study in rats

The British public still has not been told about the Séralini rat–feeding study of GMO and Roundup® by the Government or the Media. That's why in Europe they say: "the British people are being treated like lab-rats." ³⁷ Celebrity deaths are reported "after a short battle with cancer."

Healthy Harvest-safeguarding the Crop Protection toolbox: June 2014

The National Farmers' Union (NFU), the Crop Protection Association (CPA) and Agricultural Industries Confederation (AIC) launched *Healthy Harvest – safeguarding the crop protection toolbox* in June 2014. The NFU and pesticide companies continually defend the use of pesticides <u>for economic reasons</u> and complain at any attempt to restrict the 320 at their disposal. One farmer defended aerial spraying of bracken with a herbicide. ³⁸ CPA, AIC and the NFU commissioned Andersons to write a Report: <u>The effect of the loss of plant protection products (i.e. pesticides) on UK Agriculture and Horticulture</u> that predicted dire economic effects on UK farming if pesticides were restricted. ³⁹

UK Food and Environment Research Agency (FERA) survey of pesticides 1988 to 2014

This review of pesticides active substances and number of times treated from 1988 to 2014 confirms that <u>Pesticide Residues on British food are increasing annually</u>. A survey of pesticide (active substances) usage on Oil Seed Rape (OSR) 1988-2014 showed that the number of active substances applied had increased from 5 in 1988 to 15 in 2014 (Fig 1) and

 $^{^{34}}$ http://www.pan-uk.org/files/Pesticides%20in%20Your%20Daily%20Bread%20guide%20%20FINAL%20(1).pdf

³⁵ http://www.thetimes.co.uk/tto/environment/article4528297.ece

³⁶ HERBICIDE RESISTANT BLACKGRASS, FIRST SEEN IN 1982 IS NOW FOUND ON 16,000 FARMS IN 34 COUNTIES. This is a glyphosate-resistant super weed, the same as in GM in the US and Japanese Knotweed in the UK. Does the NFU understand super weeds and do they really want GMO technology?

³⁷ http://www.theguardian.com/environment/2016/mar/08/eu-vote-on-controversial-weedkiller-licence-postponed-glyphosate

³⁸ https://www.nfuonline.com/healthyharvest_final_digital/ The impact of losing plant protection products on UK Food Production

³⁹ http://www.cropprotection.org.uk/media/89364/andersons_final_report.pdf

the number of treatments had increased from 5 in 1988 to 12 in 2014. (Fig 2) In 2014, herbicides were used on 98.4% OSR and seed treatments on 95.8%.

In 2014 glyphosate was used on Wheat (601,330 kg) Winter barley, Spring barley, Oats, Rye, Triticale, Oilseed rape (577,969 kg), Linseed, All potatoes, Peas, Beans, Sugar beet, with a total of 1,765,465 kg glyphosate on all crops. The total weight of pesticides (herbicides and desiccants, fungicides, growth regulators, molluscicides and repellants, insecticides and seed treatments) applied to farmland in 2014 was in excess of 16,000 tonnes.

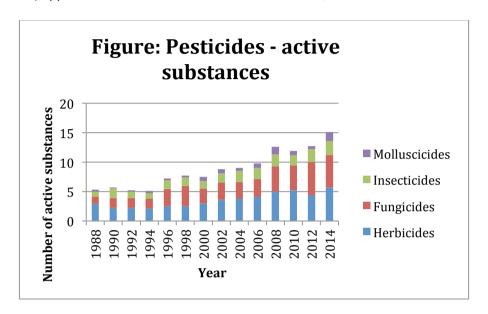


Fig. 1 PESTICIDES: Number of active substances used on Oil Seed Rape in the UK between 1988 and 2014: By kind permission of John Hoar, Hampshire Beekeeper's Spray Liaison Officer. Figures supplied by FERA

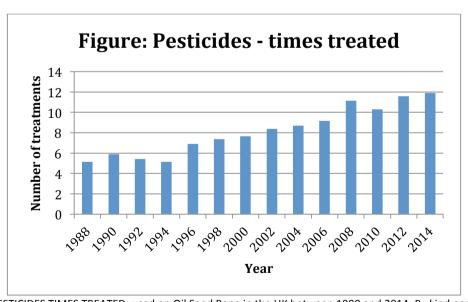


Fig. 2 PESTICIDES TIMES TREATED: used on Oil Seed Rape in the UK between 1988 and 2014: By kind permission of John Hoar, Hampshire Beekeepers Spray Liaison Officer. Figures supplied by FERA

The British Government has been 'used' by Monsanto and other pesticides companies to force the British people against their wishes to have poisoned food simply for Agrochemical Corporations to control the food supply and to make money This fact was confirmed in the 'Letter from America':

Extracts: "In our country, GM crops account for about half of harvested cropland. Around 94% of the soy, 93% of corn (maize) and 96% of cotton grown is GM. The UK and the rest of the EU have yet to adopt GM crops in the way that we have, but you are currently under tremendous pressure from governments, biotech lobbyists, and large corporations to adopt what we now regard as a failing agricultural technology...Studies of animals fed GM foods and/or glyphosate, however, show worrying trends including damage to vital organs like the liver and kidneys, damage to gut tissues and gut flora, immune system disruption, reproductive abnormalities, and even tumors. These scientific studies point to potentially serious human health problems that could not have been anticipated when our country first embraced GMOs, and yet they continue to be ignored by those who should be protecting us. Instead our regulators rely on outdated studies and other information funded and supplied by biotech companies that, not surprisingly, dismiss all health concerns.

Through our experience we have come to understand that the genetic engineering of food has never really been about public good, or feeding the hungry, or supporting our farmers. Nor is it about consumer choice. Instead it is about private, corporate control of the food system. Americans are reaping the detrimental impacts of this risky and unproven agricultural technology. EU countries should take note: there are no benefits from GM crops great enough to offset these impacts. Officials who continue to ignore this fact are guilty of a gross dereliction of duty." Most of the countries in the EU took that advice and opted out of GM (including Scotland, Wales and Ireland).

Monsanto has used British journalists, politicians and farmers as guinea pigs too

All these organisations have been misguidedly protecting Monsanto's interests. However, Monsanto has concealed its secret studies of glyphosate's carcinogenicity in the US EPA. Studies that gained glyphosate's authorisation in the first place were fraudulent. Hugh Grant CEO of Monsanto, in an interview with *Here and Now*'s Robin Young and Jeremy Hobson in March 2016 reported in Real Independent News and Film (RINF) said: ⁴⁰ "Roundup is not a carcinogen. It's 40 years old, it's been studied; virtually every year of its life it's been under a review somewhere in the world by regulatory authorities." But Grant is lying. Prior to entering the seed business, Monsanto produced polychlorinated biphenyls, commonly known as PCBs, from 1935 to 1979. The toxic compounds were used to insulate electronics before being outlawed by the U.S. Environmental Protection Agency due to human health and environmental concerns.

Internal memos prove the seed giant knew about the toxicity of PCBs as far back as 1970 but continued production, focusing only on profit revenue; Monsanto earned \$10 million off the pollutants, which are now realized to have contaminated waterways all over the world. Grant had previously told Bloomberg that genetically modified foods are good for poor people who can't afford organic. He said: "Opponents of GM who want to block genetically modified foods are guilty of 'elitism' that's fanned by social media and fail to consider the needs of the rest of the world." As a social media and fail to consider the needs of the rest of the world.

Hugh Grant can afford to eat organic food, but he has no idea of the extent of pollution of the US environment with glyphosate and neonicotinoid insecticide residues because government and regulators have failed to measure levels. The farmers just apply the chemicals blindly each year. Few can avoid the pollution of water, soil and air by genotoxic and teratogenic herbicides, insecticides and other industrial chemicals.

⁴⁰ http://rinf.com/alt-news/latest-news/monsanto-ceo-hugh-grant-insists-roundup-safe-adamantly-denies-cancer-link/

⁴¹ http://2paragraphs.com/2013/05/monsanto-ceo-says-gmo-food-good-for-poor-people/

 $^{{}^{42}\,}http://www.bloomberg.com/news/2013-05-15/monsanto-sees-elitism-in-social-media-fanned-opposition.html}$

Just as with PCBs, sealed documents from the US EPA show that Monsanto knew that glyphosate caused cancer in animals but manipulated the data

Monsanto has known since the 1970s that glyphosate causes cancer, according to this paper by researchers Anthony Samsel and Stephanie Seneff. Samsel is the first independent researcher to examine Monsanto's secret toxicology studies on glyphosate...this time in **pristine condition and without redactions** because Monsanto thought they were safely concealed in the US EPA. Samsel obtained the studies through a request to his Senator. With Dr Stephanie Seneff of MIT, he reviewed Monsanto's data. Samsel and Seneff wrote paper IV on Glyphosate: Glyphosate, pathways to modern diseases IV: cancer and related pathologies ⁴³ and concluded that: "significant evidence of tumours was found during these investigations".

Extract from IV: Glyphosate has a large number of tumorigenic effects on biological systems, including direct damage to DNA in sensitive cells, disruption of glycine homeostasis, succinate dehydrogenase inhibition, chelation of manganese, modification to more carcinogenic molecules such as N-nitrosoglyphosate and glyoxylate, disruption of fructose metabolism, etc. Epidemiological evidence supports strong temporal correlations between glyphosate usage on crops and a multitude of cancers that are reaching epidemic proportions, including breast cancer, pancreatic cancer, kidney cancer, thyroid cancer, liver cancer, bladder cancer and myeloid leukaemia.

In 1985 the US EPA classified glyphosate as a Group C carcinogen but changed to Group E in 1991⁴⁴

An archival document from the US EPA revealed that some US EPA staff colluded with Monsanto to downgrade the classification of the carcinogenicity of glyphosate. The original Panel comprised of members of the Toxicology Branch of the Hazard Evaluation Division who examined the carcinogenic potential of glyphosate. In a consensus review on March 4 1985 the Committee classified glyphosate as a Group C carcinogen. It was based on the incidence in rats/mice of renal tumours, thyroid C-cell adenomas and carcinomas, pancreatic islet cell adenomas, hepatocellular adenomas and carcinomas in males. However, in 1991 The Health Effects Division Carcinogenicity Peer Review Committee met on June 26 1991 to discuss and evaluate the weight of evidence on glyphosate with particular emphasis to its carcinogenic potential. In a review of the data the Committee concluded that glyphosate should be classified as Group E (evidence of non-carcinogenicity for humans). In order to cover themselves they declared: "It should be emphasized, however, that the designation of an agent in Group E is based on the available evidence at the time of evaluation and should not be interpreted as a definitive conclusion that the agent will not be a carcinogen under any circumstances"

There were signatures of the 11 members present, six members signed *in absentia* but three members refused to sign because they "did not concur"." Presumably they knew that the change of classification of glyphosate from Group C to Group E was fraudulent.

One of Monsanto's own long term studies in rats in 1990⁴⁵ showed an increased risk of cataracts following exposure to Roundup®

Annual rates of admission for cataract surgery in England rose 10-fold from 1968 to 2003: from 62 episodes per 100,000 population in 1968 to 637 in 2004. The rate of cataract surgery

⁴³

https://www.academia.edu/17751562/Glyphosate_pathways_to_modern_diseases_IV_cancer_and_related_pathologies

 ⁴⁴ http://www.epa.gov/opp00001/chem_search/cleared_reviews/csr_PC-103601_30-Oct-91_265.pdf
 45 Stout, L.D. & Ruecker, F.A. Chronic study of glyphosate administered in feed to albino rats. Unpublished Study, Project No. MSL-10495. Monsanto Agricultural Company (2,175 pp.) EPA MRID 416438-01 (26 September 1990)

in England "increased very substantially" between 1989 and 2004 from 173 (1989) to 637 (2004) episodes per 100,000 population. ⁴⁶ As reported before, some UK farmers started spraying glyphosate on crops pre-harvest in 1980 at the suggestion of a scientist working for Monsanto ⁴⁷ and on grassland in 1985 on the advice of another Monsanto scientist. ⁴⁸ A 2016 study by the WHO also confirmed that the incidence of cataracts had greatly increased: ⁴⁹ 'A global assessment of the burden of disease from environmental risks.' says that cataracts are the leading cause of blindness worldwide. Globally, cataracts are responsible for 51% of blindness – an estimated 20 million individuals suffer from this degenerative eye disease.

The rat study on cataracts was one of many that Anthony Samsel obtained under FOI from US EPA. He said: "Forty years of glyphosate exposure have provided a living laboratory where humans are the guinea pigs."

On December 3rd 2015, it was announced that Monsanto, the US-based transnational corporation, is to be put on trial in the International Criminal Court in The Hague for ecocide⁵⁰

PARIS – The Organic Consumers Association (OCA), IFOAM International Organics, Navdanya, Regeneration International (RI), and Millions Against Monsanto, joined by dozens of global food, farming and environmental justice groups announced today that they will put Monsanto, a US-based transnational corporation, on trial for crimes against nature and humanity, and ecocide, in The Hague, Netherlands, on World Food Day, October 16, 2016. This International Criminal Court, established in 2002 in The Hague, has determined that prosecuting Ecocide as a criminal offense is the only way to guarantee the rights of humans to a healthy environment and the right of nature to be protected.

The tribunal's website says: "According to its critics, Monsanto is able to ignore the human and environmental damage caused by its products and maintain its devastating activities through a strategy of systemic concealment: by lobbying regulatory agencies and governments, by resorting to lying and corruption, by financing fraudulent scientific studies, by pressuring independent scientists, by manipulating the press and media, etc. The history of Monsanto would thereby constitute a text-book case of impunity, benefiting transnational corporations and their executives, whose activities contribute to climate and biosphere crises and threaten the safety of the planet."

In addition to Monsanto, the tribunal intends to mount a "best case" to denounce "all multinational companies which are driven by the profit motive and thereby threaten human health and the safety of the planet". The initiative is "unique and unprecedented", says Marie-Monique Robin. 51

Séralini's team wins defamation and forgery cases on the team's GMO and pesticide research 52

On 25 November 2015, the High Court of Paris indicted Marc Fellous, former chairman of France's Biomolecular Engineering Commission, for "forgery" and "the use of forgery", in a

⁴⁶ http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1955650/

⁴⁷ O'Keeffe MG. The control of Agropyron repens and broad-leaved weeds pre-harvest of wheat and barley with the isopropylamine salt of glyphosate; 1980. pp. 53–60. Proceedings of British Crop Protection Conference-Weeds.

⁴⁸ Stride CD, Edwards RV, Seddon JC. Sward destruction by application of glyphosate before cutting or grazing; 1985. pp. 771–778. British Crop Protection Conference – Weeds 7B–6.

⁴⁹ http://apps.who.int/iris/bitstream/10665/204585/1/9789241565196_eng.pdf

⁵⁰ http://www.monsanto-tribunal.org/

⁵¹ http://gmwatch.org/news/latest-news/16576-international-lawyers-and-ngos-launch-tribunal-to-try-monsanto-for-ecocide

⁵² http://www.gmoseralini.org/seralinis-team-wins-defamation-and-forgery-court-cases-on-gmo-and-pesticide-research/

libel trial that he lost to Prof Gilles-Eric Séralini. The Biomolecular Engineering Commission had authorised many GM crops for consumption.

In September 2012, an article written by Jean-Claude Jaillette in Marianne magazine said that "researchers around the world" had voiced "harsh words" about the research of Séralini and his team on the toxic effects of a GMO and Roundup over a long term period – research that was supported by the independent organisation CRIIGEN. The journalist wrote of a "scientific fraud in which the methodology served to reinforce pre-determined results".

Séralini, his team, and CRIIGEN challenged this allegation in a defamation lawsuit. On 6

November 2015, after a criminal investigation lasting three years, the 17th Criminal Chamber of the High Court of Paris passed sentence. Marianne magazine and its journalist were fined for public defamation of a public official and public defamation of the researchers and of CRIIGEN, which is chaired by Dr Joel Spiroux de Vendômois.

Professor Séralini is one of the NGO's taking Monsanto to The Hague in October 2016
He is aware from his personal experiences of the close relationship between Monsanto, the British Government, the European Food Safety Authority and the European Commission.

The European Commission announces a ban on two endocrine disrupting chemicals out of the blue: 53 it has been 'set up' between BfR, EFSA and the Standing Committee on Plants "The European Commission has ordered a ground-breaking moratorium on two endocrinedisrupting weedkillers that have been linked to thyroid cancer, infertility, reproductive problems and foetal malformations. Use of Amitrole and Isoproturon (Nufarm) will now be banned from 30 September across Europe, after an EU committee voted unanimously for the first ever ban on endocrine-disrupting herbicides. The commission was not immediately able to explain what these concerns were." This is hardly surprising. This was 'rush job'. The German Federal Institute for Risk Assessment (BfR) held an Expert Meeting on Endocrine Disruptors in Berlin on 11 and 12 April 2016 at which EFSA was present. The EFSA **Standing** Committee on Plants, Animals, Food and Feed was held on 14 and 15 April. There was no discussion at the meeting; the members merely had to ratify the decision made by the BfR. The BfR was the RMS for glyphosate the chemical that they and EFSA had declared safe and not carcinogenic. The BfR, at the time glyphosate was being assessed, had two members of the Committee from Bayer CropScience (which makes SuperStrength glyphosate) and two members from BASF (which manufactures a glyphosate precursor.) The Glyphosate Task Force had **not** considered reports submitted by Independent scientists that had linked glyphosate to cancers, infertility, reproductive problems and foetal malformations ⁵⁴ and reports of congenital anomalies from Argentina and Paraguay. ⁵⁵

The European Commission negotiates secret deals with Monsanto, the GTF and farmers

The Guardian Europe reporter Arthur Neslen reveals that the European Commission is planning secretly to relicense glyphosate for a full 15 years following pressure from Monsanto and the Glyphosate Task Force despite opposition from several countries and the European parliament.⁵⁶

The Green party called it a betrayal of the precautionary principle that which obliges regulatory caution if there is scientific doubt. Bart Staes, the Green party's environment and food safety spokesman, said: "It is scandalous that the commission is seeking to bulldoze

http://www.theguardian.com/environment/2016/apr/19/europe-bans-two-endocrine-disrupting-weedkillers http://earthopensource.org/earth-open-source-reports/roundup-and-birth-defects-is-the-public-being-kept-in-the-dark/

⁵⁵ http://www.ncbi.nlm.nih.gov/pubmed/21132229 [Births prevalence of 27 selected congenital anomalies in 7 geographic regions of Argentina]. Campaña H et al

http://www.theguardian.com/environment/2016/apr/22/european-commission-glyphosate-weedkiller-leaked-proposal

through an EU approval for glyphosate to be used with no restrictions, despite the very serious concerns about the impact of this toxic substance on public health and the environment. Banning glyphosate would be the responsible course of action."

This was despite an Open Letter to the European Commission and the European Food Safety Authority sent on October 2015 and acknowledged. And a document sent to Dr Bernhard Url on February 1 2016. Glyphosate causes Cancers and Birth Defects. Both papers documented the toxic effects of glyphosate and the corruption that allowed it to be re-registered in 2002. If the European Commission persists in re-authorising glyphosate under pressure from the Glyphosate Task Force, these and other papers will be lodged as evidence with The International Criminal Court in The Hague, when Monsanto stands trial in October 2016.

Standing Committee on Plants, Animals, Food and Feed will take the final decision in May. EFSA's decision on glyphosate was carried unanimously (bar one) at the meeting December 10/11, despite the following Open Letter from IARC being sent to them all to read.

Open letter: Review of the Carcinogenicity of Glyphosate by EFSA and BfR⁵⁷
Prof Christopher Portier, Chairman of IARC's Working Group and a group of over 90 independent scientists wrote an Open Letter to the European Health and Food Safety Commissioner, Vytenis Andriukaitis on 27/11/2015, strongly challenging EFSA's decision and the BfR report that it was based on. They express deep concern that BfR assesses the widely used herbicide glyphosate as "unlikely to pose a carcinogenic hazard to humans".

They consider the BfR evidence point by point and the two most disturbing statements were that:

- BfR used historical controls (When using historical control data, they should be from studies in the same timeframe, for the same exact animal strain, preferably from the same laboratory or the same supplier and preferably reviewed by the same pathologist).
- The BfR Addendum dismisses the IARC Working Group (WG) finding that "there is strong evidence that glyphosate causes genotoxicity" by suggesting that unpublished evidence not seen by the IARC WG was overwhelmingly negative and that, since the studies that were reviewed were not done under guideline principles, they should get less weight.
 To maintain transparency, IARC reviews only publicly available data. Thus the use of confidential data submitted to the BfR makes it impossible for any scientist not associated with BfR to review this conclusion with scientific confidence. Further skewing their interpretation, the BfR did not include evidence of chromosomal damage from exposed humans that was highlighted in the IARC Monograph.

Sixteen eminent and independent scientists published a Consensus Statement on Glyphosate Concerns over use of glyphosate-based herbicides and risks associated with exposures: a consensus statement. 58

The scientists outlined the environmental risks of repeated heavy use of glyphosate-based herbicides (GBH) on fish, butterflies, earthworms and beneficial soil microbes, including its breakdown products of AMPA and formaldehyde contaminating soil and groundwater.... Multiple studies on GBHs have reported effects indicative of endocrine disruption [21–24]. Based on knowledge from studies of other endocrine disruptors, the developing fetus, infants, and children are most at risk. Effects following GBH exposure may not be

58 http://ehjournal.biomedcentral.com/articles/10.1186/s12940-016-0117-0

14

⁵⁷http://www.efsa.europa.eu/sites/default/files/Prof_Portier_letter.pdf

immediately apparent, because some adverse conditions caused by early-life exposure only manifest in later stages of development and/or in adulthood. These include both acute diseases and chronic health problems..." increased incidence of severe birth defects in Argentina and Paraguay in areas where GE Roundup Ready crops are widely grown may be linked to the ability of GBHs to increase retinoic acid activity during fetal development [23]4. Glyphosate-contaminated soybean feeds used in the pork industry have also been associated with elevated rates of gastrointestinal-health problems and birth defects in young pigs [32]. Related impacts have been observed in poultry [33]. A steadily growing portion of global GBH use is applied in conjunction with multiple other herbicides, insecticides, and fungicides. Herbicide and other pesticide active ingredient safety levels are calculated for each active ingredient separately, despite the fact that tank mixes including two to five, or even more active ingredients account for a significant portion of the volume of pesticides applied. Regulators do not require further testing of such mixtures, nor do they conduct any additional risk assessments designed to quantify possible additive or synergistic impacts among all herbicides applied, <u>let alone the combination of all herbicides</u>, insecticides, fungicides, and other pesticides applied on any given field."

On 06/03/2016 I wrote to the European Ombudsman to ask her why the European Commission established the Standing Committee on Plants, Animals, Food and Feed to make decisions that affect human health: she is still considering the matter "It is totally unacceptable, possibly negligent or even criminal, for the European Union to allow a group of plant scientists on the Standing Committee on Plants, Animals, Food and Feed, whose knowledge of human physiology is so out of date that they do not recognise that glyphosate has effects on humans, to make decisions that affect human health. The membership of this Committee representing Member States is not transparent."

We are drowning our world in unsafe and untested chemicals

The International Federation of Gynecology and Obstetrics (FIGO), a group representing OB-GYNs from 125 countries, released a report detailing the detrimental health effects caused by even small exposure to common chemicals like the ones found in pesticides, plastics, and air pollution.⁵⁹ Documented links between prenatal exposure to environmental chemicals and adverse health outcomes span the life course and include impacts on fertility and pregnancy, neurodevelopment, and cancer. The global health and economic burden related to toxic environmental chemicals is in excess of millions of deaths and billions of dollars every year. On the basis of accumulating robust evidence of exposures and adverse health impacts related to toxic environmental chemicals, the International Federation of Gynecology and Obstetrics (FIGO) joins other leading reproductive health professional societies in calling for timely action to prevent harm. FIGO recommends that reproductive and other health professionals advocate for policies to prevent exposure. The health problems are even greater for babies exposed in the womb, who face increased risks of cancer, reduced cognitive function, and even miscarriage or stillbirth. The organization cited concerns about the sharp increase over the past four decades in chemical manufacturing, which continues to grow by more than 3 per cent every year. Some 30,000 pounds of chemicals were manufactured or imported for every person in the United States in 2012 alone—a whopping 9.5 trillion pounds in total. Annually, the FIGO authors write, chemical manufacturing leads to 7 million deaths and billions in health care costs.

Rosemary Mason 24 April 2016

⁵⁹ http://www.figo.org/sites/default/files/uploads/News/Final%20PDF_8462.pdf