

A trial of GM Potatoes at farms in Suffolk and Cambridge Ref No. 19/R29/01

The Hon Michael Gove MP
Department of the Environment

Dear Michael Gove

I am surprised to learn that from the huge number of scientists employed by Defra and Rothamsted Research, not one of them has read the new book by Caius Rommens, former team leader at Monsanto, the creator of GM potatoes who has retracted his research on GM Potatoes. 'Pandora's Potatoes: The Worst GMOs'. It shows an ignorance beyond belief! It just demonstrates how narrow their reading is and how arrogant and brainwashed they have become! Professor Jonathan Jones Group Leader for the Sainsbury Laboratory has worked for Monsanto in the past, so he has massive conflicts of interest. Perhaps their brains have been poisoned by glyphosate-based herbicides, re-authorised by the European Glyphosate Task Force in December 2017 for 5 years!

Georgina Downs writes on the Government's Agriculture Bill after Brexit¹

Extracts: "The long-awaited Agriculture Bill finally made its first appearance this week when it was introduced before Parliament. This is the UK Government's plan on what UK farming will look like post Brexit. There is no reference to the protection of human health or public health in the Agriculture Bill as regards to farmers, the main users of pesticides - despite the DEFRA Consultation that preceded the publication of the Agriculture Bill being called Health and Harmony. The widespread use of pesticides and other toxic chemicals in our existing farming system appears to be the Government's 'elephant in the room' because of DEFRA's reluctance to mention it - let alone focus on it. Therefore, there is no recognition or even any specific reference in the Agriculture Bill - or Mr Gove's statements - to the continued risks associated with the continued use of pesticides and other agrochemicals on crop fields across the UK. Latest Government statistics show that regarding just pesticides alone (i.e. not including chemical fertilisers and all the other agrochemicals used in conventional farming), in 2014 the total area treated with pesticides on agricultural and horticultural crops was 80,107,993 hectares, with the total weight applied 17,757,242 kg." Ms Downs has appealed to Theresa May to stop multiple pesticides from being sprayed on rural residents, but she has been silent on the matter.

The UK Farming Minister was interviewed by Arthur Neslen on 30/05/2016 about Brexit

He said: "The birds and habitats directives would go. But the directives' framework is so rigid that it is spirit-crushing." On **pesticides**, he said "the EU's precautionary principle needed to be reformed in favour of a US-style risk-based approach, allowing faster authorisation."

Defra is quoted as saying that after Brexit: "The most promising crops suitable for introducing to England would be Roundup Ready GA21 glyphosate tolerant crops, which synergises well with herbicides already widely used in the UK. Empowering farmers to use the cutting-edge crop science innovations that are available is certainly one opportunity presented by shifting the responsibility for licencing domestically post-Brexit. Although the blanket spraying of herbicides like Roundup present challenges regarding their impact on the environment and animals, the more obvious solution would be to regulate the technique, not the actual product because it would make that possible."²

The alleged 'first' glyphosate-resistant weed in Britain has just been reported by scientists from ADAS, the body that endorsed Monsanto's suggestion of spraying pre-harvest glyphosate in 1980

¹ <https://theecologist.org/2018/sep/14/new-uk-agriculture-bill-triumph-or-travesty>

² <https://www.politicshome.com/news/uk/foreign-affairs/brexit/opinion/dods-monitoring/95900/future-food-will-defra-embrace-gmos>

*Poverty brome (Bromus sterilis L.) [sterile or barren brome, syn. Anisantha sterilis (L.) Nevski] is a problematic UK arable weed. There are currently no confirmed cases of glyphosate resistance in any weed species in the United Kingdom or in B. sterilis worldwide... This, coupled with increasing glyphosate use, highlights the need for increased vigilance and monitoring for glyphosate resistance in the United Kingdom.*³

Has anyone looked at Black Grass, (*Alopecurus agrestis* L.)? Herbicide-resistant black grass, first seen in 1982 (only two years after farmers started spraying glyphosate pre-harvest) and is now found on 16,000 farms in 34 counties. This was the reason Guy Gagen gave for an increase in Roundup sprayed between 2012 and 2014. Ben Webster of the Times reported: "Farmers have sharply increased their use of a weedkiller that has been classified as "probably carcinogenic to humans".⁴ 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 weedkiller grew by almost 500,000 hectares to 2.1 million hectares, an area the size of Wales." Guy Gagen 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."

The Soil Association, the organic food body, called last month on supermarkets to take bread containing glyphosate residue off shelves. It said the maximum residue level for glyphosate in wheat of 10 mg per kg had been set well before the finding that the herbicide was probably carcinogenic.

Here are some extracts from Caius Rommens interview with Sustainable Pulse.⁵

The creator of GMO potatoes reveals the dangerous truth: 'Pandora's Potatoes: The Worst GMOs'

The Ex-Director of J.R. Simplot and team leader at Monsanto, Caius Rommens, has revealed the hidden dangers of the GMO potatoes he created, in a wide ranging interview for Sustainable Pulse, on the same day that his book 'Pandora's Potatoes: The Worst GMOs' was released on Amazon.

How many years did you spend working on creating GM potatoes? Was this all lab-based work or did you get out to see the farms that were growing the potatoes?

"During my 26 years as a genetic engineer, I created hundreds of thousands of different GM potatoes at a direct cost of about \$50 million. I started my work at universities in Amsterdam and Berkeley, continued at Monsanto, and then worked for many years at J. R. Simplot Company, which is one of the largest potato processors in the world. I had my potatoes tested in greenhouses or the field, but I rarely left the laboratory to visit the farms or experimental stations. Indeed, I believed that my theoretical knowledge about potatoes was sufficient to improve potatoes. This was one of my biggest mistakes."

Why have you decided to reveal information about the failings of GM potatoes after spending many years creating them?

"I dedicated many years of my life to the creation of GMO potatoes, and I initially believed that my potatoes were perfect but then I began to doubt. It again took me many years to take a step back

³ <https://www.cambridge.org/core/journals/weed-science/article/first-cases-of-evolving-glyphosate-resistance-in-uk-poverty-brome-bromus-sterilis-populations/2EC536244FC205586290731EF1BE4593>

⁴ <https://www.thetimes.co.uk/article/farmers-using-more-carcinogenic-weed-killer-76bl8lw95t5>

⁵ https://sustainablepulse.com/2018/10/09/the-creator-of-gmo-potatoes-reveals-the-dangerous-truth-exclusive-interview/#.W70H-i97E_V

from my work, reconsider it, and discover the mistakes. Looking back at myself and my colleagues, I believe now that we were all brainwashed; that we all brainwashed ourselves. We believed that the essence of life was a dead molecule, DNA, and that we could improve life by changing this molecule in the lab. We also assumed that theoretical knowledge was all we needed to succeed, and that a single genetic change would always have one intentional effect only.

We were supposed to understand DNA and to make valuable modifications, but the fact of the matter was that we knew as little about DNA as the average American knows about the Sanskrit version of the Bhagavad Gita. We just knew enough to be dangerous, especially when combined with our bias and narrowmindedness. We focused on short-term benefits (in the laboratory) without considering the long-term deficits (in the field). It was the same kind of thinking that produced DDT, PCBs, Agent Orange, recombinant bovine growth hormone, and so on. I believe that it is important for people to understand how little genetic engineers know, how biased they are, and how wrong they can be. My story is just an example.”

Have the GM potatoes you helped create been approved by the FDA and EPA in the U.S. or indeed elsewhere in the world?

“It is amazing that the USDA and FDA approved the GM potatoes by only evaluating our own data. How can the regulatory agencies assume there is no bias? When I was at J.R. Simplot, I truly believed that my GM potatoes were perfect, just like a parent believes his or her children are perfect. I was biased and all genetic engineers are biased. It is not just an emotional bias. We need the GM crops to be approved. There is a tremendous amount of pressure to succeed, to justify our existence by developing modifications that create hundreds of millions of dollars in value. We test our GM crops to confirm their safety, not to question their safety.

The regulatory petitions for deregulation are full with meaningless data but hardly include any attempts to reveal the unintended effects. For instance, the petitions describe the insertion site of the transgene, but they don’t mention the numerous random mutations that occurred during the tissue culture manipulations. And the petitions provide data on compounds that are safe and don’t matter, such as the regular amino acids and sugars, but hardly give any measurements on the levels of potential toxins or allergens.

The Canadian and Japanese agencies approved our GMO potatoes as well, and approvals are currently considered in China, South Korea, Taiwan, Malaysia, Singapore, Mexico, and the Philippines.”

Is it possible for GM potatoes to cause gene-silencing in other potatoes or pollinating insects such as bees?

“The problem with certain insects, including bees, is that they cannot degrade the small double-stranded RNAs that cause gene silencing. These double-stranded RNAs were intended to silence several potato genes in tubers, but they are likely to be expressed in pollen as well. So, when the pollen is consumed by bees, the double stranded RNAs in this pollen may silence bee genes that share inadvertent homology.”

Your new book Pandora’s Potatoes, which is available to the public for the first time this week, includes many points as to why the GM potatoes you helped create should not be grown by farmers or eaten by the public. What would you like to say to the FDA and EPA?

“The main problem about the current process for deregulation of GMO crops is that it is based on an evaluation of data provided by the developers of GMO crops. There is a conflict of interest. I propose that the safety of GMO crops is assessed by an independent group of scientists trained at identifying unintended effects.”

Monsanto/Bayer on trial and lost twice: Judge Vincent Chhabria says in a third there will be disclosure and Bayer will have to enter into mediation to reach a global Roundup settlement

The shunning of Monsanto's products has not been helped by global publicity surrounding the first three Roundup cancer trials (apart from in the UK), which have placed internal Monsanto emails and strategic planning reports into the public spotlight and elicited testimony about the company's handling of sensitive scientific concerns about perceived hazards of its herbicides.

In the trial currently underway, a case brought by a husband and wife who both have non-Hodgkin lymphoma they blame on their use of Roundup, [evidence was introduced](#) last week about the ease with which the weed killer can absorb into human skin.

Evidence was also laid out showing that Monsanto worked closely with the Environmental Protection Agency to [block a toxicity review](#) of glyphosate by a separate government agency. The current trial, and the two previous trials, have all included evidence that Monsanto engaged in ghostwriting certain scientific papers that concluded glyphosate products were safe; and that Monsanto [spent millions of dollars](#) on projects aimed at countering the conclusions of the international cancer scientists who classified glyphosate as a probable carcinogen.

Bayer's annual shareholders meeting is set for April 26 and [angry investors](#) are calling for answers from Bayer CEO Werner Baumann who drove the acquisition of Monsanto, closing the \$63 billion deal just before the first Roundup cancer trial started last June.

The [company maintains](#) glyphosate herbicides are not carcinogenic and it will ultimately prevail. But Susquehanna Financial Group analyst Tom Claps has warned shareholders to brace for a global settlement of between \$2.5 billion and \$4.5 billion. "It's not a matter of 'if' Bayer will reach a global Roundup settlement, it is a matter of 'when,'" Claps told investors in a recent report.

U.S. District Judge Vince Chhabria [has ordered Bayer](#) to enter into mediation, to discuss just such a potential settlement of the Roundup litigation.

Robert F Kennedy Jr. one of the US Attorney's fighting Bayer, said: Bayer Needs More Than an Aspirin to Cure Its Monsanto-Sized Headache

28/08/2018 Robert F Kennedy said: *"In a special telephone meeting on Thursday, August 23, Bayer AG's CEO Werner Bauman tried to reassure the German conglomerate's principal shareholders who were concerned about the recent [drop](#) in the company's stock. Bayer's stock fell dramatically after an unfavorable [verdict](#) against Bayer's St. Louis subsidiary, Monsanto.*

A constellation of other injuries apart from Non-Hodgkin's Lymphoma

"Perhaps more ominously for Bayer, Monsanto also faces cascading scientific evidence [linking glyphosate](#) to a constellation of other injuries that have become prevalent since its introduction, including [obesity, depression, Alzheimer's, ADHD, autism, multiple sclerosis, Parkinson's, kidney disease, and inflammatory bowel disease, brain, breast and prostate cancer, miscarriage, birth defects and declining sperm counts. Strong science suggests glyphosate is the culprit in the exploding epidemics of celiac disease, colitis, gluten sensitivities, diabetes and non-alcoholic liver cancer which, for the first time, is attacking children as young as 10.](#)

Other actions of Roundup

Researchers peg glyphosate as a [potent endocrine disruptor, which interferes with sexual development in children. The chemical compound is certainly a chelator that removes important minerals from the body, including iron, magnesium, zinc, selenium and molybdenum. Roundup disrupts the microbiome](#) destroying beneficial bacteria in the human gut and triggering brain inflammation and other ill effects.

The UN expert on Toxics, Baskut Tuncak wrote in the *Guardian* on 06/11/2017: The EU and glyphosate: it's time to put children's health before pesticides

"A pending decision on Monsanto's ubiquitous weedkiller is a crucial opportunity to protect our children from the toxic cocktail of pesticides polluting their food, water and play areas."

*“Our children are growing up exposed to a toxic cocktail of weedkillers, insecticides, and fungicides. It’s on their food and in their water, **and it’s even doused over their parks and playgrounds.** Many governments insist that our standards of protection from these pesticides are strong enough. But as a scientist and a lawyer who specialises in chemicals and their potential impact on people’s fundamental rights, I beg to differ. Last month it was revealed that in recommending that glyphosate – the world’s most widely-used pesticide – was safe, the [EU’s food safety watchdog copied and pasted pages of a report directly from Monsanto](#), the pesticide’s manufacturer. Revelations like these are simply shocking.*

The UN Convention on the Rights of the Child, the most ratified international human rights treaty in the world (only the US is not a party), makes it clear that states have an explicit obligation to protect children from exposure to toxic chemicals, from contaminated food and polluted water, and to ensure that every child can realise their right to the highest attainable standard of health. These and many other rights of the child are abused by the current pesticide regime. These chemicals are everywhere and they are invisible. The only way to protect citizens, especially those disproportionately at risk from exposure, is for governments to regulate them effectively, in large part by adhering to the highest standards of scientific integrity.

Paediatricians have referred to childhood exposure to pesticides as creating a “silent pandemic” of disease and disability. Exposure in pregnancy and childhood is linked to birth defects, diabetes, and cancer. Because a child’s developing body is more sensitive to exposure than adults and takes in more of everything – relative to their size, children eat, breathe, and drink much more than adults – they are particularly vulnerable to these toxic chemicals. Increasing evidence shows that even at “low” doses of childhood exposure, irreversible health impacts can result. But, most victims cannot prove the cause of their disability or disease, limiting our ability to hold those responsible to account. In light of revelations such as the copy-and-paste scandal, a careful re-examination of the performance of states is required. The overwhelming reliance of regulators on industry-funded studies, the exclusion of independent science from assessments, and the confidentiality of studies relied upon by authorities must change.”

On December 12th 2017 the EU Commission relicensed glyphosate for 5 years. The British Government ignored the plea by Baskut Tuncak and voted with the Commission, but did they read ECHA’s full classification?

European Chemical Agency Report on the re-assessment of glyphosate. This formed the basis of the European Commission’s renewal of glyphosate’s licence for 5 years

Published 15/03/2017 ECHA said the available scientific evidence did not meet the criteria to classify glyphosate as a carcinogen, as a mutagen or as toxic for reproduction but it was **classified as causing serious eye damage and as being toxic to aquatic life with long lasting effects.**⁶

The Rapid Decline Of The Natural World Is A Crisis Even Bigger Than Climate Change

A three-year UN-backed study from the Intergovernmental Science-Policy Platform On Biodiversity and Ecosystem Services has grim implications for the future of humanity.⁷

Industrial farming is to blame for much of the destruction and extinction of nature. We need agriculture systems that regenerate ecosystems not degenerate them.

Rosemary Mason

⁶ <https://echa.europa.eu/-/glyphosate-not-classified-as-a-carcinogen-by-echa>

⁷ <https://www.awaken.com/2019/03/the-rapid-decline-of-the-natural-world-is-a-crisis-even-bigger-than-climate-change/>