

## Why do the experts on Science Advice for Policy by European Academies fight for higher pesticide exposure?

### Documents reveal EU bowed to demands of pesticide lobbies

An environmental non-profit has obtained documents showing the extent to which the European Commission has been lobbied by pesticide producers seeking to protect their interests, leading to a more lenient regulation of these controversial substances<sup>1</sup>

The environmental group, Pesticide Action Network Europe (PAN), has obtained over 600 documents from the Commission showing top EU officials fighting to “cripple” the bloc’s pesticide protection legislation. *“The Commission has chosen the side of the industry,”* PAN’s Chemicals Coordinator Hans Muilerman told *De Morgen*.

### Use of confidential data: current EU legislation is set up in favour of the pesticides industry

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.<sup>2</sup>

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.

### The European Parliament has no legislative function in the approvals process

According to the European Glyphosate Task Force, the renewal process is legislated for by means of a Commission Regulation (No. 1107/2009). Therefore, the European Parliament has no legislative function within the framework of the approval process.<sup>3</sup>

### Alan Boobis (a SAPEA member) claimed he had no conflicts of interest, but *The Guardian’s* European Environment Editor showed that his organisation had received industry money

Professor Alan Boobis, who claimed he had no conflicts of interest, is Vice President of the International Life Science Institute (ILSI) Europe, an organisation that had received money from both Monsanto and CropLife International. The following report was from *Guardian* journalist Arthur Neslen.<sup>4</sup> *“A UN panel that on Tuesday ruled that glyphosate was probably not carcinogenic to humans has now become embroiled in a bitter row about potential conflicts of interests. It has emerged that an institute co-run by the chairman of the UN’s joint meeting on pesticide residues (JMPPR) received a six-figure donation from Monsanto, which uses the substance as a core ingredient in its bestselling Roundup weedkiller. Professor Alan Boobis, who chaired the UN’s joint FAO/WHO meeting on glyphosate, also works as the Vice-president of the International Life Science Institute (ILSI) Europe. The co-chair of the sessions was Professor Angelo Moretto, a board member of ILSI’s Health and Environmental Services Institute, and of its Risk21 steering group too, which Boobis also co-chairs. In 2012, the ILSI group took a \$500,000 (£344,234) donation from Monsanto and a \$528,500 donation from the industry group CropLife International, which represents Monsanto, Dow, Syngenta and others, according to documents obtained by the US right to know campaign.”*

<sup>1</sup> <http://www.brusselstimes.com/eu-affairs/15496/documents-lobbies-attempts-cripple-undermine-pesticide-regulation-eu>

<sup>2</sup> <https://dl.dropboxusercontent.com/u/6366131/letter%20to%20Commissioner%20Andriukaitis.pdf>

<sup>3</sup> [http://www.glyphosate.eu/system/files/sidebox-files/renewal\\_process\\_for\\_glyphosate\\_faqs\\_0.pdf](http://www.glyphosate.eu/system/files/sidebox-files/renewal_process_for_glyphosate_faqs_0.pdf)

<sup>4</sup> <https://www.theguardian.com/environment/2016/may/17/unwho-panel-in-conflict-of-interest-row-over-glyphosates-cancer-risk>

When Glyphosate was reassessed in 2004, Professor Alan Boobis was also Chairman of the UN's JMPR meeting on pesticide residues.<sup>5</sup> The presentation on glyphosate was done by two members of the German Rapporteur Member State Federal Institute of Risk Assessment (BfR) Dr Rudolf Pfeil and Dr Lars Niemann and two other members of the BfR were present Dr Roland Solecki and Dr Ursula Banasiak.

The Ridley and Mirly paper on C<sup>14</sup> labelled glyphosate showed it was distributed to every organ in the body (page 98). So why did [Dan Goldstein](#), Senior Science Fellow and Lead, Medical Sciences and Outreach, Monsanto on Friday, 12/20/2013 3:16 pm: claim:

*"If ingested, glyphosate is excreted rapidly, does not accumulate in body fat or tissues, and does not undergo metabolism in humans. Rather, it is excreted unchanged in the urine (EU Review Report of the active substance glyphosate, 2002)"*<sup>6</sup> and refer back to the 2002 (sic) assessment?

Conclusions of the UN's JMPR meeting

Page 158 *In view of the absence of a carcinogenic potential in animals and the lack of genotoxicity in standard tests, the Meeting concluded that glyphosate is unlikely to pose a carcinogenic risk to humans.*

Page 159 *The Meeting concluded that glyphosate is not teratogenic. The Meeting concluded that the existing database on glyphosate was adequate to characterize the potential hazards to fetuses, infants, and children.*

*On the basis of the new toxicological data, the present Joint Meeting concluded that AMPA is of no greater toxicological concern than its parent compound, thus confirming the conclusion of the 1997 JMPR.*

### **US Scientists sound the alarm over global mass poisoning. Editorial: Regulating toxic chemicals for public and environmental health**

Lisa Gross and Linda Birnbaum.<sup>7</sup>

*"By the time President Gerald Ford signed the United States Toxic Substances Control Act in the fall of 1976, tens of thousands of synthetic chemicals had entered world markets with no evidence of their safety... Ford's signing statement described a law giving the Environmental Protection Agency (EPA) broad regulatory authority to require toxicity testing and reporting to determine whether the chemicals posed risks." "If a chemical is found to present a danger to health or the environment," Ford promised, "appropriate regulatory action can be taken before it is too late to undo the damage."*

*That's not what happened. The 60,000-plus chemicals already in commerce were grandfathered into the law on the assumption that they were safe. And the EPA faced numerous hurdles, including pushback from the chemical industry that undermined its ability to implement the law. Several articles explore the failure of regulations to keep hazardous chemicals from polluting our food, air, and drinking water. Maricel Maffini and her colleagues describe the failure of regulators to account for health risks associated with the thousands of chemicals introduced into the food system since 1958, when Congress authorized the Food and Drug Administration to ensure the safety of substances added to food. Chemicals from agriculture, industry, and other commercial uses routinely enter drinking water supplies."*

Joseph M Braun and Kimberley Gray: Challenges to studying the health effects of early life environmental chemical exposures on children's health.<sup>8</sup>

Maricel V Maffini, Thomas G Neltner, Sarah Vogel: We are what we eat: Regulatory gaps in the United States that put our health at risk.<sup>9</sup>

<sup>5</sup> [http://whqlibdoc.who.int/publications/2006/9241665203\\_eng.pdf?ua=1](http://whqlibdoc.who.int/publications/2006/9241665203_eng.pdf?ua=1)

<sup>6</sup> [http://ec.europa.eu/food/plant/protection/evaluation/existactive/list1\\_glyphosate\\_en.pdf](http://ec.europa.eu/food/plant/protection/evaluation/existactive/list1_glyphosate_en.pdf)

<sup>7</sup> <http://journals.plos.org/plosbiology/article?id=10.1371/journal.pbio.2004814>

<sup>8</sup> <http://journals.plos.org/plosbiology/article?id=10.1371/journal.pbio.2002800>

<sup>9</sup> <http://journals.plos.org/plosbiology/article?id=10.1371/journal.pbio.2003578>

*“The American diet has changed dramatically since 1958, when Congress gave the United States Food and Drug Administration (FDA) the authority to ensure the safety of chemicals in food. Since then, thousands of chemicals have entered the food system. Yet their long-term, chronic effects have been woefully understudied, their health risks inadequately assessed. The FDA has been sluggish in considering scientific knowledge about the impact of exposures—particularly at low levels and during susceptible developmental stages. The agency’s failure to adequately account for the risks of perchlorate—a well-characterized endocrine-disrupting chemical—to vulnerable populations is representative of systemic problems plaguing the regulation of chemicals in food. Today, we are faced with a regulatory system that, weakened by decades of limited resources, has fallen short of fully enforcing its mandates. The FDA’s inability to effectively manage the safety of hundreds of chemicals is putting our children’s health at risk.”*

### **Assessment of Glyphosate Induced Epigenetic Transgenerational Inheritance of Pathologies and Sperm Epimutations: Generational Toxicology**

Michael Skinner, a WSU professor of biological sciences, and his colleagues exposed pregnant rats to the herbicide glyphosate between their eighth and 14th days of gestation. The dose—half the amount expected to show no adverse effect—produced no apparent ill effects on either the parents or the first generation of offspring. But writing in the journal *Scientific Reports*, the researchers say they saw “dramatic increases” in several pathologies affecting the second and third generations. The second generation had “significant increases” in testis, ovary and mammary gland diseases, as well as obesity. In third-generation males, the researchers saw a 30 percent increase in prostate disease – three times that of a control population. The third generation of females had a 40 percent increase in kidney disease, or four times that of the controls. More than one-third of the second-generation mothers had unsuccessful pregnancies, with most of those affected dying. Two out of five males and females in the third generation were obese.

Skinner and his colleagues call this phenomenon “generational toxicology” and they’ve seen it over the years in fungicides, pesticides, jet fuel, the plastics compound bisphenol A, the insect repellent DEET and the herbicide atrazine. At work are epigenetic changes that turn genes on and off, often because of environmental influences.

### **The Rapid Decline of The Natural World Is A Crisis Even Bigger Than Climate Change. Why aren’t pesticides blamed? Because Bayer and Syngenta scientists are pollination experts**

three-year UN-backed study from the Intergovernmental Science-Policy Platform On Biodiversity and Ecosystem Services has grim implications for the future of humanity.<sup>10</sup>

Industrial farming is to blame for much of the destruction and extinction of nature. We need agriculture systems that regenerate ecosystems not degenerate them.<sup>11</sup>

*“The loss of species, ecosystems and genetic diversity is already a global and generational threat to human well-being. Protecting the invaluable contributions of nature to people will be the defining challenge of decades to come. Policies, efforts and actions – at every level - will only succeed, however, when based on the best knowledge and evidence. This is what the IPBES Global Assessment provides.”*

– Sir Robert Watson, IPBES Chair.

The only mention of pesticides appears to be: *“Pesticides, including neonicotinoid insecticides, threaten pollinators worldwide, although the long-term effects are still unknown.”* It’s a pity Sir Robert didn’t take notice of Dr Henk Tennekes’ toxicological studies on systemic neonicotinoid insecticides. He said that these chemicals act on the brains of insects (and humans) in an irreversible

<sup>10</sup> <https://www.ipbes.net/news/ipbes-global-assessment-summary-policymakers-pdf>

<sup>11</sup> <https://www.awaken.com/2019/03/the-rapid-decline-of-the-natural-world-is-a-crisis-even-bigger-than-climate-change/>

and time-dependent manner and that they were a ‘Disaster in the Making.’<sup>12</sup> Instead Sir Robert believed Syngenta and Bayer who said that they were harmless to bees.

Did he invite Christian Maus from Bayer CropScience and Helen Thompson from Syngenta as experts to author some of the Chapters on Pollination because they had (falsely) opposed Dr Tennekes?<sup>13</sup>

Dr Tennekes has written an Editorial in 2019, describing Bayer’s strategy. At the end, he says, “*Maus and Nauen did not retract earlier publications of Bayer experts (Abbink and Mehlhorn) that had asserted irreversibility of receptor binding, and did not declare a conflict of interest, that they were employed by Bayer.*”

He concludes: “*Unwarranted product defense by Bayer and Syngenta may have had catastrophic consequences for the environment.*”<sup>14</sup>

Why is there no mention of glyphosate-based herbicides that Monsanto claims are as safe as table salt? Monsanto/Bayer have lost three court cases in the US (more than 13,000 plaintiffs), in which the Attorneys for Baum Hedlund have released the Monsanto Papers.<sup>15</sup> See page 14 for final verdict.

### **The health impacts generated by food systems are severe, widespread, and closely linked to industrial food and farming practices<sup>16</sup>**

Breaking away from industrial food and farming: International Panel on Sustainable Food Systems  
October 2018

A major new report on the damage to human health from existing industrial and chemical-intensive conventional food and farming systems was launched today by the UN Committee on World Food Security in Rome.

*Food and farming systems around the world are driving environmental degradation, loss of vital ecosystem services, economic hardship for smallholders, socio-economic inequities, and debilitating health impacts and food insecurity for many. The majority of these problems are linked to ‘industrial agriculture’: the input-intensive crop monocultures and industrial-scale feedlots that now dominate many farming landscapes. Some of the most impressive impacts of these transitions – greater resource efficiency, improvements in community livelihoods and nutrition, increased resilience to shocks, biodiversity enhancement – tend to be overlooked at the political level. Moreover, transition initiatives may be delivering positive impacts simply by keeping land in (sustainable) agricultural production and keeping people in rural communities in the face of unfavourable macro-economic and political conditions.*

### **Germany reported 57 different pesticides in one dead bee**

Irish beekeeper [Mary Montaut](#) said campaigners were advocating for the banning of a class of pesticides known as neonicotinoids, and also the well-known pesticide Roundup. “*Roundup is systemic and gets into the whole plant and is therefore on the nectar and the pollen,*” she explained. She cited a recent German report which found 57 pesticides in one dead bee. “*What we don’t know is what is the effect of that combination? We have only recently discovered that fungicides and pesticides together make it even more damaging for bees.*”

<sup>12</sup> <http://www.disasterinthemaking.com/reviews.html>

<sup>13</sup> <https://www.ipbes.net/pollination-assessment-experts>

<sup>14</sup> <https://juniperpublishers.com/oajt/pdf/OAJT.MS.ID.555623.pdf>

<sup>15</sup> <https://www.baumhedlundlaw.com/toxic-tort-law/monsanto-roundup-lawsuit/monsanto-secret-documents/>

<sup>16</sup> [http://www.ipes-food.org/\\_img/upload/files/CS2\\_ExecutiveSummary.pdf](http://www.ipes-food.org/_img/upload/files/CS2_ExecutiveSummary.pdf)

### **Irish Agriculture and Food Development Authority TEAGASC publishes list of pesticides approved for vegetable crops in 2019<sup>17</sup>**

There are many pesticides authorised for use, including insecticides, herbicides, fungicides, acaricides, nematocides and growth inhibitors. These include neonicotinoid insecticides that have been banned in the EU, chlorothalonil, a fungicide that EFSA has found to be toxic to humans and the environment and the ban will be passed formally in late April or early May 2019 and then enter into force three weeks later, the commission spokeswoman said.

Sulfoxaflor- a second-generation neonicotinoid insecticide manufactured by Dow that was authorised by the US EPA in 2013. In 2015, a court overturned the EPA approval, because there was insufficient evidence that it did not harm bee health. In October 2016 it was re-approved because Dow contributed \$1 million to Trump's campaign. A similar thing happened to the pesticide chlorpyrifos which the EPA had already banned because of toxic effects on the brains of children.

### **The first systematic testing of neonicotinoids in rivers in Britain was mandated by EU water regulations and conducted in 2016<sup>18</sup>**

The results, obtained by the conservation charity Buglife, show that half of the 16 rivers tested in England had either chronic or acute levels of contamination. Of the 23 rivers tested across Britain, neonicotinoids were not detected in six.

### **In 2019, a large-scale survey from Switzerland of house sparrows feathers reveals ubiquitous presence of neonicotinoids in farmlands<sup>19</sup>**

*"We quantified neonicotinoids in 146 feather samples of house sparrows living on organic, integrated-production and conventional farms using UHPLC-MS/MS.*

*All samples were positive for neonicotinoids.*

*Thiacloprid was the most prevalent (99% of samples) and clothianidin attained the highest levels (up to 131.4 ppb). Feathers of birds living on conventional farms showed higher concentrations than in the other farms. Our results highlight the extent to which farmland birds are exposed to neonicotinoids, and hence the extent of contamination of our agroecosystems."* Clothianidin has a half-life in soil of 545 (13-1386) days. In some soils the half-life is up to 19 years.

### **Massive declines in Monarch Butterfly numbers due to Roundup<sup>20</sup>**

*The NRDC Report in February 2015: "Recently, though, a dramatic change in farming practices—the widespread cultivation of genetically engineered, glyphosate-resistant Roundup Ready corn and soybeans—has triggered a precipitous decline of common milkweed, and thus of monarchs.*

*Glyphosate, sold by Monsanto under the name of Roundup, is one of the very few herbicides that is effective on milkweed. Unlike many other weedkillers, once absorbed it is translocated (moved internally) to root tissue, where it kills milkweed at the root and so prevents regeneration.*

*Glyphosate is particularly lethal to milkweed when used in conjunction with Roundup Ready crops. It is applied more frequently, at higher rates, and later in the season—during milkweed's most vulnerable flowering stage of growth—than when used with traditional crops. The increasingly common practice of growing Roundup Ready crops continuously on the same fields means that milkweed is exposed to glyphosate every year, with no opportunity to recover."*

<sup>17</sup> <https://www.teagasc.ie/media/website/publications/2019/Teagasc-Approved-Pesticides-for-Use-on-Vegetable-Crops-2019.pdf>

<sup>18</sup> <https://www.theguardian.com/environment/2017/dec/13/english-rivers-polluted-by-powerful-insecticides-first-tests-reveal>

<sup>19</sup> <https://www.sciencedirect.com/science/article/pii/S0048969719300749>

<sup>20</sup> [https://www.centerforfoodsafety.org/files/cfs-monarch-report\\_2-4-15\\_design\\_05341.pdf](https://www.centerforfoodsafety.org/files/cfs-monarch-report_2-4-15_design_05341.pdf)



### **The fields where Roundup Ready GM crops are grown in the US are biological deserts**

The German Rapporteur Member State Federal Institute for Pesticides Risk Assessment (BfR) Renewal Assessment Report (RAR) on Ecotoxicity<sup>21</sup> broadly concluded that glyphosate is not harmful to the environment. I challenged the European Food Safety Authority about this huge divergence of opinion. I quoted from Craig Childs' book, *Apocalyptic Planet*.<sup>22</sup> Chapter 6 Species Vanish: Page 185. Grundy County, Iowa was where Craig Childs spent a long weekend in a monoculture of GM-Roundup® Ready Corn looking for wildlife. Roundup Ready corn has clothianidin attached to it. Page 187: "In this cornfield, I had come to a different kind of planetary evolution. I listened and heard nothing, no bird, no click of an insect ... Page 188: Mr Owen was the farmer who had given us permission to backpack across his cornfields. He grew a combination of DuPont and Monsanto stock. We were in DuPont now. It didn't look any different to me." Page 192: Childs said: "I chose Iowa for a mass-extinction analogue because it is the most thorough picture of genetic exhaustion, the many organs of what was once tallgrass prairie removed and replaced with this."

Robert Krulwich's blog commented on Craig Child's description:<sup>23</sup> "Corn farmers champion corn. Anything that might eat corn, hurt corn, bother corn, is killed. Their corn is bred to fight pests. The ground is sprayed. The stalks are sprayed again. So, Craig wondered, "What will I find?" The answer amazed me. He found almost nothing. There were no bees. The air, the ground, seemed vacant. He found one ant "so small you couldn't pin it to a specimen board." A little later, crawling to a different row, he found one mushroom, "the size of an apple seed." Then, later, a cobweb spider eating a crane fly (only one). A single red mite "the size of a dust mote hurrying across the barren earth," some grasshoppers, and that's it." Though he crawled and crawled, he found nothing else. "It felt like another planet entirely," he said, a world denuded.

Yet, 100 years ago, these same fields, these prairies, were home to 300 species of plants, 60 mammals, 300 birds, hundreds and hundreds of insects. This soil was the richest, the loamiest in the state. And now, in these patches, there is almost literally nothing but one kind of living thing. We've erased everything else. There's something strange about a farm that intentionally creates a biological desert to produce food for one species: us. It's efficient, yes. But it's so efficient that the ants are missing, the bees are missing, and even the birds stay away. Something's not right here. Our cornfields are too quiet."

Iowa was just one state in which the US Geological Survey said: "Glyphosate and AMPA were detected frequently in soils and sediment, ditches and drains, precipitation, rivers, and streams; and less frequently in lakes, ponds, and wetlands; soil water; and groundwater."<sup>24</sup>

### **Birth defects in animals in Montana correlates with glyphosate usage on crops and with birth defects in humans**

A recent study by Hoy *et al.* found alarming increases in congenital malformations in wildlife in Montana that Hoy has been documenting for the past 19 years.<sup>25</sup> Similar birth defects have occurred in humans in the USA. Their graphs illustrating human disease patterns over the twelve-year period correlate remarkably well with the rate of glyphosate usage on corn, soy and wheat crops, which has increased due to "Roundup® Ready" crops. While the animals' exposure to the herbicide is through food, water and air, the authors believe that human exposure is predominantly through food, as the majority of the population does not reside near agricultural fields and forests. They conclude: "Our over-reliance on chemicals in agriculture is causing irreparable harm to all

<sup>21</sup> Renewal Assessment Report Vol 3 Annex B9. Evaluation of peer-reviewed literature regarding ecotoxicity

<sup>22</sup> Childs, C. *Apocalyptic Planet. Field Guide to the Future of the Earth*, New York: Vintage Books (2013).

<sup>23</sup> <https://www.npr.org/sections/krulwich/2012/11/29/166156242/cornstalks-everywhere-but-nothing-else-not-even-a-bee>

<sup>24</sup> <http://onlinelibrary.wiley.com/doi/10.1111/jawr.12159/abstract>

<sup>25</sup> <http://www.esciencecentral.org/journals/the-high-cost-of-pesticides-human-and-animal-diseases-2375-446X-1000132.php?aid=56471>

*beings on this planet, including the planet herself. Most of these chemicals are known to cause illness, and they have likely been causing illnesses for many years. But until recently, the herbicides have never been sprayed directly on food crops, and never in this massive quantity. We must find another way”.*

### **Shockingly high levels of weed killer in UK breakfast cereals**

We read an article in the UK *Guardian* about breakfast cereals in the US having weed killer in oat-based cereals. The UK *Guardian* reported: “*There was no indication that the claims related to products sold outside the US.*” In view of this statement by the *Guardian*, we sent samples of four oat-based breakfast cereals marketed for children in the UK to the Health Research Institute, Fairfield, Iowa, an accredited laboratory for glyphosate testing. Kellogg No added sugar granola with apricot and pumpkin seeds Barley Flakes 27% Oats 23% Rye 13% Wheat flour Oat flour; Quaker Oat so Simple: Quaker Whole Grain Rolled Oats; Weetabix Oatibix 100% wholegrain oats; Nestle Multigrain Cheerios: Whole Grain Oat Flour 29.6% Whole Grain Wheat 29.6% Whole Grain Barley Flour 17.9% Whole Grain Corn Flour 2.1% Whole Grain Rice Flour 2.1%.

Dr Fagan the Director says: “*These results are consistently concerning. The levels consumed in a single daily helping of any one of these cereals, even the one with the lowest level of contamination, is sufficient to put the person’s glyphosate levels above the levels that cause fatty liver disease in rats (and likely in people).*”

Type of breakfast cereal marketed for children Product description	Glyphosate level ng/g	AMPA ng/g	Effective glyphosate level ng/g
Kelloggs No added sugar granola with Apricot & pumpkin seeds	499.90	ND	499.90
Quaker/Oat So simple/Original Microwaveable Oats	464.23	24.04	500.28
Weetibix Oatibix 100% wholegrain oats	318.85	16.96	344.28
Nestle Multigrain Cheerios Whole Grain Oat Flour 29.6% Whole Grain Wheat 29.6% Whole Grain Barley Flour 17.9% Whole Grain Corn Flour 2.1% Whole Grain Rice Flour 2.1%.	137.29	ND	137.29

We sent the results to the organisation, Beyond GM. They wrote a press release. The information was reported in the *Daily Mail*.<sup>26</sup> Are you eating organic food or have you got a glyphosate belly?

### **Cancer Research UK protects the Agrochemical Industry: the CRUK website claims ‘*there is little evidence that pesticides cause cancer*’**

Michael Pragnell former Chairman of Cancer Research UK (2010-2017), founder of Syngenta and former Chairman of CropLife International was awarded a CBE in 2017 for services to cancer research. CropLife International was founded in 2001.<sup>27</sup> As of 2015 CropLife International’s member list includes the following 8 companies: BASF, Bayer CropScience, Dow AgroSciences, DuPont, FMC Corp., Monsanto, Sumitomo and Syngenta. Many of these make their own formulated glyphosate. CRUK said that there was little evidence that pesticides caused cancer. CRUK, the CMO England and PHE, linked cancer to alcohol, obesity and smoking. They blamed the people for 'lifestyle choices'.

<sup>26</sup> <https://www.dailymail.co.uk/health/article-6315209/Revealed-UK-cereals-contain-potentially-harmful-amounts-WEEDKILLER.html>

<sup>27</sup> [https://www.vinci.com/vinci.nsf/en/management-board-directors/pages/michael\\_pragnell.htm](https://www.vinci.com/vinci.nsf/en/management-board-directors/pages/michael_pragnell.htm)

**The Francis Crick Institute with its ‘world class resources’ is failing to improve people’s lives by analyzing their genetic codes, but it is definitely strengthening the economy of the pesticides industry and the pharmaceutical industry**

Medical Research Council donated	£ 300 million
Cancer Research UK donated	£ 160 million
Wellcome Trust donated	£ 120 million
University College, Imperial College and King’s College donated	£ 40 million each

*Report: “The Francis Crick Institute is a biomedical discovery institute dedicated to understanding the fundamental biology underlying health and disease. Its work is helping to understand why disease develops and to translate discoveries into new ways to prevent, diagnose and treat illnesses such as cancer, heart disease, stroke, infections, and neurodegenerative diseases.”<sup>28</sup>*

*An independent organisation, its founding partners are the Medical Research Council (MRC), Cancer Research UK, Wellcome, UCL (University College London), Imperial College London and King's College London. The Crick was formed in 2015, and in 2016 it moved into a brand-new state-of-the-art building in central London which brings together 1500 scientists and support staff working collaboratively across disciplines, making it the biggest biomedical research facility under a single roof in Europe. The Francis Crick Institute will be world-class with a strong national role. Its distinctive vision for excellence includes commitments to collaboration; to developing emerging talent and exporting it to the rest of the UK; to public engagement; and to helping turn discoveries into treatments as quickly as possible to improve lives and strengthen the economy.”*

**In the UK there were 13,605 new cases of Non-Hodgkin Lymphoma in 2015 (and 4,920 deaths in 2016)<sup>29</sup>**

There were 41,804 new cases of bowel cancer in 2015 (and 16,384 deaths in 2016); 12,547 new cases of kidney cancer in 2015 (and 4,619 deaths in 2016); 5,736 new cases of liver cancer in 2015 (5,417 deaths in 2016); 15,906 new cases of melanoma in 2015 (2,285 deaths in 2016); 3,528 new cases of thyroid cancer in 2015 (382 deaths in 2016); 10,171 new cases of bladder cancer in 2015 (5,383 deaths in 2016); 8,984 new cases of uterine cancer in 2015 (2,360 deaths in 2016); 7,270 cases of ovarian cancer in 2015 (4,227 deaths in 2016); 9,900 new cases of leukaemia in 2015 (4,712 deaths in 2016); 55,122 new cases of invasive breast cancer in 2015 (11,563 deaths in 2016); 46,388 new cases of lung cancer in 2015 (and 35,620 deaths in 2016); 47,151 new cases of prostate cancer in 2015 (11,631 deaths in 2016); 9,211 new cases of oesophageal cancer in 2015 (8,004 deaths in 2016) and 5,540 new cases of myeloma in 2015 (3,079 deaths in 2016); 2,288 new cases of testicular cancer in 2015 (57 deaths in 2016); 9,921 new cases of pancreatic cancer in 2015 (9,263 deaths in 2016); 11,432 new cases of brain cancer in 2015 (5,250 deaths in 2016). In the US in 2014 there were 24,050 new cases of myeloma.

**Each year there are steady increases in the numbers of new cancers, and increases in deaths from the same cancers, with no treatments making any difference to the numbers.**

In 2011, CRUK began donating money (£450 million/year) to the Government’s Strategy for UK Life Sciences and AstraZeneca provided 22 compounds to academic research to develop medicines.<sup>30</sup>

**Massive amounts of glyphosate used globally<sup>31</sup>**

‘In 2016, Charles Benbrook reported Trends in glyphosate use in the US and globally: 1974-2014. Between 1994 and 2014 the estimated global use of glyphosate was 8.6 billion kilograms and nearly 0.53 kg/ha (0.47 pounds/acre) on all cropland worldwide.’ That doesn’t include amenity use; and the

<sup>28</sup> <https://www.crick.ac.uk/about-us/>

<sup>29</sup> <https://www.cancerresearchuk.org/health-professional/cancer-statistics/statistics-by-cancer-type/non-hodgkin-lymphoma>

<sup>30</sup> <https://www.gov.uk/government/publications/uk-life-sciences-strategy>

<sup>31</sup> <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5044953/>



several tonnes over a period of years that destroyed biodiversity on the area of our small nature reserve in South Wales. We are in Denmark at present and we have few pollinators as a result of a high, warm wind that has blown the topsoil (glyphosate and AMPA) off farmland around the area.

### **UN warns of global failure to tackle sales of synthetic chemicals – with risks ranging from cancer to coral damage<sup>32</sup>**

*Sales of synthetic chemicals will double over the next 12 years with alarming implications for health and the environment, according to a global study that highlights government failures to rein in the industry behind plastics, pesticides and cosmetics.*

*The second [Global Chemicals Outlook](#), which was released in Nairobi on March 11<sup>th</sup> 2019, said the world will not meet international commitments to reduce chemical hazards and halt pollution by 2020. In fact, the study by the United Nations Environment Programme found that the industry has never been more dominant nor has humanity's dependence on chemicals ever been as great. Depending on the chemical and degree of exposure, the risks can include cancer, chronic kidney disease and congenital anomalies. The World Health Organization estimated that the burden of disease was 1.6 million lives in 2016. Halpaap said this was likely to be an underestimate. In addition to the human health dangers, he said chemicals also affect pollinators and coral reefs.*

[Global Chemicals Outlook II – From Legacies to Innovative Solutions: Implementing the 2030 Agenda for Sustainable Development March 2019<sup>33</sup>](#)

Mandated by the UN Environment Assembly in 2016, seeks to alert policymakers and other stakeholders to the critical role of the sound management of chemicals and waste in sustainable development. It takes stock of global trends as well as progress made and gaps in achieving the global goal to minimize the adverse impacts from chemicals and waste by 2020.

#### **Continued growth in the pesticide/crop protection industry**

Pesticides include herbicides, insecticides, termiticides, nematocides, rodenticides and fungicides. These products are largely used for crop protection in agriculture. Today the industry is valued at over US dollars 50 billion and there are around 600 active ingredients. Herbicides account for approximately 80 per cent of all pesticide use (Phillips McDougal 2018).

#### **Top 10 products used on major crops in the United States by volume, 1968 and 2016 (Phillips McDougal 2018, p. 4)**

Glyphosate	an herbicide, an antibiotic, a fungicide, an antiprotozoal, an organic phosphonate, a growth regulator, a toxicant, a virulence enhancer and is persistent in the soil. It chelates (captures) and washes out the following minerals: boron, calcium, cobalt, copper, iron, potassium, magnesium, manganese, nickel and zinc. (Monsanto/Bayer)
Metolachlor	an organochlorine, selective herbicide
Pyraclostrobin	a fungicide (Aldrich-Sigma)
Mesotrione	an herbicide (Syngenta)
Thiamethoxam	a neonicotinoid insecticide (Syngenta)
Acetochlor	an herbicide (Monsanto and Zeneca)
Azoxystrobin	a systemic fungicide (Syngenta)
Atrazine	an endocrine-disrupting herbicide (Syngenta)
Abamectin	an insecticide, acaricide, nematocide
Clothianidin	a long acting (545 (13-1386) days) systemic neonicotinoid insecticide (Bayer)

<sup>32</sup> <https://www.theguardian.com/environment/2019/mar/12/surge-in-chemical-use-a-threat-to-health-and-environment>

<sup>33</sup>

<https://wedocs.unep.org/bitstream/handle/20.500.11822/28113/GCOII.pdf?sequence=1&isAllowed=y>

### Global insect apocalypse due to intensive agriculture and pesticides<sup>34</sup>

The analysis, [published in the journal Biological Conservation](#), says intensive agriculture is the main driver of the declines, particularly the [heavy use of pesticides](#). Urbanisation and climate change are also significant factors. *“If insect species losses cannot be halted, this will have catastrophic consequences for both the planet’s ecosystems and for the survival of mankind,”* said Francisco Sánchez-Bayo, at the University of Sydney, Australia, who wrote the review with Kris Wyckhuys at the China Academy of Agricultural Sciences in Beijing. The 2.5% rate of annual loss over the last 25-30 years is “shocking”, Sánchez-Bayo told the Guardian: *“It is very rapid. In 10 years you will have a quarter less, in 50 years only half left and in 100 years you will have none.”*

One of the biggest impacts of insect loss is on the many birds, reptiles, amphibians and fish that eat insects. *“If this food source is taken away, all these animals starve to death,”* he said. Such cascading effects have already been seen in Puerto Rico, where a recent study revealed a [98% fall in ground insects over 35 years](#). The new analysis selected the 73 best studies done to date to assess the insect decline. Butterflies and moths are among the worst hit. For example, the number of widespread [butterfly species fell by 58% on farmed land](#) in England between 2000 and 2009. **The UK has suffered the biggest recorded insect falls overall**, though that is probably a result of being more intensely studied than most places. He thinks new classes of insecticides introduced in the last 20 years, including neonicotinoids and fipronil, have been particularly damaging as they are used routinely and persist in the environment: *“They sterilise the soil, killing all the grubs.”* This has effects even in nature reserves nearby; the [75% insect losses recorded in Germany](#) were in protected areas.

### Robert F Kennedy Jr. one of the US Attorney’s fighting Bayer in the Courts, 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.*

*Bauman expressed his confidence in [Monsanto](#) and predicted a sunny future for its flagship herbicide, Roundup. He told his top-tier investors that Bayer had performed an adequate due-diligence on Monsanto before [purchasing](#) the troubled company for \$66 billion this past June. At the time of its purchase, Monsanto told its German suitors that a \$270-million set-aside would cover all its outstanding liabilities arising from Monsanto’s 5,000 Roundup cancer lawsuits.*

*Bauman did concede to anxious shareholders that Monsanto had withheld [internal papers](#) relevant to the case. Bayer never saw those internal Monsanto documents prior to the purchase.*

*It’s no surprise that Monsanto kept secrets from Bayer. Johnson’s jury [heard evidence](#) that for four decades Monsanto maneuvered to conceal Roundup’s carcinogenicity by capturing regulatory agencies, corrupting public officials, bribing scientists and engaging in scientific fraud to delay its day of reckoning. The jury found that these activities constituted “malice, fraud and oppression” warranting \$250 million in punitive damages.*

*I am one of several attorneys representing, collectively, now some 8,000 clients with similar cases. I attended the two-month trial and worked with the trial team led by two young and exceptionally gifted lawyers, Brent Wisner of Baum Hedlund Aristei & Goldman and Dave Dickens of The Miller Firm. For Bayer the worst is yet to come.*

*Despite Monsanto’s efforts, the science [linking glyphosate](#)—Roundup’s active ingredient—to non-Hodgkin’s lymphoma has passed the critical inflection point. European nations are [moving](#) to ban or restrict the chemical, and California regulators and courts have [ordered](#) Monsanto to warn consumers of Roundup’s carcinogenicity at all points of sale. Both federal and state courts across the*

<sup>34</sup> <https://www.theguardian.com/environment/2019/feb/10/plummeting-insect-numbers-threaten-collapse-of-nature>

country have agreed that the question can be sent to juries. Hundreds of new inquiries have flooded our offices since the Johnson verdict.”

### **Roundup causes 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 public’s growing concerns with Roundup are, in part, due to Monsanto’s overreaching.*

*For two decades following its licensing in 1974, farmers and gardeners used Roundup as a conventional weedkiller. After Monsanto’s introduction of Roundup Ready seeds in the 1990s, farmers began aerial spraying of the herbicide on entire fields, including newly planted corn, canola and soy genetically altered to thrive in the toxic mist that killed all neighboring weeds.*

*Then, around 2006 (in the UK, in 1980<sup>35</sup>), Monsanto started marketing Roundup as a [desiccant](#) to dry up oats and wheat immediately before harvest. For the first time, farmers were spraying the chemical directly on food. Roundup sales rose dramatically to 300 million pounds annually in the U.S., with farmers spraying enough to cover every tillable acre in America with a gallon of Roundup. Glyphosate now accounts for about [50% of all herbicide use](#) in the U.S. About [75% of glyphosate use](#) has occurred since 2006, with [the global glyphosate market](#) projected to reach \$11.74 billion by 2023. Never in history has a chemical been [used](#) so pervasively. Glyphosate is in our air, water, plants, animals, grains, vegetables and meats. It’s in beer and wine, children’s [breakfast cereal and snack bars](#) and mother’s breast milk. It’s even in our vaccines.*

### **Roundup is exterminating at least 13 species in the US alone**

*As grim as its financials now look, Monsanto’s reputational liability may be even more of an anchor for Bayer than all the lawsuits. Environmentalists complain that Roundup is exterminating at least 13 species in the U.S. alone, including North America’s iconic [Monarch butterfly](#). Human rights advocates blame the [suicides](#) of more than 200,000 Indian farmers on the suffocating economics caused by Monsanto’s monopolistic control of international seed stocks. Government regulators are already under pressure to restrict these sorts of chemical mayhems with laws limiting glyphosate and GMOs. Monsanto has carved out a market niche monetizing deadly chemicals that more squeamish companies shun, a strategy that has made the company the Snidely Whiplash of corporate scoundrels and the planet’s worst villain, according to many environmentalists and human rights advocates. As a boy, I watched Monsanto’s vicious campaign to pillory the dying heroine Rachel Carson over her book, “Silent Spring,” in its efforts to exonerate its pesticide DDT which was wiping out songbirds and the American bald eagle.”<sup>36</sup>*

### **There are even more lies from Monsanto revealed by secret sealed documents obtained by scientist Anthony Samsel from the US EPA under FOI regulations**

<sup>35</sup> <http://www.hgca.com/media/185527/is02-pre-harvest-glyphosate-application-to-wheat-and-barley.pdf>

<sup>36</sup> <https://www.organicconsumers.org/blog/kennedy-monsanto-roundup-verdict-bayer-stock>

### **Monsanto's sealed secret studies obtained under FOI from the US EPA**

Samsel and Seneff wrote paper IV on Glyphosate: Glyphosate, pathways to modern diseases IV: cancer and related pathologies<sup>37</sup> and concluded that: "*significant evidence of tumours was found during these investigations*". Ridley and Mirly (1988) (for Monsanto) found bioaccumulation of <sup>14</sup>C labelled glyphosate in Sprague Dawley rat tissues. Residues were present in bone, marrow, blood and glands including the thyroid, testes and ovaries, as well as major organs, including the heart, liver, lungs, kidneys, spleen and stomach (Table 11 Page 127). The eye is included in this list. Table 8 Page 126): Incidence and occurrence of ophthalmic degenerative lens changes by glyphosate. Table 9 Page 126: Data on unilateral and bilateral cataracts (all types) and Y-suture opacities, excluding "prominent Y suture", following glyphosate exposure to rats: this Stout & Rueker (1990) study was commissioned by Monsanto.

The rate of cataract surgery in England "*increased very substantially*" between 1989 and 2004 from 173 (1989) to 637 (2004) episodes per 100,000 population.

A 2016 study by the WHO also confirmed that the incidence of cataracts had greatly increased: '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.<sup>38</sup>

In the US between 2000 and 2010 the number of cases of cataract rose by 20% from 20.5 million to 24.4 million. It is projected that by 2050, the number of people with cataracts will have doubled to 50 million. A Senior Monsanto scientist had claimed that glyphosate didn't accumulate but was excreted unchanged from the body<sup>39</sup> and referred back to the glyphosate re-assessment in Europe in 2002. However, Monsanto's secret studies and the 2002 reassessment had revealed otherwise.

### **The European Chemicals Agency confirmed it. They classified glyphosate as a substance that caused severe eye damage and is toxic to aquatic life with long-lasting effects**<sup>40</sup>

ECHA's harmonised classification of glyphosate formed the basis on which the European Commission relicensed glyphosate for 5 years on December 12 2017.<sup>41</sup>

### **Glyphosate pathways to modern diseases V: Amino acid analogue of glycine in diverse proteins**<sup>42</sup>

Abstract: Glyphosate, a synthetic amino acid and analogue of glycine, is the most widely used biocide on the planet. Its presence in food for human consumption and animal feed is ubiquitous.

Epidemiological studies have revealed a strong correlation between the increasing incidence in the United States of a large number of chronic diseases and the increased use of glyphosate herbicide on corn, soy and wheat crops. Glyphosate, acting as a glycine analogue, may be mistakenly incorporated into peptides during protein synthesis. A deep search of the research literature has revealed a number of protein classes that depend on conserved glycine residues for proper function. Glycine, the smallest amino acid, has unique properties that support flexibility and the ability to anchor to the plasma membrane or the cytoskeleton. Glyphosate substitution for conserved glycines can easily explain a link with diabetes, obesity, asthma, chronic obstructive pulmonary disease

<sup>37</sup> <http://www.amsi.ge/jbpc/31515/11SA15R.pdf>

<sup>38</sup>

[https://apps.who.int/iris/bitstream/handle/10665/204585/9789241565196\\_eng.pdf;jsessionid=C6B74ED621793B22A3D688FF027CD474?sequence=1](https://apps.who.int/iris/bitstream/handle/10665/204585/9789241565196_eng.pdf;jsessionid=C6B74ED621793B22A3D688FF027CD474?sequence=1)

<sup>39</sup> <https://gmoanswers.com/ask/hi-does-senior-monsanto-scientist-dan-goldstein-still-maintain-if-ingested-glyphosate-excreted>

<sup>40</sup> <https://echa.europa.eu/-/glyphosate-not-classified-as-a-carcinogen-by-echa>

<sup>41</sup>

[https://ec.europa.eu/food/sites/food/files/plant/docs/pesticides\\_glyphosate\\_commission\\_proposal\\_final\\_version.pdf](https://ec.europa.eu/food/sites/food/files/plant/docs/pesticides_glyphosate_commission_proposal_final_version.pdf)

<sup>42</sup> <http://www.amsi.ge/jbpc/11616/03SA16A.pdf>

(COPD), pulmonary edema, adrenal insufficiency, hypothyroidism, Alzheimer's disease, amyotrophic lateral sclerosis (ALS), Parkinson's disease, prion diseases, lupus, mitochondrial disease, non-Hodgkin's lymphoma, neural tube defects, infertility, hypertension, glaucoma, osteoporosis, fatty liver disease and kidney failure. The correlation data together with the direct biological evidence make a compelling case for glyphosate action as a glycine analogue to account for much of glyphosate's toxicity. Glufosinate, an analogue of glutamate, likely exhibits an analogous toxicity mechanism. There is an urgent need to find an effective and economical way to grow crops without the use of glyphosate and glufosinate as herbicides.

### **Glyphosate and AMPA found in pet foods**

Samsel and Seneff found significant amounts of glyphosate and AMPA in 9 brands of pet food.<sup>43</sup> 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."

### **Independent researchers show glyphosate formulations are highly toxic to the environment and destroy human health**<sup>44</sup>

238 Abstracts with Glyphosate formulations in Research

63 diseases researched for glyphosate formulations

29 adverse pharmacological actions researched for glyphosate formulations

23 glyphosate formulations related articles

### **Genetically-engineered crops, glyphosate and the deterioration of health in the United States of America**<sup>45</sup>

**Abstract:** *A huge increase in the incidence and prevalence of chronic diseases has been reported in the United States (US) over the last 20 years. Similar increases have been seen globally. The herbicide glyphosate was introduced in 1974 and its use is accelerating with the advent of herbicide-tolerant genetically engineered (GE) crops. Evidence is mounting that glyphosate interferes with many metabolic processes in plants and animals and glyphosate residues have been detected in both. Glyphosate disrupts the endocrine system and the balance of gut bacteria, it damages DNA and is a driver of mutations that lead to cancer.*

*In the present study, US government databases were searched for GE crop data, glyphosate application data and disease epidemiological data. Correlation analyses were then performed on a total of 22 diseases in these time-series data sets. The Pearson correlation coefficients are highly significant ( $< 10^{-5}$ ) between glyphosate applications and **hypertension** ( $R = 0.923$ ), **stroke** ( $R = 0.925$ ), **diabetes prevalence** ( $R = 0.971$ ), **diabetes incidence** ( $R = 0.935$ ), **obesity** ( $R = 0.962$ ), **lipoprotein metabolism disorder** ( $R = 0.973$ ), **Alzheimer's** ( $R = 0.917$ ), **senile dementia** ( $R = 0.994$ ), **Parkinson's** ( $R = 0.875$ ), **multiple sclerosis** ( $R = 0.828$ ), **autism** ( $R = 0.989$ ), **inflammatory bowel disease** ( $R = 0.938$ ), **intestinal infections** ( $R = 0.974$ ), **end stage renal disease** ( $R = 0.975$ ), **acute kidney failure** ( $R = 0.978$ ) cancers of the **thyroid** ( $R = 0.988$ ), **liver** ( $R = 0.960$ ), **bladder** ( $R = 0.981$ ), **pancreas** ( $R = 0.918$ ), **kidney** ( $R = 0.973$ ) and **myeloid leukaemia** ( $R = 0.878$ ).*

*The Pearson correlation coefficients are highly significant ( $< 10^{-4}$ ) between the percentage of GE corn and soy planted in the US and **hypertension** ( $R = 0.961$ ), **stroke** ( $R = 0.983$ ), **diabetes prevalence** ( $R = 0.983$ ), **diabetes incidence** ( $R = 0.955$ ), **obesity** ( $R = 0.962$ ), **lipoprotein metabolism disorder** ( $R = 0.955$ ), **Alzheimer's** ( $R = 0.937$ ), **Parkinson's** ( $R = 0.952$ ), **multiple sclerosis** ( $R = 0.876$ ), **hepatitis C** ( $R = 0.946$ ), **end stage renal disease** ( $R = 0.958$ ), **acute kidney failure** ( $R = 0.967$ ), cancers of the **thyroid** ( $R = 0.938$ ), **liver** ( $R = 0.911$ ), **bladder** ( $R = 0.945$ ), **pancreas** ( $R = 0.841$ ), **kidney** ( $R = 0.940$ ) and **myeloid leukaemia** ( $R = 0.889$ ). The significance and strength of the correlations show that the effects of glyphosate and GE crops on human health should be further investigated.*

<sup>43</sup> <http://www.amsi.ge/jbpc/31515/11SA15R.pdf>

<sup>44</sup> <http://www.greenmedinfo.com/toxic-ingredient/glyphosate-formulations>

<sup>45</sup> [http://www.organic-systems.org/journal/92/JOS\\_Volume-9\\_Number-2\\_Nov\\_2014-Swanson-e\\_t-al.pdf](http://www.organic-systems.org/journal/92/JOS_Volume-9_Number-2_Nov_2014-Swanson-e_t-al.pdf)



### **Third trial and largest fine against Monsanto to a couple over Roundup: this time the Attorneys were able to reveal Monsanto's strategy for keeping Roundup on the market (13/05/2019)**

A [California](#) jury has ordered Monsanto to pay more than \$2bn to a couple that got cancer after using its weedkiller, marking the third and largest verdict against the company over Roundup.<sup>46</sup>

A jury in Oakland ruled Monday that [Monsanto](#), now owned by the German pharmaceutical corporation Bayer, was liable for the non-Hodgkin's lymphoma (NHL) cancer of Alva and Alberta Pilliod. The jury ordered the company to pay \$1bn in damages to each of them, and more than \$55m total in compensatory damages.

### **Breaking News: Monsanto hit with \$2 billion verdict in 3<sup>rd</sup> Roundup trial<sup>47</sup>**

Law360 (May 13, 2019, 5:04 pm EDT). [Excerpts](#): Other experts called by the Pilliods testified that the US EPA approved Roundup, based on fraudulent studies by Industrial Bio-test Laboratories. They said the company kept selling the product, even after the fraud was exposed, and refused for decades to conduct certain studies of its Roundup formula, despite requests from the EPA and its own toxicologist. During closings, the Pilliod's counsel, Brent Wisner, argued that Monsanto spent decades suppressing science linking its product to cancer, by ghost-writing academic articles and feeding the EPA "bad science". He asked the jury to 'punish' Monsanto with a \$1 billion punitive damages award. On Monday 13<sup>th</sup> May the jury sided with the Pilliods and found Monsanto liable for failure to warn claims, design defect claims, negligence claims and negligent failure to warn claims.

### **Bayer's shares plummet<sup>48</sup>**

The punitive damages awarded Monday (13<sup>th</sup> May 2019) are 36 times the actual damages. The multiple lawsuits have battered Bayer's stock since it purchased Monsanto for \$63 billion last year and Bayer's top managers are facing shareholder discontent. Chairman Werner Wenning told shareholders at Bayer's annual general meeting in Bonn last month that company leaders "*very much regret*" falls in its share price. At the same time, CEO Werner Baumann insisted that "*the acquisition of Monsanto was and remains the right move for Bayer.*" Bayer's stock price closed Monday at \$15.91 a share, down 45 cents or 2.76 percent per share, in trading on the New York Stock Exchange. The verdict was announced after the trading session closed. Bayer's share price has lost half its value since it reached a 52-week high of \$32.80 a share.

### **Monsanto kept a list of French politicians, scientists and journalists with views on GM crops**

German chemical giants Bayer has admitted its subsidiary Monsanto could have kept lists of key figures - for or against pesticides - "*in other European countries*", and not just in France.

Bayer apologised yesterday after it emerged that Monsanto had a PR agency collate lists of French politicians, scientists and journalists, with their views on pesticides and GM crops.

"*I think it's very likely that such lists also exist in other European countries,*" Matthias Berninger, Bayer's head of Public Affairs, told journalists in a conference call.

Mr Berninger said he "*firmly believes that other countries in Europe will be affected.*"

"*It is clear that we apologise for what has come to light in France,*" he added.

"*We consider what we have seen so far to be completely inappropriate. Of course, we were not able to see everything.*" "*However, we were of the opinion that the reports of these dealings with journalists, politicians and activists are not in order and not in agreement with what Bayer stands for.*"

<sup>46</sup> <https://www.theguardian.com/business/2019/may/13/monsanto-cancer-trial-bayer-roundup-couple>

<sup>47</sup> <https://www.law360.com>

<sup>48</sup> <https://www.ny1.com/nyc/all-boroughs/ap-top-news/2019/05/13/jury-monsanto-to-pay-2-billion-in-weed-killer-cancer-case>

French authorities have opened a preliminary enquiry into claims Monsanto had information illegally collected on the views and pliability of hundreds of high-profile figures and media outlets. Monsanto allegedly had public relations agency FleishmanHillard draw up files on their opinions on the controversial weedkiller glyphosate and on genetically modified crops.

Paris police said it would carry out the probe following a complaint by the daily *Le Monde* and one of its journalists, whose names appear on the list, the Paris prosecutor's office said. Two anti-pesticide NGOs, Foodwatch and Generations Futures, and two French research institutes, the CNRS and INRA, were also preparing to lodge legal complaints.

**Vince Chhabria: evidence that Monsanto has not taken a responsible approach to its product**


According to Judge Vince Chhabria, who presided over a recent federal trial that resulted in \$80 million in damages against Monsanto, “the [plaintiffs have presented a great deal of evidence](#) that Monsanto has not taken a responsible, objective approach to the safety of its product.” The judge [also wrote](#):

IV.

For similar reasons, the plaintiffs presented sufficient evidence at summary judgment to support a punitive damages award against Monsanto. Although the evidence that Roundup causes cancer is quite equivocal, **there is strong evidence from which a jury could conclude that Monsanto does not particularly care whether its product is in fact giving people cancer, focusing instead on manipulating public opinion and undermining anyone who raises genuine and legitimate concerns about the issue.**

**IT IS SO ORDERED.**

Date: March 7, 2019

  
\_\_\_\_\_  
Honorable Vince Chhabria  
United States District Court

Rosemary Mason

14 May 2019