

Monsanto: A "Sustainable Agriculture" Company?

By <u>Dr. Joseph Mercola</u> Global Research, March 29, 2015

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<u>Monsanto</u>, leading the pack of chemical technology companies that have infiltrated the seed business with their patented genetically engineered (GE) seeds, has spent many years trying to rehabilitate its reputation as a producer of toxic chemicals responsible for death and suffering.

It's not working very well however, and the reason for that is because despite the user-friendly rhetoric, they still haven't found a moral compass that points due North. They're still producing toxic goods, and they're still going to extreme means to hide it.

Monsanto now refers to itself as a "sustainable agriculture" company, delivering agricultural products that "support farmers" around the world. But it seems Monsanto has no concept of what "sustainable" really means, as its solutions are anything but.

Glyphosate Labeled 'Probable Carcinogen' by WHO Research Group

Further tarnishing Monsanto's "sustainable ag" claims is the labeling of glyphosate as a "probable carcinogen" (Class 2A) by the International Agency for Research on Cancer (IARC), which is the research arm of the World Health Organization (WHO).

As reported by Bloomberg:2

"A report³ published by the WHO in the journal Lancet Oncology said Friday there is "limited evidence" that the weedkiller can cause non-Hodgkin's lymphoma and lung cancer and "convincing evidence" it can cause cancer in lab animals."

IARC's report also notes that glyphosate and glyphosate formulations have been shown to induce DNA and chromosomal damage in mammals, as well as human and animal cells in vitro.

IARC is considered the global gold standard for carcinogenicity studies, so this determination is of considerable importance. The determination was published on March 20, 2015.^{4,5}

The IARC working group consists of 17 experts from 11 countries, and most noteworthy is the fact that these members were selected not only for their expertise, but also for the absence of real or apparent conflicts of interest.⁶

Along with glyphosate, the commonly used insecticides malathion and diazinon were also classified as "probably carcinogenic to humans" (Group 2A), and the insecticides tetrachlorvinphos and parathion were classified as "possibly carcinogenic to humans" (Group 2B).

Monsanto has Consistently Lied and Covered Up Toxicity Issues

In response, a Monsanto spokesman said: "All labeled uses of glyphosate are safe for human health," and the company has gone so far as to request a retraction of the IARC's report.

However, Monsanto feigned ignorance on the dangers of PCB's for several decades, which turned out to be a bold-faced lie. Its assurances that Roundup is biodegrade and "leave the soil clean" also turned out to be a lie, so why should anyone believe Monsanto's assurances that Roundup is safe?

Especially when you take into account the mounting research demonstrating that (as usual) Monsanto's assessment of its product is severely flawed. For example, research by Samsel and Seneff reveals that glyphosate wrecks human health by way of your gut bacteria. Cancer is but *one* of the potential health outcomes.

In Sri Lanka, drinking water contaminated with glyphosate and spraying glyphosate on rice fields without protective gear has also been linked to chronic kidney disease.⁸

Roundup also Tied to Antibiotic Resistance, New Research Shows

Right on the heels of the IARC's reclassification of glyphosate as a Class 2 carcinogen, another breakthrough study⁹ published in the peer-reviewed journal mBio on March 24 ties Monsanto's weedkiller to antibiotic resistance.

According to this study, sublethal doses of Roundup (the actual formulation of Roundup, not just glyphosate in isolation) alter disease-causing bacteria's response to commonly used antibiotics, including tetracycline and ciprofloxacin, thereby raising resistance to drugs used in medicine. As reported by Rodale News:¹⁰

"The way Roundup causes this effect is likely by causing the bacteria to turn on a set of genes that are normally off, [study author] Heinemann says. "These genes are for 'pumps' or 'porins,' proteins that pump out toxic compounds or reduce the rate at which they get inside of the bacteria...

Once these genes are turned on by the herbicide, then the bacteria can also resist antibiotics. If bacteria were to encounter only the antibiotic, they would instead have been killed.

In a sense, the herbicide is 'immunizing' the bacteria to the antibiotic:...This change occurs at levels commonly used on farm field crops, lawns, gardens, and parks." [Emphasis mine]

Study author Jack Heinemann, PhD, professor and lecturer of genetics at the University of Canterbury in New Zealand said:

"Antibiotic resistance is a big and growing problem. I think that a key lesson of this work is that we have to think more broadly, holistically, about medicine and the environment and not think that because herbicides are used on plants and antibiotics are used on people that they don't have any relevance when they mix together somewhere."

I would not be at all surprised if in the end glyphosate's toxicity becomes well-recognized and Monsanto ends up spending decades fighting lawsuits over it, just as it's still being sued over its PCB's pollution, decades after the fact. Glyphosate is now massively polluting both land and waterways. So much so it's even detected in <u>air and rain samples</u>. Disturbingly, the US Environmental Protection Agency (EPA) appears to have suppressed or minimized evidence in order to raise the allowable limits for glyphosate in food, which was done in 2013.

As noted by the Institute for Science in Society:¹¹ "The amount of allowable glyphosate in oilseed crops (except for canola and soy) went up from 20 ppm to 40 ppm, 100,000 times the amount needed to induce breast cancer cells." [Emphasis mine]

GE Foods Sold in California Will Likely have to Carry Cancer Warning

The IARC's determination may end up having a significant impact on the sale of genetically engineered (GE) foods. As reported by PoliticoPro March 24:¹²

"The World Health Organization cancer research body's determination that exposure to a key pesticide used on genetically modified crops is linked to cancer is another reason why lawmakers should move ahead with a national GMO labeling mandate, Rep. Jim McGovern said this morning.

"They are saying that glyphosate is a likely cause of cancer, that may be something people want to know," McGovern said this morning during a House Agriculture Committee hearing on the costs of GMO labeling. "Don't you think people should have a right to know how their food is grown?"

Indeed, the IARC's classification of glyphosate as a probable carcinogen is more significant than you may realize. IARC is one of the five research agencies from which the OEHHA—which is the California agency of environmental hazards—gets its reports to declare carcinogens under Prop 65. What this means is that in a few years' time, foods containing glyphosate will have to have a Prop 65 Warning label to be sold in California. While it will take time, that process is now in motion with the IARC classifying glyphosate as a Class 2 carcinogen.

Why Monsanto Will Never Be a Sustainable Ag Company

Part of being sustainable includes minimizing or eliminating agricultural chemicals, as synthetic fertilizers and pesticides decimate soil microbes, and Monsanto is not doing anything to limit the use of chemicals on our crop fields.

Why would it, considering the fact that its patented seeds are designed to promote and secure the expanded use of pesticides, not lessen it. As noted in a Food & Water Watch report¹³ on Monsanto:

"Sales from Roundup and other glyphosate-based herbicides accounted for 27 percent of Monsanto's total 2011 net sales. Monsanto engineers its GE seeds to resist Roundup and Roundup alone, so that the sale of the herbicide is absolutely necessary for those who buy Roundup Ready seeds."

In his paper "Pesticide Use on Genetically Engineered Crops,"¹⁴ Dr. Ramon J. Seidler, Ph.D., a former senior scientist with the Environmental Protection Agency (EPA), presents USDA data showing that glyphosate use has increased *12-fold* since 1996, when the first GE crops were introduced.

Glyphosate is the active ingredient in Monsanto's broad spectrum herbicide Roundup, and its Roundup Ready seed varieties are designed to tolerate otherwise lethal doses of this chemical.

The problem is, while the crop may survive, it's saturated with glyphosate—you cannot wash the chemical off as it is integrated systemically into all the plant's cells. Recent research has also revealed how glyphosate promotes chronic disease, in part by inhibiting enzymes that catalyze the oxidation of organic substances.

Overall, annual herbicide use has risen by more than 500 million pounds—an increase that in part is driven by expanded use of GE crops, and in part by escalating weed resistance. This includes pesticide use on Bt plants, which are genetically engineered to produce their own internal pesticide, ostensibly to reduce the need for topical pesticide applications.

According to the latest data,¹⁵ insecticide use on Bt crops has dramatically increased since 2010. So to suggest that Bt crops has led, or will lead, to a decrease in pesticide use is patently false.

The United States now uses about 1.1 billion pounds of pesticides each year, ^{16,17} and mounting research has linked pesticides to an array of serious health problems. Land, waterways, and food itself is also becoming increasingly toxic, thanks to companies like Monsanto. What's sustainable about that?

Monsanto's Best-Selling Herbicide Has Cut Monarch Population by 90 Percent

In 1996, when GE crops made their entrance, there were close to 1 billion monarch butterflies across the US. Today, their numbers have dwindled by 90 percent. Their rapid demise is tied to escalating glyphosate use, which kills the monarchs' sole food source, the milkweed.

In the past, even as prairies and forests in the Midwest were converted to cropland, the deep, extensive root system of the common milkweed allowed it to survive tillage, mowing, harsh winters, and even the application of most herbicides, which typically didn't affect their roots.

This changed when farmland was converted to GE crops and heavy Roundup application became the norm. Between 1995, the year before the first Roundup Ready crops were introduced, and 2013, total use of glyphosate on corn and soybeans increased 20-fold, according to a report¹⁸ by the Center for Food Safety (CFS).

A 2013 paper¹⁹ published in *Insect Conservation and Diversity* also links the monarchs' decline to increased use of glyphosate, in conjunction with increased planting of genetically modified (GM) glyphosate-tolerant corn and soybeans.

Monsanto—A Champion for Monarchs?

Monsanto now claims to be committed to "doing their part" to protect monarch butterflies—but don't think for a second that this commitment extends to curtailing the use of Roundup. It does not. Instead, Monsanto states:²⁰

"Effective control of weeds in their fields, however, doesn't prevent farmers from contributing to a conservation effort aimed at finding places outside farm fields for monarchs to thrive...

That's why we are collaborating with experts from universities, nonprofits, and government agencies to help the monarch by restoring their habitat in Crop Reserve Program land, on-farm buffer strips, roadsides, utility rights-of-way, and government-owned land."

The article also includes the following curious statement:

"Saying a species is closing in on extinction when most disagree... makes for a great news headline. It doesn't do anything to help solve the problem."

What's confusing about that is that I'm really not aware of any experts on monarch butterflies disagreeing with the statement that these <u>butterflies are on the verge of extinction</u>, let alone "most" disagreeing...

As for solving the problem, Monsanto has not only failed to accept responsibility for causing the problem in the first place, it's also unwilling to support strategies that involve cutting the use of Roundup, which is part and parcel of the solution.

Instead, it wants you to believe that because it supports the planting of milkweed in private gardens and on public lands and along roadways, Monsanto is somehow "doing its part" in solving the problem. What a joke.

Meanwhile, the answer, not only to dwindling monarch populations, but also to soil destruction, top soil erosion, water shortages, loss of biodiversity, and the threat of increased famine, is being aggressively *opposed* by Monsanto and other industry leaders.

I'm referring of course to <u>regenerative land management</u> practices and organic farming, which has been shown to outperform both GE and conventional chemical agriculture.

Part and parcel of such sustainable agriculture practices is cutting the use of chemicals, and that's undoubtedly why Monsanto won't have anything to do with it. It's truly an irony of gargantuan proportions for one of the most unsustainable companies in the world to proclaim itself a leader in sustainability.

Veterans for Peace Want Monsanto to Offer Restitution for Agent Orange Before Discussing Food Security

Voice of America recently reported²¹ that Monsanto co-sponsored a workshop in Ho Chi Minh City, trying to sell people on their brand of sustainable farming. The feedback was mixed however, with many Vietnamese being less than enthusiastic. Monsanto was one of nine manufacturers of Agent Orange, which killed and maimed an estimated 400,000 people during the Vietnam War,²² and has continued to affect the health of millions. And, as noted in the article, some are not fooled by Monsanto's efforts to create a new image:

"Chuck Palazzo, a founding member of the Vietnam chapter of Veterans for Peace, accused Monsanto of trying to 'brainwash' locals, especially young people. The company is on a public relations push to align itself with the positives of food security, he said, instead of its controversial products, Agent Orange and genetically modified seeds.

'Even if Monsanto has pure intentions, it should wait to get involved in sustainable agriculture and first compensate Vietnamese who suffer birth defects like missing limbs and distended bodies,' Palazzo said. 'The first thing they need to do is benefit, somehow, the victims of Agent Orange, they need to show some good faith,' he said. 'Doing the right thing, in my mind, is giving financial benefits, medical benefits, and social benefits…'

[H]e can't divorce these different sides of the company — its role in food security today, versus its role as purveyor of a wartime herbicide. Palazzo also opposes genetically modified seeds, which some fear could render long-term health problems. 'In my mind it's just about impossible to compartmentalize each of those and say, this is the good Monsanto and this is the bad Monsanto,' he said."

Remember Anniston?

Monsanto cannot rid itself of its toxic past for the simple reason that it hasn't changed the way it does business. It's still a major purveyor of toxic chemicals, and acts with reckless disregard for who gets hurt in the process of making a buck. In 2002, Monsanto was found guilty of decades of "outrageous acts of pollution" in the town of Anniston, Alabama. Residents accused the company of dumping PCBs into the local river—a chemical that the US government ended up banning in 1976²³ due to its carcinogenic potential. Monsanto also buried PCBs in a landfill, and PCBs can linger in the environment for centuries. In the end, they won. According to an article²⁴ discussing the case:

"Lawyers claimed Monsanto had deliberately covered up evidence that the PCBs were harmful, including evidence of fish dying in nearby creeks. Internal memos were produced that insisted they should protect the image of the corporation. One said: 'We can't afford to lose one dollar of business.' Although a clear link between the chemicals and cancer has not been proven, the people of Anniston have argued for years that their cancer rate is abnormally high. Some of the plaintiffs were found to have PCBs in their blood 27 times higher than the national average.

Monsanto's defense was that it closed the plant in 1971, eight years before the government ban. The company said it was not aware the chemicals were being released or that they could be dangerous. It has spent \$40m (£27m) on a

clean-up operation...The company has paid \$80m in out of court settlements...

The jury in Gadsden, Ala., a town 20 miles from Anniston... held Monsanto and its corporate successors liable on all six counts it considered: negligence, wantonness, suppression of the truth, nuisance, trespass, and outrage. Under Alabama law, the rare claim of outrage typically requires conduct so outrageous in character and extreme in degree as to go beyond all possible bounds of decency so as to be regarded as atrocious and utterly intolerable in civilized society."

Documents revealed that Monsanto had known about the severity of the pollution problem it caused for at least three decades. Anniston residents didn't learn the horrid truth until 1996; 30 years prior, in 1966, Monsanto managers found that fish placed in the river floated to the surface within 10 seconds, "spurting blood and shedding skin." In 1969, the company found a fish in another creek that had a PCB level 7,500 times the legal limit. Yet Monsanto never told anyone, and decided it wasn't worth going through "expensive extremes" to limit its toxic discharges.

San Diego Sues Monsanto for Polluting Bay with PCBs

Now San Diego is suing Monsanto for polluting the Coronado Bay with PCBs.²⁵ According to the complaint, "PCBs manufactured by Monsanto have been found in bay sediments and water and have been identified in tissues of fish, lobsters, and other marine life in the Bay." In its complaint, the city also claims that "the risks did not deter Monsanto from trying to protect profits and prolong the use of PCB compounds such as Aroclor, as shown in a report from an ad hoc committee that Monsanto formed in 1969."

According to a Food & Water Watch report²⁶ on Monsanto, the company produced 99 percent of all the PCBs in the US prior to it being banned, and the documentation revealed in the Anniston case over a dozen years ago shows that Monsanto was far from unaware of its extreme toxicity. Yet it put profits before all else—including the health of women, children, wildlife, and waterways—and hid what it knew while doing nothing to curtail its pollution. This company now proclaims to be a leader in "sustainable agriculture," and Robert T. Fraley, Monsanto's Vice President and Chief Technology Officer sends out tweets wondering why so many people "doubt science"...

As noted in a recent Counter Punch article:27

"[T]he answer to the question "Why do people doubt science" is not because... a bunch of 'irrational' activists have scared them witless about GM crops or some other issue. It is because they can see how science is used, corrupted, and manipulated by powerful corporations to serve their own ends. It is because they regard these large corporations as largely unaccountable and their activities and products not properly regulated by governments. That's why so many doubt science – or more precisely the science corporations fund and promote to support their interests."

That's precisely right, I think, yet Monsanto along with all the other chemical technology companies are trying their best to make you think that if you don't believe their corrupted science, you're somehow intellectually deficient. The problem is, Monsanto is like the boy who cried wolf too many times. Too many times it has assured us that its products are safe,

if not harmless, only to later be proven wrong. Remember France found <u>Monsanto guilty of lying</u> when it said Roundup was biodegradable? A few years later France again found <u>Monsanto guilty in a pesticide poisoning</u> case.

Tens of thousands of residents in Nitro, West Virginia also sued Monsanto in a class-action lawsuit over carcinogenic dioxins, which they claim the company spewed all over the city over the course of 20 years. The plant in Nitro produced the herbicide 2,4,5-T, which is a component of Agent Orange. As noted by Reuters²⁸ in July last year:

"In lieu of going to trial over the contamination, the biotech company agreed in 2012 to spend millions of dollars on a program that for the next three decades will assist residents of Nitro impacted by the plant."

And these are just a handful of examples of Monsanto's brand of "sustainability." For a rundown on Monsanto's checkered history, check out this Waking Times' article²⁹ from last year.

PR Firm Boasts Doubling Positive Media Coverage on GMOs by Supervising Social Media

In February, US Right to Know posted a series of press releases^{30,31,32,33} "outing" the Grocery Manufacturers Association's new lobbying firm, hired to combat GMO labeling, and how the GMO industry's PR firm made the mistake of bragging about using well-known propaganda tactics to double positive GMO messages.

"Food company CEOs worried about losing the trust of the American public... might want to take note: their trade association has taken another tone-deaf step into the abyss by hiring the law firm of a famous felon to do their dirty work... [T]he Grocery Manufacturers Association has retained the law firm K&L Gates to lobby against GMO labeling. K&L Gates was formed in a 2007 merger between Kirkpatrick & Lockhart and Preston Gates – which was Jack Abramoff's law firm from 1994 to 2000. Jack Abramoff, as we know, was sentenced to four years in prison for political corruption, and ended up as the poster child for corruption in Washington."

Monsanto, as most of you may already know, has long been referred to by those in the know as "the most evil company on the planet." But it has stiff competition. Before there was Monsanto, junk food companies were already hard at work influencing American politics to further their own agenda.

In 2014 I named the GMA "the most evil corporation on the planet," considering the fact that it consists primarily of pesticide producers and junk food manufacturers who are going to great lengths to violate some of your most basic rights—just to ensure that subsidized, genetically engineered and chemical-dependent, highly processed junk food remains the status quo.

Indeed, Jack Abramoff went on 60 Minutes (below) revealing in shocking detail how he spent years <u>illegally influencing Congress as a lobbyist</u>. Considering the fact that the GMA was caught red-handed in an illegal <u>money laundering scheme</u> during the Washington State

GMO labeling campaign, their choice of lobbying firm is certainly an ironic but fitting one.

According to the PR firm, Ketchum, it was hired by the <u>Council for Biotechnology Information</u> to improve GMO's public image and "balance" the online conversation. US Right to Know calls attention to a video ad in which the firm talks about how it doubled positive GMO coverage using online social media monitoring—a tactic that smacks of Internet "sockpuppets"—fake Internet personas who interject themselves into social media conversations to steer the debate.

(In 2008, Mother Jones³⁴ implicated Ketchum in an espionage effort against nonprofit organizations, including the Center for Food Safety and Friends of the Earth.) Ketchum also created the GMO Answers website, in which professors at public universities answer GMO questions from the public—supposedly without remuneration from the industry.

In late January, US Right to Know filed state public records requests³⁵ to obtain "correspondence and emails to and from professors at public universities who wrote for the agrichemical industry's PR website, GMO Answers... and agrichemical companies such as Monsanto, as well as to and from PR firms such as Ketchum or Fleishman Hillard, and to and from trade associations such as the Grocery Manufacturers Association and the Council for Biotechnology Information." It remains to be seen just how independent all these GMO experts answering questions on GMO Answers really are.

The Way Out of This Nightmare Starts at Home

The way off this out-of-control chemical treadmill will decimate profits for the chemical technology industry, and THAT is why they do not want you to know which foods contain genetically modified organisms (GMOs). If Americans started making dramatically different food choices, it could quickly revolutionize the US agricultural system because farmers will grow that which sells. If people want uncontaminated organic foods, that's what farmers will grow—and there's already evidence that biodynamic farming can be done even on the large scale. In fact, using regenerative agriculture principles, you can grow a lot more food on fewer acres.

Real solutions *are* available. What's lacking is the political will to stand up to the chemical technology industry and break its iron grip on our food supply. But we can still get it done, by making conscious choices each and every time we shop for food. Remember, your money either goes to support the chemical-based system that threatens the survival of the Earth and your descendants, or it supports a system that can regenerate and revitalize the soil and the environment so that healthy food and healthy people can thrive. To make conscious choices, we need information, and that is why GMO labeling is so crucial.

Help Support GMO Labeling

The Grocery Manufacturers Association (GMA)—Monsanto's Evil Twin—is pulling out all the stops to keep you in the dark about what's in your food. For nearly two decades, Monsanto and corporate agribusiness have exercised near-dictatorial control over American agriculture.

Finally public opinion around the biotech industry's contamination of our food supply and destruction of our environment has reached the tipping point. We're fighting back.

The insanity has gone far enough, which is why I encourage you to boycott every single product owned by members of the GMA, including natural and organic brands. More than 80 percent of our support comes from individual consumers like you, who understand that real change comes from the grassroots.

Thankfully, we have organizations like the Organic Consumers Association (OCA) to fight back against these corporate giants. So please, fight for your right to know what's in your food and help support the GMO labeling movement by making a donation today.

Internet Resources Where You Can Learn More

- Non-GMO Shopping Guide
- GMA Boycott List
- GMA Traitor Brands

Together, Let's Help OCA Get The Funding They Deserve

Let's Help OCA get the funding it deserves. I have found very few organizations who are as effective and efficient as OCA. It's a public interest organization dedicated to promoting health justice and sustainability. A central focus of the OCA is building a healthy, equitable, and sustainable system of food production and consumption.

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