# **Spraying Our Killing Fields with Agent Orange**



The United States Department of Agriculture is rapidly challenging the war machine of the Pentagon for the most wanted and most feared honor of creating the world's largest and most effective killing fields. Killing fields is of course a reference to the compelling British movie of the 1980's about the US war in Cambodia which Nixon ordered in May, 1970, in frustration at the lack of victory in neighboring Vietnam. These killing fields, however, are the golden green fields of US GMO corn and the endless acres of GMO soybeans which make up almost all US corn and soybean production today.

Would you knowingly feed your family a documented toxin that is said to cause cancers, autism and other illnesses? If you are old enough to recall the tragic history of the Vietnam War of the 1970s and the US military's massive spraying across the rich jungles of Vietnam with a highly toxic defoliant or weed-killer nicknamed Agent Orange, the following might give you pause.

## 'Super-weeds'

The advent of the widespread use of Genetically Modified Organisms (GMOs), the direct result of President G.H.W. Bush's collusion with Monsanto in 1992, opened a Pandora's Box for the human and animal food chain which is only now beginning to be seriously looked at by a larger scientific and lay

public. To date, almost all GMO patented seeds or crops, whether soybean, corn or cotton, have been modified for one trait enhancement-that they are resistant to the powerful and highly toxic weed-killer glyphosate, the main component of Monsanto's Roundup, the world's best-selling weed-killer.

At the beginning of US commercialization of GMO in the mid-1990s, glyphosate herbicides, whether from Monsanto, Dow, DuPont or Syngenta or others, appeared to farmers to be salvation for weed control. It killed everything, everything, except the genetically modified GMO corn or soybean crops which had been genetically manipulated, not to increase harvest yield as Monsanto slick PR would have us believe, but only to "resist" glyphosate and Roundup. Farmers were delighted at the beginning. Monsanto GMO plantings spread across the fields of America to the point today, according to a recent USDA survey, GMO soybeans sprayed with glyphosate weed-killer chemicals comprise fully 94% of the entire US soybean harvest. That means virtually every food product on US supermarket shelves containing soy or soybean derivative is GMO, sprayed with glyphosate. The figure was only 17% in 1997. The USDA figure for GMO corn drenched in glyphosate chemicals this year will reach 92% of all corn produced in America. The United States is the world's largest corn producer and the largest exporter, and the world's largest soybean producer.

US produced GMO corn and soybeans covered with glyphosate, are exported to the European Union and even to China under various legal loopholes, despite a de facto prohibition of GMO planting in those countries. It is exported as high protein "power feed" for animals–chicken, pigs, cattle.

Initially into the turn of the century all seemed to be going well. Owing to the collusion between G.H.W. Bush and subsequent US presidents Clinton, Baby Bush and Obama, Americans were denied the basic human right to know what they were feeding their family. It was prohibited that the US Government Environmental Protection Agency (EPA) or the USDA or any other government agency independently test the approved GMO patented crops for health and safety. It was known as the Doctrine of Substantial Equivalence and it's a criminal fraud in force since 1992 when old Bush agreed with Monsanto on that. Farmers have since sprayed tons of glyphosate chemicals on their crops of GMO corn or soybeans or cotton–the three major US GMO crops.

After several years however, nature found devious ways to outfox Monsanto, Dow, DuPont and their glyphosate weed-killers. Nature mutated new varieties of so-called super-weeds. Today an estimated 50 percent of US farmland is being strangled by new super-weeds requiring application of far more tons of chemical weed-killers than with normal non GMO and non-glyphosate-treated crops.

The spread of giant fields of super-weeds is worst in the southeastern United States where most soybeans and cotton crops are grown. There, as of 2013, a reported 92 percent of cotton and soybean fields were infested as a result of Roundup Ready <u>crops</u>.

The now-Roundup-resistant Palmer amaranth is just one example of the weeds spreading across America's farmland. It's a fast-growing weed that can reach eight feet in height, outcompeting soybeans or cotton; it develops a tough stem that can damage farm machinery. Other aggressive super weeds, impervious to Roundup or other glyphosate weed-killers, are spreading rapidly through the Midwest and the Corn Belt. The cause is the widespread use since the mid-1990s of GMO crops sprayed with Roundup or other glyphosate based weed killers. Nature is clever in finding solutions and the nature of super weeds is far cleverer, it seems, than the minds of the GMO Monsanto scientists devising <u>weed-killers</u>.

### Roundup resistant Super weeds are covering American GMO acres

Some of the super-weeds have incorporated genetic material from the GMO plants into their own genetics and used it to grow taller, stronger, and with greater vitality than the previous weeds that were killed by glyphosate when it was first introduced to genetically modified <u>crop fields</u>.

## 2,4-D-a cure worse than the disease

Now the even-cleverer scientists at Monsanto-rival Dow Chemical have rolled out a new, likely even more toxic cocktail they claim will solve the super-weed crisis the glyphosate weed-killers caused in the first place. Only this "solution" is worse than the super-weed disease itself. It involves mixing the glyphosate chemicals together with something chemists call 2, 4-Dichlorophenoxy acetic acid or simply 2,4-D.

Dow Chemical has won USDA and Environmental Protection Agency (EPA) approval for its new herbicide, "Enlist," which is based on 2,4-D as well as other non-disclosed (company confidential) chemical adjuvants. They claim it will solve the problem of glyphosate-resistant super-weeds caused by widespread GMO crop spraying with Monsanto's Roundup. The EPA claims that "tests" have proven 2,4-D completely safe even for the fetus inside a mother's womb. The only problem is that the safety tests were funded and given to the corrupt EPA by Dow Chemical <u>itself</u>.

The US Government EPA is a cesspool today of chemical industry influence. Decisions on permitting toxic chemicals to be sprayed on food crops are not made as to whether there is any human health risk

from the chemical. Rather the EPA criterion is a bizarre "cost-benefit analysis." The agency calculates the social cost of possible illnesses even deaths from spraying with a given chemical. It weighs those costs against the benefits to farmers, to the corporate profit, to the economy of approving a new weed-killer. Since it was created in the mid-seventies, the EPA has issued regulations restricting the use of only five industrial chemicals out of more than eighty thousand in the <u>environment</u>.

One since-fired EPA whistle-blower described the corrupt relation between the chemical industry and the EPA that is supposed to safeguard the public from harmful chemicals. Dr. Marsha Coleman-Adebayo, former Senior Policy Analyst in the Office of the Administrator at the US Environmental Protection Agency told about the collusion between the EPA and the chemical companies. She was fired for publicly protesting the poisoning of South African mine workers by a US corporation in 2000. She describes the EPA culture: "...when I first arrived at EPA, it was not unusual to have someone from Dow Chemical sitting at a desk in the corner in the same office that you were in, who was also writing environmental policy. ... It took me a while to sort of... get a handle on who was a government official and who was from the private sector..."

In announcing approval of the new weed-killer, Enlist, Dow AgroSciences President, Tim Hassinger, said it promised to be the biggest selling and most profitable in the history of Dow's agriculture <u>division</u>.

## **History of Agent Orange**

But the US Department of Agriculture and the EPA are lying to the public about the benign effects of Dow's Enlist super weed killer containing 2,4-D. They claim that 2,4-D is harmless and that even though it was a component in the deadly Agent Orange used during the Vietnam War as a jungle defoliant. They claim that the "harmful" part of Agent Orange, 2,4,5-T, an unintended by-product of the manufacture was responsible for the negative health effects and eventually led to the ban on Agent Orange. We are supposed to believe 2,4-D is as harmless as a vanilla milkshake.

Agent Orange's ingredient 2,4-D, was first developed during World War II as one of many chemical warfare agents, used as a herbicide or plant killer that was sprayed by air to kill enemy crops. Later during the Korean and Vietnam wars it was compounded with another chemical to create what came to be called Agent Orange. Agent Orange contained both 2,4-D and 2,4,5-T. According to the National Pesticide Information Center Dioxin, an unintended by-product of the manufacture of 2,4,5-T, was blamed for the negative health effects and eventually led to the ban of Agent Orange.

A report of the Natural Resources Defense Council on 2,4-D states:

Over the past 40 years, dozens of studies have shown the connection between 2,4-D and non-Hodgkin's lymphoma (cancers of the blood) and soft-tissue sarcoma in people. Other research reveals that 2,4-D enters breast milk and semen where it disrupts normal hormone functions, which can also cause serious and lasting effects during fetal and infant development. In fact, in Minnesota, Montana, North Dakota, and South Dakota, researchers have found higher rates of certain birth defects in areas with the highest use of 2,4-D and other similar herbicides. The higher rate of birth defects was most evident in infants conceived in the spring—the time of year when the herbicide is most used. Those birth defects were significantly higher in males, and consisted mostly of cardiac and lung abnormalities.

## New England Journal of Medicine calls for Halt

Dow AgroSciences in October, 2014 got EPA approval for a second variant of "Enlist" containing 2,4-D. This is called "Enlist Duo." Enlist Duo contains 2,4-D choline and glyphosate. It has been approved in Canada and the US. It's used on genetically modified soybeans and genetically modified maize that is resistant to 2,4-D and glyphosate. If the EU is foolish or corrupt enough to approve Washington's Trans-Atlantic Trade and Investment Partnership, Enlist Duo will soon be spread across the farm fields of the EU as well.

The New England Journal of Medicine, the most respected medical science journal in the United States, has now come out sounding the alarm on the decision by the EPA and USA to approve Dow's Enlist Duo. In an article in the August 20, 2015 issue, Dr Philip Landrigan M.D. and Charles Benbrook, PhD call for a drastic policy change regarding the Dow herbicide combination.

They point out that the recent spread since the mid-1990's of GMO herbicide-resistant crops "has led to overreliance on herbicides and, in particular, on glyphosate. In the United States, glyphosate use has increased by a factor of more than 250 — from 0.4 million kg in 1974 to 113 million kg in 2014. Global use has increased by a factor of more than 10. Not surprisingly, glyphosate-resistant weeds have emerged and are found today on nearly 100 million acres in 36 states. Fields must now be treated with multiple herbicides, including 2,4-D, a component of the Agent Orange defoliant used in the Vietnam War."

The authors focus on the safety issue regarding GMO crops arising from the October, 2014 EPA decision approving Enlist Duo, stating:

"It will be marketed in tandem with newly approved seeds genetically engineered to resist glyphosate, 2,4-D, and multiple other herbicides. The EPA anticipates that a 3-to-7-fold increase in 2,4-D use will result. In our view, the science and the risk assessment supporting the Enlist Duo decision are flawed. The science consisted solely of toxicologic studies commissioned by the herbicide manufacturers in the 1980s and 1990s and never published...These studies predated current knowledge of low-dose, endocrine-mediated, and epigenetic effects and were not designed to detect them. The risk assessment gave little consideration to potential health effects in infants and children, thus contravening federal pesticide law. It failed to consider ecologic impact, such as effects on the monarch butterfly and other pollinators. It considered only pure glyphosate, despite studies showing that formulated glyphosate that contains surfactants and adjuvants is more toxic than the pure compound."

They add, "The second new development is the determination by the (World Health Organization's) International Agency for Research on Cancer (IARC) in 2015 that glyphosate is a 'probable human carcinogen' and 2,4-D a 'possible human carcinogen.' These classifications were based on comprehensive assessments of the toxicologic and epidemiologic literature that linked both herbicides to dose-related increases in malignant tumors at multiple anatomical sites in animals and linked glyphosate to an increased incidence of non-Hodgkin's lymphoma in humans."

The authors conclude that GMO foods and the herbicides applied to them "may pose hazards to human health that were not examined in previous assessments. We believe that the time has therefore come to thoroughly reconsider all aspects of the safety of plant biotechnology...we believe the EPA should delay implementation of its decision to permit use of Enlist Duo. This decision was made in haste. It was based on poorly designed and outdated studies and on an incomplete assessment of human exposure and environmental effects. Second, the National Toxicology Program should urgently assess the toxicology of pure glyphosate, formulated glyphosate, and mixtures of glyphosate and other herbicides."

Could it be that some people are deliberately trying to maim and kill us?

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