

PROVIDED IN  
SPEAKER CARD  
BOX -

ADDENDUM MATERIAL  
DATE 11/22/16 ITEM NO. 8, 8+9

GM Crops banned in

Azerbaijan, Austria, Bosnia and Herzegovina, Bulgaria,

Croatia, Cyprus, Denmark, France, Germany, Greece,

Hungary, Italy, Latvia, Lithuania, Luxembourg, Malta,

Moldova, the Netherlands, Northern Ireland, Norway,

Poland, Russia, Scotland, Serbia, Slovenia,

Switzerland, Ukraine, and Wales.

Belize, Ecuador, Peru, and Venezuela

Bhutan, Kyrgyzstan, Saudi Arabia, and Turkey

Algeria and Madagascar

BAKE FOR GOOD

# Keeping It Close to Home

*A fresh look at farming brings better baking  
to the neighborhood*

written by jeff yankellow • photographed by julia a. reed

**T**his is a story about an American farmer and his wife, but it's not a story about farming. It's a story about the couple's efforts to change the status quo, and the good things that happened in their community as a result.

Tom and Sue Hunton own Camus Country Mill in Eugene, Oregon. Their mill is changing the way grains have been handled in their region: they're forging new ground, and leading the way for others around the country.

Until the last decade, grains in this part of Oregon were nothing more than a rotational planting, grown to break the cycle of disease of more profitable crops. In an age where consumers want to know more about where their food comes from, especially produce and proteins, grain was largely disregarded. That's starting to change, as local grain economies are being revived around the country to the benefit of the farmer, baker, and consumer.

These days you don't have to look far to find a bakery using (or even milling) local grain. There's one near Camus Country Mill, and it's in a surprising location: the back of the cafeteria at Willamette High School in Eugene. The bakers in this tiny kitchen in the Bethel School District have been using locally

grown flour since long before it was trendy. The reason they can do this is because the grain is grown and milled mere minutes away at Camus Country Mill.

I've had the privilege of knowing Tom and Sue for a few years now. Genuine and passionate, they're doing incredible work and have learned to create opportunity out of adversity. When the economy took a turn for the worse in 2008, the demand for Tom's main crop (grass seed) dropped drastically. As a third-generation farmer, he'd always grown grain in rotation, which was sent off to the commodity market for a price he didn't set and to a user he'd never know. Tom thought there must be a way to add value to the grain for the farmer and consumer, and build a more rewarding relationship between the two.

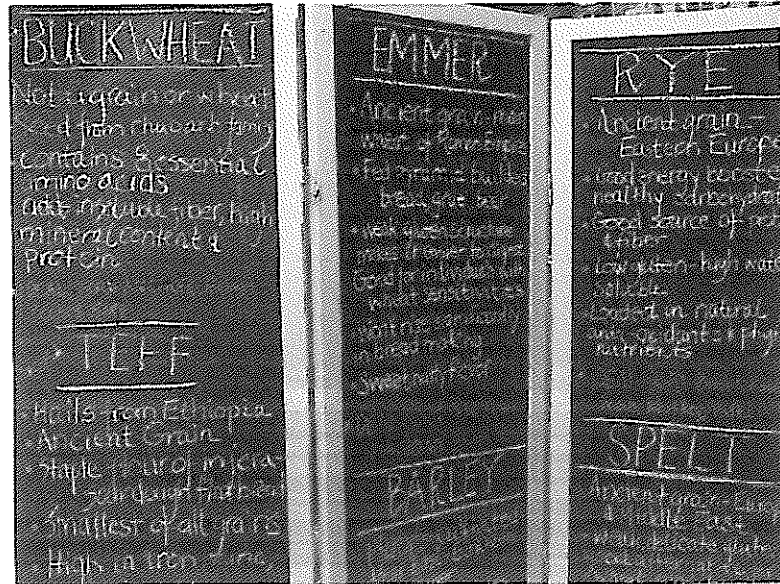
At that time Jennie Kolpak, director of nutrition services for the local school district, realized that using locally grown grain and flour could help local farmers during the economic downturn. She wanted to bring Tom's grain and flour into the schools. When I commented that the students are lucky to have someone like her that cared enough to pursue the opportunity, Jennie replied, "I never met anyone in school nutrition that didn't care. If the bakers at Willamette High are any reflection of that, I'm a believer."



**Opposite left:** Tom and Sue's Country Store provides an outlet for friends and neighbors to stock their pantries with locally grown grains.

**Left:** Ellen Sisnera gets ready to serve nutritious whole grain breakfast cakes to high school students.

**Below:** Chalkboards list some of the grains the Huntons grow and sell at their store.



You can see the love and attention they put into their work,  
a key ingredient in making anything taste good.

On my visit, the mood was light. The smiling bakers worked with focus and intent as they plated cakes for the morning snack, or rolled dough for sandwich flatbreads. You can see the love and attention they put into their work, a key ingredient in making anything taste good.

Bethel isn't the only school district that benefits from being near Camus Country Mill. The Huntons support other schools that don't have the luxury of having a full-time baking staff by creating easy-to-use custom flour blends, including biscuit and muffin mixes using whole grain emmer and buckwheat. As a result, the children in these schools get to enjoy tasty, nutritious baked goods.

The mill also hosts students at their farm store, giving them the rare opportunity to connect with the source of their food. Sue is a former teacher and she beams with excitement to tell how young students not only like their carrot emmer muffins, they ask for seconds!

To say Tom's idea was a good one would be an understatement. He wasn't the only one who wanted to change the status quo, and he has found willing partners in other local farmers. Now they all get better value for their crops, with the added reward of knowing that what they're producing is nourishing their community. It took a lot of courage for Camus Country Mill to make this change, but the risk has paid off for themselves and their neighbors. Tom and Sue Hunton are a model for farmers across the country and around the world. Their efforts make baking for good a reality in school meals every day.



October is Bake for Good Month, when we encourage everyone to use their ovens to make the world a better place. Who will you bake for? Let us (and the world) know! #bakeforgood #kingarthurfour



# SIERRA CLUB

Grand Canyon Chapter • Rincon Group  
738 N 5th Ave # 214 ♦ Tucson, Arizona 85705-8400  
(520) 620-6401

November 21, 2016

Pima County Board of Supervisors  
130 W. Congress  
Tucson, AZ 85701

Dear Chairperson Bronson and Supervisors Miller, Valadez, Carroll, and Elias,

We are concerned about the possible decision you will make to give Monsanto Corporation a significant tax break to bring their seed operations to Avra Valley. We strongly object to any tax incentives for this multi-national biotechnology corporation to bring their experimental operation to our community.

As you know, Sierra Club's mission is "to explore, enjoy, and protect the wild places of the earth; to practice and promote the responsible use of the earth's ecosystems and resources; and to educate and enlist humanity to protect and restore the quality of the natural and human environments." Our members have significant interest in Tucson and surrounding communities where we have worked to protect natural and cultural resources from the negative impacts of unwise development.

Monsanto Co. has already purchased 155 acres in Avra Valley, where it has plans to produce genetically-modified corn and soybean seeds in a vast greenhouse and on open-field operations where it will field-test experimental seeds.<sup>1</sup> Monsanto already has cotton operations in Casa Grande and Eloy, and it has already purchased the land for its planned new operations. Therefore, there is clearly no need to provide Monsanto with any financial incentives to "move" its operations here.

Additionally, the Sierra Club has grave concerns about how Monsanto's planned operations will impact the environment and local farmers, especially organic farmers. There is little to no information available to the public regarding the planned use of pesticides, nor any information about the consequences of experimental seeds cross-pollinating with local crops already in operation. Monsanto has proven time and again that it is not a good community partner. Sadly, it has a reputation of prosecuting small farmers for "infringing" on intellectual property rights when Monsanto's seeds and pollen escape its fields and contaminate the fields of organic and local farmers. This not only threatens to impose unfair and unwieldy legal costs on the local community, but it will threaten the recent UNESCO Gastronomy designation that honors Tucson's 4,100-year agricultural history and multicultural food traditions.

We ask that any discussion about providing any incentives to Monsanto Co. be conducted in public and that the public be provided an adequate opportunity to provide input. We ask that an environmental analysis of the impacts of any proposed operations be prepared and disclosed to the public prior to the authorization of any permits required for operations or building of the greenhouse.

Supporting this multi-national agri-business operation at the expense of local farmers and the local community, while using our tax dollars to do so, is irresponsible and we ask that you oppose this project.

Sincerely,

Meg Weesner  
Rincon Group Chair

<sup>1</sup> *Monsanto to build conventional, GMO corn germplasm greenhouse in Arizona*, Lee Allen, Western Farm Press, October 15, 2016.  
<http://m.westernfarmpress.com/management/monsanto-build-conventional-gmo-corn-germplasm-greenhouse-arizona>







**STATEMENT on Nov. 22, 2016, by Melissa Diane Smith**

**The corn or whatever Monsanto wants to develop here is the antithesis of health-promoting real food. It's pesticide-soaked, pseudo-food.**

**Monsanto is a chemical corporation. It got into foods so it could sell more of its chemicals. The corporation promised increased yields and decreased use of herbicides. None of that has occurred. It changes foods in ways that it help sell more of its chemicals, then it patents those foods and owns them, and it owns a larger and larger percentage of our food. All of those are not congruent with the City of Gastronomy designation that UNESCO gave Tucson.**

The first wave of crops Monsanto created was Roundup Ready crops. So much Roundup has been sprayed that weeds have adapted and become resistant to it. So, the corporation is moving onto developing new genetically modified seeds that are resistant to combinations of herbicides. It's now making crops that are resistant to Roundup and a dangerous, volatile herbicide called Dicamba. That's probably what they want to do here. But weeds have already become resistant to that combination, and Monsanto wants to create crops that are resistant to multiple herbicides.

**Monsanto has said that the corn seed of 2025 will have 14 genetically modified traits and allow farmers to spray five different kinds of herbicide.**

That's taking our food system in totally the wrong direction to produce health-supporting food or a healthy environment.

Hawaii has become Ground Zero for testing experimental seeds and chemicals. They've suffered horrible consequences; and Monsanto never pays for those consequences.

I have Powerpoint slides about Monsanto's record and pictures of the red dust cloud that came from Monsanto's corn fields in Molokai for each of you to look over. We do not want red dust clouds here. **It's simply another one of Monsanto's empty promises that mesh on its greenhouse is going to keep that out of our air.**

**We do not want Monsanto in Pima County at all, and we certainly don't want you to use our taxpayer money to give the corporation a tax break or other benefits to conduct their toxic business here!** Vote No on this outrageous tax break proposal! And in the new year, give a tax break to local, pesticide-free farmers so you can foster the food and environment we in Pima County want and deserve.

Come to the

## Stand Up Against Monsanto! Community Meeting


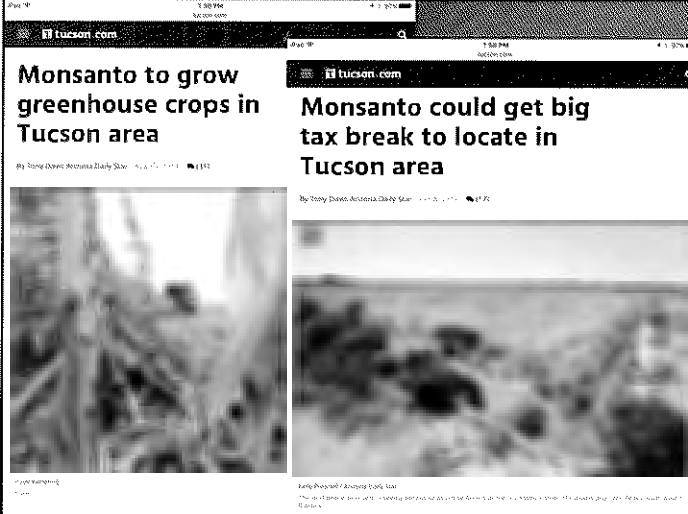
Get more information about what Monsanto wants to do in Pima County, watch a video about Hawaii's experience with Monsanto, hear from speakers, and learn what you can do about this serious issue facing Pima County.

**Oro Valley Library**  
1305 W. Naranja Drive

**2:00-4:00 p.m.**  
**Saturday, Nov. 19, 2016**

Event organized by GMO Free Arizona in collaboration with GMO Free Baja Arizona, March Against Monsanto Tucson, and Organic Sustainable Seed Action

**Introduction by Melissa Diane Smith,**  
author of *Going Against GMOs*

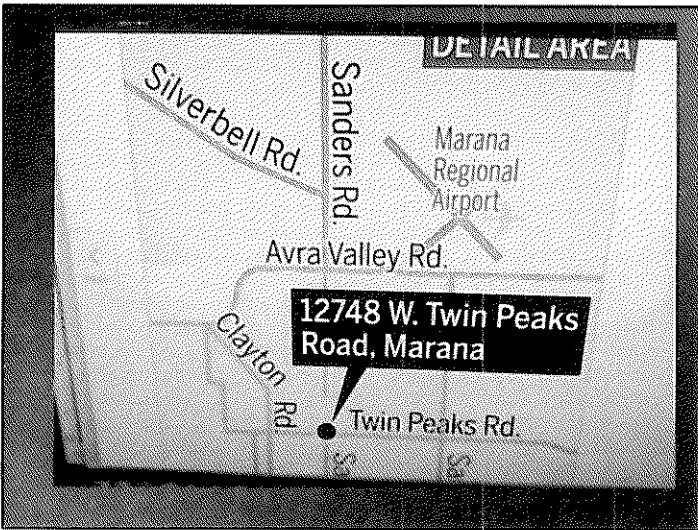



**Monsanto to grow greenhouse crops in Tucson area**

By Tony Davis, Arizona Daily Star

**Monsanto could get big tax break to locate in Tucson area**

By Tony Davis, Arizona Daily Star




**FARM PRESS**

**Monsanto to build conventional, GMO corn germplasm greenhouse in Arizona**

Like 8 min. [Read this story first](#)

Corn research on acres under glass

- Monsanto Corporation plans to build a seven-acre, state-of-the-art greenhouse corn research facility in Southern Arizona which will house GMO corn breeding and "trait integration" that combines genetic and biotech traits.
- Monsanto has purchased 175 acres of farmland near Marana where the 20-foot-tall greenhouse will be housed along with breeding facilities and traditional ground production.

Whole town and the other dozen or so traditional corn-growing states don't have anything to fear from Arizona, you can now add the Grand Canyon State as a player in corn line research and production efforts.

While figures vary month to month, the U.S. Department of Agriculture's World Agriculture Supply and Demand Estimates released in September still forecast a record 16.8 billion bushels for 2016-2017 or roughly 175.5 bushels per acre.

According to National Corn Growers Association President Chip Rowland, the report provides "evidence of challenges that farmers face" and the need to "step up and work together to solve those challenges."

**Popular Now**

- Complacency fades, could kill California citrus industry
- Are California's seed growers...

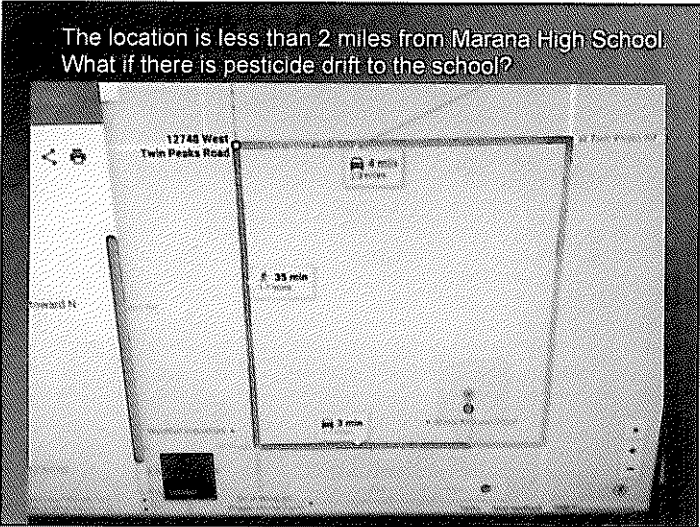
**STORY NOT CONSISTENT**

This article says Monsanto will have Traditional Ground Operations.

Other articles say it won't (for now).

Which is it?





### Pima County: Don't Let What Happened in Hawaii Happen Here

by Melissa Diane Smith, author of *Going Against GMOs*

In both my comments to the Pima County supervisors and the guest opinion piece that I posted here, I explained that Pima County in Arizona should learn from what Hawaiians experienced at the hands of biotech giant Monsanto.

**Monsanto's Invasion of Molokai**

To give you a bit of background, Monsanto snuck into Molokai even more than seems to be doing in Avra Valley near Tucson. In a statement given to us by Hawai'i SEED, Walter Ritte, a member of Hawai'i SEED, explains:

### Basics about Monsanto

- A multinational chemical corporation
- The maker of Roundup weed killer
- The biggest shareholder of the world's largest seed producer
- To have a huge presence (50%) in every state
- To transform 100% of the world's food

### WHAT'S IN YOUR CORN?

<p><b>GMO</b></p> <p><b>E. COLI BACTERIA DNA</b></p> <p><b>CAULIFLOWER MOSAIC VIRUS DNA</b></p> <p><b>ANTIBIOTIC RESISTANT MARKERS</b></p> <p><b>UP TO 6 VARIETIES OF Bt TOXIN PESTICIDES</b></p> <p><b>ROUNDUP RESIDUE</b></p>		<p><b>ORGANIC CORN</b></p> <p><b>GENO FREE</b></p>
---	--	--

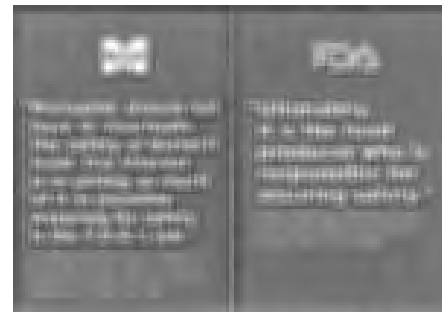
**SUBSTANTIALLY EQUIVALENT?**

## Person in charge of FDA's GMO policy ignored scientists' warnings

### Michael Taylor

- Former Monsanto attorney
- Later Monsanto vice president
- Now back at FDA as  
**US Food Safety Czar**  
("Deputy Commissioner for Foods")

## While the FDA and Monsanto point fingers...



who is looking out for  
american food safety?



**GMOs do not  
Live up to their  
Promises!**

**No higher yields!**

**An increase,  
Not a decrease  
in the use  
of pesticides!**

## Impacts of genetically engineered crops on pesticide use in the U.S. -- the first sixteen years

Charles M Benbrook<sup>1\*</sup>  
\*Corresponding author  
Email: cbenbrook@wsu.edu

<sup>1</sup> Centre for Sustaining Agriculture and Natural Resources, Washington State  
University, Hulbert 421, PO Box 646242, Pullman, WA 99164-6242, USA

**Results** 527 million more pounds of herbicides used

Herbicide-resistant crop technology has led to a 239 million kilogram (527 million pound) increase in herbicide use in the United States between 1996 and 2011, while *Bt* crops have reduced insecticide applications by 56 million kilograms (123 million pounds). Overall, pesticide use increased by an estimated 183 million kgs (404 million pounds), or about 7%.



[Home](#)
[Search](#)
[Sign in](#)
[My account](#)
[My profile](#)
[My settings](#)
[My subscriptions](#)
[My notifications](#)
[My history](#)
[My favorites](#)
[My lists](#)
[My bookmarks](#)
[My feeds](#)
[My groups](#)
[My tags](#)
[My filters](#)
[My preferences](#)
[My privacy](#)
[My security](#)
[My account info](#)
[My account settings](#)
[My account preferences](#)
[My account security](#)
[My account privacy](#)
[My account info](#)
[My account settings](#)
[My account preferences](#)
[My account security](#)
[My account privacy](#)

**Monsanto Betting Big on Dicamba**

In April 2016, Monsanto announced a \$975 million expansion plan for its Luling, Louisiana facility where dicamba is produced. As with its Roundup Ready seeds, the primary reason for creating these genetically modified (GM) seeds is to expand the market for the chemicals that go with them.

For decades, Roundup ruled supreme, becoming the most commonly used weed killer in the world. Now, Monsanto is betting on dicamba, apparently without much thought to the health and environmental effects it will wreak as farmers start to douse our food supply with both glyphosate (recently classified as a probable human carcinogen) AND dicamba (which despite its known toxic profile can be found in over 1,100 different weed killer formulas sold in the U.S.)

After all, volatility and drift is not the only hazard with dicamba. Whether Monsanto's "VaporGrip" formula works or not, this chemical poses health and environmental threats over and above those of glyphosate. I shudder to think what scientists may find in the years to come when they start investigating the synergistic effects of this Roundup/dicamba combination on health.

What's certain is that Monsanto will do everything it can to make dicamba the new go-to solution, just like Roundup was before its serious health and environmental hazards became more widely known. As reported by Mother Jones:

*"Within a decade, the company wrote, the new GM crops will proliferate from the U.S. Midwest all the way to Brazil and points south, covering as much as 250 million acres of farmland (a combined land mass equal to about two and a half times the acreage of California) — and moving lots of dicamba."*

**Signs and Symptoms of Dicamba Exposure**

Dicamba (as well as 2,4-D) acts like auxins — natural plant hormones that control plant growth.

**Monsanto Has Said That The EPA Side of Roundup Is Genetically Modified Seeds and Other Farmers Are Saying It's a Matter of Survival**

The National Center for Food Safety and Public Health

Monsanto's Roundup Ready crops are genetically modified to resist the herbicide Roundup. The company has said that the EPA side of Roundup is genetically modified seeds and other farmers are saying it's a matter of survival.

The National Center for Food Safety and Public Health

Monsanto's Roundup Ready crops are genetically modified to resist the herbicide Roundup. The company has said that the EPA side of Roundup is genetically modified seeds and other farmers are saying it's a matter of survival.

[Home](#)
[Search](#)
[Sign in](#)
[My account](#)
[My profile](#)
[My settings](#)
[My subscriptions](#)
[My notifications](#)
[My history](#)
[My favorites](#)
[My lists](#)
[My bookmarks](#)
[My feeds](#)
[My groups](#)
[My tags](#)
[My filters](#)
[My preferences](#)
[My privacy](#)
[My security](#)
[My account info](#)
[My account settings](#)
[My account preferences](#)
[My account security](#)
[My account privacy](#)

**NEWS**

**Monsanto guilty in 'false ad' row**

France's highest court has ruled that US agricultural giant Monsanto had not told the truth about the safety of its best-selling weed-killer, Roundup.

The court overturned an earlier judgement that Monsanto had falsely advertised its herbicide as "biodegradable" and claimed a "low risk to the environment".

The company was fined 15 million (€3.2 million) for not telling the truth about the safety of its best-selling weed-killer, Roundup.

Monsanto's US sales chief, Stephen Heitsch, said the ruling is "a major setback" for the company.

French environmental groups had brought the case in 2013 on the basis that Monsanto's advertising was "deceptive" and "misleading" by the European Union.

In the latest ruling, France's Supreme Court upheld two earlier convictions against Monsanto by the Lyon criminal court in 2007, and the Lyon court of appeal in 2010. The APF news agency reports.

The ruling comes as Monsanto reported a fourth quarter loss of \$2.55 billion (€447m), driven mostly by a drop in sales of its Roundup brand.

**Monsanto has a history of not telling the truth about its products or business...**

**Monsanto Fined for claiming "clean the soil clean"**

[Home](#)
[Search](#)
[Sign in](#)
[My account](#)
[My profile](#)
[My settings](#)
[My subscriptions](#)
[My notifications](#)
[My history](#)
[My favorites](#)
[My lists](#)
[My bookmarks](#)
[My feeds](#)
[My groups](#)
[My tags](#)
[My filters](#)
[My preferences](#)
[My privacy](#)
[My security](#)
[My account info](#)
[My account settings](#)
[My account preferences](#)
[My account security](#)
[My account privacy](#)

**NBC NEWS**

**Monsanto Fined for Not Reporting Toxic Chemical Releases**

Monsanto Co. has agreed to pay \$600,000 in fines for not reporting hundreds of uncontrolled releases of toxic chemicals at its eastern Idaho production plant.

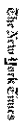



The U.S. Environmental Protection Agency and the U.S. Department of Justice announced the agreement involving the biotechnology company's facilities.

Federal officials say the chemicals released are hazardous and can pose serious health risks. Monsanto in a statement noted that none of the allegations that the releases exceeded state of federal standards, or that they contributed to any water quality violations at the Idaho Springs area.

Federal officials said the releases occurred between 2006 and 2009 at the plant, which produces glyphosate, a herbicide. Although federal and industry guidelines are required by law to report such releases, Monsanto says.

Back of these chemicals are major food and feed crops.

**Monsanto Agreed to Pay \$600K For Not Reporting Hundreds of Uncontrolled Releases of Toxic chemicals At an eastern Idaho plant**

The New York Times  
 100 West Street  
 New York, NY 10038  
 (212) 512-2000  
 nytimes.com

**E.P.A. Fines Monsanto \$2.5 Million**

ST. LOUIS (AP) — The Mercersburg, Kansas, agency that regulates environmental pesticides assesses a \$2.5 million penalty for selling mislabeled bags of Roundup Ready cropseed.

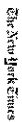



The E.P.A. said it was the largest fine ever imposed under a law that prohibits pesticides and fungicides.

From 2003 to 2007, Monsanto retroactively sold its Roundup and Roundup II cotton seeds in Texas counties where the seeds were banned, according to the E.P.A. The cotton seeds are registered as perennials because they kill insects, and the seeds were banned in parts of Texas to avoid preemptions reserved for Roundup. The ban has since been lifted.

Monsanto informed the E.P.A. it was selling seeds in the 10 Texas counties, even though the company was supposed to label the seeds as banned in those areas, the E.P.A. said.

Monsanto later changed its cotton seed labels to reflect the ban.

**EPA Fined Monsanto \$2.5 Million For Mislabeled And Illegally Distributing Cotton seeds In Texas Counties where The seeds were banned**

The New York Times  
 100 West Street  
 New York, NY 10038  
 (212) 512-2000  
 nytimes.com

**Monsanto Fined for Crop Tests**

ST. LOUIS (AP) — The St. Louis, Missouri, agency that regulates environmental pesticides assesses a \$63,000 penalty for testing genetically modified crops.





The fine, though much less a million-dollar company, was far higher than any previously imposed to have been levied against Monsanto in similar circumstances, and they called fresh questions about how highly the biotechnology industry can avoid test crops and yet pay no price.

The St. Louis company said it might the violation itself, and reported them to the government as part of an ongoing program ordered to ensure that unapproved crops do not get into public food or other agricultural commodities. Eric S. Sachs, director of pesticide affairs for Monsanto, noted that the company had conducted about 20,000 field tests of gene-altered crops since 1992, and in only four cases did the government find violations serious enough to warrant fines.

"This's not an error," Sachs said. "Our commitment is to making sure that every field trial we conduct is in full compliance with the regulations."

Although noting the government's oversight of agricultural biotechnology was less rigorous than the case elsewhere, Sachs said that if the government were looking harder for violations, it would probably find more of them.

**Monsanto & partners paid \$63,000 in fines for undisclosed violations in testing GMO crops**

CIVIL BEAT

**Terminix, Monsanto Investigated For Pesticide Misuse In Hawaii**

The EPA is investigating alleged pesticide violations at Waiwae Farm in Waiwae, Kauai, a prime of Syngenta continues.

NOVEMBER 2008 By Anne Haskerewicz

The U.S. Environmental Protection Agency is investigating Terminix and Waiwae Farm for allegedly violating pesticide laws in Hawaii.

The ongoing investigations are some of the pesticide-related cases so far that the federal agency has worked on this year.

The most high-profile ongoing investigation involves Syngenta, a seed company that operates on Kauai and Oahu. Two Syngenta workers on Kauai tested the Terminix in January after walking onto a field where chrysanthemum had been applied 20 hours earlier.

EPA spokesman Doug Hightler confirmed four investigations are ongoing, but declined to share any additional details or provide copies of the investigations because the cases are still being investigated.

**Monsanto Being Investigated By the EPA For allegedly Violating Pesticide Laws in Hawaii**



**MONGSANTO SALES**  
 ♦ **STOCK PRICE DROOP**  
 = **2600 JOB CUTS**



MONGSANTO'S STOCK PRICE AND SALES HAVE COLLAPSED SINCE THE  
 LAUNCH OF THE 2002 JOBS DEVELOPMENT AND INVESTMENT ACT (JOBS  
 ACT). THE STOCK PRICE HAS DROPPED 80% SINCE 2002 AND SALES  
 HAVE COLLAPSED BY 90% SINCE 2002. THE COMPANY HAS CUT 2600  
 JOBS SINCE 2002. THE COMPANY HAS CUT 2600 JOBS SINCE 2002.

**Monsanto**  
**Quit**  
**the Farm**



The good news is that you can quit  
 Monsanto. The bad news is that you  
 can't quit Monsanto. The good news  
 is that you can quit Monsanto.

## **Monsanto's Sealed Documents Reveal the Truth behind Roundup's Toxicological Dangers**

*by Richard Gale and Gary Null*

The year 2015 wasn't kind to Monsanto. That March, the World Health Organization declared that the company's flagship product, its herbicide glyphosate or Roundup, is a probable human carcinogen. Increasingly, national health ministries are taking a hard second look at glyphosate's health and environmental dangers and efforts are underway to ban the herbicide.<sup>1</sup> To protect their citizens, last year the Netherlands, Bermuda, and Sri Lanka either banned or imposed strict limits on Roundup. Last June, France banned its use in gardens. Brazil, Germany, and Argentina are considering legislative bans. And in September, California's Environmental Protection Agency launched plans to label Roundup as a carcinogen.<sup>2</sup>

Glyphosate is the most widely used herbicide in the world today. Over 130 countries currently permit extensive use of the chemical. The US is the largest consumer, using approximately 20% of the world's Roundup.<sup>3</sup> The latest reliable figures from the US Geological Survey record that 280 million pounds of Roundup were used in 2012, nearly a pound for every American.<sup>4</sup> In 2013, gross profit of \$371 million on crop chemicals including Roundup climbed 73% due to a 37% increase in sales. That same year Monsanto's net income rose 22% to \$1.48 billion.<sup>5</sup>

Over the years, a large body of independent research has accumulated and now collectively provides a sound scientific rationale to confirm that glyphosate is far more toxic and poses more serious health risks to animals and humans than Monsanto and the US government admit. Among the many diseases and health conditions that nonindustry studies identified as associated with glyphosate are Alzheimer's, Parkinson's, and autism, since Roundup has been shown to instigate aluminum accumulation in the brain. The herbicide has been responsible for reproductive problems such as infertility, miscarriages, and neural tube and birth defects. It is a causal agent for a variety of cancers: brain, breast, prostate, lung, and non-Hodgkin lymphoma. Other disorders include chronic kidney and liver diseases, diabetes, heart disease, hypothyroidism, and leaky gut syndrome. In addition to lung cancer, glyphosate may be responsible for today's growing epidemics of chronic respiratory illnesses among farm workers and their families.<sup>6</sup> However, these findings derive from outside the Big Agriculture industry. Private industries routinely defend themselves by positing their own research to refute independent reports. Consequently, for several decades it has been a he-said/she-said stalemate. Monsanto is content with this. It can conduct business as usual, Roundup sales increase, and the debates and media wars continue without government interference. Then who is protecting the public?

## **Monsanto's Sealed Documents Reveal the Truth behind Roundup's Toxicological Dangers**

*by Richard Gale and Gary Null*

The year 2015 wasn't kind to Monsanto. That March, the World Health Organization declared that the company's flagship product, its herbicide glyphosate or Roundup, is a probable human carcinogen. Increasingly, national health ministries are taking a hard second look at glyphosate's health and environmental dangers and efforts are underway to ban the herbicide.<sup>1</sup> To protect their citizens, last year the Netherlands, Bermuda, and Sri Lanka either banned or imposed strict limits on Roundup. Last June, France banned its use in gardens. Brazil, Germany, and Argentina are considering legislative bans. And in September, California's Environmental Protection Agency launched plans to label Roundup as a carcinogen.<sup>2</sup>

Glyphosate is the most widely used herbicide in the world today. Over 130 countries currently permit extensive use of the chemical. The US is the largest consumer, using approximately 20% of the world's Roundup.<sup>3</sup> The latest reliable figures from the US Geological Survey record that 280 million pounds of Roundup were used in 2012, nearly a pound for every American.<sup>4</sup> In 2013, gross profit of \$371 million on crop chemicals including Roundup climbed 73% due to a 37% increase in sales. That same year Monsanto's net income rose 22% to \$1.48 billion.<sup>5</sup>

Over the years, a large body of independent research has accumulated and now collectively provides a sound scientific rationale to confirm that glyphosate is far more toxic and poses more serious health risks to animals and humans than Monsanto and the US government admit. Among the many diseases and health conditions that nonindustry studies identified as associated with glyphosate are Alzheimer's, Parkinson's, and autism, since Roundup has been shown to instigate aluminum accumulation in the brain. The herbicide has been responsible for reproductive problems such as infertility, miscarriages, and neural tube and birth defects. It is a causal agent for a variety of cancers: brain, breast, prostate, lung, and non-Hodgkin lymphoma. Other disorders include chronic kidney and liver diseases, diabetes, heart disease, hypothyroidism, and leaky gut syndrome. In addition to lung cancer, glyphosate may be responsible for today's growing epidemics of chronic respiratory illnesses among farm workers and their families.<sup>6</sup>



However, these findings derive from outside the Big Agriculture industry. Private industries routinely defend themselves by positing their own research to refute independent reports. Consequently, for several decades it has been a he-said/she-said stalemate. Monsanto is content with this. It can conduct business as usual, Roundup sales increase, and the debates and media wars continue without government interference. Then who is protecting the public?

Government officials and health regulators more often than not simply ignore these studies even if published in peer-reviewed journals. The bulk of the studies are independently funded. Most have been performed in foreign nations and therefore American bias dismisses them outright. Furthermore, Monsanto and other large chemical agricultural companies are quick to counter and discredit adverse scientific findings. The company has the financial means to retain large international PR firms, such as Burson-Marsteller and Fleishman Hillard, consultation firms and think tanks, as well as large armies of hired trolls and academic spokespersons to mobilize damage control upon notice and protect the integrity of Monsanto's products and public image. It funds and orchestrates self-serving research at universities and research laboratories to increase an arsenal of junk science. And of course it has Hillary Clinton and Bill Gates as its celebrity cheerleaders.

The EPA continues to align itself with Monsanto's safety claims and limits glyphosate's risks to kidney, reproductive, and carcinogenic damage; and the warning only applies for very long-term exposure to high levels of the toxin. Anything under that is considered harmless. The EPA continues to approve small amounts of glyphosate as safe in drinking water to children. Its safety level is 0.7 ug/L. This was determined back in 1994, and after 20 years of further research into glyphosate's biomolecular activities and health risks, the level has remained the same.<sup>7,8</sup> A review of existing data sponsored by Moms Across America found that out of 21 drinking water samples analyzed, 13 had glyphosate levels between 0.08 and 0.3 ug/L, well below the EPA's limit, but significantly above the European Union's limit of 0.1 ug/L.<sup>9</sup>

While the company manages to successfully dodge scientific research outside its purview, the tables would certainly turn if it could be proved in a court of law that Monsanto has known for decades that glyphosate is one of the most toxic substances ever launched on the public, adversely affecting almost every tissue and cell in a mammal's body.

Imagine for a minute that evidence emerged to implicate Monsanto on a massive cover-up and manipulation of scientific data from hundreds of research trials. If it were Monsanto's data indicting itself about glyphosate's toxicity, and if it can be shown the company falsified, masked, or fudged its data to win regulatory approval, it may likely be

the largest corporate scandal in history. The question: could Monsanto be charged with crimes of omission and more deservingly crimes against humanity?

This scenario may not be fantasy or the wishful thinking of GMO opponents. The case has a precedent and has been played out in the courts before. In November 1998, the US government won a judgment against the four largest US tobacco companies: Philip Morris, RJ Reynolds, Brown & Williamson, and Lorillard. The case came to trial after a former vice president of research and development at Brown & Williamson, Jeffrey Wigand, turned whistleblower and revealed that his company concealed the tobacco's health risks and was making concerted efforts to addict people to smoking. High-ranking executives were found to have approved the inclusion of known addictive and carcinogenic chemicals, such as coumarin, in its cigarettes to increase smoking, sales, and profits. Before the trial there had never been a lawsuit lost by a tobacco company because no one could prove with absolute medical certainty that smoking had ever caused lung cancer or emphysema. During congressional hearings, all seven CEOs representing the four tobacco giants lied under oath, stating that they had no knowledge about an association between nicotine and brain addiction. Their rationale was that they believed that their research data and marketing strategies were protected under propriety secrecy claims and therefore they could avoid conviction. Although FDA scientists possessed all the necessary information that could condemn Big Tobacco's false claims, the industry relied upon proprietary rules in order to hide behind legal protection. The FDA was silenced and powerless to make the industry's information public. Consequently, it is estimated that millions of people died from a risk that could have been prevented or at least reduced substantially. Instead, the FDA honored the tobacco industry above all human life.

The guilty verdict, which resulted in the Tobacco Master Settlement Agreement against the tobacco companies, enforced a minimum \$206 billion settlement over a 25-year period. While the majority of payments were to settle 46 states' Medicaid lawsuits to recover smoking-related health costs, the settlement unfortunately exempted the industry from private tort claims. Many critics of the agreement state that the settlement was too merciful. No tobacco executive went to prison, and evidence indicates the industry emerged stronger and consolidated the companies into an ever more powerful cartel.<sup>10</sup>

What busted the tobacco companies was not the scientific evidence piling up outside the industry. Rather it was its crimes of omission about cigarettes' health risks within the industry. The industry's own research prosecuted itself. And this is demanded today in order to bring down Monsanto's chemical regime and to protect populations and children throughout the world.

Perhaps we might want to consider the atmosphere that Monsanto faced after it first developed glyphosate in 1973 and prepare for EPA approval for the remainder of the decade.

During the latter half of the 1970s, Monsanto's leading products were under federal inquiry and public assault regarding safety. Dioxin had been banned. Safety concerns arose over its sweetener saccharin, and cyclamate was removed from the market. The company's attempts to get its new artificial sweetener aspartame approved confronted obstacles during FDA scientific review. Independent research had shown that aspartame caused brain tumors in mammals. And its best-selling herbicide at the time, Lasso, was showing signs of carcinogenicity. Today Lasso is a restricted-use pesticide due to its oncogenicity. With sales falling and future growth under threat, Monsanto faced a desperate need to launch a novel flagship product. Monsanto found itself banking its future on its new herbicide glyphosate. As we recently discovered, enormous amounts of research, analysis, and hundreds of trials were conducted to learn as much as possible about the compound's bioactivity in mammals and its potential health risks. All of this research data, studies, and reports were subsequently sealed as trade secrets upon submission to the EPA. For over 30 years, it has sat in the EPA vaults.

Monsanto has yet to be caught and charged for falsifying scientific data on glyphosate. However, on earlier occasions, two laboratories that Monsanto outsourced research to were caught and indicted. In 1978, the EPA busted Industrial Biotest Laboratories for rigging laboratory results; the company's executives were found guilty for submitting fabricated data supporting glyphosate positively to the government. In 1991, another firm, Craven Labs, was found guilty on similar charges with 20 felony counts.<sup>11</sup>

To this day, Monsanto continues to assert that Roundup is environmentally friendly. We are told that it biodegrades rapidly and therefore poses no long-term risks after repeated usage. We are told that the herbicide is ideal for weed control. Throughout the US, it is liberally sprayed on our public parks, school playgrounds, sporting fields, and lawns and gardens. We are told that it doesn't bioaccumulate in the body's cells and tissues and is excreted rapidly. We are also told that glyphosate toxicity is dose specific. Only exceedingly high levels of the pesticide pose any serious health risks.<sup>12</sup>

How factual are these claims? Or are they mere propaganda to obscure scientific truths far more deceptive and sinister? To answer that, we would have to know for certain whether Monsanto conducted long-term studies on glyphosate that revealed devastating toxic effects on mammal health. We would need evidence that its own data clearly negate its scientific declarations, and that the company intentionally, and with forethought, either distorted or concealed data from federal regulatory officials and the public.

There is now an enormous cache of evidence on both scientific and legal grounds that Monsanto in fact conducted numerous studies in the 1970s and 1980s on glyphosate's toxicity and health risks and intentionally sealed this research from independent and public review and scrutiny. As with Big Tobacco's proprietary claims that prevented the FDA from publicly warning Americans about the dangers of smoking, the EPA has sat on Monsanto's own deleterious data for decades.

Anthony Samsel is an independent research scientist working internationally in the interest of public health and the environment. He is a member of the Union of Concerned Scientists, and a former scientist and consultant at Arthur D. Little, one of the world's leading management consulting firms. Now retired, Samsel has devoted much of his independent research on Roundup's toxicological characteristics and bioactivity. Unable to gain access to research reports and data that Monsanto submitted to the EPA through FOIAs, he turned to his senator's office, which assisted in the procurement of studies and reports he sought. Months later he received a hoard of scientific documents, over 15,000 pages' worth, covering Monsanto's complete glyphosate research.

He and coinvestigator Dr. Stephanie Seneff of MIT have been reviewing Monsanto's

data. Their conclusion is that Monsanto's claims about glyphosate's safety are patently false. The company has known for almost four decades that glyphosate is responsible for a large variety of cancers and organ failures. Clearly it was for this reason that Monsanto demanded that the data and reports be sealed and hidden from public scrutiny as proprietary trade secrets.

During an exclusive interview on the Progressive Radio Network on September 4, 2015, Samsel stated that Monsanto used an industry trick to dismiss evidence about glyphosate's risks in its own research. "Monsanto misrepresented the data," says Samsel, "and deliberately covered up data to bring the product [glyphosate] to market."<sup>13</sup>

To minimize and cancel out its adverse findings, Samsel explained, Monsanto had relied upon earlier historical animal control data, toxicological research with lab animals afflicted with cancer and organ failures, and completely unrelated to glyphosate. In some cases, the control animals displayed kidney, liver, and pancreatic diseases. Many of Monsanto's own studies required the inclusion of extraneous studies in order to cancel out damaging results. This is not an uncommon industry habit, particularly in toxicological science. It enables corporations to mask undesirable outcomes and make claims that observable illnesses and disease are spontaneous occurrences without known causal factors. Frequently, Monsanto would have to rely on three external control studies to negate the adverse effects of a single one of its own. Samsel found other incidences in Monsanto's data where 5, 7, and in one case 11 unrelated studies were necessary to diminish the severity of its own findings. In effect, glyphosate received licensure based upon a platform of junk tobacco science. By ignoring causal relationships behind the onset of multiple cancers and other life-threatening diseases throughout many of its research trials, Monsanto engaged in a radical scientific denialism that has since raked in tens of billions of dollars.

But the cache of Monsanto documents, after Samsel's and Seneff's review, reveals much more that we should be worried about. In addition, Monsanto's studies included doses from low to high range. Samsel observed that low glyphosate doses were equally if not more toxic than higher doses. The company later discontinued low-dose trials, relying only on higher levels because it is customarily assumed to have greater toxicological

risks. Samsel's observation has recently been confirmed by a study published in the August issue of the *Environmental Health Journal* by scientists at King's College London and the University of Caen in France. The 2-year study found that glyphosate administered at an ultralow dose of 0.1 ppb (the EU's safety limit) in drinking water altered over 4000 gene clusters in the livers and kidneys of rats. These alterations, the study reports, "were consistent with fibrosis, necrosis, phospholipidosis, mitochondria membrane dysfunction and ischemia."<sup>14</sup> Consequently, low doses of Roundup are far more toxic than US EPA limits.

During its years investigating glyphosate's bioactivity, Monsanto conducted hundreds of trials on mice, rats, beagle dogs, rabbits, and other life. Among the many cancers and diseases that Monsanto's own research found associated with glyphosate are:

- adenoma cancer in the pituitary gland
- glioma tumors in the brain
- reticular cell sarcomas in the heart
- malignant tumors in the lungs
- salivary mandibular reticular cell carcinoma
- metastatic sarcomas of the lymph gland
- prostate carcinoma
- cancer of the bladder
- thyroid carcinoma
- adrenal reticulum cell sarcomas
- cortical adenomas
- basal cell squamous skin tumors

In female mammals, there were cancers of the lung, liver, thymus, stomach, bladder, adrenal glands, ovaries, colon, uterus, parathyroid, and mammary glands.

Samsel and Seneff also noticed that Monsanto had conducted many long-term studies, as long as 2 years, on mice and rats. When Gilles-Eric Séralini and his French team reproduced and extended the length of Monsanto's 3-month GM maize-fed rat study for the life of the animals, they observed that profuse cancer and tumor development started after the 4th month of the study. Monsanto continues to stand by its 3-month study as

sufficient proof of GM maize's safety. Yet the thoroughness and variety of Monsanto's research operations should give strong reason to suspect that Monsanto has likewise conducted long-term studies and knows all too well the deleterious effects of its pesticides, herbicides, and genetically modified crops.

One of Monsanto's claims is that glyphosate doesn't bioaccumulate in tissues, rapidly biodegrades, and is excreted from the body readily. Contrary to this claim, Monsanto carried out meticulous studies to determine levels of accumulation and the organs, tissues, and cells that glyphosate reaches. Glyphosate was radiolabeled with carbon-14 and given in 10 mg doses to seven groups of animals, male and female. After only 24 hours, the toxic chemical was found in the lungs and all body fluids: lymph, blood, urine, and cerebrospinal fluid. Glyphosate also accumulated in the bone by 30 ppm and in the bone marrow by 4 ppm. Monsanto's studies were comprehensive. It found an accumulation of the chemical in red cells, thyroid, uterus, colon, testes and ovaries, shoulder muscle, nasal mucosa, heart, lung, small intestine, abdominal muscle, and eyes.

Samsel and Seneff noted that the bioaccumulation in the pancreas was not reported. Why would such meticulous efforts be made to measure radiolabeled carbon-14 laced glyphosate levels in all the other organs, tissues, and bodily fluids and then ignore the pancreas? The scientists believe that this was deliberate.

Samsel notes that glyphosate does a "particular number on the lungs." According to a 2014 report by the National Cancer Institute, lung cancer rates have been declining. The decline is largely due to the national decrease in smoking. However, other lung cancers such as adenocarcinomas are on the rise. The NCI cannot account for this anomaly.<sup>15</sup> Yet is the institute not considering that Americans are increasingly being exposed to glyphosate in their food, water, and environment?

During the PRN interview, Seneff stated that the pancreas may be driving glyphosate to gather in the lungs. The pancreas is responsible for the release of the enzyme trypsin, which in turn infiltrates the lungs. A study published by Brazil's Universidade Federal de Santa Maria in the medical journal *Ciência Rural* measured glyphosate's reactivity with digestive enzymes, including trypsin. Trypsin activity was found to increase in parallel to

higher glyphosate concentrations.<sup>16</sup> Seneff suggests that this may be contributing to the increase of glyphosate in the lungs, leading to the dramatic rise in COPD and asthma conditions, as well as lung cancers.

The occurrence of cataracts is rising rapidly, particularly in Midwestern states such as North Dakota, South Dakota, Nebraska, Iowa, Kansas, and Missouri. According to Prevent Blindness America's statistics, 17% of adults over 40 years have cataract problems. The NIH projects that the rate will reach nearly 40% by 2030.<sup>17</sup> Monsanto's study showing glyphosate activity in the eye may be contributing to this epidemic. Seneff stated that the eye's exposure to sunlight reacts with glyphosate residue, thereby potentially making the chemical more toxic. Farmers often apply glyphosate on crops when it is warm and moist and when there is plenty of sunlight in order for the chemical to activate more effectively. These are similar conditions to our eyes during the day.

Monsanto's research was not limited solely to the Roundup compound. It also performed extensive research on glyphosate's individual metabolites, the intermediate molecules that result after Roundup's breakdown through metabolic reactions. Many of these metabolites are every bit as toxic as glyphosate. All the glyphosate metabolites in solutions fed to rats were measured before and after feeding. One of Samsel's more disturbing discoveries was that levels of the metabolite N-nitrosoglyphosate (NNG) were found in higher concentrations in the rats' feces and urine excretions than the original amount in the feeding solutions. NNG is a known carcinogen and endocrine disruptor. Samsel postulates that our own bodies' natural nitrous acid reacts immediately with glyphosate, without requiring a catalyst, to produce NNG. Both the EPA and the World Health Organization acknowledge that NNG is present in glyphosate during the manufacturing process. The agencies therefore have established safety limits for NNG. However, for any endocrine disruptor, there is no realistic safety limit because such chemical disruptors destroy cells on a molecule to molecule basis.

Nitrous acid naturally occurs in the colon, urinary tract, and skin tissue. According to the CDC, skin cancer is the most common form of cancer in the US, and affects more men than women. The Skin Cancer Foundation estimates that "each year there are more new cases of skin cancer than the combined incidence of cancers of the breast, prostate, lung



and colon."<sup>18,19</sup> Basal cell and squamous cell carcinomas are the two most common forms, both which have been associated by Monsanto with glyphosate exposure, particularly in males. When glyphosate reacts in the skin along with nitrous acid, NNG contributes to skin melanomas. Other chemicals are added to Monsanto's Roundup to increase its effectiveness such as the surfactant POEA (polyethoxylated tallow amine), which also increases its toxicity.

We don't pay enough attention to these other ingredients, Samsel states, because the EPA permits Monsanto to add anything that it wants to enhance Roundup's potency while identifying these substances innocuously as "inert." When Monsanto convinces the public that glyphosate breaks down quickly, we are not told that the compound's metabolic byproducts are equally toxic.

Therefore, Anthony Samsel's unprecedented discovery and review of Monsanto's actual scientific and toxicological data of Roundup has provided us with information that warrants a thoughtful pause. Samsel and Seneff cover the subject in more detail in a new peer-reviewed paper titled "Glyphosate Pathways to Modern Diseases IV: Cancer and Related Pathologies."<sup>20</sup>

During recent years dozens of states are submitting bills to label GMO foods. These food crops are heavily laced with glyphosate residue. Not only GM crops, but even non-GM produce are sprayed with Roundup. According to the Organic Consumers Association, non-organic and non-GM foods such as wheat, barley, oats, flax, peas, lentils, beans, and sugar cane are also being sold to farmers "as a desiccant, to dry out all their crops so they could harvest them faster."<sup>21</sup> Monsanto, Dupont, Syngenta, Grocery Manufacturers of America, and other agro-chemical companies are aggressively combating labeling efforts. The Big Ag lobby is today pushing for a national bill to prevent GMO labeling that would supersede individual state's rights. We can only wonder what the voting outcome in California, Colorado, Washington, and Oregon may have been had Monsanto's own research been made available to the media and public. Is it therefore not time for full Congressional hearings to learn the truth and make the disclosure of Monsanto's Roundup research public for all?

# Monsanto's Sealed Documents Reveal the Truth behind Roundup's Toxicological Dangers

by Richard Gale and Gary Null

Progressive Radio Network

## Notes

1. Cressey D. Widely used herbicide linked to cancer. *Nature*. March 25, 2015. Available at <http://www.scientificamerican.com/article/widely-used-herbicide-linked-to-cancer/>
2. California EPA mulls labeling Monsanto's Roundup as being "known to cause cancer" [online article]. September 6, 2015. RT [Russian TV]. <https://www.rt.com/usa/314544-california-epa-glyphosate-carcinogenic>.
3. Baden-Mayer A. Monsanto's Roundup. Enough to make you sick [online article]. Organic Consumers Association. January 21, 2015. <https://www.organicconsumers.org/news/monsanto%E2%80%99s-roundup-enough-make-you-sick>.
4. Kustin ME. Glyphosate is spreading like a cancer across the U.S. [blog post]. Environmental Working Group. April 7, 2015. <http://www.ewg.org/agmag/2015/04/glyphosate-spreading-cancer-across-us>.
5. Kaskey J. Monsanto raises forecast as profits tops estimates on corn [online article]. Bloomberg Business. April 3, 2013. <http://www.bloomberg.com/news/articles/2013-04-03/monsanto-raises-forecast-as-profit-tops-estimates-on-corn-seed>.
6. Baden-Mayer, op.cit.
7. Glyphosate fact sheet [Web page]. Environmental Protection Agency. Available at <http://www.epa.gov>.
8. Basic information about glyphosate in drinking water [Web page]. Environmental Protection Agency. <http://water.epa.gov/drink/contaminants/basicinformation/glyphosate.cfm>
9. Honeycutt Z, Rowlands H, Grace L. Glyphosate testing full report: findings in American mothers' breast milk, urine and water [online article]. Moms Across America. April 7, 2015 [http://www.momsacrossamerica.com/glyphosate\\_testing\\_results](http://www.momsacrossamerica.com/glyphosate_testing_results).
10. Tobacco Master Settlement Agreement [online document]. Wikipedia. [https://en.wikipedia.org/wiki/Tobacco\\_Master\\_Settlement\\_Agreement](https://en.wikipedia.org/wiki/Tobacco_Master_Settlement_Agreement).
11. Derricks KL. Monsanto timeline of crime 1901-2014 [online article]. Children of Vietnam Veterans Health Alliance. February 16, 2015. <http://covha.net/monsanto-1901-2014-timeline>.
12. EPA. Glyphosate fact sheet, op.cit.
13. Samsel A, Seneff S. Interview. *Gary Null Show*. Progressive Radio Network. September 4, 2015. <http://prn.fm/the-gary-null-show-09-04-15>.
14. Mesnage R, Arno M, Costanzo M, Séralini G-E, Antoniou M. Transcriptome profile analysis reflects rat liver and kidney damage following chronic ultra-low dose Roundup exposure. *Environ Health*. 2015, 14:70 doi:10.1186/s12940-015-0056-1.
15. Lung cancer fact sheet [Web page]. American Lung Association. <http://www.lung.org/lung-disease/lung-cancer/resources/facts-figures/lung-cancer-fact-sheet.html>.
16. Salbero I, Pretto A, Machado da Silva V, Loro V, Lazzari R, Baldisserotto B. Glyphosate on digestive enzymes activity in piava (*Leporinus obtusidens*). *Cienc Rural*. September 2014;44(9).
17. Vision problems in the US [Web page]. Prevent Blindness America. <http://www.visionproblemsus.org/cataract/cataract-map.html>.
18. Skin cancer facts [Web page]. Skin Cancer Foundation. <http://www.skincancer.org/skin-cancer-information/skin-cancer-facts>.
19. Skin cancer statistics [Web page]. Centers for Disease Control. <http://www.cdc.gov/cancer/skin/statistics>.
20. Samsel A, Seneff S. Glyphosate, pathways to modern diseases IV: cancer and related pathologies. *J Biol Phys Chem*. 2015;15(3):121-159.
21. Baden-Mayer, op.cit.

Richard Gale is the executive producer of the Progressive Radio Network and a former senior research analyst in the biotechnology and genomic industries. Dr. Gary Null is the host of the nation's longest-running public radio program on nutrition and natural health and a multi-award-winning director of progressive documentary films, including *Seeds of Death* about GMOs and *Poverty Inc.* More at the Progressive Radio Network: <http://prn.fm>.

Blue Oak Clinic  
Naturopathic Family Medicine

4646 E Ft Lowell Rd, Ste 107  
Tucson, AZ 85712

www.BlueOakClinic.com

Ph: 520-322 WELL (9355)

Fax: 520-322-9359

November 22, 2016

Pima County Board of Supervisors,

Thank you for serving the citizens of Pima County and looking out for our best interest.

I take care of the people of Tucson as a Physician by looking for the root cause of their health issues. Not only am I here to oppose any tax incentive for Monsanto, I am also encouraging that we disallow Monsanto to begin operations.

I would like to speak on behalf of three patients – one of them has severe allergic reactions from eating GMO food – she can't eat modified corn and soybeans or she breaks out in body-wide hives and must be hospitalized. We know that there are dozens of components within the modified food and this is likely why allergies are on the rise. This woman, like so many of my patients is a "canary in the coal mine" – this means it's only a matter of time before we see more of this. The next two patients are married and both born in 1945. About 15 years ago they moved to Tucson to get away from the Monsanto pesticides that were being sprayed in their area just down the hill from them. In a matter of months, the man developed extremely high blood pressure that was of unknown origin and could do not be controlled by medications. Within this time, this couple became suicidal and made a pact to walk off the mountain together holding hands. Thankfully, they moved to this area of Arizona. The man is now an organic farmer (with excellent blood pressure) and since they moved they are no longer depressed. When I spoke with him yesterday he said – "Just look at the birds – they devour our organic corn – it's so hard to keep them away. They won't touch the Monsanto corn." We should look at the bees too. The air in Pima County will be polluted by the sprayed crops and our friends and families will be affected.

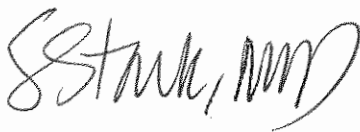
In Hawaii, on several occasions students were evacuated and about 60 were hospitalized with symptoms like dizziness, headaches, and nausea when on a windy day blowing dust from the GMO test fields settled in. Indeed, the concentrations of airborne pesticides were found at much higher levels in Waimea than elsewhere on the island.

"Where's the Science?" See the attached article and its references from the medical journal The Townsend Letter. Briefly, Monsanto's own research found associated with glyphosate are: Cancers of the breast, lungs, prostate, bladder, thyroid, skin, ovaries, colon, pituitary, brain, heart and lymphatic system.

Who else doesn't want Monsanto? Germany, France, Greece, Russia, Italy, Switzerland and 32 other countries allow Monsanto in their country? Mexico is also moving to disallow Monsanto.

Our future is clear and it should not include Monsanto. Please do your best to help protect our community- we know you care about us.

Sincerely,



Dr. Stephanie Stark

Board Supervisors holding their ethics in front of them. 11/22/16

Last month a Neighborhood Reinvestment Project voted through by this board is based on lies, misrepresentations, minority rule, lack of true discussion by and with affected neighbors.

Objections expressed in bullet pts

newly paved road does not need fixing

proposed path will kill the existing trees

proposed path does not improve safety for children

monies being spent a clever way to use neighborhood reinvestment funds to add to the county's 14M SC river project

project benefits only a very small number of people in the neighborhood, not the stated 4000 plus.

18 people were for the project while 50 were opposed to it and were ignored.

50 plus people will be negatively impacted by this project including endangering the elders at the end of the dead end street due to higher response times by emergency vehicles.

plans were not discussed at noticed meetings before being voted on to approve.

50 people asked for inclusion in the discussions and was told by Board through their vote the county did not have to follow its own consensus guidelines for the project

plan itself is against the bylaws of the neighborhood.

We ask at that Board meeting before the Board approve this plan that the Board send the project back to the consensus level within the neighborhood, which was skipped as part of the process, as per county rules governing such awards for funds.

We said To do otherwise is to admit that minority rules in this county, that people have no voice in what happens to them and the county does not have to follow its own rules.

Summary, people of the public at the meeting understood these issues and applauded our efforts.

*\* After a pregnant silence, perhaps waiting to see if anyone had a moment of conscience they voted*

Even though this agenda item was near the beginning of the agenda, the Board waited till the very last part of the meeting after all public hearings were done and few people from the public were still in the audience to vote to ignore the concerns of a majority of people asking for redress. This appeared <sup>toward</sup> ~~uncourageous~~ to not let people see how this Board truly operates toward members of the public with legitimate concerns.

People are now fighting the Monsanto issue as they have fought other behind the scenes issues like the balloon and I-11 corridor. Years ago the Board of Supervisors found the courage to begin working toward a sustainable region by protecting the watersheds, enacting development codes, concerns for dark skies, and voting against projects that would not be in the best interest of the health of the community.

With the known science that points toward needs to change how humans interact with nature and each other, it is our hope that this Board can again find that courage. *for ~~transpar~~*

*ethical transparency and to protect our habitats.*

Beryl Baker

November 22, 2016

Kenneth Richings  
1830 E. Broadway Blvd #124  
Tucson, AZ 85719

TO THE PIMA COUNTY BOARD OF SUPERVISORS:

Ally Miller, District 1,  
Ramón Valadez, District 2,  
Sharon Bronson, District 3,  
Ray Carroll, District 4, and  
Supervisor Richard Elías, District 5:

We as a community should be ashamed of ourselves for letting this greenhouse project go forward. For shame! What small financial profit are we considering, and for what potential harm? We are all aware of the problems faced by local farmers and residents when Monsanto GMO is involved...

While I don't argue anything about any one in particular working for or with Monsanto, their history speaks for itself.

At the very, very least, how can anyone even suggest that this organization should receive such a huge tax decrease in property taxes? This is an unjust utilization of such free trade zones, and we all know it.

You all know it.

Very sincerely,  
Kenneth Richings

STATEMENT TO PIMA COUNTY BOARD OF SUPERVISORS

RE: MONSANTO TAX INCENTIVE/PROJECT CORN

I'd like to begin with one definition of Trojan Horse: any trick or stratagem that causes a target to invite a foe into a securely protected bastion or place.

Make no mistake.

Monsanto is a Trojan Horse.

You may already be aware that Monsanto poses a threat to our environment, health, local food supply, special UNESCO status, property values, local farming, and adjacent schools near the fields they intend to spray. Some have described Monsanto as "the world's most dangerous corporation."

What I'd like to remind you is that the most dangerous threats do not always arrive with a sign that says, "I am your friendly neighborhood dangerous threat. Won't you invite me in?" Rather, they come bearing gifts in order to gain entry. The story of the original Trojan Horse reminds us of what can happen if we blindly accept a gift and roll open the community gates to usher it in.

I invite you to consider what your legacy will be. How do you want your time in office to be remembered?

Do you want to be remembered as a Supervisor who opened the gates and rolled in the Trojan Horse?

Or do you want to be remembered as a Supervisor who had the wisdom to identify the threat of the modern-day Trojan Horse that is Monsanto, who spared our community from a potentially devastating threat?

I ask you to vote "No" on the Monsanto tax incentive. Thank you.

Sincerely,

Cori McGraw

3920 E. San Simeon Dr.  
Tucson, AZ 85718  
(520) 208-1916

Pima County concerned citizen, voter, and business owner

Virginia Marth  
David Eakle  
10040 W Rudasill Rd  
Tucson AZ, 85743

(520) 760 6647  
gmarth88@gmail.com

November 21, 2016

To whom it may concern:

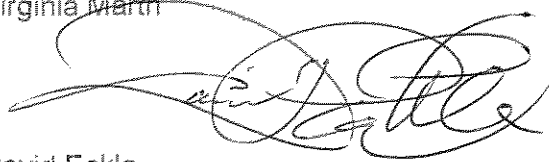
I am writing to express my concern and in fact strong opposition to the presence of Monsanto in our community. Monsanto uses a chemical called Glyphosate ( Roundup) on it's genetically modified crops. Glyphosate has been shown to be hazardous to human health in study after study ( note - studies that are NOT funded nor skewed by Monsanto). Also notable, people exposed to Roundup acutely can have immediate distressing symptoms - headaches, seizures, mood disturbances, pain. I am one of those people. Many people will experience health consequences that are more subtle acutely yet become dangerous over time.

It has been shown that glyphosate is damaging and disruptive to human DNA, even in small concentrations. The WHO has classified glyphosate as a Class 2 probable carcinogen. It has been shown to disrupt liver chemistry ( the cytochrome p450 pathway to name one), break down gut flora ( our first line of defense as far as the immune system), has caused tumors in lab animals, is implicated in obesity and autism. No human being should be eating food that has been sprayed with glyphosate, it is really that simple. Several countries have banned imports of our glyphosate laced grain, a wise choice.

I feel that it is fundamentally imperative that we as a community stand in opposition to Monsanto and their presence here as well as their blatant disregard for human health. The planet is in crisis environmentally and it is time to begin examining the practices that we use that will either sustain or further hasten the deterioration of our fragile ecosystems. Developing sustainable agricultural methods that are not toxic nor harmful to the soil, the air, the people and all living life is part of the remedy that is needed on a massive scale. This is a precious planet, Monsanto in my strong opinion needs to cease and desist and have their resources and R&D capabilities repurposed in a way that is helpful to our environment and its people, not just to the pocketbooks of its tycoons.

Thank you very much for your support,

  
Virginia Marth

  
David Eakle



# Friends of Tucson's Birthplace

P.O. Box 1228 Tucson, AZ 85702 • 520.777.9270 • missiongarden.tucson@gmail.com • tucsonsbirthplace.org

## Board of Directors

November 21, 2016

Amanda & Tomas  
Castillo

Pima County Board of Supervisors  
130 W. Congress  
Tucson, AZ. 85701

Bill DuPont

Jesus Garcia

Dear Board of Supervisors,

Diana Hadley

Katya Peterson

Roger F. Pfeuffer

Raul Ramirez

Nancy & Fe Tom

## Distinguished Friends

Jim Griffith, PhD

Luis Gutierrez

Lillian Lopez-Grant

Gary Paul Nabhan, PhD

Linda Ronstadt

Bernard Siqueiros

The Board of Directors and staff of the nonprofit 501(c)(3) organization Friends of Tucson's Birthplace, which operates Mission Garden, strongly opposes Pima County granting any form of incentive for the company Monsanto. In addition, FOTB recommends that public officials delay all decisions related to the establishment of this controversial company in our area until a thorough process of consultation with community stakeholders and experts has taken place.

By setting up business in the ancient and most fertile farmlands of the Santa Cruz River valley Monsanto threatens to significantly undermine the economic benefits issuing from Tucson's recent designation as a UNESCO City of Gastronomy. Essential to this designation is the fact that the Tucson Basin boasts an agricultural area with the longest continual cultivation in the United States, and that increasing numbers of area residents are drawing on this rich agricultural heritage by preserving, reviving and utilizing landrace or heirloom crop varieties to create unique cutting-edge food products, food festivals, dining establishments and heritage farms and gardens. These diverse landrace crop varieties have been adapted over the millennia to thrive in our local climate and soil conditions. Therefore, not only do they lend our region special tastes and identity, they also consist in immensely valuable and irreplaceable tools for ensuring our food security.

Tucson has been awarded the UNESCO designation precisely because it is well on the way to creating an innovative food system that is sustainable and secure, one that that may serve as a model for other cities, an alternative to the current environmentally and economically unsustainable and unjust model that Monsanto represents.

## Staff

Phil Hall,  
Legal Counsel

Bill O'Malley,  
Project Manager

Betsy Wirt,  
Gardener

Jose Gastelum  
Assistant Gardener

Since the presence of Monsanto may imperil the maintenance of the UNESCO City of Gastronomy designation, and may compromise the integrity of our invaluable biodiversity and agricultural heritage, and since it may be detrimental to farming and landscaping operations in general by giving rise to invasive "super weeds", and since the aggressive monopolistic tactics common to Monsanto may run counter to the burgeoning re-localized and mutually supportive food economy that our community desires, FOTB feels it is imperative that all local stakeholders have the chance to weigh in on all the pertinent policy decisions on this matter and appreciates your consideration in denying Monsanto tax incentives.

Roger Pfeuffer - Co-Chair

Katya Peterson - Co-Chair

FOTB is a 501(c)3 organization.

Your donation is tax deductible to the fullest extent allowed by law. EID 27-1326401