

Global Organic Alliance, Inc
 P. O. Box 530
 Bellefontaine, Ohio 43311
 www.goa-online.org

PH: (937) 593-1232
 FAX: (937) 593-9507
 email: goaorg@centurylink.net

President: Betty Kananen
Vice President: David L Baldock
Staff: Sharon Ringler, Becky Scheifele, Rebecca Turner, Jessica Partington, Amber Coyer, Mary Smith, Lorraine Szymanski and Dalanie Barnes.

Certification Director: Jodi Snyder
Japanese Coordinator: Yoshiko Tuttle
Certification Specialist: Brandie Rose, Taylor McNamara, and Katie Elsasser

Betty's Bits

What happened to Fall? Around here we went from July weather to November weather on the first of October.

Not sure if any of you missed my "lilting" voice for the past 4 plus weeks. I fell and fractured my femur 9/26 and ended up with hip replacement surgery. All is going very well, so I am told by all the therapy people, even kudos from the physical torture lady. I am at the office for our Annual ISO 17065 audit—will be answering phones again next week. Saving grace: doctor said I have good strong bones which helped.

Our final reviewers are learning very quickly and getting the reviews out, we are about 60 days back hoping to get it down to 30 days and less in the very near future and keep it that way.

GOA will not be offering COR (Canadian Organic Regime) organic certification after December 31, 2018. I have personally known and worked with many of our Canadian friends since 1989, which made this a very tough and emotional decision. Kinda sad when good business forces us to make these kinds of decisions. But, I guess that is life. I will miss them.

The Jersey boys are still growing and begging cookies. Bear still expects pets and cuddles since in his mind he is still a puppy, not a 100# wolf.

We welcome visitors, whether they are certified with GOA or not. The pot is always on for coffee, tea and hot chocolate. The Fridge has cold bottled water and

soda.

Finally, the whole GOA team here in Bellefontaine wants to wish each and every one of our GOA members a very special Holiday Season. We hope you have many happy hours with family and friends, especially those you don't get to see often. And we are sure your meals will be great because they will be Organic.

Betty

Do you know about the FieldWatch program? It allows you to list your farm (there is a no-cost option) to help prevent accidental spraying of your crops. Search on FieldWatch or go to <https://fieldwatch.com/faq/>

Contents	
item	page
News from GOA and Beyond	2
	2
	10

Organic Vision is published quarterly, when possible, for the benefit of our members and associates. The editor is happy to hear comments and suggestions: Phil Fry; 5370 N. Elm Tree Rd.; Conover, OH 45317; (937) 362-4493 pfryohio@gmail.com

2018 HOLIDAY CLOSING SCHEDULE FOR GOA

Wed, 4 Jul	INDEPENDENCE DAY	Mon, 24 Dec	CHRISTMAS EVE HOLIDAY
Mon, 3 Sep	LABOR DAY	Tue, 25 Dec	CHRISTMAS HOLIDAY
Thu, 22 Nov	THANKSGIVING	Fri, 28 Dec	NEW YEARS (CLOSE AT NOON)
Fri, 23 Nov	THANKSGIVING HOLIDAY	Mon, 31 Dec	NEW YEARS EVE HOLIDAY
Fri, 21 Dec	CHRISTMAS (CLOSE AT NOON)	Tue, 1 Jan, 2019	NEW YEARS HOLIDAY

NEWS FROM GOA AND BEYOND

[Ed Note: I get much of the material for this section of the Organic Consumers Association (OCA) at <http://www.organicconsumers.org/> and The Cornucopia Institute at <http://www.cornucopia.org/> I always include the url so readers can read the full article but some url's are hard to read. Readers can also search on the article title and will almost always get the original. Adding the author will narrow the results.]

The Creator of GMO Potatoes Reveals The Dangerous Truth – Exclusive Interview

Sustainable Pulse
9 Oct 2018

ED NOTE: *The genetically modified Innate potato was approved by the USDA in 2014 and the FDA in 2015. The cultivar was developed by J. R. Simplot Company. It is designed to resist blackspot bruising, browning and to contain less of the amino acid asparagine that turns into acrylamide during the frying of potatoes.* Wikipedia

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

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

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

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

It is amazing that the USDA and FDA approved the GM potatoes by only evaluating our own data. How can the

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

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

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

What was your role at Monsanto and J.R. Simplot?

I led a small team of 15 scientists at Monsanto, and I directed the entire biotech R&D effort at Simplot (up to 50 scientists). My initial focus was on disease control but I eventually considered all traits with commercial value. I published hundreds of patents and scientific studies on the various aspects of my work.

Why did you leave firstly Monsanto and then later J.R. Simplot?

I left Monsanto to start an independent biotech program at J.R. Simplot, and I left J.R. Simplot when my 'pro-biotech' filter was wearing thin and began to shatter; when I discovered the first mistakes. These first mistakes were

minor but made me feel uncomfortable. I realized there had to be bigger mistakes still hidden from my view.

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

I dedicated many years of my life to the creation of GMO potatoes, and I initially believed that my potatoes were perfect but then I began to doubt. It again took me many years to take a step back from my work, reconsider it, and discover the mistakes. Looking back at myself and my colleagues, I believe now that we were all brainwashed; that we all brainwashed ourselves. We believed that the essence of life was a dead molecule, DNA, and that we could improve life by changing this molecule in the lab. We also assumed that theoretical knowledge was all we needed to succeed, and that a single genetic change would always have one intentional effect only.

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

Will GM potatoes not lead to larger yields and bigger tubers?

I somehow managed to ignore the almost daily experience that GM potatoes were not as healthy as normal potatoes. They were often misshapen, stunted, chlorotic, necrotic, and sterile, and many GM plants often died quickly. One of the reasons for this genetic inferiority is that GM potatoes are derived from 'somatic' cells, which are meant to live for only one season (to support a stem or leaf structure). These cells don't have the genetic integrity to create new plants (like pollen cells and egg cells). So, by transforming somatic cells, we created GM potatoes that contained hundreds of genetic mutations, and these mutations compromised yield. Additionally, the genetic modifications often have 'unintended' effects that negatively affect both the agronomic performance and nutritional quality of a crop.

GM potatoes are meant to be bruise resistant, isn't this a big benefit to farmers and food producers?

Normal potatoes easily develop damaged tissues that are entry points for pathogens and exit points for water. I

believed that the GM potatoes were bruise resistant but now understand I was wrong. The GM potatoes bruise just as easily as normal potatoes, but the bruises are concealed. They don't develop the dark color that helps processors identify and trim them. I didn't understand that my potatoes were incapable of depositing melanin, a protective compound, when damaged or infected. More importantly, I didn't understand that the concealed bruises accumulate certain toxins that may compromise the nutritional quality of potato foods.

Are the biotech traits in GM potatoes genetically stable?

A trait is stable only if it fits in the natural environment of the plant genome. If it doesn't fit, which is often the case with GM crops, the trait may get silenced or recombined. My ex-colleagues at Syngenta and Monsanto often told me about their (under-reported) problems with GM corn and soybean, but none of their crops were as unstable as the GM potatoes. Two of the potato traits have already been lost and several others appear to be weakening.

Late blight resistance in GM potatoes has been sold as a major breakthrough, surely this is the case?

Late blight is one of the very few plant diseases that speak to the imagination, mostly because it caused major famines in Europe that forced millions of Europeans to migrate to the United States. But that was in the 1840s. Late blight is not a big issue where most potatoes are grown in the United States, which is in the arid Northwest, and late blight represents a manageable issue in the minor, more humid potato growing regions. Farmers there would like to have access to late blight resistant potatoes, but they would still have to worry about dozens of other diseases and pests that can be equally harmful.

My concern is that any attempt to promote the production of GM potatoes in humid regions (as vulnerable as Bangladesh and Indonesia) would actually increase rather than reduce disease issues. Furthermore, late blight is one of the most dynamic pathogens affecting agriculture. It is known to quickly evolve around any barrier to resistance. Therefore, the efficacy of a late blight resistance gene can never be guaranteed, and the resistance gene can be broken at any moment. In fact, some European and Middle American strains have already broken the resistance.

Are GM potatoes less carcinogenic, as suggested by the GMO industry?

I guess that many people will ask themselves: are potatoes carcinogenic? I don't think there is any evidence for that. So, an even more interesting question is: why would GM potatoes be promoted as less carcinogenic?

Do GM potatoes include a legally acquired gene?

I mostly modified potatoes by using their own DNA. In other words, I used the DNA of a public variety to create a proprietary variety. This strategy may be ethically problematic but is legally acceptable. However, one of the genes that were used to create the GM potatoes is derived from a unique wild potato plant that grows in Argentina. I believe that the attainment and patenting of this gene without permission from Argentina was an act of biopiracy.

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

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

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

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

Where can people find your new book '*Pandora's Potatoes*'? The book is now available on Amazon.

Read more: <http://tinyurl.com/y9po2v1b>



Berry Farmers Break Free From Big Agriculture

Lynsi Burton, Yes! Magazine
29 Aug 2018

These farmworkers created an organic co-op that guarantees fair wages and healthy working conditions while preserving indigenous heritage.

For the first time, Ramon Torres maintains control over his livelihood. He chooses what to farm and how to farm it, free from pesticides that harm workers, under working conditions he helps set.

The 22 acres of juicy strawberries and blueberries he farms belong to him and three others under Cooperativa Tierra y

Libertad (“Land and Liberty Cooperative”), a farm co-op founded in 2013 to meet consumer demand for berries farmed under nonexploitative conditions and worker demand for a fair paycheck and safe working conditions. The co-op prides itself on organic farming and livable wages for its workers.

When Torres worked at Sakuma Brothers berry farms in Skagit County, Washington, several years ago, he and his fellow farmworkers endured low wages, unpaid breaks, and exposure to pesticides.

A co-worker, Federico Lopez, was fired immediately after requesting a raise, and, along the way, the workers learned they weren’t paid for rest breaks.

A strike organized by Familias Unidas por la Justicia—and a federal class-action lawsuit resolved in 2015—afforded them more benefits, including the paid rest breaks, and propelled Sakuma Brothers workers to secure a union contract in 2016 that improved their working conditions and led to farmworkers getting paid a minimum of \$12 per hour.

In April, a Washington state Supreme Court decision determined that piece workers must be paid at an equal rate for any work that doesn’t involve direct piece work, such as downtime and travel between fields.

“All the bad things about housing, treatment of workers—everything changed,” Torres said through an interpreter.

But in the lead-up to the court-ordered changes, Torres and several other workers were starting to think about other solutions. They asked themselves: What if we set the standard for our own working conditions and own the land we work?

Torres and three others—with the support of food sovereignty and worker solidarity nonprofit Community to Community—formed a cooperative in which members own and live on the land they farm and will, if all goes according to plan, be making enough income selling their crops at markets. They worked amid the long hours and demands from family, work, and life.

This summer is the first harvest season for Cooperativa Tierra y Libertad. The co-op now owns and farms berry fields in the rural towns of Sedro-Woolley and Lynden. They’re now producing 150 to 200 boxes each week to sell in markets throughout the region and have laid the groundwork to establish a community-supported agriculture subscription service next year.

And it’s all organic, which is a primary tenet of the co-op’s mission.

Inspiration

Torres and the three other workers—Pedro Torres, Modesto Hernandez Leal, and Tomas Ramon—began organizing the co-op as part of Ramon Torres’s efforts with Familias Unidas por la Justicia, where he was organizing workers to make demands of Sakuma Brothers.

They did so with the support of C2C, which trained the workers using a culturally relevant curriculum in how to form a cooperative. While the four worker-owners farm the land and make all decisions, C2C pitches in with administrative work, marketing, and other tasks the owners need support with as the cooperative gets going.

The co-op members all worked at corporate farms before and are doing their own farming for the first time, says Rosalinda Guillén, executive director at C2C. She is also a farmworker organizer who grew up on a Skagit County berry farm. They’re training as they’re doing the work, she says.

Torres was forced to change course after the Sakuma Brothers strike; while he helped get his coworker reinstated, he was fired.

So, using the lessons he learned from his union activism, he sought to gain greater control of his livelihood.

He and the Cooperativa Tierra y Libertad members agreed on their founding principles.

“When we came together, we decided what we wanted: working with organics, no pesticides, good wages, and the most important thing was not to have a boss ordering [me] around or telling me what to do,” Torres says.

Farmworkers often encounter abusive situations, ranging from wage theft to eviction to injury and illness, Guillén says. They’re typically left powerless because employers can retaliate against complaints by firing workers, she adds.

State agencies exercise control over working conditions and pesticide use—and C2C participates in rulemaking processes—but within the parameters of these overarching laws, the co-op sets additional rules about how it raises its crops and treats its workers.

The workers of the co-op have had to overcome barriers.

“The time and intellectual power to change from capitalism to cooperativism requires a lot of energy and time,” Guillén says.

All four co-op founders are currently working other jobs—in corporate agriculture—to support themselves as they get Cooperativa Tierra y Libertad off the ground.

Guillén says their aim isn’t riches, but a preservation of their heritage as they secure their rights.

Organic

Guillén says if the worker-owners want to see a post-pesticide world, they must put it into action.

“It’s more valuable for us to form a model and example of how farmworkers can grow food without pesticides,” Guillén says. “If we don’t grow organic ourselves, we can’t argue our point.”

Farmworkers are the first to be affected by pesticides, and the physical protection they might wear, like gloves, doesn’t always help. They still can’t remove every trace of pesticides from their bodies, Guillén says.

“Why do we have to go out in the fields looking like robots?” she says, referring to the protective equipment workers wear in the fields. “We just don’t want this stuff in the field. It is better that robots do it because it’s killing us.”

And then there’s the damage to the soil, air, water supply, and the pesticides that remain on food.

Torres sees symptoms of pesticide irritation among farmworkers: swollen eyes and faces and, once, white spots on a worker’s hands.

“As farmworkers, pesticides are harming us,” Torres says. “We don’t have the option of saying, ‘Do or don’t apply pesticides.’ We just go to work. We have to work at the mercy of whatever company is there.”

And to Torres, farming organic isn’t a way of growing that belongs to White, wealthy people—it’s traditional, and a practice passed down through generations.

“We’re all used to growing our food without the need of pesticides or chemicals,” he says of their ancestral heritage. “We want to follow that tradition to not use pesticides.”

Vision

The co-op’s 10-year vision includes 100 acres, 10 houses, meeting areas, and spaces where the farmworkers can practice their native art, Torres says. Most of the workers are indigenous, often Mixteco or Trique.

Meanwhile, the co-op employs eight workers separate from the worker-owners and pays them \$15 an hour. Guillén says the four worker-owners will start making money on their enterprise in about three years.

Torres continues to work other jobs to support his two kids until the union can provide full-time income. His wife also

works as a union member.

Read more: <http://tinyurl.com/y8sqocx9>



So, You Want to Be a Hemp Farmer?

Brian Barth, Modern Farmer
9 Jul 2018

Industrial hemp is now being grown legally on 26,000 acres in 19 states. We dug into the details about what's involved in raising the crop.

On a recent road trip through eastern North Carolina, a land of giant soybean fields and industrial hog farms, I passed the time by reading the nearly constant stream of billboards along the highway. “God Bless the Farmer, He Blesses You Three Times a Day,” read one, as I whizzed down I-40 toward Wilmington. “Repent and Believe in Jesus and You Will Be Saved,” encouraged another.

Amid the religious exhortations and pork-themed advertising—one billboard with a giant image of grilled sausages declared pork “The Heart and Soul of Our Communities”—was a marketing message I never expected to see: a giant billboard that said, simply, “Hemp Farmers Wanted.” Driving by at 70 miles-per-hour, I did a quick double take to make sure I’d read that right.

Hemp, which refers to strains of Cannabis that lack enough THC to get you high, but have a long history of use in products ranging from food and cosmetics to textiles and building materials, is one of the oldest cultivated crops on Earth, and featured prominently on colonial era farms in the U.S. But it was effectively banned from commercial cultivation by the federal government in 1957 amid a period of anti-marijuana hysteria.

North Carolina is one of a handful of states where hemp cultivation has recently resumed. There is a steady demand for hemp as a raw material for industrial uses (making things with hemp was never outlawed, but manufacturers have been required to import it from places like Canada and Europe for the last seven decades). As the American hemp industry grows, manufacturers are hoping to get their hemp locally—hence the signs encouraging North Carolina farmers to plant it.

Is It Legal to Grow Hemp?

In the nineties, as the marijuana legalization movement gained traction, a number of states began to introduce legislation to allow hemp cultivation to begin anew, contradicting the federal ban. A variety of legal and practical roadblocks prevented farmers from actually planting hemp

on any meaningful scale until recently, however.

Now, 36 states have legalized hemp cultivation to varying degrees (some for research purposes only). The first commercial planting happened in 2013, when Colorado farmer Ryan Loflin harvested a 55-acre crop, the first in the nation since 1957.

The 2014 Farm Bill included a provision that allowed states to initiate research programs on hemp cultivation. Though the federal ban on commercial cultivation remained intact, this new policy was taken as a sign that federal rules would eventually be loosened further, sparking a new wave of activity at the state level to legalize hemp and promote it as a viable crop. Since then, hemp has been planted in 19 states.

In raw numbers, hemp is still a very minor crop, but it is rapidly expanding: in 2016, less than 10,000 acres were grown nationwide; in 2017, nearly 26,000 acres—more than double the prior year—were produced by about 1,500 farmers.

Senator Mitch McConnell (R-KY) has introduced an amendment to the 2018 Farm Bill that would lift the federal ban on hemp cultivation, which has fairly broad bipartisan support. If it passes, the American hemp industry will likely balloon in short order, creating a massive demand for farmers to plant the crop.

If you’re interested in growing hemp, step one is to make sure it’s legal in your area. The National Conference of State Legislatures maintains a comprehensive, up-to-date list of state-level hemp statutes. [Ed: Search on “State Industrial Hemp Statutes” or go to <http://tinyurl.com/opt8xzy>]

Why Grow Hemp?

Hemp grows more vigorously than corn, but requires less water, pesticides, herbicides, and fertilizer, earning it a reputation as a sustainable crop. The plant has over 25,000 known uses and is potentially an eco-friendly alternative for other crops commonly produced on an industrial scale.

The voluminous quantities of biomass hemp produces are a potential raw material for livestock feed, biofuel production, paper and textiles. The seeds, and the oil produced from them, have many uses, both culinary and industrial. It’s even possible to make alternative building materials with the stalks, such as hempcrete, which sequesters more carbon from the atmosphere than the carbon emissions required to produce it. [Ed: See next article.]

One of the most lucrative industries that hemp farmers are tapping into is the production of CBD oil, a medicinal compound in cannabis plants that contains no THC and is thus legal to consume in all 50 states.

What Are the Ideal Growing Conditions for Hemp?

Hemp is an annual plant that grows well in most parts of the country, other than in extreme desert conditions and high mountain areas.

It thrives in warm weather and grows best in well-drained soils that are high in organic matter. Hemp seeds are generally sown in directly where the plants are to grow, rather than in pots for transplanting. They should be planted after the average date of last frost has passed. Established hemp plants are fairly drought tolerant, but the seedlings require irrigation for the first six weeks whenever the soil is dry.

What Are the Biggest Obstacles When Growing Hemp?

Hemp is often attributed with miraculous potential for sequestering carbon, reducing agricultural pollution, and allowing farmers to make large profits on marginal land. But the reality is not so simple. Here are some things to keep in mind before deciding if hemp is the right crop for you.

You need a lot of land: This is a crop suited for industrial applications, not farmer's market sales. As with most grains, it's tough to be profitable growing hemp without planting at least 50 acres or so.

The "red-tape quotient" is high: Because of its legal limbo, hemp growers need special licenses from their state, which means fees and paperwork. Growers may also be subject to a criminal background check. In states where it is legal, farmers must have their hemp plants tested to ensure they are below a certain threshold of THC content. If your plants are found to have too much THC, they may be destroyed.

Suitable seed can be hard to find: Hemp growers are generally required to plant seed that has been certified for low THC content, but the seed industry lags behind the demand and there are potential complications with the feds when shipping cannabis seeds across state lines.

Most commercially available farm equipment will do double duty for hemp cultivation, though custom modifications are often needed to prevent the bush plants from clogging machinery. The special machinery needed to process hemp stalks for fiber is not readily available throughout the U.S., though it is increasingly found in the larger hemp-producing states, like Colorado. To avoid making costly new equipment purchases, growers may be able to contract with companies who accept the raw plant material and do processing at a regional level.

Is Hemp Well-Suited to Organic Cultivation?

Hemp is an ideal plant for organic farmers because it requires minimal inputs, is fairly resistant to pests and diseases, and grows so fast and tall that it outcompetes weeds, minimizing the need for hand cultivation—a major labor cost for most other organic crops.

The USDA does not allow marijuana to be certified organic in the states where it is legally grown, but the agency has made an exemption for hemp. The market for certified organic hemp seeds, a popular health food, is especially strong.

Is Growing Hemp Profitable?

This remains to be seen, as the hemp market is still in its tenuous early stages. A recent Cornell University analysis found that profits ranged from roughly \$130 to \$730 per acre — comparable to most grain crops on the lower end and approaching high-value vegetable crops on the upper end.

Read more: <http://tinyurl.com/ybvp2x6g>



Why Hemp Houses Will Be the Best in the World

Sara Burrows, Return to Now
27 Aug 2018

Hempcrete is ten times stronger than concrete, mold resistant, rot resistant, pest resistant, fire resistant, and carbon negative. It's even better than cob/adobe.

[This article introduces a 15 minute ad supported documentary. <https://youtu.be/naGAnhax-tI>]

Read more: <http://tinyurl.com/ybmdjpsl>



Scientists Know Plastics are Dangerous. Why Won't the Government Say So?

Paul D. Thacker
12 Sep 2018

In July, the American Academy of Pediatrics issued a letter that would stop almost any parent in their tracks: Chemicals in food colorings, preservatives and packaging can be dangerous to children, and they aren't being suitably regulated by the government. A review of almost 4,000 additives found that 64 percent had no research proving they were safe for people to eat or drink; these chemicals can be especially harmful to small children because they are still growing, making them more vulnerable to any ill effects.

If these materials pose such a danger, why are they everywhere? Where is our government?



It's a good question, with a complex and terrible answer. Scientists have known for some time that many of these chemicals are harmful, but as more evidence accumulates, the industry that produces them has mounted an increasingly aggressive and widespread campaign — publishing counter-studies in corporate-friendly science journals, attacking scientists and journalists who report on the dangers of these chemicals, and doing as much as possible to create doubt about harm, all tactics borrowed from the tobacco industry.

The FDA enjoys much higher levels of public trust than the federal government in general does, but maybe it shouldn't: Much of what we consume is simply not regulated. "To be blunt, it's an honor system," says Erik Olson, an attorney with the Natural Resources Defense Council and a former Environmental Protection Agency employee. Olson says that while the EPA does a terrible job of protecting people from dangerous chemicals, the FDA is worse: "They are completely in bed with industry." With corporate interests creating an alternate scientific reality and little federal pushback, ordinary Americans are left to sort through the noise and try to assess what is safe for themselves and their children.

Before concluding that the FDA is not protecting children, says Leonardo Trasande, director of the division of environmental pediatrics at the NYU School of Medicine and a member of the AAP, the academy spent two years discussing food additive safety. He adds that the statement is a conservative consensus of the AAP's 67,000 members, who delved into the research on the dangers of chemicals to small children. "This is not a bunch of green, tree-hugging pediatricians," says Trasande.

There is little confusion among independent scientists about these chemicals and their effects on humans. But given the manufactured public confusion on these issues, Trasande says he does not expect Congress or federal agencies to address chemical safety. Eventually, pressure from consumers for more transparency about the chemicals in our food will force companies to make changes to protect their brands. Until our government acts, or the public pressure becomes overwhelming, every time we walk down the supermarket aisle and wonder which products are safest for our families, we're on our own.

The AAP called for reforms to the Food and Drug Administration's food additive regulatory process and offered guidelines that could be more panic-inducing than reassuring: Don't microwave foods or liquids in plastic, buy fewer processed foods, switch from plastic to glass or metal whenever possible, avoid putting plastics in the dishwasher.

Read more: <http://tinyurl.com/ycoczku7>

Brazil's Pesticide Poisoning Problem Poses Global Dilemma, Say Critics

Anna Sophie Gross
27 Aug 2018
Mongabay

This is the third in a series by journalist Anna Sophie Gross who traveled to the Brazilian states of Tocantins and Maranhão in Legal Amazonia in May for Mongabay to assess the impacts of agribusiness on the region's environment and people.

The fact that this Latin American nation exports vast amounts of sprayed fruit, vegetables and coffee, along with meat fattened on pesticide-laden soy, should give consumers the world over pause.

There are a variety of social concerns involved with tilling Brazilian fields, but the most insidious by far is pesticide intoxication. In 2016, 4,208 cases of intoxication by exposure to pesticides were registered across the nation — the equivalent of 11 per day (killing 355 people). Tocantins is the state with the highest levels of poisoning caused by agricultural pesticide use, according to data from the Notification of Injury Information System (SINAN).

Despite this clear and present danger, the issue of pesticide use in Brazil is highly divisive, with the politically powerful agricultural sector on one side, pushing for greater deregulation, and environmental and social NGOs and academics on the other side, demanding a more rigorous, precautionary approach to legislation. Activists often lead off their arguments by pointing to a long list of herbicides and insecticides that are legal and liberally used in Brazil, but which have been found to be carcinogenic or otherwise hazardous to health and banned in the EU and United States.

Read more: <http://tinyurl.com/yblxns53>



Bombshell New Study Calls for Ban on Pesticide Family Tied to Brain Damage in Kids

For pregnant women, there is no safe level of exposure to organophosphate pesticides.

Alexander C. Kaufman
24 Oct 2018

The entire family of widely used pesticides known as organophosphates causes brain damage in children even at low levels of exposure — and should be phased out.

That's the finding of a first-of-its-kind paper, published Wednesday [24 Oct 2018] in the peer-reviewed journal PLOS Medicine, that examined all the existing scientific literature on a class of chemicals that has for decades served as the main ingredient in farmers' pest killers.

The results are staggering. The eight researchers who authored the paper found there is no safe level of exposure to any organophosphate pesticide for pregnant women, whose babies suffer disorders ranging from impaired mental and motor skills and memory loss to autism and attention-deficit hyperactivity disorder.

"We're very concerned that we're not confident there is any safe level to these chemicals," Jennifer Sass, a senior scientist at the Natural Resources Defense Council and a co-author, said by phone.

The Trump administration ignited a new debate over chlorpyrifos, one of the pesticides in the family, nearly two years ago when the Environmental Protection Agency abandoned plans to ban the chemical's use on food. Federal regulators already banned chlorpyrifos from at-home use in 2000. The EPA planned to expand the prohibition to the thousands of American farms that still use the chemical, but then-Administrator Scott Pruitt reversed course, defying the recommendation of agency scientists.

In a letter to Pruitt at the time, the American Academy of Pediatrics, a leading organization of pediatricians, and the Environmental Working Group, a nonprofit advocacy group, said the move "puts all children at risk."

In August, a federal court ordered the agency to enact the ban, a decision the EPA is appealing.

But the new paper urges national, state and provincial regulators in the 71 countries that use organophosphates to halt that piecemeal approach and phase out all uses of the chemicals at once. The pesticides are frequently used on golf courses, schools, shopping malls and other public spaces. They're also used in flea and tick medication for dogs and cats, and in insecticides sprayed to kill mosquitoes carrying Zika and West Nile virus. The widespread use has "led to

ubiquitous human exposure," the study said.

"We're calling for really moving toward a ban on both agricultural and nonagricultural uses," said Irva Hertz-Picciotto, a co-author and environmental epidemiologist at the University of California, Davis.

The study also calls on medical schools to design curricula around teaching doctors and nurses to identify both acute and chronic effects of exposure and advise pregnant women and parents of young children on how to avoid the chemicals.

Drastically reducing exposure to organophosphates will require major overhauls. The chemicals became popular in the 1960s and 1970s as safer alternatives to DDT, aldrin and dieldrin, widely used insecticides known as organochlorines. By the time the EPA banned DDT in 1972, organophosphates, which naturally degrade much faster than organochlorines, were mainstream.

Alternatives to organophosphates carry their own risks. Pyrethroids, the main class of insecticides now used in residential pest control products, are linked in recent studies to similar developmental issues in children. Neonicotinoids, now the fastest-growing class of insecticides used on crops in the United States, are highly toxic to invertebrates, including endangered species of aquatic life and bees.

Curbing the use of organophosphates likely means adopting low-tech growing methods. That includes crop rotation, physical controls such as traps and vacuums for pests, and intercropping, the process of planting two or more crops in close proximity, which can reduce susceptibility to disease and pests.

"It's a complicated answer, but the answer has to be moving toward using less and more targeted uses of these agrochemicals," Sass said. "The agrochemical industry itself calls it plant medicine, so use it like medicine, use it only with prescription."

The EPA declined to comment on the paper's proposals.

"EPA has not yet reviewed this study," Michael Abboud, an agency spokesman, said in an email. "EPA's priority has always been using the best available science in the most transparent manner to make the best decisions in both the pesticides and toxics programs."

Adama Agricultural Solutions, the Chinese-owned Israeli chemical manufacturer, said it would review the report "thoroughly to understand the findings and the science behind them."

"We take all scientifically-based reports by credible sources extremely seriously," Wayne Rudolph, the company's

executive director of development, said in an email.

The German conglomerate BASF, the world's largest chemical maker, said it "does not have any organophosphate active ingredients in our product portfolio in the U.S."

Other big manufacturers of the pesticides — including Bayer, Sumitomo Chemical, Arysta LifeScience and United Phosphorus Limited — did not respond to requests for comment.

Read more: <http://tinyurl.com/ycqpegxu>



You can Cut your Cancer Risk by Eating Organic, a New Study Says

Susan Scutti, CNN
22 Oct 2018

You can protect yourself from cancer by eating organic, a new study suggests. Those who frequently eat organic foods lowered their overall risk of developing cancer, a study published Monday [22 Oct 2018] in JAMA Internal Medicine finds. Specifically, those who primarily eat organic foods were more likely to ward off non-Hodgkin lymphoma and postmenopausal breast cancer compared to those who rarely or never ate organic foods.

Led by Julia Baudry, an epidemiologist at Institut National de la Sante et de la Recherche Medicale in France, a team of researchers looked at the diets of 68,946 French adults. More than three-quarters of the volunteers were women, in their mid-40s on average. These volunteers were categorized into four groups depending on how often they reported eating 16 organic products, including fruits and vegetables, meat and fish, ready-to-eat meals, vegetable oils and condiments, dietary supplements and other products.

Follow-up time varied for each participant but lasted slightly more than four and a half years on average, and during that time, the study volunteers developed a total of 1,340 cancers. The most prevalent was breast cancer (459) followed by prostate cancer (180), skin cancer (135), colorectal cancer (99), and non-Hodgkin lymphomas (47).

The authors calculated cancer risk

Comparing the participants' organic food scores with cancer cases, the researchers calculated a negative relationship between high scores (eating the most organic food) and overall cancer risk. Those who ate the most organic food were 25% less likely to develop cancer. Specifically, they were 73% less likely to develop non-Hodgkin lymphoma and 21% less likely to develop post-menopausal breast cancer.

Even participants who ate low-to-medium quality diets yet stuck with organic food experienced a reduced risk of cancer, the authors found.

The authors theorize a "possible explanation" for the negative relationship between organic food and cancer risk stems from the "significant" reduction of contamination that occurs when conventional foods are replaced by organic foods.

"If the findings are confirmed, promoting organic food consumption in the general population could be a promising preventive strategy against cancer," Baudry and her colleagues concluded.

Dr. Jorge E. Chavarro, an associate professor in the Department of Nutrition at Harvard T.H. Chan School of Public Health, said in a podcast that the new study is "incredibly important." He co-authored a commentary published with the study.

The new findings are consistent with those of the International Agency for Research in Cancer, which found pesticides are cancer causing in humans, noted Chavarro. They also align with those of another study that showed a negative relationship between eating organic food and non-Hodgkin lymphoma, he said.

However, Chavarro added that researchers designing future studies should be mindful of certain limitations in this new study.

Drawbacks of the study

"Assessing intake of diet is difficult, assessing intake of organic foods is notoriously difficult," said Chavarro. "That is because deciding to eat organic foods or not is a decision that has very strong social and economic determinants. Even though the authors had access to information of why people are choosing not to eat organic foods, they consider all non-consumers of organic foods the same."

For example, people who choose not to eat organic despite being able to afford to do so might have a poor attitude toward their health in general and that would likely influence the results.

Chavarro also said it is unclear that quantifying organic food consumption is really calculating what the study authors want to measure -- reduced exposure to pesticide residues through diet.

It's true that previous research, including one of Chavarro's own studies, have shown a correlation between organic food consumption and pesticide levels in urine, so the assumption is not incorrect. Still the authors need to show this, he said

in the podcast about the study. And, different conventional foods are more "dirty" (contaminated with pesticides) than others, he said, so eating certain organic foods does a better job of protecting us against ingesting pesticides than others. Yet the study does not do a good job of sorting and evaluating these differences, he noted.

"At the current stage of research, the relationship between organic food consumption and cancer risk is still unclear," Chavarro and his co-authors wrote in the commentary.

In the end, the study's takeaway, according to Chavarro, is that we should all probably be paying more attention to how much organic food we eat and "we should probably be studying this more."

Read more: <http://tinyurl.com/ydaehak7>



Insect Collapse Study ‘One of the Most Disturbing Articles I have ever Read,’ expert warns

Just 3.6°F warming has wiped out up to 98% of rainforest insects.

Joe Romm
Think Progress
18 Oct 2018

A disturbing new study finds that global warming helped drive as much as a 60-fold decline in insect population in Puerto Rico's tropical rainforest between 1976 and 2013.

"Our results suggest that the effects of climate warming in tropical forests may be even greater than anticipated," said lead author, biologist Brad Lister, of Rensselaer Polytechnic Institute (RPI).

And that's a potentially catastrophic problem given that the forest saw 3.6°F (2°C) warming during that time — yet warming this century is on track to be far greater.

These new findings follow several studies in recent years that found collapsing insect populations around the world.

A 2014 review of scientific literature and data in the journal *Science* found the number of insects "such as beetles, butterflies, spiders and worms has decreased by 45 percent" since 1980. The reason: "loss of habitat and global climate disruption."

And a 2017 Dutch study found that in the past three decades, a stunning three-fourths of the total insect population was lost in 63 protected nature reserves in Germany. The decline was even bigger in mid-summer. The researchers speculate that pesticides may have played a role in the decline — but the RPI biologists argue in their new study that the Dutch scientists "did not thoroughly analyze a number of climate-change variables."

The RPI researchers explain why pesticides did not cause the insect crash in their study in the Proceedings of the National Academy of Sciences published Monday: "Due to the ongoing reduction in agriculture and associated farmland, pesticides use in Puerto Rico also fell up to 80% between 1969 and 2012."

They note that cold-blooded creatures, such as insects, "living in tropical climates are particularly vulnerable to climate warming since they are adapted to relatively stable year-round temperatures." So what seems like a small increase in average temperatures can be devastating.

Along with the insect crash in Puerto Rico, the study found "synchronous declines in the lizards, frogs, and birds that eat" the insects. The study's bottom line: "Climate warming is the driving force behind the collapse of the forest's food web."

The researchers also found a similarly devastating drop in insect population in a tropical dry forest in western Mexico. Between the late 1980s and 2014, the temperature rose in 2.4°C (4.3°F) in this biosphere research — and "we found an eightfold decrease in the dry-weight biomass" of the insects caught in ground traps daily.

What's especially worrisome about the sharp decline in insects in so many places is that insects play an essential role in the food chain. They also provide crucial services such as pollinating crops.

So these findings are "a real wake-up call — a clarion call — that the phenomenon could be much, much bigger, and across many more ecosystems," invertebrate expert David Wagner (who was not involved in the study) told the *Washington Post*.

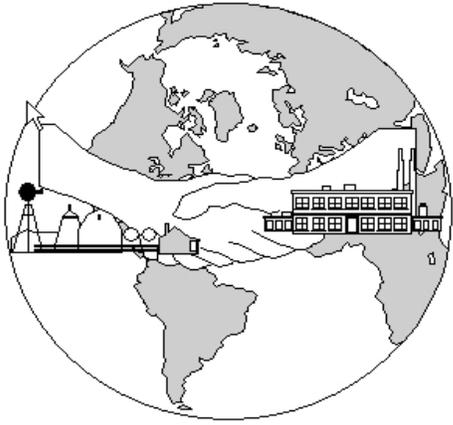
He added, "This is one of the most disturbing articles I have ever read."

Read more: <http://tinyurl.com/yaq7ak3f>



From our Members

We really like hearing from our members and passing their stories this way. But it doesn't happen oftenn, and this report from David Baldock wasn't exactly a letter either, but it was close enough. We hope you enjoy it and that it helps encourage others to tell us what is going on around their farm.



Farm for Sale: Tuscarawas County, OHIO. 530 A farm land and 844 A gas and oil rights. Farm has not been sprayed for more than 25 years. For more information, call Kevin Chumney 234-567-0617 chumfarm93@yahoo.com



November Clouds