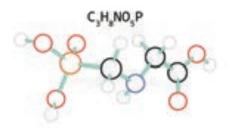
Glyphosate A slow moving horror



Tony Mitra

Agriculture World interviewed

Mr Tony Mitra, a food security activist and an independent researcher based in Canada, regarding the safety and use of herbicide glyphosate and glyphosate based formulations.



he safety and use of the popular herbicide Glyphosate and Glyphosate-based formulations the active ingredient in Monsanto's Roundup, are been discussed globally and is still a controversial topic. Many countries around the world have taken the lead in banning glyphosate, the recent ban being in the small state of Kerala, India. France has promised to take all immediate measures to ban the product as soon as possible and the phasing out strategies has already started.

Over the last 40 years, there wouldn't have been a molecule researched so far and that have been extensively evaluated for human health and safety. Independent researchers have conducted most of the scientific research on glyphosate. Recent report brings needed attention to the dangers of early-pregnancy pesticide exposure, and underlines the need to take a precautionary approach to the introduction of biocides in our environment so that future generations do not suffer from mistakes of the past. Lawmakers and regulators need to consider taking a more precautionary approach and seek independent and unbiased and vigorous investigation on the safety of molecules such as Glyphosate and its effect on soil biology, ecology and health.

In this context, Agriculture World also had a recent talk with Mr Tony Mitra, an engineer,

a food security activist and an Independent Researcher based in Canada. It was interesting to know about his single-handed campaign to get the Canadian Government to test many samples of locally grown and imported foods, to detect the presence and level of contamination of Glyphosate. Subsequently Canada becoming the first and so far the only country to have conducted such thorough tests, and Mr Tony Mitra became the only common man outside of the Canadian government to have access to the test results. The analysis of these results proved North America to be producing the most toxic foods on earth containing glyphosate. The results were analyzed, categorized, tabled and put into charts. These have been published in a 400 plus page book available through Amazon under the title 'POISON FOODS OF NORTH AMERICA". It is the only study of its kind to give details of the toxic residues of glyphosate in various foods from different countries.

This analysis also exposed the case of highly toxic lentils being imported into India from Canada, concerns over rapidly rising ill health vaguely linked with modern lifestyle, but strongly suspected by many to have a direct link with exposure to agricultural toxins in general, which has encroached into the agriculture of India, often through the backdoor. Discussions with him

GLYPHOSATE IN FOOD TYPES				
Flour - Bean	1067	0	0	
Flour - Chickpea	970	12		
Flour - Soy	718	0		
Chickpea Products	426	2		
Chickpea	565	18		
Bean - Kidney	358		0	
Lentil	357	295		
Lentil Products	272	11		
Flour - Pea	210	188		
Bean - Pinto	128		102	
Millet	127	0	0	
Bean - Other	136	5	3	
Pea	117	.171	0	
Buckwheat Products	67	0	0	
Millet Products	54	0	0	
Infant Food (non-cereal)	32	0	0	
Grain - Rice	5	1	0	

were a revelation to a few facts, which was quite unknown

The Book reveals studies, which show that USA and Canada produce the most toxic foods on the planet, with regard to glyphosate contamination and Canada, particularly West region have significantly higher levels of glyphosate. Cleanest of food suppliers are Peru, Thailand, France, South Africa, Mexico, and China. China apparently exports cleaner foods than what locals consume inside China. For example, imported foods from China, averaging 3 ppb contamination, is 28 times cleaner than foods produced in the US. and over 45 times cleaner than foods produced in Canada. Foods imported from Mexico are 70 times cleaner than Canadian foods and over 40 times cleaner than foods originating in the United States

Conventional foods desiccated by glyphosate are far more contaminated with glyphosate than roundup ready GM crops. Out of the main cereals, rice is about the only one that is more or less without any glyphosate, except for some rice and rice-products produced in North America. Lentils and chickpea (garbanzo) produced in North America, as well as foods made with these ingredients are highly contaminated with glyphosate. Although soy flour may contain

high glyphosate, tofu made out of soy has none. Wheat bran produced in Canada has an average of around 2,500 ppb of glyphosate in every sample. Organic foods are much better than conventional foods, but are not completely free of glyphosate. Gluten free foods are a mixed bag since some of them are high on glyphosate content, while others are clean.

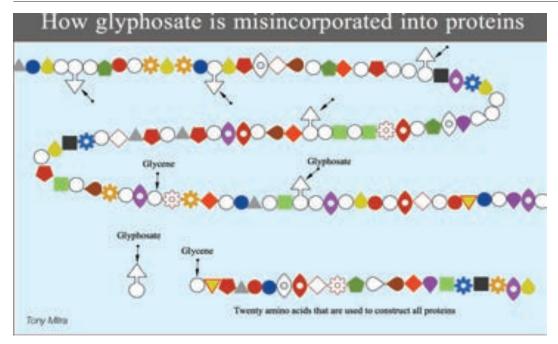
Mr Tony Mitra in his book explains that he has been personally struggling with the Canadian Government for a number of years now he says, trying to get its ministry of health to release to him all documents on Glyphosate it has received that are supposed to prove its safety in food.

In 2015, the International Agency for Research on Cancer labelled glyphosate as "probable carcinogen". Nations such as Sri Lanka banned glyphosate because they have reason to suspect farm workers exposed to glyphosate were dying from kidney failure or throat cancer. The American Association for the Advancement of Science (AAAS) has awarded two researchers for uncovering the link between glyphosate and chronic kidney disease (CKD), which has killed at least 25,000 Sri Lankans and 20,000 Central Americans. Award recipients are Sarath Guanatilake, MD, and Channa Jayasumana,

GLYPHOSATE IN FOODS FROM NORTH AMERICA, INDIA & CHINA				
REGION	NOS	% Dirty	ppb	
North America	4214	44	108	
India	200	20	15	
China	145	14 /0001/0000	ST MERTY AMERICA	

Table represents foods from India and Ohina that are imported into Canada, and not foods consumed by locate in those countries

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PhD. "To right a wrong when significant financial interests are at stake and the power imbalance between industry and individual is at play takes the unique combination of scientific rigor, professional persistence and acceptance of personal risk demonstrated by the two scientists recognized by this year's award," says Jessica Wyndham, director of the Scientific Responsibility, Human Rights and Law Program at AAAS. Under this situation of extreme intimidation, coercion and hegemony, it is impossible to consider what remains as honest scientific evidence when it comes to glyphosate.

As long as safety data based on which glyphosate was approved for use in agriculture is kept out of reach of the public, and as long as independent verification of the results is denied, there is no proof that glyphosate is safe at any level of contamination. Independent labs, institutions or universities should be encouraged to crosscheck these tests to ensure the results and the deductions are honest. Approval of glyphosate is constitutionally illegal if the public is denied access to such safety data and document. Jurisprudence already exists in India in the Supreme Court case between Ms. Aruna Rodrigues and the Union of India involving GMO and represented by esteemed lawyer Mr. Prashant Bhushan.

"There is a possibility that high levels of herbicide "glyphosate" in lentils imported from Canada and Australia, are impacting the health of the consumer says FSSAI in their recently published circular. The lentils such as masoor dal and moong dal are said to be induced with hazardous herbicide Glyphosate which is being used by farmers in some countries to desiccate, or kill the crop prior to harvesting.

MRL in food has been repeatedly raised to

legitimize with rising levels of pesticide without supporting proof. Since India has not approved use of glyphosate in food, and consequently not set any MRL inpulses, FSSAI regulators has been coaxed to change its position of "no glyphosate allowed", to the high glyphosate MRLs set by Codex Alimentarius. FSSAI reports that MRL (as specified in Codex) will also be taken into consideration for the purpose of import clearance. The FSSAI action came after it was warned by Mr. Mitra that Australian moong dal and Canadian masoor dal contained high residues of Glyphosate.

Glyphosate- A chelator

Glyphosate is a chelator which means it has a strong attraction to metallic ions, what we often call minerals, or nutrients. Our food contains small quantities of such minerals such as iron or manganese, etc. All animals including us humans need small quantities of such minerals and are usually picked up from our food through the digestive system, often assisted by our gut bacteria colony or microbiome. However, if glyphosate is present, it captures these minerals, and makes these nutrients unavailable to us. Thus, we starve of nutrition even if the food we eat are nutritious.

Endocrine disruptor

Glyphosate is known to disrupt the endocrine or hormone system. The effects of glyphosate interfering with endocrine system as well as specific enzymes have been studied by independent scientists such as Antony Samsel and Stephanie Seneff. Glyphosate can kill off our microbiome faster than they can reproduce and make up. A person living with damaged and dying gut bacteria colony is like being condemned to slow poisoning

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Glyphosate can seriously interfere with construction of proteins

All proteins of the living planet are constructed of twenty specific amino acids. Out of the twenty amino acids, glycine is the most common and frequently used. Glyphosate is an analog of glycine. This means it is structurally similar to glycine, with a small protrusion of extra material. It can fit into proteins in place of glycine. Our body, unfortunately, is unable to distinguish glycine from glyphosate.

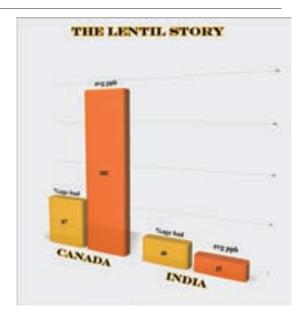
Therefore, when a new protein is to be created to replace an old one, or to create fresh molecules for a growing body such as a fetus or a child, our body can and does wrongly pick up a glyphosate molecule, if it is around, instead of selecting a glycine, and use it in constructing a protein. Thus, glyphosate is suspected to be getting mis-incorporated into proteins, which in effect becomes defective proteins.

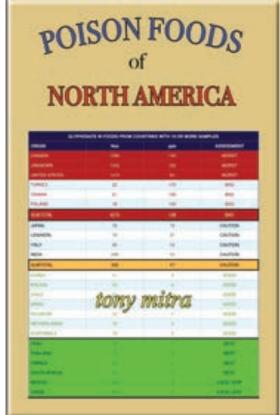
Thus these proteins malfunction, and can trigger a cascading series of diseases, many of which were earlier rare or unheard of. This is perhaps the most dangerous aspect of glyphosate being present in our food.

Scientists Anthony Samsel and Stephanie Seneff have studied the effects of glyphosateon living biology and have published a series of papers on scientific journals, linked below. Crops such as lentils, chickpeas, beans, wheat and other cereals are now directly filled with glyphosate spray just before harvesting. This process is called desiccation. This results in skyrocketing the concentration of glyphosate in these seed crops.

India also has the highest and still rising rates in the world of various medical problems relating to birth defects such as Neural Tube Defect, Spina Bifida, and a runaway increase of many other disease from diabetes to autism and auto-immune disease that are spread across the urban and the rural community.

Unless the toxic overload is restricted, India faces the real prospect of a systemic and simultaneous collapse of its healthcare as well as agriculture system in the near future. India needs to get its priorities right. Clean food, water, air, good health and food sovereignty are inalienable rights of the people, and not commodities to make profit on at the expense of public health.





Reference

- 1. Poison Foods of North America: Tony Mitra
- 2. Anthony Samsel and Stephanie Seneff on Glyphosate
- 3. Poison Spring

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