

El daño a la salud del glifosato

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Today's Reality

UG



Advanced
Medicine



Poor Health



Primeras causas de muerte:

1. Cáncer
2. Enfermedades Cardiovasculares
3. Diabetes
4. Alzheimer

¿Son los pesticidas parte del problema del deterioro de la salud de las personas?

Ultimo informe de la ONU

Los plaguicidas provocan 200.000 muertes al año

Un informe encargado por la ONU advierte del peligro para las personas y el medio ambiente de los productos químicos insecticidas y herbicidas



A los herbicidas se les ha relacionado con "el cáncer, el Alzheimer, el Parkinson, alteraciones hormonales, trastornos en el desarrollo y esterilidad" dice el Informe de las Naciones Unidas, de los que también dicen que son la causa de unas 200.000 muertes anuales por intoxicación aguda.

¿Se necesitan los pesticidas para trabajar con el hambre en el mundo?



Cita del informe sobre los pesticidas de la ONU-2017

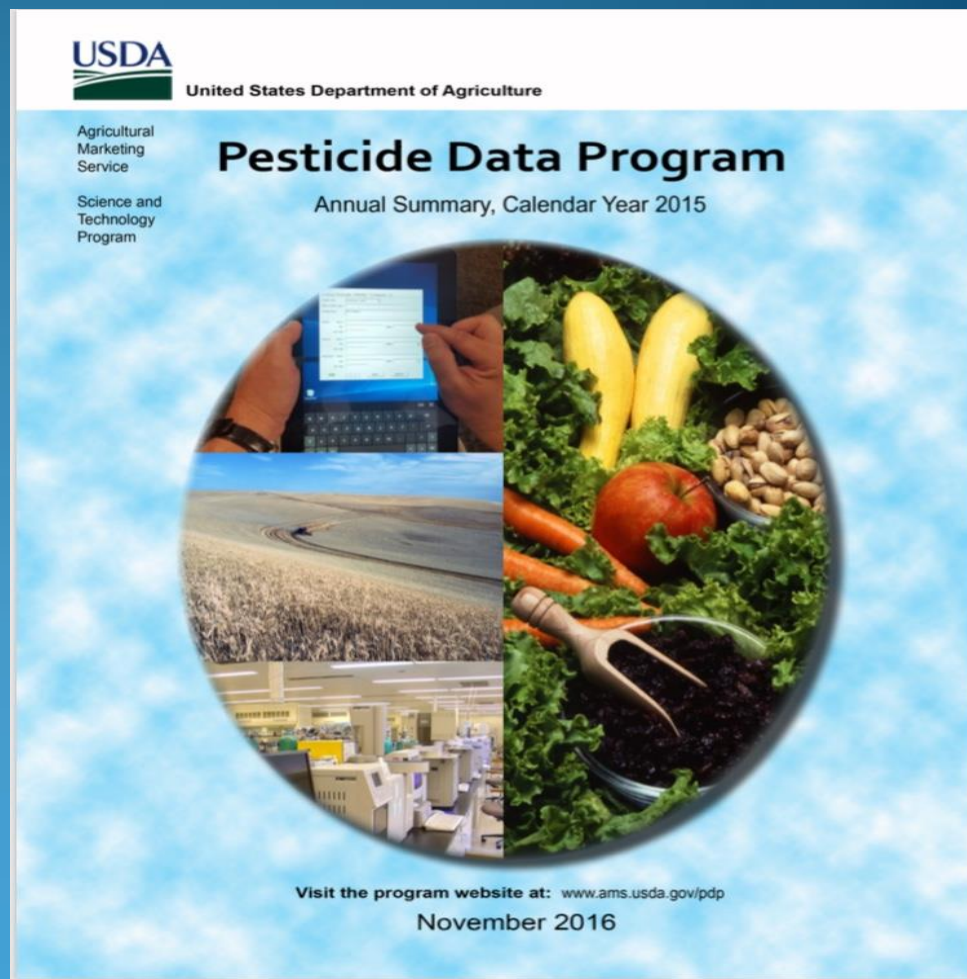
- **“El empleo de los herbicidas
nada tiene que ver
con la resolución
del problema del hambre”.**
– **Hilal Elver, ONU.**

Uso y abuso de pesticidas en Estados Unidos

El Departamento de Agricultura Federal en su reporte del 2015 analizó sobre 10,000 muestras de alimentos y encontró residuos de pesticidas en el 85% de las muestras.

El análisis incluyó a sobre 400 pesticidas: fungicidas, insecticidas, herbicidas, etc.

El reporte no analizó los residuos de glifosato en los alimentos.



Los alimentos más contaminados son los siguientes:

1. fresas- 38
2. tomates- 27
3. nectarines- 24
4. Uvas-23
5. Espinacas-23
6. Peras- 20
7. Cherries- 20
8. Pepinillos- 18
9. Melocotones- 16
10. Manzanas-16
11. Lechuga-14
12. Habichuelas tiernas- 12
13. Papas-10



El glifosato

¡El herbicida más utilizado en el mundo!

¿Qué es el glifosato?

El glifosato

- El glifosato (*Glycine Methyl phosphonate*) fue desarrollado para limpiar las tuberías.
- Es una molécula que se une y atrapa metales. De esta forma, elimina los depósitos de minerales y limpia las tuberías.



1964 a descaling agent

US Patent 3,160,632 Glyphosate

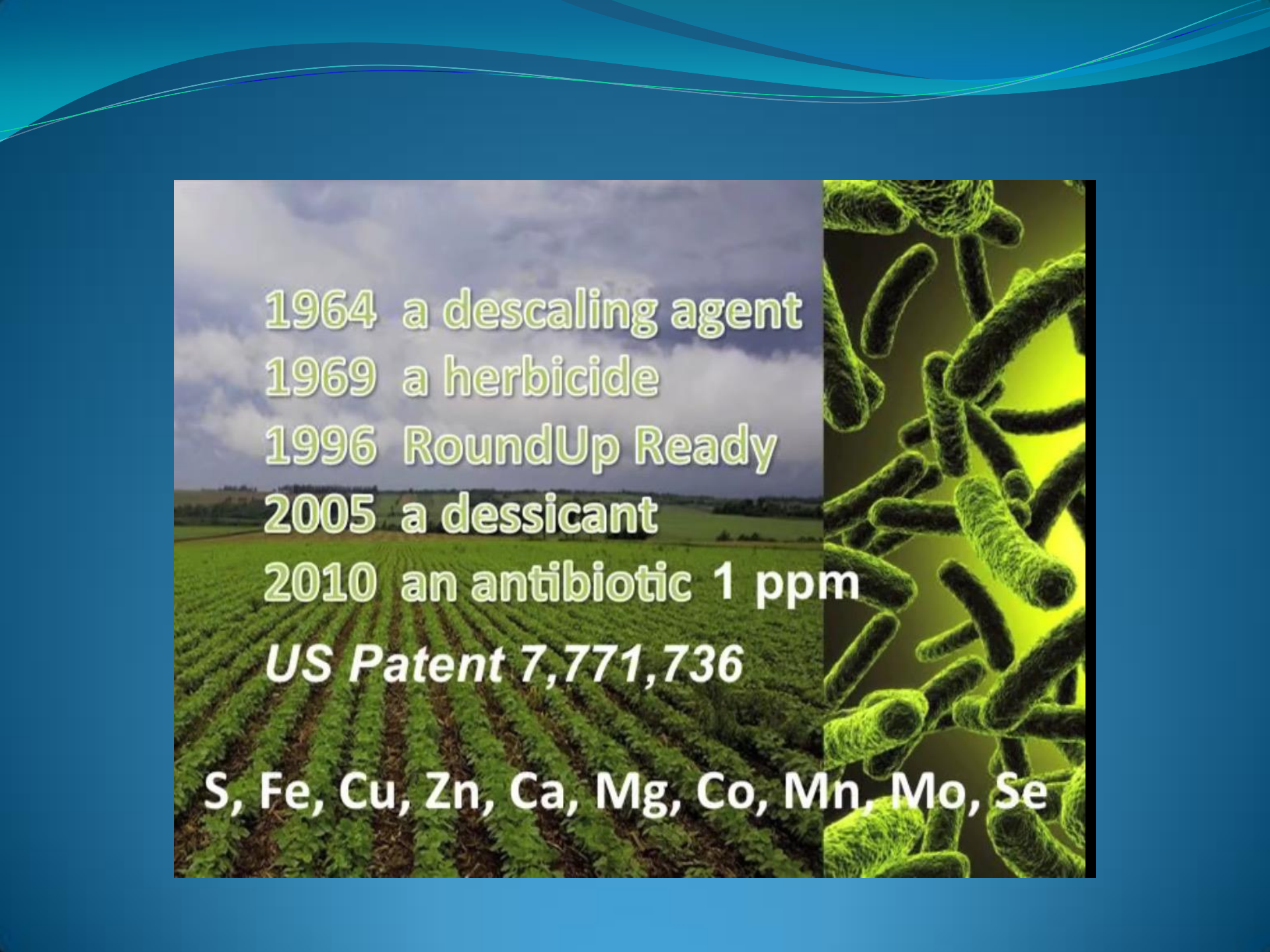
S, Fe, Cu, Zn, Ca, Mg, Co, Mn, Mo, Se

The image shows industrial machinery, likely a descaling system, with various pipes and a red fire extinguisher. Overlaid on the image is the text '1964 a descaling agent' in yellow, 'US Patent 3,160,632 Glyphosate' in white and red, and a list of metals 'S, Fe, Cu, Zn, Ca, Mg, Co, Mn, Mo, Se' in white. A small molecular model of Glyphosate is visible in the top right corner of the image area.

El glifosato

- Herbicida no selectivo de amplio espectro que elimina todo tipo de vegetación.
- Se utiliza en el control de malezas en: los hogares y municipios en áreas comunes y públicas.
- En la agricultura convencional.





1964 a descaling agent

1969 a herbicide

1996 RoundUp Ready

2005 a dessicant

2010 an antibiotic 1 ppm

US Patent 7,771,736

S, Fe, Cu, Zn, Ca, Mg, Co, Mn, Mo, Se

Uso en la agricultura y residuos en nuestra mesa...



Aprobación del glifosato

- La clasificación inicial de la EPA fue clase C, lo que significa: “Evidencia Sugestiva de potencial cancerígeno”.

US EPA ARCHIVE DOCUMENT



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

FEB 26 1985

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: Use of historical data in determining the weight of evidence from kidney tumor incidence in the Glyphosate two-year feeding study; and some remarks on false positives

TO: Reto Engler, Chief
Scientific Mission Support Staff
TOX/HED/OPP (TS-769C)

FROM: Herbert Lacayo, Statistician
Scientific Mission Support Staff
TOX/HED/OPP (TS-769C) *Herbert Lacayo Feb 24, 1985*

THRU: Bertram Litt, Statistics Team Leader
Scientific Mission Support Staff
TOX/HED/OPP (TS-769C) *Bertram Litt 2/24/85*

BACKGROUND

The Glyphosate feeding study (EPA Reg. #: 524-308; Caswell #: 661A, Accession #: 251007-014) on Charles River CD-1 mice generated renal tubular adenomas in male mice at the 5000 and 30000 ppm dose levels. The registrant (Monsanto) claims that such tumors are "unrelated to treatment." (ref.1). In support of that they provide historical data from Bio/dynamics and two other laboratories (ref.2).

With respect to historical data we note the large number and variety of factors which influence the life history of rodents in chronic studies. Hence, it is generally agreed that the most relevant historical controls are experiments from the subject laboratory studied within a 3 to 4 year "window" (ref.3).

SUMMARY

The main purpose of this memo is to show one way historical data may be used to evaluate the significance of tumors in the glyphosate feeding study. When these data are so used we can conclude that Glyphosate dosing has a statistically significant effect (at the $p = .006$ level) in the production of kidney tumors in male mice. The appropriate procedure is outlined in the next section entitled Use of Historical Data. The last Section, Remarks on False Positives, addresses some comments by Monsanto (Ref.1) on this subject. That section outlines some of the weaknesses in Monsanto's position.

USE OF HISTORICAL DATA

The following information was derived from Reference 2.

Data Source*	p (est. of tumor rate)	Sigma (est. of standard deviation)
Bio/dynamics	.00368	.00212
IRD Corp.	.00437	.00109
Combined	.00399	.00094

The value $p = .00368$, derived from Bio/dynamics data is a reasonable choice to use as a historical control. The data are from the same laboratory that performed the Glyphosate study and are within the appropriate 3-4 year time "window" (ref.3). Further, the standard deviation of the estimate is reasonably small.

We will now examine the Monsanto contention that the kidney tumors are unrelated to treatment. (i.e. Glyphosate has no effect on kidney tumors). First, consider the tumor rate in the Glyphosate Study: $4/198 = .0202$ ---

In contrast, Bio/dynamics has the lower historical rate:

$$3/815 = .00368$$

The relevant question is: What is the probability that the 198 CD-1 mice in the Glyphosate study will produce by pure chance 4 or more mice with kidney tumors? Another way of stating this is - How likely are we to have a tumor rate of .0202 --- for the Glyphosate study given that the historical rate is .00368?

Questions of this type may be answered from manipulation of the relevant distribution which, in this case is the Binomial:

$$P(r \text{ out of } n \text{ mice have tumors}) = \binom{n}{r} p^r q^{n-r}$$

Where: n = the # of male mice in the study

r = the # of male mice with kidney tumors

$p = .00368$, the historical probability that an individual male mouse will develop kidney tumors.

$$q = 1 - p$$

*This does not include Hazleton Laboratories America, Inc. due to the small sample size of that data set

Using the above distribution and elementary but tedious calculations, we generate the following table:

# of mice with tumor	Probability that r or more mice will have tumors in a study with 198 male mice
r = 0	1.
1	.518177
2	.165711
3	.037443
4	.006481

This last table indicates that based on a historical rate of $p = .00368$ that the probability of seeing 3 or more mice with kidney tumors is about .037; and the probability of seeing 4 or more such mice (i.e. seeing what in fact happened) is about .0064. We note that even considering data from I.R.D., the p value is about .01.

Under such circumstances a prudent person would reject the Monsanto assumption that Glyphosate dosing has no effect on kidney tumor production. Another way of saying this is that if Glyphosate were truly unrelated to kidney production we would expect to see 4 or more tumors in less than 1 out of 100 experiments of the type sponsored by Monsanto. Thus, Glyphosate is suspect.

REMARKS ON FALSE POSITIVES

In ref. 1 Monsanto notes that "...if 20 types of lesions were evaluated at a probability level of .05, the number expected to be positive would not be one in 20, but rather the probability would be 64 in 100, an unacceptably high value..." Monsanto is referring to the well-known fact that by examining enough data it is likely that one will find an excess of some tumor type by chance alone; thus generating a false positive.

The Monsanto argument required the following assumptions:

1. A mouse may develop 20 distinct and independent (in the statistical sense) types of tumors.
2. The probability of each tumor type in a typical mouse is .05.

It follows from the above that:

$$P(\text{a mouse has at least one tumor}) = 1 - .95^{20} = .6415$$

Hence in 100 mice one would on the average see 64 with tumors. Monsanto proposes to avoid this "problem" of false positives by analyzing the study "...at the .01 probability level."

We disagree with the Registrants position. First, even if one did analyze the study at the .01 level as they suggest it would still result (using the same mathematics as before) in seeing 18 mice out of 100 with tumors. And hence one still has the problem of false positives from the registrant's viewpoint. But this causes something worse from a regulatory viewpoint. We have decreased the false positive rate (i.e., the probability of saying that a chemical causes tumors when in fact it does not) at the cost of increasing the false negative rate (i.e., the probability of saying that a chemical doesn't cause tumors when in fact it does). The Registrant wishes to avoid false positives while those concerned with the public health wish to avoid false negatives. Hence, for this reason alone Monsanto's argument is unacceptable.

We further disagree as follows:

1. The two assumptions needed to support the Monsanto argument are themselves in need of support (especially the requirement for statistical independence).
2. False positive results are less likely to occur with rare tumors (ref. 5). And the tumors in question are rare.

Viewpoint is a key issue. Our viewpoint is one of protecting the public health when we see suspicious data. it is not our job to protect registrants from false positives. We sympathize with the Registrants problem; but they will have to demonstrate that this positive result is false.

Finally, we mention that none of the tumors occurred in the control or low dose groups. Instead there was one at 5000 ppm and 3 at the 30000 ppm dose level. This together with the previous comments make it likely that there is a dose-tumor relationship for Glyphosate.

30 YEAR EPA CANCER COVER UP REVEALED

FOR
GLYPHOSATE

1985

CLASS C

"SUGGESTIVE
EVIDENCE OF
CARCINOGENIC
POTENTIAL"

6 YEARS LATER

CLASS E

"EVIDENCE OF NON-
CARCINOGENICITY
FOR HUMANS"

**WHAT HAPPENED
IN BETWEEN?**

MONSANTO

www.gmofreeusa.org

www.facebook.com/gmofreeusa

www.facebook.com/gmofreecanadagroup

UNITED STATES
ENVIRONMENTAL
PROTECTION AGENCY

1201 Constitution Avenue
East Building

MONSANTO

Empresa poderosa con fuertes vínculos en todas las esferas del gobierno de Estados Unidos y otros países con un historial de controversias científica y creación de múltiples productos nocivos a la salud.

Monsanto continúa insistiendo en que el glifosato es seguro..

- Sacarina
- DDT
- PCB (Bifenilo policlorado)
- Agente Naranja
- Hormona de crecimiento bovino

La compañía
Monsanto alega que
si por accidente una
persona se toma el
Roundup, no le pasa
nada ya que al tomar
agua, el glifosato se
elimina del cuerpo.

Revista científica peer-reviewed.



Detection of Glyphosate Residues in Animals and Humans

Monika Krüger¹, Philipp Schledorn¹, Wieland Schrödl¹, Hans-Wolfgang Hoppe², Walburga Lutz³ and Awad A. Shehata^{1,4*}

¹Institute of Bacteriology and Mycology of Veterinary Faculty, University of Leipzig, Germany

²Medizinisches Labor Bremen Hafenwende 12, 28357 Bremen, Germany

³Wildlife Research Institute, Bonn, Germany

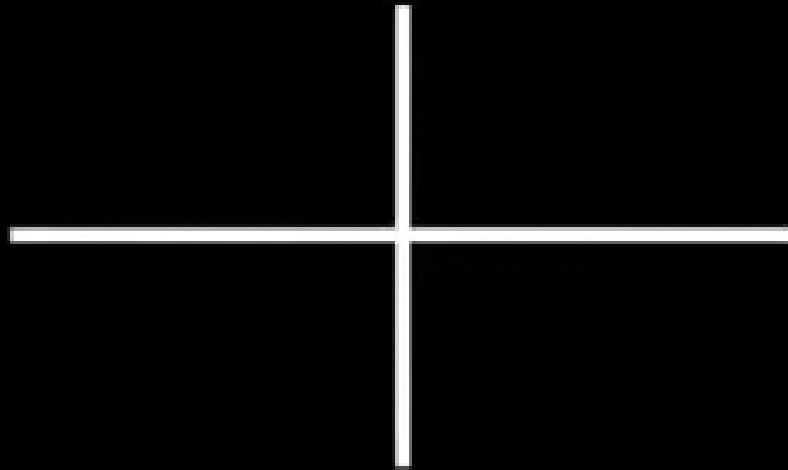
⁴Avian and Rabbit Diseases Department, Faculty of Veterinary Medicine, Sadat City University, Egypt

Abstract

In the present study glyphosate residues were tested in urine and different organs of dairy cows as well as in urine of hares, rabbits and humans using ELISA and Gas Chromatography-Mass Spectroscopy (GC-MS). The correlation coefficients between ELISA and GC-MS were 0.96, 0.87, 0.97 and 0.96 for cattle, human, and rabbit urine and organs, respectively. The recovery rate of glyphosate in spiked meat using ELISA was 91%. Glyphosate excretion in German dairy cows was significantly lower than Danish cows. Cows kept in genetically modified free area had significantly lower glyphosate concentrations in urine than conventional husbandry cows. Also glyphosate was detected in different organs of slaughtered cows as intestine, liver, muscles, spleen and kidney. Fattening rabbits showed significantly higher glyphosate residues in urine than hares. Moreover, glyphosate was significantly higher in urine of humans with conventional feeding. Furthermore, chronically ill humans showed significantly higher glyphosate residues in urine than healthy population. The presence of glyphosate residues in both humans and animals could haul the entire population towards numerous health hazards, studying the impact of glyphosate residues on health is warranted and the global regulations for the use of glyphosate may have to be re-evaluated.

Glyphosate accumulates in the lungs, heart,
kidneys, intestine, liver, spleen, muscles, bones ...

Monsanto y ahora Bayer insisten en la seguridad del glifosato



Francia reporta espionaje por parte de Monsanto... (mayo 13- 2019)



Monsanto espió a políticos, científicos, periodistas y líderes agrícolas: Bayer...

listado- y el canal *France2*. La denuncia apunta al responsable de "**la recolección de datos personales por medio fraudulento, desleal e ilícito**".

La empresa alemana **Bayer** anunció que contratará un bufete de abogados externo para que investigue el proyecto de **Monsanto** que según medios franceses se creó para **reprimir críticas y presionar** a fin de conseguir la aprobación de pesticidas, incluido el controvertido herbicida **Roundup**.

Los archivos incursionan no sólo en las posiciones de los centenares de investigados respecto a los pesticidas, de Monsanto y de los OGM, sino también abarcan **informes sobre sus pasatiempos, capacidad de ser influenciados y direcciones y teléfonos**

Monsanto tenía espías de personalidades en siete países

Estos espías afectaban "principalmente a periodistas, políticos y otros grupos de interés".

Por **Radio Isla** - May 21, 2019  58



Estos espías afectaban «principalmente a periodistas, políticos y otros grupos de interés», confirmó Bayer.

Tras estas revelaciones, la justicia francesa impulsó una investigación por las sospechas de la creación de ficheros presuntamente ilegales a

través de «la recolección de datos personales a través de medios fraudulentos, desleales e ilícitos».

Estos databan de 2016, es decir antes de la compra de Monsanto por el grupo alemán Bayer culminada el año pasado.

Comments

comments

VÍA AFP

ETIQUETAS

BAYER

MONSANTO

Nuevo informe toxicológico del glifosato- abril, 2019 que estuvo detenido por directivos de la EPA- “Si puedo paralizar esto, me merezco una medalla”, Jess Rowland.

Confirmado el efecto cancerígeno del glifosato por la Agencia de Substancias tóxicas y registro de enfermedades del Departamento de Salud y Servicios Humanos de Estados Unidos, “Department of Health and Human Services (DHHS), the Agency for Toxic Substances and Disease Registry (ATSDR), released the long-awaited Draft Toxicological Profile for Glyphosate”.



Toxicological Profile for Glyphosate

Draft for Public Comment

NRDC.ORG

**ATSDR Report Confirms Glyphosate
Cancer Risks**



Toxicological Profile for Glyphosate

Draft for Public Comment

April 2019



U.S. Department of Health and Human Services
Agency for Toxic Substances and Disease Registry

032919-1-4

Correos internos revelan complicidad de la EPA...

The court documents included Monsanto's internal emails and email traffic between the company and federal regulators. The records suggested that Monsanto had ghostwritten research that was later attributed to academics and indicated that a senior official at the Environmental Protection Agency had worked to quash a review of Roundup's main ingredient, glyphosate, that was to have been conducted by the United States Department of Health and Human Services.

The documents also revealed that there was some disagreement within the E.P.A. over its own safety assessment.

Dan Jenkins, a Monsanto executive, said in an email in 2015 that Mr. Rowland, referring to the other agency's potential review, had told him, "If I can kill this, I should get a medal."

The review never took place. In another email, Mr. Jenkins noted to a colleague that Mr. Rowland was planning to retire and said he "could be useful as we move forward with ongoing glyphosate defense."

Resumen de daños del ATSD

An overview of the number of human and animal studies examining potential endpoints of concern from exposure to glyphosate formulations is presented in Figure 2-2. Results from available animal studies identify the following targets of toxicity:

- **Developmental effects:** Histopathologic testicular lesions, decreased sperm production, and increased incidence of fetal skeletal malformations were reported in response to oral dosing of rat weanlings or pregnant rats with selected glyphosate formulations in the range of 5–500 mg/kg/day.
- **Endocrine effects:** Decreased serum testosterone was noted in male rat weanlings administered a glyphosate formulation orally at 5 mg/kg/day.
- **Body weight effects:** Seriously depressed body weight gain was observed in mice administered a glyphosate formulation orally at 50 mg/kg/day.
- **Renal effects:** Histopathologic kidney lesions were noted in male rats gavaged once with a glyphosate formulation at 250 mg/kg.
- **Hepatic effects:** Increased serum liver enzyme activity and histopathologic liver lesions were reported in male rats repeatedly gavaged with a glyphosate formulation at 487 mg/kg/day.
- **Hematological effects:** Decreases in red blood cells, hematocrit, and hemoglobin, and increases in mean corpuscular volume and neutrophils were reported in mice administered a glyphosate formulation orally at 500 mg/kg/day.
- **Reproductive effects:** Increased percentage of morphologically abnormal sperm was reported among rats receiving a glyphosate formulation from the drinking water for 8 days at 640 mg/kg/day.

MARION COPLEY IS A HERO!



Former EPA Toxicologist,
Veterinarian, and Mother

Thank you for speaking
up against corruption
in the EPA.

Rest in Peace.

Find out more about GMOs and related toxins at
www.momsacrossamerica.org/data



**Glifosato: desgarradora carta
antes de morir de una científica
de la EPA "sí, causa cáncer"**

Resumen del daño toxicológico

La carta de la científica de la EPA **Marion Copley**, que falleció víctima de cáncer, fue descubierta en los documentos no sellados originalmente por el Tribunal del Distrito Norte de California, USA, en la "**Acción Civil N° 16-MD-02741-VC Monsanto Company, sobre responsabilidad por el herbicida RoundUp**". La carta la dió a conocer el grupo anti-GMO 'US Right to Know (**USRTK**), y fue publicado en el sitio **Glyphosate.news**

En la carta, Copley le pide al científico **Jess Rowland**, llamado el "topo de Monsanto" dentro de la EPA, que "deje mentir sobre los peligros del RoundUp (Glifosato).

-*"Cualquiera de estos mecanismos por sí solos puede causar tumores, pero el glifosato causa todos ellos simultáneamente"*. Copley señaló que el glifosato fue previamente clasificado por la EPA como un "POSIBLE carcinógeno humano", y argumentó que, de acuerdo con los conocimientos de la EPA sobre el producto químico, la EPA debería re-clasificar el glifosato como **"PROBABLE carcinógeno humano"**.

En esta carta, Copley le pide a Jess Rowland que haga su trabajo y proteja al público en lugar de proteger los intereses de Monsanto, diciéndole : -*"Por una vez en tu vida, escúchame y no hagas tu juego de connivencia política con la ciencia para favorecer a los registrantes. Por una vez haz lo correcto y no tomes decisiones basadas en cómo afecta a tu bono"*. En dicha correspondencia, la toxicóloga cita pruebas de estudios en animales y escribe: **"Es esencialmente cierto que el glifosato causa cáncer"**.

Organización Mundial de la Salud alertó en marzo del 2015 que el glifosato es cancerígeno en animales y probable cancerígeno en humanos. Este pronunciamiento ha sido apoyado por más de 100 científicos de más de 25 países en el mundo.

**GLYPHOSATE CARCINOGENICITY REPORT
PUBLISHED IN FULL**

**By World Health Organization's International
Agency for Research on Cancer**



**It's clearly written and provides a useful document in
support of individuals and groups campaigning
against glyphosate herbicide spraying.**

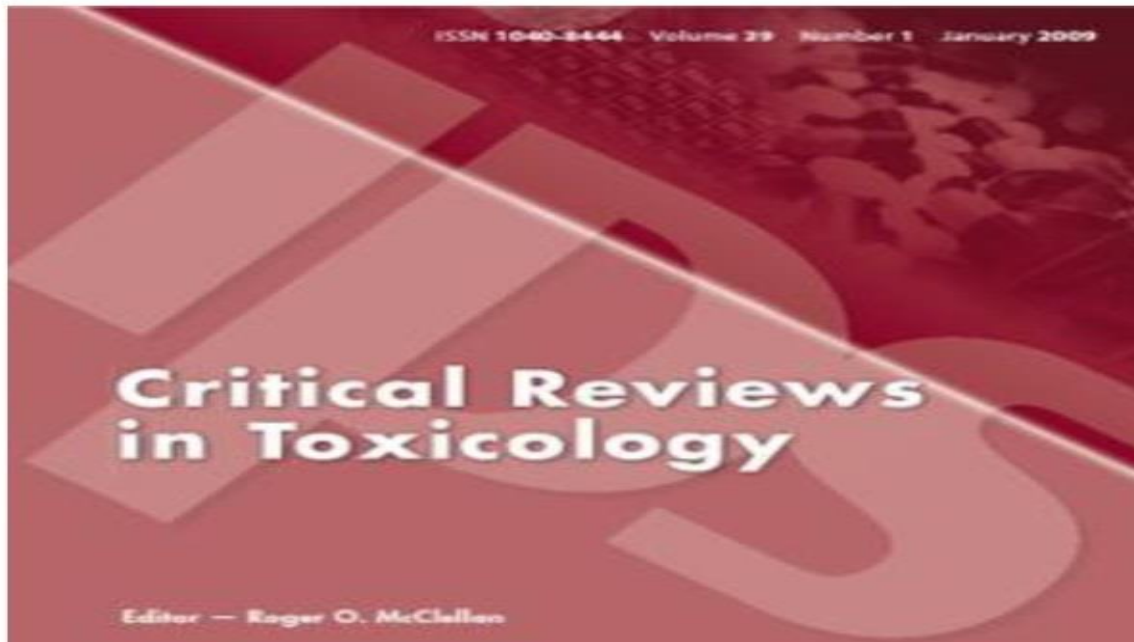
BAN ROUNDUP.

Nota de disculpa del editor de revista científica

Retraction Watch



**Journal flags papers,
saying authors didn't
adequately disclose ties
to Monsanto**



A toxicology journal has issued an expression of concern for a group of papers about the controversial herbicide glyphosate after concluding that some of the authors didn't adequately disclose their ties to the maker of the product.

At issue are five articles that appeared in a 2016 supplement to *Critical Reviews in Toxicology*, a Taylor & Francis title, about the chemical, the active ingredient in Monsanto's blockbuster weed-killer Roundup. Although the authors of the articles don't overlap perfectly, Keith Solomon, of the University of Guelph, in Canada, appears on three of the articles; Gary Williams, of New York Medical College, appears on three as well.

Williams was caught up in a ghost-writing scandal after court documents revealed that he had put his name on a published paper written by Monsanto employees. Solomon

Revisiones actualizadas con nuevas secciones de Agradecimientos y Declaración de Intereses

Varios de los autores presentaron sus disculpas en las secciones actualizadas de la Declaración de intereses de tres de los cinco documentos de revisión, entre ellos:

Keith R. Solomon (ha trabajado como consultor para Monsanto)

David Brusick (ha trabajado como consultor para Monsanto)

Marilyn Aardema

Larry Kier (ha trabajado como consultor para Monsanto)

David Kirkland (ha trabajado como consultor para Monsanto)

Gary Williams (ha trabajado como consultor para Monsanto)

John Acquavella (antiguo empleado de Monsanto, ha trabajado como consultor para Monsanto)

David Garabrant

Gary Marsh

Tom Sorahan (antiguo empleado de Monsanto, ha trabajado como consultor para Monsanto)

Douglas L. Weed (ha trabajado como consultor para Monsanto)

Paga a científicos y periodistas para que escriban a favor del glifosato. Ejemplo: Dr. Kevin Folta, Universidad de la Florida y Kelly Kelland- Reuters quien criticó el pronunciamiento de la IARC.



Monsanto Employee Admits an Entire Department Exists to “Discredit” Scientists

themindunleashed.org

¿Dónde se encuentra el
glifosato?

¡En el 80 % de la
comida procesada!

















La principal semilla modificada genéticamente es la “Roundup Ready”- semilla resistente al glifosato. Incluye:

1. Maíz
2. Soya
3. Canola
4. Algodón
5. Azúcar de remolacha

- Maíz y derivados como el “Hight Fructose Corne Syrup”
- Soya y derivados como lecitina de soya
- Canola
- Trigo por el proceso de desecado
- Avena por el proceso de desecado

ies (5 fl oz)

g 2.3

g 5.3

g 10.8

g 133

mg 800

IU 300

IU 60

IU 2

mcg 9

mcg 80

mcg 140

mcg 60

mcg 0.3

mcg 1000

INGREDIENTS: CORN SYRUP SOLIDS, PARTIALLY HYDROLYZED NONFAT MILK AND WHEY PROTEIN CONCENTRATE SOLIDS (SOY), VEGETABLE OIL (PALM OLEIN, SOY, COCONUT, AND HIGH OLEIC SUNFLOWER OILS), AND LESS THAN 2%: MORTIERELLA ALPINA OIL*, CRYPTHECODINIUM COHNII OIL**, VITAMIN A PALMITATE, VITAMIN D₃, VITAMIN E ACETATE, VITAMIN K₁, THIAMIN HYDROCHLORIDE, RIBOFLAVIN, VITAMIN B₆ HYDROCHLORIDE, VITAMIN B₁₂, NIACINAMIDE, FOLIC ACID, CALCIUM PANTOTHENATE, BIOTIN, ASCORBIC ACID, CHOLINE CHLORIDE, INOSITOL, CALCIUM CARBONATE, CALCIUM PHOSPHATE, MAGNESIUM PHOSPHATE, FERROUS SULFATE, ZINC SULFATE, MANGANESE SULFATE, CUPRIC SULFATE, SODIUM SELENITE, SODIUM CITRATE, POTASSIUM CHLORIDE, POTASSIUM IODIDE, TAURINE, AND L-CARNITINE.

MEAD JOHNSON & COMPANY LLC

ENFAMIL®
#1 BRAND RECOMMENDED BY
PEDIATRICIANS



Er

Info
Milk-b



- Helps reduce fussiness, gas & crying within 24 hours
- Easy-to-digest protein



These Three Companies are Using GMOs in their Baby Formula

earthweareone.com

Enviromental Work Group



LIVELOVEFRUIT.COM

Glyphosate in Food: Complete List of Products and Brands Filled with Popu...



INSECTICIDAL GMOs & WEEDKILLER FOUND IN KELLOGG'S FROOT LOOPS

Independent lab tests confirm that Kellogg's Froot Loops cereal contains high levels of insecticide-producing GMOs and is laced with glyphosate, the main ingredient of Roundup weedkiller.



**OPERATION: LABEL GMOs
BOYCOTT KELLOGG'S.**



www.facebook.com/gmofreeusa www.gmofreeusa.org facebook.com/gmofreecanadagroup

Estudio canadiense- septiembre 2018

New Testing Conducted by an Independent Lab Found

GLYPHOSATE

in Common Children's
Lunch Foods and Snacks
Sold in Canada



SUSTAINABLE
PULSE



209



233



569



135



53



521



231



760



506



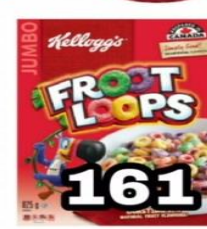
284



744



577



161

All
numbers
are in parts
per billion
(ppb)



19

2019



Moms Across America

Yesterday at 10:40 PM • 🌐

Our glyphosate-in-orange-juice-test-results are getting out there. Thank you to **Collective Evolution** for publishing this piece.



COLLECTIVE-EVOLUTION.COM

**Cancer-Linked Monsanto Chemical
Discovered In Five Major Orange Juic...**

Orange Juice Brand	Effective Glyphosate Level (ppb)	Retail Store of Purchase
Tropicana	26.05	Target
Tropicana	25.12	Target
Minute Maid	13.54	Jack in the Box
Minute Maid	12.65	Jack in the Box
Stater Bros	4.93	Stater Bros
Stater Bros	4.43	Stater Bros
Signature Farms	6.33	Vons
Signature Farms	5.78	Vons
Kirkland	5.96	Costco
Kirkland	4.33	Costco

The full report can be seen [here](#). The testing methodology was "Glyphosate and AMPA Detection by UPLC-MS/MS."

Abril-2019



Investigadores del centro **Abraxis de Pennsylvania** junto a la **Universidad de Boston** han presentado un informe que muestra evidencias del **herbicida "glifosato" en altas cantidades en productos alimenticios como la miel** comprada en Philadelphia, Estados Unidos. Los resultados mostraron que la miel de los países que permiten los cultivos genéticamente modificados contenía mucho más glifosato que los países que limitan o prohíben el cultivo de transgénicos.





GLYPHOSATE: UNSAFE ON ANY PLATE

FOOD TESTING RESULTS AND
SCIENTIFIC REASONS FOR CONCERN



REPORT BY **FOOD DEMOCRACY NOW!** AND **THE DETOX PROJECT**

Glyphosate Food Testing Results: (in parts per billion – ppb)

Full laboratory reports for this food testing can be [found here](#). A searchable database of results can be [found here](#).

General Mills		
	Original Cheerios	Glyphosate - 1,125.3 ppb AMPA - 26.4
	Honey Nut Cheerios	Glyphosate - 670.2 ppb AMPA - 14.5
	Wheaties	Glyphosate - 31.2 ppb
	Trix	Glyphosate - 9.9 ppb
	Gluten Free Bunny Cookies Cocoa & Vanilla	Glyphosate - 55.13* ppb
Kellogg's		
	Corn Flakes	Glyphosate - 78.9 ppb
	Raisin Bran	Glyphosate - 82.9 ppb
	Organic Promise**	Glyphosate - 24.9 ppb
	Special K	Glyphosate - 74.6 ppb
	Frosted Flakes	Glyphosate - 72.8 ppb
	Cheez-It (Original)	Glyphosate - 24.6 ppb
	Cheez-It (Whole Grain)	Glyphosate - 36.25* ppb
	Soft-Baked Cookies, Oatmeal Dark Chocolate	Glyphosate - 275.58* ppb
Nabisco		
	Ritz Crackers	Glyphosate - 270.24 ppb
	Triscuit	Glyphosate - 89.68 ppb
	Oreo Original	Glyphosate - 289.47* ppb

Nabisco (continued)

	Oreo Double Stuf Chocolate Sandwich Cookies	Glyphosate - 140.90* ppb
	Oreo Double Stuf Golden Sandwich Cookies	Glyphosate - 215.40* ppb
PepsiCo		
	Stacy's Simply Naked Pita Chips (Frito-Lay)	Glyphosate - 812.53 ppb
	Lay's: Kettle Cooked Original	Glyphosate - 452.71* ppb
	Doritos: Cool Ranch	Glyphosate - 481.27* ppb
	Fritos (Original) (100% Whole Grain)	Glyphosate - 174.71* ppb
Campbell Soup Company		
	Goldfish crackers original (Pepperidge Farm)	Glyphosate - 18.40 ppb
	Goldfish crackers colors	Glyphosate - 8.02 ppb
	Goldfish crackers Whole Grain	Glyphosate - 24.58 ppb
Little Debbie		
	Oatmeal Creme Pies	Glyphosate - 264.28* ppb
Lucy's		
	Oatmeal Cookies Gluten Free	Glyphosate - 452.44* ppb
Whole Foods		
	365 Organic Golden Round Crackers**	Glyphosate - 119.12* ppb
Back to Nature		
	Crispy Cheddar Crackers	Glyphosate - 327.22* ppb

Limit of Quantitation: 5 ppb

*These samples exhibit very low recovery and/or response. The above amounts found are rough estimates at best and may not represent an accurate representation of the sample.

** Widespread contamination in food supply — even organic farmers are having their crops/ our food contaminated.

Para evitar los pesticidas:

Productos
provenientes de
mercados
agroecológicos



¿Además de los
alimentos, en dónde
más se encuentra el
glifosato?



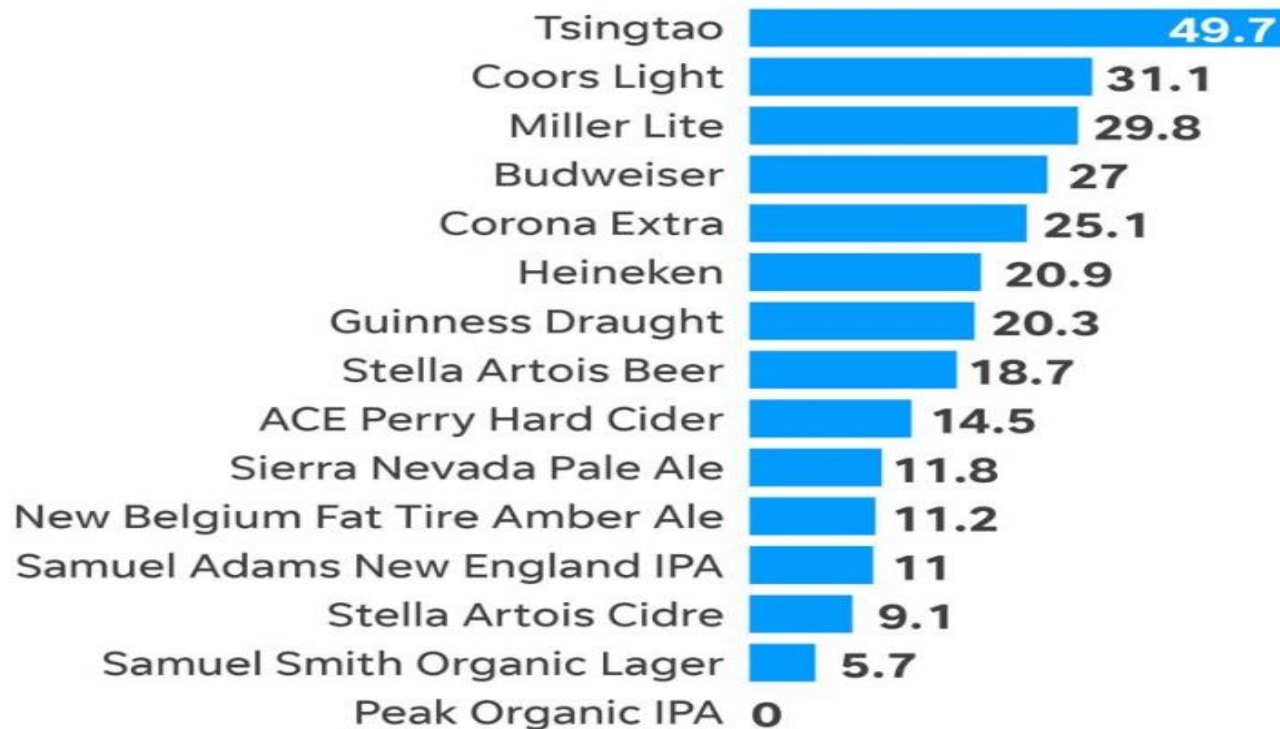
**Roundup's Toxic Chemical Glyphosate,
Found in 100% of California Wines Test...**

2019

Hidden chemicals in beer

The weed killer glyphosate was found in 14 of the 15 beers U.S. PIRG tested.

Amount of glyphosate (parts per billion)



SOURCE: U.S. Public Interest Research Group

Hallaron glifosato en algodón, gasas, hisopos, toallitas y tampones de La Plata

El estudio fue realizado por investigadores de la Universidad de La Plata (UNLP). Otra investigación halló la presencia del herbicida en la orina del 90% de los vecinos de Mar del Plata

20 de octubre de 2015



162

"El 85 por ciento de todas las muestras dieron positivos para [glifosato](#) y el 62 por ciento para AMPA, que es el metabolito ambiental; pero en el caso de algodones y gasas el porcentaje fue del cien por ciento",

¿Monsanto en tu vagina? 85% de los tampones y productos de higiene femenino contaminado con herbicida glifosato causante de cáncer

Por: [Alan Santana](#) — [8 comentarios](#)

Archivada en: [Glifosato](#), [Monsanto](#), [Salud básica](#), [Salud Casera](#)





Report: Independent Lab Discovers Glyphosate in Five Different Childhood Vaccines

By [Nick Meyer](#) On September 12, 2016



Gracias al uso masivo de herbicidas en todo el planeta, seguramente hemos inhalado una dosis del herbicida mejor vendido de Monsanto, Roundup, según el último estudio del US Geological Survey publicado en la revista *Enviromental Toxicology and Chemistry*.

- Roundup era preponderante (en aire y lluvia) así como otros 37 compuestos tóxicos.

- Se encontró glifosato en el 86% de las muestras de aire y en el 77% de lluvia.

Daño al ambiente y las abejas

- Desorienta las abejas
- Reduce la biodiversidad
- Compactación de los suelos
- Creación de “súper malezas”
- Responsable de nuevas plagas

Impacto a la salud del glifosato

Principales problemas a la salud:

- Alergias
- Problemas gastrointestinales: inflamación, irritación y cambios en la flora intestinal

Dr. Phillip J. Landrigan,
Epidemiólogo y Pediatra
solicita que:

1. La Academia Nacional de Ciencias nombre un nuevo comité para una nueva evaluación sobre el daño de los pesticidas, particularmente el glifosato y los GMO.
2. Señala el serio problema actual en la población por el gran incremento en las alergias.

NEJM  Search NEJM

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GMOs, Herbicides, and Public Health

Philip J. Landrigan, M.D., and Charles Benbrook, Ph.D.

August 20, 2015
N Engl J Med 2015; 373:693-695

Comments open through August 26, 2015
Available on the NEJM.org full site.

Article Hide

Genetically modified organisms (GMOs) are not high on most physicians' worry lists. If we think at all about biotechnology, most of us probably focus on direct threats to human health, such as prospects for converting pathogens to biologic weapons or the implications of new technologies for editing the human germline. But while

Audio Interview



Interview with Dr. Philip Landrigan on health concerns associated with genetically modified crops and the herbicides used on them.

Disbiosis en la microbiota

The effect of glyphosate on potential pathogens and beneficial members of poultry microbiota in vitro

Shehata A. et al

Current Microbiology 2013; 66: 350

1 ppm is antibiotic to *Bacillus*, *Enterococcus*, *Bifidobacteria*, *Lactobacillus*, *Campylobacter*, *Pseudomonas*, ...

The effect of glyphosate on potential pathogens and beneficial members of poultry microbiota in vitro

Shehata A. et al

Current Microbiology 2013; 66: 350

Salmonella and *Clostridia* are resistant.

Sensitividad al gluten/ intestino permeable



**Gluten Intolerance
or Glyphosate Intolerance?**

- **Glyphosate: the key ingredient in Monsanto's RoundUp**
- **Routinely used to "dry down" wheat prior to harvest**
- **Linked to celiac disease, gluten intolerance, and irritable bowel**

Get the facts. Share the awareness.
facebook.com/gmoawarenessusa

GMO

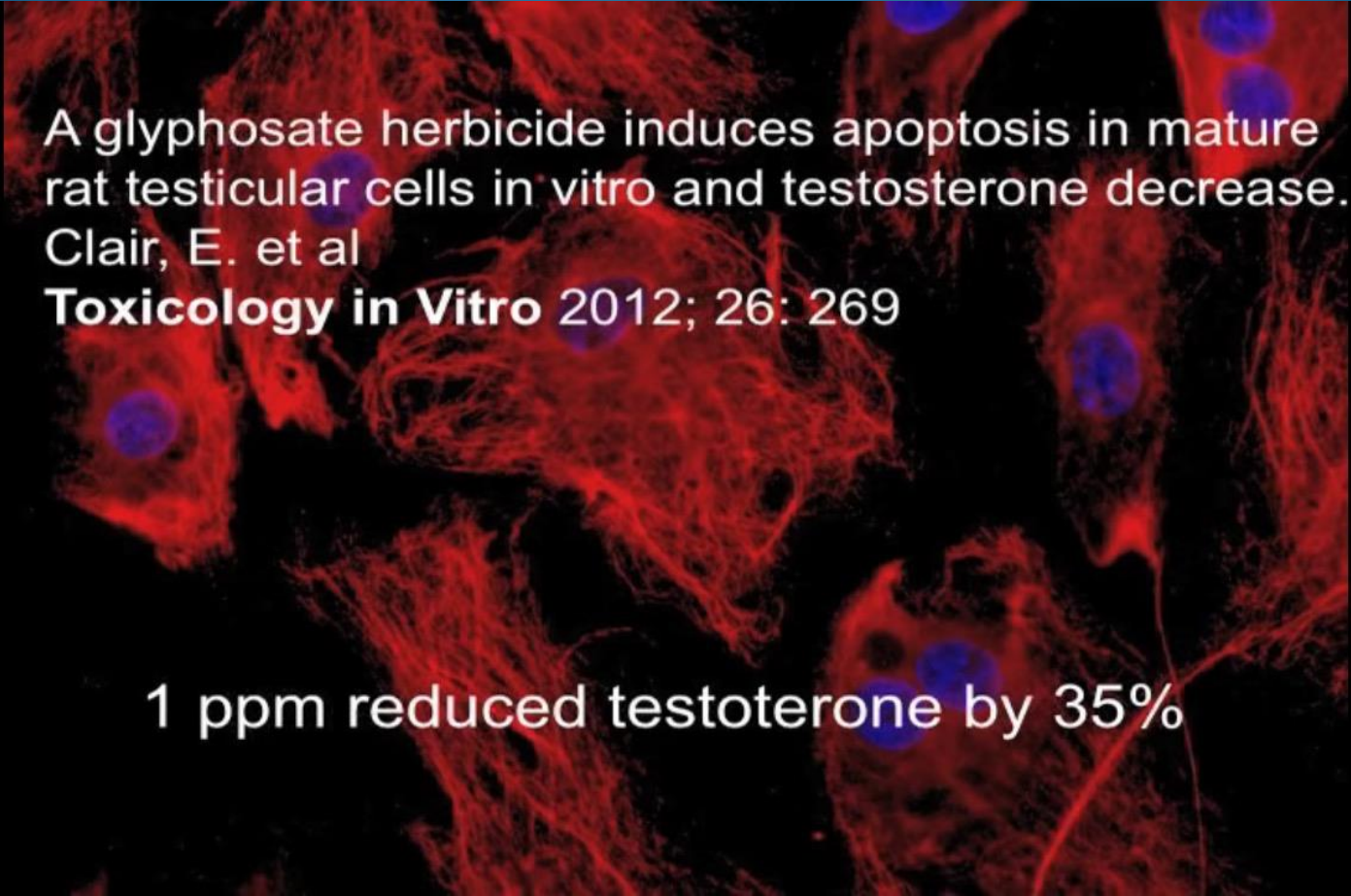
- El glifosato se asocia a un aumento en:
 - Disfunción eréctil
 - Estrés oxidativo
 - Parkinson
 - Alzheimer
 - Autismo

El glifosato y la disfunción eréctil...

 HOSTED BY ELSEVIER	Contents lists available at ScienceDirect Asian Pacific Journal of Reproduction journal homepage: www.apjr.net	
Review http://dx.doi.org/10.1016/j.apjr.2015.07.012		
Potential pathways of pesticide action on erectile function – A contributory factor in male infertility		
R.P. Kaur, V. Gupta, A.F. Christopher, P. Bansal*		
<i>University Centre of Excellence in Research, Baba Farid University of Health Sciences, Faridkot, India</i>		
ARTICLE INFO	ABSTRACT	
<i>Article history:</i> Received 12 Dec 2014 Received in revised form 10 Jun 2015 Accepted 20 Jul 2015 Available online 5 Aug 2015	One of the important objectives of this manuscript is to focus on the place of erectile dysfunction as an important factor for infertility. The review is about correlating the indiscriminate use of pesticides and to find out and highlight the evidences for mechanism of action of these pesticides for erectile dysfunction and find out the most used and most dangerous pesticide from erectile dysfunction point of view. The review suggests that erectile dysfunction is having a significant place as a causal factor for infertility. Study infers that pesticides are having multiple mechanisms of action through which these cause erectile dysfunction. It also reflects that acetamiprid is having most devastating effect causing erectile dysfunction as it acts through multiple inhibitory pathways. The review successfully highlights the indiscriminate regional use of pesticides.	
<i>Keywords:</i> Pesticides Erectile function Infertility		

Alta toxicidad en testículos de ratas y disminución de un 35% en los niveles de testosterona.

Clair, et. al. Toxicol In Vitro. 2012 Mar;26(2):269-79.



A fluorescence micrograph showing several cells with bright red cytoplasm and blue nuclei, set against a black background. The cells appear to be in various stages of apoptosis or are undergoing significant stress, with some showing fragmented nuclei and irregular cytoplasmic shapes.

A glyphosate herbicide induces apoptosis in mature rat testicular cells in vitro and testosterone decrease.

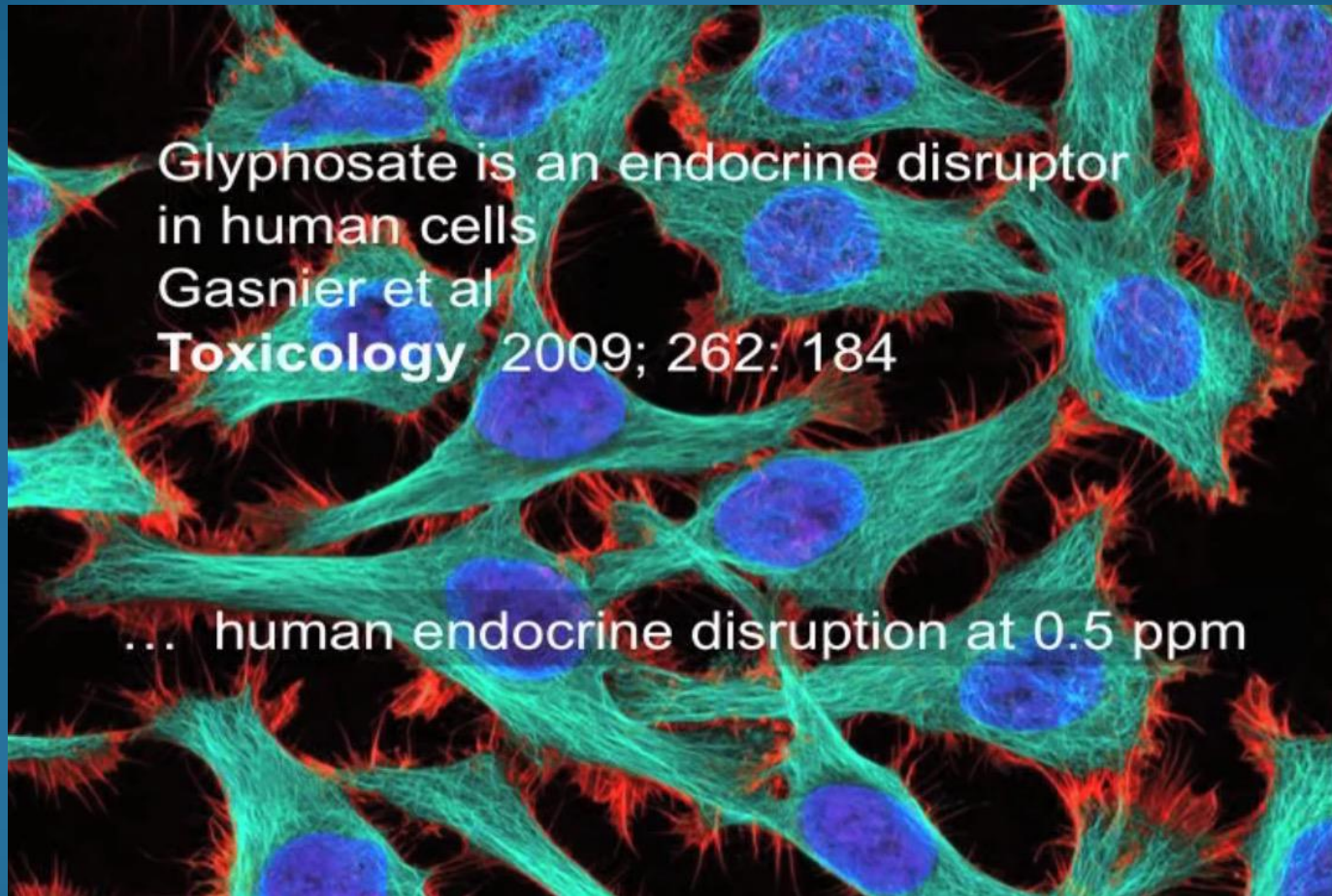
Clair, E. et al

Toxicology in Vitro 2012; 26: 269

1 ppm reduced testosterone by 35%

Disruptor endocrino

(Revista científica peer-reviewed).



El glifosato causa estrés oxidativo

- Estrés oxidativo surge cuando hay un imbalance en el cuerpo entre los radicales libres y la capacidad del organismo de reparar el daño celular causado por estos radicales.
- El estrés oxidativo se asocia con envejecimiento celular y un mayor riesgo de enfermedades como cáncer, Alzheimer y Parkinson, entre otras.

El Roundup produce estrés oxidativo resultando en necrosis en las células del hígado , testículos y células de Sertoli (producción de espermatozoides).

Oxidative stress responses of rats exposed to Roundup and its active ingredient glyphosate.

El-Shenawy NS. Environ Toxicol Pharmacol. 2009.
[Show full citation](#)

Abstract

Glyphosate is the active ingredient and polyoxyethyleneamine, the major component, is the surfactant present in the herbicide Roundup formulation. The objective of this study was to analyze potential cytotoxicity of the Roundup and its fundamental substance (glyphosate). Albino male rats were intraperitoneally treated with sub-lethal concentration of Roundup (269.9mg/kg) or glyphosate (134.95mg/kg) each 2 days, during 2 weeks. Hepatotoxicity was monitored by quantitative analysis of the serum alanine aminotransferase (ALT), aspartate aminotransferase (AST), alkaline phosphatase (ALP) activities, total protein, albumin, triglyceride and cholesterol. Creatinine and urea were used as the biochemical markers of kidney damages. The second aim of this study to investigate how glyphosate alone or included in herbicide Roundup affected hepatic

Roundup disrupts male reproductive functions by triggering calcium-mediated cell death in rat testis and Sertoli cells.

de Liz Oliveira Cavalli VL, et al. Free Radic Biol Med. 2013.

[Show full citation](#)

Abstract

Glyphosate is the primary active constituent of the commercial pesticide Roundup. The present results show that acute Roundup exposure at low doses (36 ppm, 0.036 g/L) for 30 min induces oxidative stress and activates multiple stress-response pathways leading to Sertoli cell death in prepubertal rat testis. The pesticide increased intracellular Ca^{2+} concentration by opening L-type voltage-dependent Ca^{2+} channels as well as endoplasmic reticulum IP3 and ryanodine receptors, leading to Ca^{2+} overload within the cells, which set off oxidative stress and necrotic cell death. Similarly, 30 min incubation of testis with glyphosate alone (36 ppm) also increased $(45)\text{Ca}^{2+}$ uptake. These events were prevented by the antioxidants Trolox and ascorbic acid. Activated protein

Exposición aguda y crónica al glifosato causa estrés oxidativo con neurotoxicidad y muerte de células del hipocampo.

Mechanisms underlying the neurotoxicity induced by glyphosate-based herbicide in immature rat hippocampus: involvement of glutamate excitotoxicity.

Cattani D, et al. Toxicology. 2014.

[Show full citation](#)

Abstract

Previous studies demonstrate that glyphosate exposure is associated with oxidative damage and neurotoxicity. Therefore, the mechanism of glyphosate-induced neurotoxic effects needs to be determined. The aim of this study was to investigate whether Roundup® (a glyphosate-based herbicide) leads to neurotoxicity in hippocampus of immature rats following acute (30min) and chronic (pregnancy and lactation) pesticide exposure. Maternal exposure to pesticide was undertaken by treating dams orally with 1% Roundup® (0.38% glyphosate) during pregnancy and lactation (till 15-day-old). Hippocampal slices from 15 day old rats were acutely exposed to Roundup® (0.00005-0.1%) during 30min and experiments were carried out

Glifosato y Autismo

MIT Researcher's New
Warning:

“At Today's Rate, Half
Of All U.S. Children Will
Be Autistic By 2025”

Stephanie Seneff of
the Massachusetts
Institute of
Technology (MIT)-
octubre, 2014.

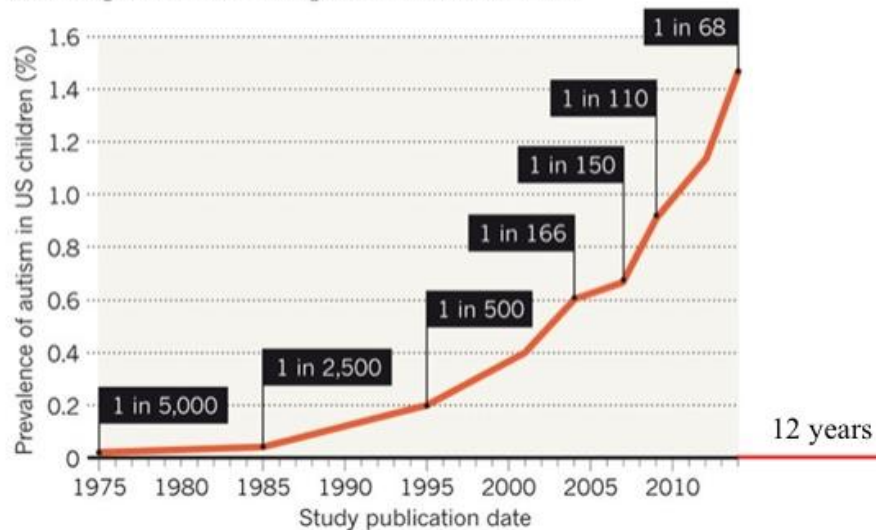


Estadísticas de Autismo

A Frightening Trend*?

AUTISM DIAGNOSES RISING

Almost 1.5% of US children are now diagnosed with autism, according to data from 11 regions in the United States.



*K. Weintraub, Nature 479, Nov. 3 2011, 22-24.

1. Embarazadas expuestas al glifosato tienen un 30% de más riesgo de que sus niños tengan autismo con “intelectual dissability”. Y si los niños en el primer año de vida se exponen al glifosato el riesgo aumenta en un 40%.

thebmj

Open access

Research

Prenatal and infant exposure to ambient pesticides and autism spectrum disorder in children: population based case-control study

BMJ 2019 ; 364 doi: <https://doi.org/10.1136/bmj.l962> (Published 20 March 2019)

Cite this as: BMJ 2019;364:l962

Linked Editorial
Pesticides and autism

Article Related Metrics Responses

Peer review

Online S von Ehrenstein , associate professor^{1 2}, Chenxiao Ling, research assistant², Xin Cui, research assistant^{2 3 4}, Myles Cockburn, professor⁵, Andrew S Park, research assistant², ...

El glifosato afecta la glándula pineal que modula los patrones de sueño y sus disfunciones se asocian a autismo, depresión, demencia y otros.

(Revista científica peer-reviewed) _Staphany Seneff y Nancy Swanson

Agricultural Sciences, 2015, 6, 42-70
Published Online January 2015 in SciRes. <http://www.scirp.org/journal/as>
<http://dx.doi.org/10.4236/as.2015.61005>



Aluminum and Glyphosate Can Synergistically Induce Pineal Gland Pathology: Connection to Gut Dysbiosis and Neurological Disease

Stephanie Seneff^{1*}, Nancy Swanson², Chen Li¹

¹Computer Science and Artificial Intelligence Laboratory, MIT, Cambridge, MA, USA

²Independent Researcher, Abacus Enterprises, Lummi Island, WA, USA

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Received 17 October 2014; revised 10 November 2014; accepted 10 December 2014

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Abstract

Many neurological diseases, including autism, depression, dementia, anxiety disorder and Parkinson's disease, are associated with abnormal sleep patterns, which are directly linked to pineal gland dysfunction. The pineal gland is highly susceptible to environmental toxicants. Two pervasive substances in modern industrialized nations are aluminum and glyphosate, the active ingredient in the herbicide, Roundup®. In this paper, we show how these two toxicants work synergistically to induce neurological damage. Glyphosate disrupts gut bacteria, leading to an overgrowth of *Clostridium difficile*. Its toxic product, p-cresol, is linked to autism in both human and mouse models. p-Cresol enhances uptake of aluminum via transferrin. Anemia, a result of both aluminum disruption of heme and impaired heme synthesis by glyphosate, leads to hypoxia, which induces increased pineal gland transferrin synthesis. Premature birth is associated with hypoxic stress and with substantial increased risk to the subsequent development of autism, linking hypoxia to autism. Glyphosate chelates aluminum, allowing ingested aluminum to bypass the gut barrier. This leads to anemia-induced hypoxia, promoting neurotoxicity and damaging the pineal gland. Both glyphosate and aluminum disrupt cytochrome P450 enzymes, which are involved in melatonin metabolism. Furthermore, melatonin is derived from tryptophan, whose synthesis in plants and microbes is blocked by glyphosate. We also demonstrate a plausible role for vitamin D3 dysbiosis in impaired gut function and impaired serotonin synthesis. This paper proposes that impaired sulfate supply to the brain mediates the damage induced by the synergistic action of aluminum and glyphosate on the pineal gland and related midbrain nuclei.

*Corresponding author.

How to cite this paper: Seneff, S., Swanson, N. and Li, C. (2015) Aluminum and Glyphosate Can Synergistically Induce Pineal Gland Pathology: Connection to Gut Dysbiosis and Neurological Disease. *Agricultural Sciences*, 6, 42-70.
<http://dx.doi.org/10.4236/as.2015.61005>

Acción del glifosato

- Inflamación
- Intestino Permeable
- Muerte de bacterias buenas y proliferación de los patógenos

Disbiosis en el intestino

Metabolismo del glifosato

- Aumento en los niveles de amoníaco (Relación con Alzheimer y Autismo)
- Acción inhibitoria de las enzimas citocromo P450 (CYP) limitando capacidad de detoxificación de sustancias nocivas
- Potencia los efectos dañinos de otras sustancias químicas

- Las sustancias tóxicas pasan la barrera hemato encefálica
- Bacterias en el intestino llevan a cabo el “shikymate pathway” afectando la síntesis de A.A. aromáticos y por lo tanto la producción de neurotransmisores

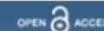
En el cerebro

El glifosato y el cáncer

Aumento en el
riesgo de cáncer
en niños cuando
sus padres
fumigan con
glifosato.



ENVIRONMENTAL
HEALTH
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[Environ Health Perspect.](#) 2004 Apr; 112(5): 631–635.

PMCID: PMC1241933

Research Article

Cancer risk and parental pesticide application in children of Agricultural Health Study participants.

[Kori B Flower](#), [Jane A Hoppin](#), [Charles F Lynch](#), [Aaron Blair](#), [Charles Knott](#), [David L Shore](#), and [Dale P Sandler](#)

[Author information](#) ► [Copyright and License information](#) ►

This article has been [cited by](#) other articles in PMC.

Abstract

Parental exposure to pesticides may contribute to childhood cancer risk. Through the Agricultural Health Study, a prospective study of pesticide applicators in Iowa and North Carolina, we examined childhood cancer risk and associations with parental pesticide application. Identifying information for 17,357 children of Iowa pesticide applicators was provided by parents via questionnaires (1993-1997) and matched against the Iowa Cancer Registry. Fifty incident childhood cancers were identified (1975-1998). Risk of all childhood cancers combined was increased [standardized incidence ratio (SIR) = 1.36; 95% confidence interval (CI), 1.03-1.79]. Risk of all lymphomas combined was also increased (SIR = 2.18; 95% CI, 1.13-4.19), as was risk of Hodgkin's lymphoma (SIR = 2.56; 95% CI, 1.06-6.14). We used logistic regression to explore associations between self-reported parental pesticide application practices and childhood cancer risk. No association was detected between frequency of parental pesticide application and childhood cancer risk. An increased risk of cancer was detected among children whose fathers did not use chemically resistant gloves [odds ratio (OR) = 1.98; 95% CI, 1.05-3.76] compared with children whose fathers used gloves. Of 16 specific pesticides used by fathers prenatally, ORs were increased for aldrin (OR = 2.66), dichlorvos (OR = 2.06), and ethyl dipropylthiocarbamate (OR = 1.91). However, these results were based on small numbers and not supported by prior biologic evidence. Identification of excess lymphoma risk suggests that farm exposures including pesticides may play a role in the etiology of childhood lymphoma.

El glifosato y el linfoma Non Hodgkin

El riesgo de este cáncer aumenta en un 41% cuando la persona se expone al glifosato.

Int. J. Environ. Res. Public Health **2014**, *11*, 4449–4527; doi:10.3390/ijerph110404449

OPEN ACCESS

International Journal of
Environmental Research and
Public Health
ISSN 1660-4601
www.mdpi.com/journal/ijerph

Review

Non-Hodgkin Lymphoma and Occupational Exposure to Agricultural Pesticide Chemical Groups and Active Ingredients: A Systematic Review and Meta-Analysis

Leah Schinasi * and Maria E. Leon

Section of Environment and Radiation, International Agency for Research on Cancer 150,
Cours Albert Thomas, 69372 Lyon Cedex 08, France; E-Mail: leonrouxm@iarc.fr

* Author to whom correspondence should be addressed; E-Mail: schinasil@fellows.iarc.fr;
Tel.: +33-472-73-8485; Fax: +33-472-73-8320.

Received: 12 February 2014; in revised form: 31 March 2014 / Accepted: 1 April 2014 /
Published: 23 April 2014

Abstract: This paper describes results from a systematic review and a series of meta-analyses of nearly three decades worth of epidemiologic research on the relationship between non-Hodgkin lymphoma (NHL) and occupational exposure to agricultural pesticide active ingredients and chemical groups. Estimates of associations of NHL with 21 pesticide chemical groups and 80 active ingredients were extracted from 44 papers, all of which reported results from analyses of studies conducted in high-income countries. Random effects meta-analyses showed that phenoxy herbicides, carbamate insecticides, organophosphorus insecticides and the active ingredient lindane, an organochlorine insecticide, were positively associated with NHL. In a handful of papers, associations between pesticides and NHL subtypes were reported; B cell lymphoma was positively associated with phenoxy herbicides and the organophosphorus herbicide glyphosate. Diffuse large B-cell lymphoma was positively associated with phenoxy herbicide exposure. Despite compelling evidence that NHL is associated with certain chemicals, this review indicates the need for investigations of a larger variety of pesticides in more geographic areas, especially in low- and middle-income countries, which, despite producing a large portion of the world's agriculture, were missing in the literature that were reviewed.

Keywords: pesticides; insecticides; herbicides; fungicides; lymphoma; non-Hodgkin; occupational; agricultural

Mutation Research/Reviews in

Mutation Research

Available online 10 February 2019

In Press, Accepted Manuscript ?

Review

Exposure to Glyphosate-Based Herbicides and Risk for Non-Hodgkin Lymphoma: A Meta-Analysis and Supporting Evidence

Luoping Zhang ^a   ... Lianne Sheppard ^{b, d}

 Show more

<https://doi.org/10.1016/j.mrrev.2019.02.001>

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Abstract

Desregulación del ciclo celular que es un marcador para cáncer.

PubMed

Search term



↓ Full text

Glyphosate-based pesticides affect cell cycle regulation.

Marc J, et al. Biol Cell. 2004.

[Show full citation](#)

Abstract

Cell-cycle dysregulation is a hallmark of tumor cells and human cancers. Failure in the cell-cycle checkpoints leads to genomic instability and subsequent development of cancers from the initial affected cell. A worldwide used product Roundup 3plus, based on glyphosate as the active herbicide, was suggested to be of human health concern since it induced cell cycle dysfunction as judged from analysis of the first cell division of sea urchin embryos, a recognized model for cell cycle studies. Several glyphosate-based pesticides from different manufacturers were assayed in comparison with Roundup 3plus for their ability to interfere with the cell cycle regulation. All the tested products, Amega, Cargly, Cosmic, and Roundup Biovert induced cell cycle dysfunction.

El glifosato y otras enfermedades

Estudio de Nancy Swanson...

En el estudio publicado, ella recoge los datos del CDC de Atlanta y los del Depto. De Agricultura Federal y establece una correlación entre el uso del glifosato, la producción de los GMO y ciertas enfermedades.

Journal of Organic Systems, 9(2), 2014

ORIGINAL PAPER

Genetically engineered crops, glyphosate and the deterioration of health in the United States of America

Nancy L. Swanson¹, Andre Leu^{2*}, Jon Abrahamson³ and Bradley Wallet⁴

¹ *Abacus Enterprises, Lummi Island, WA, USA*

² *International Federation of Organic Agricultural Movements, Bonn, Germany*

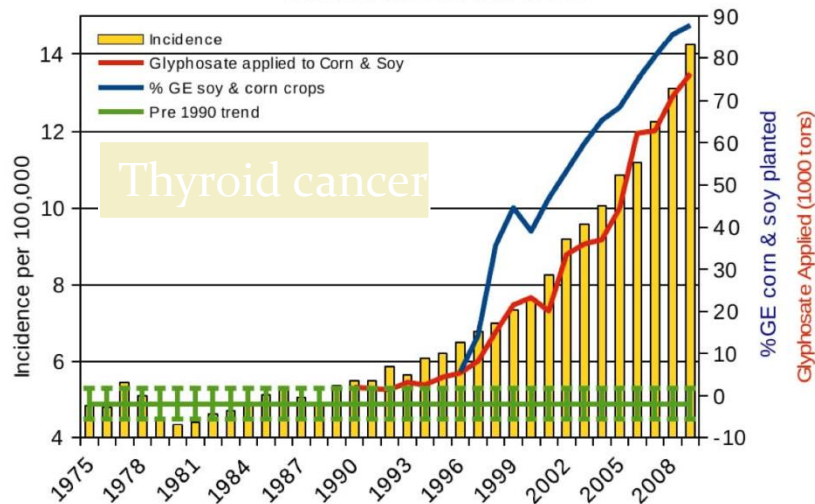
³ *Abacus Enterprises, Lummi Island, WA, USA*

⁴ *Crustal Imaging Facility, Conoco Phillips School of Geology and Geophysics, University of Oklahoma, USA*

** Corresponding author: andreleu.al@gmail.com*

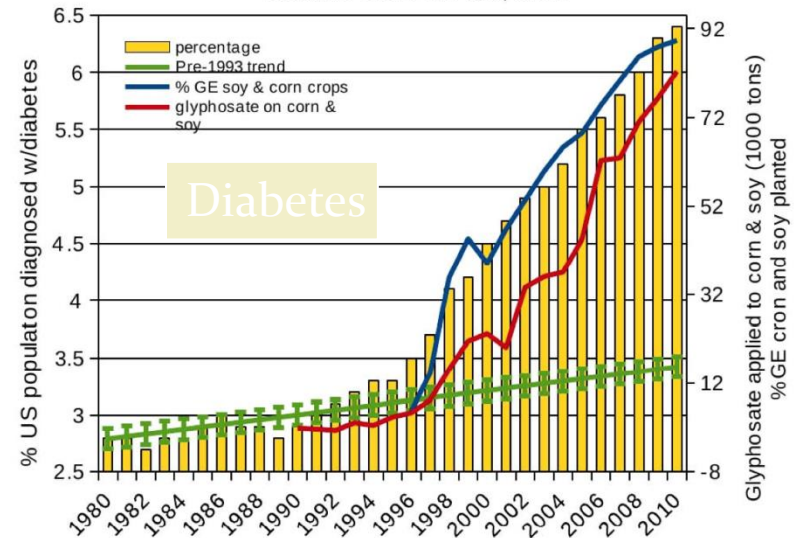
Thyroid Cancer Incidence Rate (age adjusted)

plotted against glyphosate applied to U.S. corn & soy ($R = 0.988$, $p \leq 7.612e-09$)
along with %GE corn & soy crops $R = 0.9377$, $p \leq 2.152e-05$
sources: USDA:NASS; SEER



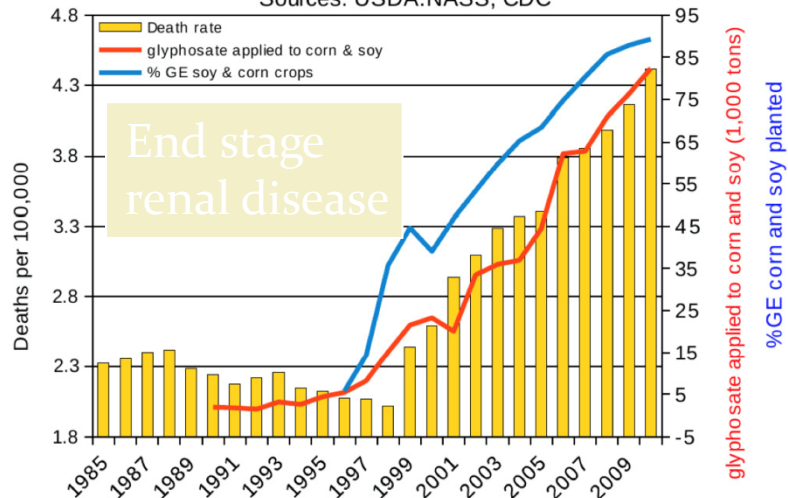
Prevalence of Diabetes in US (age adjusted)

plotted against glyphosate applied to corn & soy ($R = 0.971$, $p \leq 9.24e-09$)
along with %GE corn & soy grown in US ($R = 0.9826$, $p \leq 5.169e-07$)
sources: USDA:NASS; CDC



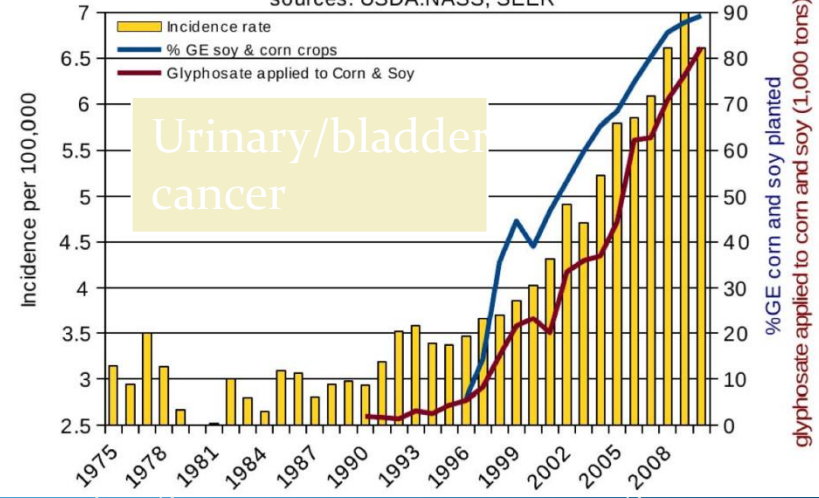
Age Adjusted End Stage Renal Disease Deaths (ICD N18.0 & 585.6)

plotted against %GE corn & soy planted ($R = 0.9578$, $p \leq 4.165e-06$)
and glyphosate applied to corn & soy ($R = 0.9746$, $p \leq 7.244e-09$)
Sources: USDA:NASS; CDC

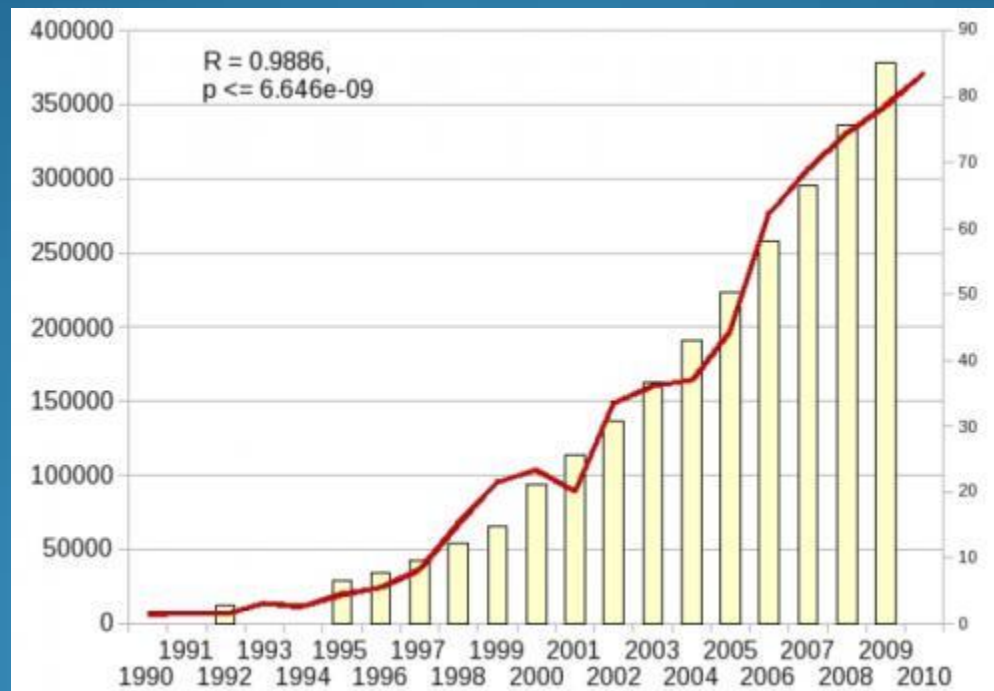


Age Adjusted Urinary/Bladder Cancer Incidence

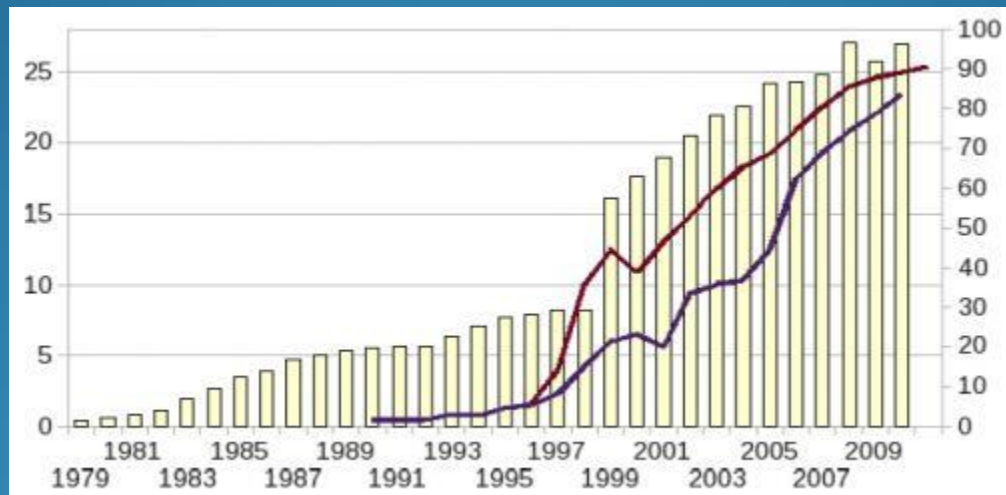
Plotted against % GE corn and soy ($R = 0.9449$, $p \leq 7.1e-06$)
and glyphosate applied to corn and soy ($R = 0.981$, $p \leq 4.702e-09$)
sources: USDA:NASS; SEER



AUTISMO Y GLIFOSATO APLICADO A SOJA Y MAÍZ TRANSGÉNICOS



MUERTES POR ALZHEIMER



Correlation coefficients

RoundUp Ready soy and corn and Autism	0.99
RoundUp Ready soy and corn and Celiac	0.98
RoundUp Ready soy and corn and Intestinal infection	0.97
RoundUp Ready soy and corn and Thyroid cancer	0.99
RoundUp Ready soy and corn and Liver cancer	0.96
RoundUp Ready soy and corn and Bladder cancer	0.98
RoundUp Ready soy and corn and Pancreatic cancer	0.92
RoundUp Ready soy and corn and Kidney cancer	0.97
RoundUp Ready soy and corn and Kidney failure	0.98
RoundUp Ready soy and corn and Diabetes	0.97
RoundUp Ready soy and corn and Obesity	0.96
RoundUp Ready soy and corn and Dementia	0.99

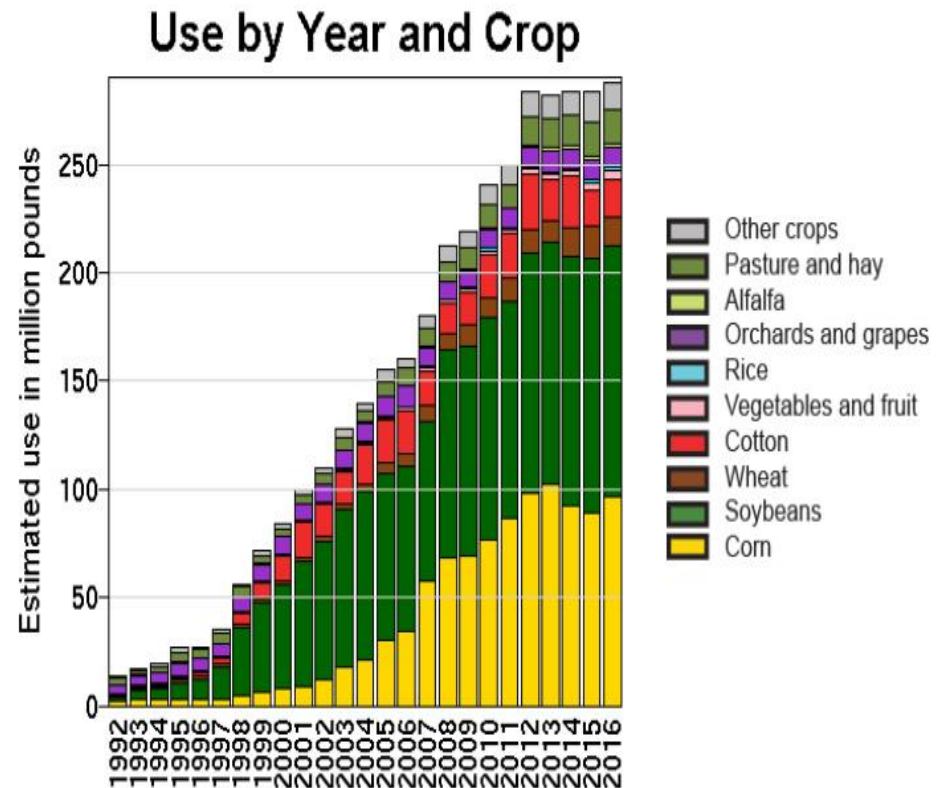
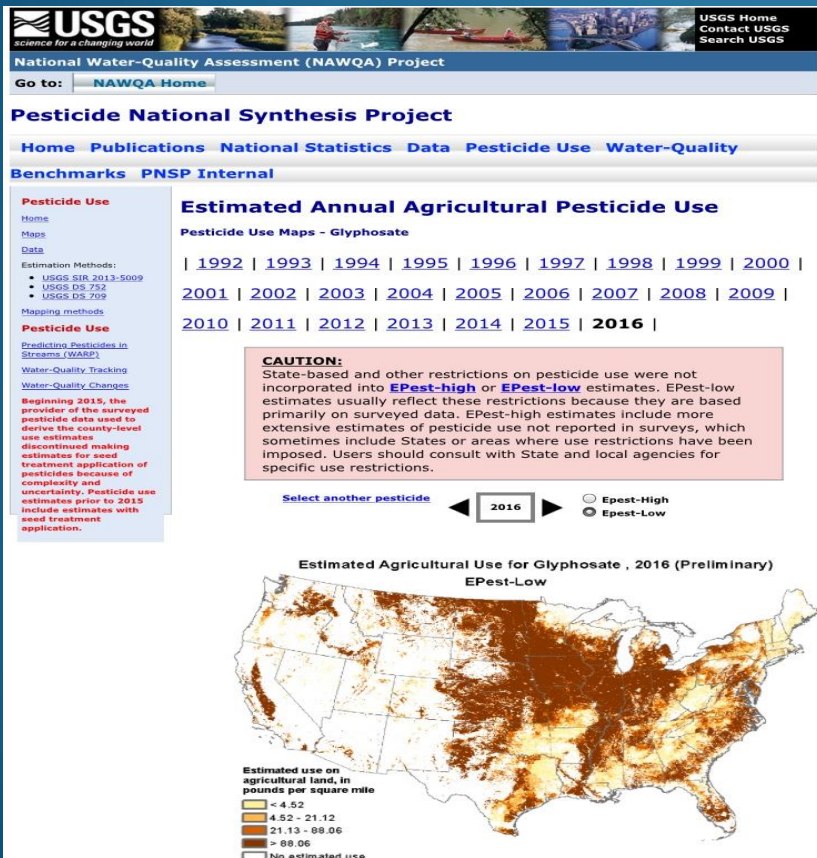
US Centre for Disease Control
US Department of Agriculture

Quote from the Conclusion*

“Although correlation does not necessarily mean causation, when correlation coefficients of over 0.95 (with *p*-value significance levels less than 0.00001) are calculated for a list of diseases that can be directly linked to glyphosate, via its known biological effects, it would be imprudent not to consider causation as a plausible explanation.”

*NL Swanson et al. Journal of Organic Systems 9(2), 2014, p. 32.

Uso alarmante de glifosato en Estados Unidos, ¡300 millones de libras al año!



El glifosato causa:

- Toxicidad al hígado
- Problemas al riñón

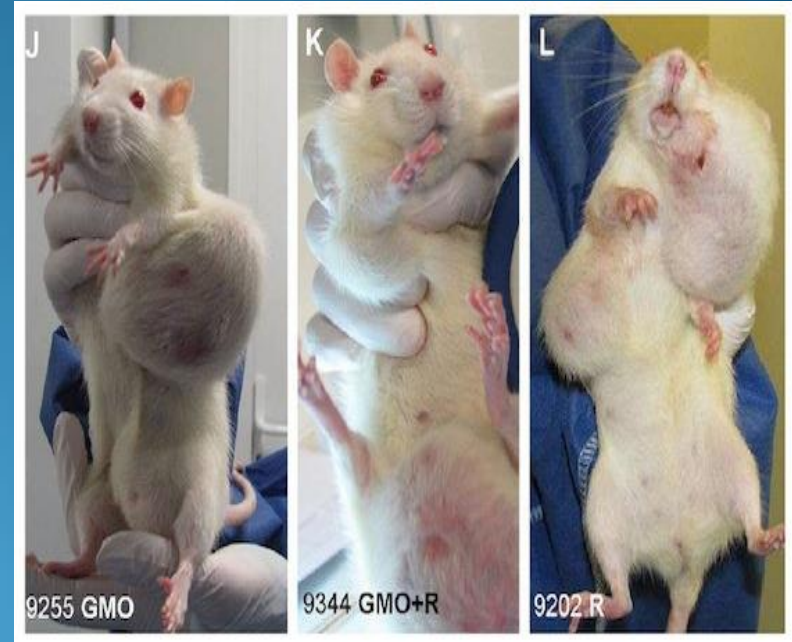
Estudio de Gilles-Eric Seralini- Biólogo Molecular de la Universidad de Caen, Francia

Primer estudio hecho sobre toxicidad a largo plazo (24 meses) revisado por pares.

Serios efectos tóxicos en hígado y riñones.

Crecimiento de tumores que se manifestaron entre el cuarto y séptimo mes de exposición.

En resumen, los signos de toxicidad que reportaba el estudio de Monsanto a los 90 días y que la EFSA determinó como “biológicamente no significativos”, se convirtieron en serios daños a los órganos, cáncer y muerte prematura a los 24 meses en la investigación de Seralini.



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Research

Republished study: long-term toxicity of a Roundup herbicide and a Roundup-tolerant genetically modified maize

Gilles-Eric Séralini^{1*}, Emilie Clair¹, Robin Mesnage¹, Steeve Gress¹, Nicolas Defarge¹, Manuela Malatesta², Didier Hennequin³ and Joël Spiroux de Vendômois¹

* Corresponding author: Gilles-Eric Séralini criigen@criigen.info Author Affiliations

1 Institute of Biology, EA 2608 and CRIIGEN and Risk Pole, MRSN-CNRS, Esplanade de la

Rats fed RoundUp Ready corn have damaged liver and kidneys.

Previously retracted for inconclusive results

El glifosato se asocia a :

- Infertilidad, abortos y malformaciones

Dra. Stella Benítez (2009) de la Universidad de Asunción en Paraguay

Estudio demostró asociación entre el herbicida utilizado por Monsanto y malformaciones en embarazadas y múltiples problemas de salud en niño expuestos a este agro tóxico.



PARAGUAY

Arch Pediatr Urug 2009; 80(3): 237-247

ARTÍCULO ORIGINAL

Malformaciones congénitas asociadas a agrotóxicos

Stella Benítez-Leite¹, María Luisa Macchi¹, Matilde Acosta²

Resumen

Summary

Introducción: la exposición a plaguicidas es un riesgo reconocido para la salud humana. Se describe la relación entre la exposición de los padres y malformaciones congénitas en el neonato.

Objetivo: estudiar la asociación entre la exposición a pesticidas y malformaciones congénitas en neonatos nacidos en el Hospital Regional de Encarnación, Itapúa-Paraguay.

Materia y método: estudio prospectivo de casos y controles de marzo de 2006 a febrero de 2007. Se consideró caso a todo neonato con malformación congénita, y control a todo niño sano del mismo sexo que naciera inmediatamente después. No se incluyeron los nacimientos ocurridos fuera del hospital. Se consideró exposición a cualquier contacto con agroquímicos, así como a otros factores de riesgo conocidos para malformación congénita.

Resultados: se analizaron 52 casos y 87 controles. El promedio de nacimientos por mes fue de 216. Los factores de riesgo asociados significativamente fueron: vivir cerca de campos fumigados (OR = 2,46, IC95% 1,09-5,57, $p < 0,02$), vivienda ubicada a menos de 1 km (OR = 2,66, IC95% 1,19-5,97, $p < 0,008$), almacenamiento de plaguicidas en el hogar (OR 15,35, IC95% 1,96-701,63, $p < 0,003$), contacto en forma directa o accidental con plaguicidas (OR = 3,19, IC95% 0,97-11,4, $p < 0,04$), antecedente de malformación en la familia (OR = 6,81, IC95% 1,94-30,56, $p < 0,001$). Los demás factores de riesgo conocidos para malformaciones no tuvieron significancia estadística.

Conclusión: los resultados muestran una asociación entre exposición a pesticidas y malformaciones congénitas. Se requiere de estudios futuros para confirmar estos hallazgos.

Introduction: exposure to pesticides is a known risk for human health. This paper describes the relationship between parental exposure and congenital malformations in the newborn.

Objective: to study the association between exposure to pesticides and congenital malformations in neonates born in the Regional Hospital of Encarnación, in the Department of Itapúa, Paraguay.

Materials and methods: a prospective case-controlled study carried out from March 2006 to February 2007. Cases included all newborns with congenital malformations, and controls were all healthy children of the same sex born immediately thereafter. Births outside the hospital were not counted. Exposure was considered to be any contact with agricultural chemicals, in addition to other known risk factors for congenital defects.

Results: a total of 52 cases and 87 controls were analyzed. The average number of births each month was 216. The significantly associated risk factors were: living near treated fields (OR 2,46, CI95% 1,09-5,57, $p < 0,02$), dwelling located less than 1 km (OR 2,66, CI95% 1,19-5,97, $p < 0,008$), storage of pesticides in the home (OR 15,35, CI95% 1,96-701,63, $p < 0,003$), direct or accidental contact with pesticides (OR 3,19, CI95% 0,97-11,4, $p < 0,04$), and family history of malformation (OR 6,81, CI95% 1,94-30,56, $p < 0,001$). Other known risk factors for malformations did not show statistical significance.

Conclusion: the results show an association between exposure to pesticides and congenital malformations. Further studies are required to confirm these findings.

Palabras clave:

ANOMALÍAS CONGÉNITAS
PLAGUICIDAS-toxicidad
EXPOSICIÓN A PLAGUICIDAS

Key words:

CONGENITAL ABNORMALITIES
PESTICIDES-toxicity
PESTIC DE EXPOSURE

1. Cátedra de Pediatría, Centro Materno Infantil (CMI), Facultad de Ciencias Médicas, UNA-Paraguay.
2. Hospital Regional de Encarnación, Paraguay.
Esta investigación se realizó en el marco de la convocatoria 2006 para proyectos de investigación de la Dirección General de Investigaciones Científicas y Tecnológicas de la Universidad Nacional de Asunción.

Archivos de Pediatría del Uruguay 2009; 80 (3)

Dr. Andrés Carrasco del Laboratorio de Embriología Molecular

1. Estudio hecho en anfibios demostró que el herbicida Roundup induce a la muerte celular e interfiere con los mecanismos de reparación fisiológica del DNA lo que puede incrementar el riesgo de mutaciones.
2. El mecanismo que describe el estudio es la alteración del “retinoic acid signaling pathway”. Este mecanismo está presente en los vertebrados (humanos) y asegura el correcto desarrollo de los órganos, huesos y tejidos ya que determina el tiempo exacto y el lugar de desarrollo de los órganos y tejidos en los embriones.

Glyphosate-Based Herbicides Produce Teratogenic Effects on Vertebrates by Impairing Retinoic Acid Signaling

Alejandra Paganelli, Victoria Gnazzo, Helena Acosta, Silvia L. López and Andrés E. Carrasco

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Chemical Research in Toxicology

Vol. 23: Issue. 10: Pages. 1586-1595
Publication Date (Web): August 9, 2010

DOI: 10.1021/tx1001749

The broad spectrum herbicide glyphosate is widely used in agriculture worldwide. There has been ongoing controversy regarding the possible adverse effects of glyphosate on the environment and on human health. Reports of neural defects and craniofacial malformations from regions where glyphosate-based herbicides (GBH) are used led us to undertake an embryological approach to explore the effects of low doses of glyphosate in development. *Xenopus laevis*

Informe de la Organización Earth Open Source sobre el glifosato y malformaciones

Acerca de los autores

Michael Antoniou, PhD (doctor en medicina) es lector en genética molecular y dirige el Grupo de Terapia y Expresión Genética del King's College de la Escuela de Medicina de Londres, Reino Unido. Tiene 28 años de experiencia en el uso de la tecnología de ingeniería genética, investigando la organización y el control de los genes, con más de 40 papers con revisión de pares de su trabajo original, y status de descubridor en varias patentes de biotecnología de expresión de genes. El Dr. Antoniou tiene una vasta red de colaboradores en la industria y el mundo académico que están utilizando sus descubrimientos sobre mecanismos de control de los genes para la elaboración de productos seguros y eficaces de investigación, diagnóstico y terapia y terapia genética humana somática para alteraciones heredadas y adquiridas.

Roundup and birth defects

Is the public being kept in the dark?

Michael Antoniou
Mohamed Ezz El-Din Mostafa Habib
C.Vyvan Howard
Richard C. Jennings
Carlo Leifert
Rubens Onofre Nodari
Claire Robinson
John Fagan

Earth Open Source
June 2011

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Roundup and birth defects: Is the public being kept in the dark?

4

Taken together, the industry studies and regulatory documents on which the current approval of glyphosate rests reveal that:

- Industry (including Monsanto) has known since the 1980s that glyphosate causes malformations in experimental animals at high doses
- Industry has known since 1993 that these effects could also occur at lower and mid doses
- The German government has known since at least 1998 that glyphosate causes malformations

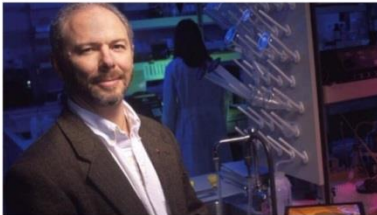
Nuevo estudio- daño generacional

Glyphosate Causes Serious Multi-Generational Health Damage to Rats – New WSU Research

Posted on Apr 23 2019 - 10:45pm by Sustainable Pulse

« PREVIOUS |

Washington State University (WSU) researchers have found a variety of diseases and other health problems in the second- and third-generation offspring of rats exposed to glyphosate, the world's most used weed killer. In the first study of its kind, the researchers saw descendants of exposed rats developing prostate, kidney and ovarian diseases, obesity and birth abnormalities.



Michael Skinner, a WSU professor of biological sciences, and his colleagues



Washington State University (WSU) researchers have found a variety of diseases and other health problems in the second- and third-generation offspring of rats exposed to glyphosate, the world's most used weed killer.

In the first study of its kind, the researchers saw descendants of exposed rats developing prostate, kidney and ovarian diseases, obesity and birth abnormalities.

New WSU Research Glyphosate Causes Serious Multi-Generational Health Damage to Rats

The research found no abnormalities in PARENTS or FIRST GENERATION offspring, that were exposed to a dose, half the amount expected to show no adverse effects.



However...

...the researchers saw “**dramatic increases**” in several pathologies affecting the SECOND and THIRD GENERATIONS.

• SECOND GENERATION

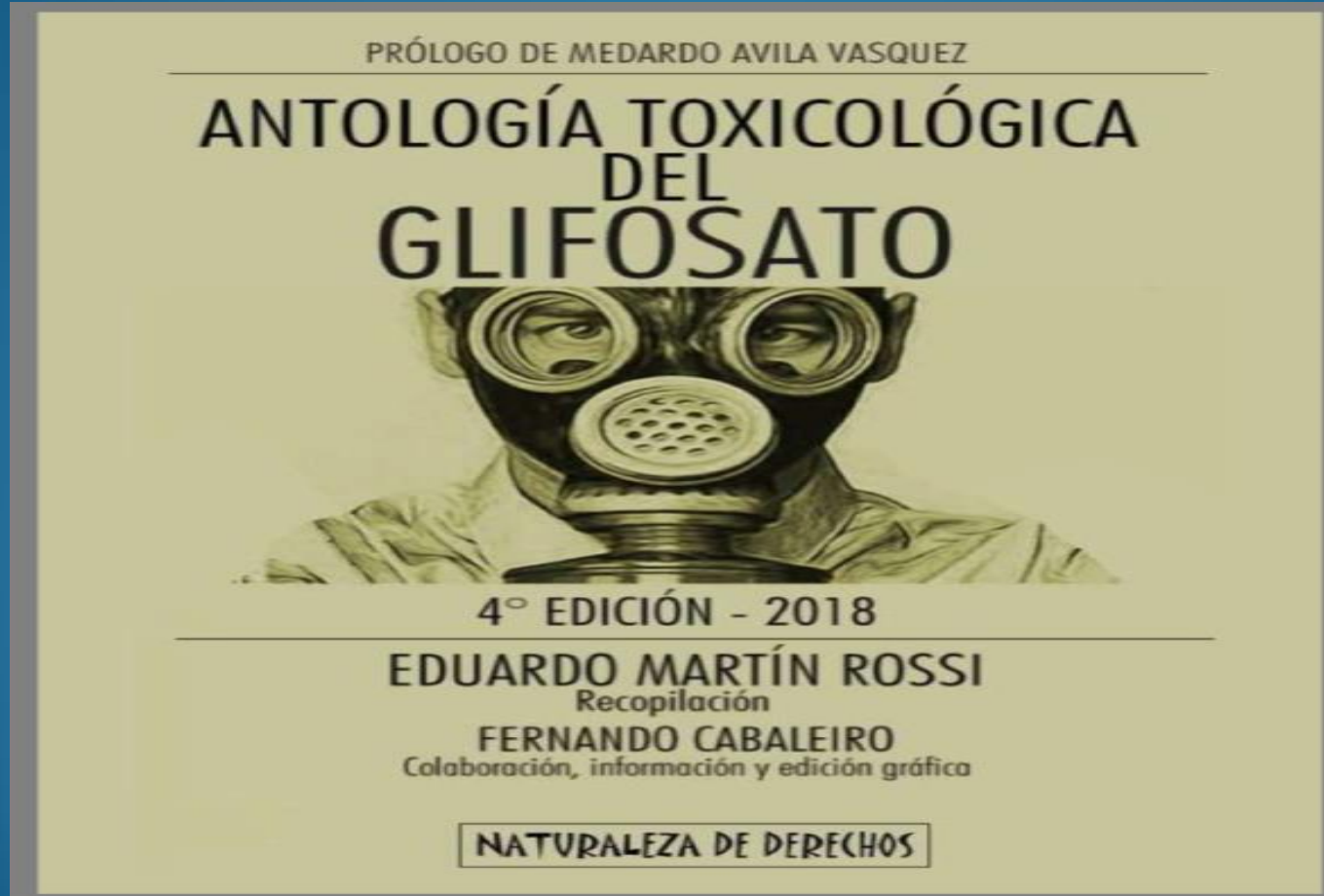
- had “significant increases” in testis, ovary and mammary gland diseases, as well as obesity;
- More than one-third of the mothers had unsuccessful pregnancies.

• THIRD GENERATION

- males - the researchers saw a 30% increase in prostate disease – three times that of a control population;
- females - 40% increase in kidney disease, or four times that of the controls;
- 2 out of 5 males and females were obese.



Más de 800 estudios que demuestran toxicidad del glifosato



¡Urge el principio de precaución!

- Remedio ético ante incertidumbres o controversias sobre un posible daño.
- Para aplicarlo no se necesita gran evidencia y en el caso del glifosato existe amplia investigación que lo vincula a múltiples enfermedades.
- Este principio ha sido aplicado por Francia, Noruega, Rusia y otros países.

Prohibición del glifosato en:

Estados Unidos:

1. La ciudad de Miami
2. Los Angeles
3. New York

Puerto Rico:

1. Aguas Buenas
2. San Juan
3. Proyecto en el Senado



EHN.ORG

**NYC leaders join calls for ban on
Monsanto herbicide**

Posición sobre el Proyecto De O. 43 Ordenanza Para Prohibir el Glifosato

- Apoyo a la prohibición del uso del glifosato en San Juan y Puerto Rico.
- Exhortación a una prohibición de su distribución y ventas.

¡Gracias!

Oficina: 787 282-7244

vilmacalderon.nutricionista@gmail.com

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