THE LANDSCAPE OF PESTICIDES & HERBICIDES



U.S. FARMING IS DEPENDENT ON CHEMICALS

There are **2 MILLION** U.S. farms.



98% of all U.S. FARMS use CONVENTIONAL practices spraying pesticides,

herbicides, and synthetic fertilizers.



80% of all pesticides are sprayed on corn, soy, potatoes, cotton, and wheat.

Corn	39.5% CORN
Soy	04 70/
	21.7% SOYBEANS
Potatoes	10.2% POTATOES
Cotton	7.3% COTTON
Wheat	4.5% WHEAT
Other	
	2.7% SORGHUM, 2.5% ORANGES, 2% PEANUTS,
	1.9% TOMATOES, 1.5% GRAPES, 1.5% RICE, 1.4% APPLES, 0.8% SUGARCANE, 2.5% OTHER

THE MOST HEAVILY SPRAYED HERBICIDE

GLYPHOSATE (aka Round Up) is the most commonly used herbicide, comprising half of all herbicides applied at 280 MILLION LBS annually.



U.S. regulators measure the risk of single exposure as opposed to other markets that seek cumulative exposure and combination exposure. Data tracks lbs. of active ingredients sold, as opposed to applications and number of compounds over time.

U.S. SPRAYS 2-3X MORE CHEMICALS THAN IN 1960

MILLION LBS OF PESTICIDE ACTIVE INGREDIENT



PESTICIDE USE IN U.S. AGRICULTURE. 21 SELECTED CROPS. 1960-2008

OTHER PESTICIDES FUNGICIDES **INSECTICIDES** HERBICIDES

OUR AG LANDS ARE DRENCHED IN CHEMICALS GLYPHOSATE SPRAYED FOR AGRICULTURAL USE IN 2019



Estimated use on agriculural land, in **POUNDS PER SQUARE MILE**

>114.64

- **114.64 27.98**
- 27.97 -5.71
- <5.71
- NO ESTIMATED USE

WHAT IS THE PROBLEM? PESTICIDES & HERBICIDES & FUNGICIDES ARE TOXIC

EXPOSURE IS HARMFUL FOR FARMERS, WORKERS & COMMUNITIES

- Multiple peer reviewed studies on NON-HODGKIN'S LYMPHOMA AND LEUKEMIA show a positive association with exposure.
- BRAIN, PROSTATE AND KIDNEY CANCERS are linked to high and prolonged exposure.
- Rural communities with exposure are linked to NEGATIVE HEALTH OUTCOMES including cancer.



- Pesticide toxins are FOUND IN 80% OF WATERWAYS near farms.
- Nearly HALF OF TESTED FOODS show detectable PESTICIDE RESIDUE.
- Broadly used Neonicotinoid is directly LINKED TO BEE DECLINES and found systemically in a variety of species.

The U.S. STILL USES 71 PESTICIDES BANNED in the EU, 11 banned in China, and 17 banned in Brazil.



GLYPHOSATE EXPOSURE LINKED TO CANCER

- The World Health Organization's
 International Agency of Research for
 Cancer puts most widely used herbicide
 GLYPHOSATE ON LIST AS PROBABLY
 CARCINOGENIC to humans.
- BAYER HAS SPENT OVER 10 BILLION
 ON GLYPHOSATE LAWSUITS, and it is
 now banned in 10 countries including
 Mexico and Germany.
- Chemical INDUSTRY HAS FUNDED MANY STUDIES resulting in a DEARTH OF INDEPENDENT STUDIES.

WHAT IS THE PROBLEM? U.S. SPRAYS PESTICIDES BANNED AROUND THE WORLD

STATUS BY COUNTRY

United States of America (USA) European Union (EU) Brazil (BRA) China (CHN)

NUMBERS

X = Banned
✓ = Approved
— = Not in database/unknown

COLORS

Green = banned/phasing out Red = approved Yellow = Not approved/unknown

(W) = World Health Organization deems "extremely" or "highly" hazardous pesticide

PESTICIDE	USA	EU	BRA	CHN
2,4-DB	\checkmark	\checkmark	×	×
Bensulide	\checkmark	×	×	
Chloropicrin	\checkmark	×		×
Dichlobenil	\checkmark	×	×	· · · · · · · ·
Dicrotophos ^(W)	\checkmark	×	×	
EPTC	\checkmark	×	×	
Norflurazon	\checkmark	×	×	
Oxytetracycline	\checkmark	×	×	
Paraquat	\checkmark	×	×	×
Phorate ^(W)	\checkmark	×	×	×
Streptomycin	\checkmark	×	×	\checkmark
Terbufos	\checkmark	×	\checkmark	×
Tribufos (DEF) ^(W)	\checkmark	×	×	

WHAT IS THE SOLUTION? ORGANIC FARMING



ORGANIC FARMING DOES NOT USE SYNTHETIC CHEMICALS ACCORD D IN CORRELA



ACCORDING TO THE AMERICAN MEDICAL ASSOCIATION A

DRAMATIC REDUCTION IN THE RISK OF CANCER

IS CORRELATED WITH EATING ORGANIC, PESTICIDE FREE FOOD

HOW IS IROQUOIS VALLEY FARMLAND REIT PART OF THE SOLUTION?

SINCE 2014 IROQUOIS VALLEY FARMERS HAVE ELIMINATED 8.2 MILLION LBS OF SYNTHETIC CHEMICALS FROM THE FOOD SYSTEM



OUR ORGANIC WHEAT FARMS ELIMINATED 1.4 MILLION LBS OF SYNTHETIC CHEMICALS



OUR ORGANIC CORN FARMS ELIMINATED 4.7 MILLION LBS OF SYNTHETIC CHEMICALS



OUR ORGANIC SOYBEAN FARMS ELIMINATED 2.1 MILLION LBS OF SYNTHETIC CHEMICALS

IROQUOIS VALLEY ONLY WORKS WITH TRANSITIONING & ORGANIC FARMERS WITH YOUR \$100,000 INVESTMENT



LEGAL DISCLAIMER – FORWARD LOOKING STATEMENTS

This presentation contains "forward-looking statements" about impact that represent our beliefs, projections and predictions about future events. These statements are necessarily subjective and involve known and unknown risks, uncertainties and a number of factors could cause future Company results to differ materially from these forward-looking statements. Past performance is not an indication or guarantee of future results.

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