

Republic of the Philippines
HOUSE OF REPRESENTATIVES
Quezon City

SEVENTEENTH CONGRESS
First Regular Session

HOUSE BILL NO. 5677



INTRODUCED BY ANAKPAWIS PARTY-LIST REPRESENTATIVE
ARIEL B. CASILAO
CARLOS ISAGANI T. ZARATE, EMMI A. DE JESUS, ANTONIO L. TINIO,
ARLENE D. BROSAS, FRANCE L. CASTRO, AND SARAH JANE I. ELAGO

EXPLANATORY NOTE

Glyphosate or N-(phosphonomethyl)glycine is a broad-spectrum herbicide developed and commercially introduced by Monsanto in 1974 under the brand name Roundup. It is believed to inhibit protein synthesis in weeds leading to death. It persists in some soils for up to three years and can bio-accumulate. It is used in plantations, parks, gardens and orchards. The global production of glyphosate reached 1.1 million tons in 2012 causing tremendous pressure to disperse Roundup Ready (RR) crops. RR crops increased glyphosate use from just 25-30 million lbs in 1995 to 180-185 million lbs in 2007.

A growing body of independent scientific evidence suggests that glyphosate is harmful to humans. Use of glyphosate formulations was found to induce DNA damage and has been associated with increased risk of (i) cancer especially non-Hodgkin's lymphoma; (ii) neurobehavioral disorders in children; (iii) birth defects and other diseases.

In the laboratory, glyphosate formulations were found to (i) inhibit the production of steroid hormones e.g. progesterone; (ii) cause cell death and necrosis in various human cell cultures at fairly low levels; (iii) induce congenital craniofacial malformations on frog and chicken embryos; and (iv) be highly toxic to frogs.

Continuous use of glyphosate disrupts soil microbial communities, and makes RR crops more susceptible to disease, deficient in key nutrients, and less productive than conventional crops. Glyphosate increases the severity of sudden death syndrome – a serious plant disease caused by *Fusarium* – in RR soybeans. Low level glyphosate spray has caused reduced leaf concentrations of calcium, manganese and magnesium as well as reduced seed concentrations of calcium, magnesium, iron and manganese in non-transgenic soybeans.

Intensive glyphosate use led to the emergence of glyphosate-resistant (GR) weeds, that resistance is now recorded in 35 weed species in 27 countries. Such widespread use also contaminated the environment with glyphosate residues being detected in food, drinking water, wine, beer, and in RR cotton products. The extent

of human exposure is confirmed by the presence of glyphosate in human urine and breast milk.

In 2015, the International Agency for Research on Cancer classified glyphosate as a probable human carcinogen. During the Monsanto Tribunal on October 2016 in the Hague (Netherlands), Dr. Peter Clausing a toxicologist, debunked the arguments used by the authorities to dismiss the significant finding of glyphosate-induced malignant lymphoma in mouse carcinogenicity bioassays that led to the reclassification of glyphosate as non-carcinogen. In that tribunal, Dr Clausing declared: *"In 2017 the European Chemicals Agency has to decide whether it accepts the compelling evidence for glyphosate's carcinogenicity and declares it a carcinogen. This would be an overdue acknowledgement of the reality."*

Such declaration resulted to national bans and restrictions, and voluntary action by local authorities and retailers to curb glyphosate use. Sri Lanka was the first country to ban it completely, although the ban has recently been relaxed to allow use in tea plantations; Italy has banned pre-harvest use, and all use in public places and those frequented by children and the elderly; France is phasing out the use of pesticides in towns and public areas; and the European Union has extended approval for glyphosate for only 18 months instead of the usual 15 years.

Glyphosate is included in Pesticide Action Network's (PAN) *List of Highly Hazardous Pesticides* targeted for global phase-out. The PAN monographs detail glyphosate's adverse effects on humans, ecosystem functioning, pollination services, biological controls, soil fertility and crop health. PAN has strongly urged governments to adopt agroecological approaches to pest/weed management.

Dr Rosemary Mason's open letter to European Chemicals Agency Executive Director Geert Dancet described the devastating effects of agrochemicals and how corporate power works to encourage scientific fraud and subvert public watchdogs and policy-making institutions to get toxic agrochemicals, especially glyphosate, onto the market and ensure they remain there. Revelations in Dr Mason's letter include (i) US Environmental Protection Agency's collusion with Monsanto in changing glyphosate's classification from Group C /probable carcinogen to Group E/evidence of non-carcinogenicity for humans; (ii) Monsanto's sealed secret studies showing glyphosate's carcinogenicity since the 1970s; (iii) Glyphosate's possible link with increased incidence of cataracts and interstitial damage, and a range of diseases e.g. brain tumors, cancers, non-Hodgkin's lymphoma, Parkinson's, multiple sclerosis, Alzheimer's and dementia; (iv) Glyphosate's adverse effects on bumblebees, butterflies, moths, bush crickets, spiders, dragonflies, ladybirds, solitary bees, hoverflies, bats, beetles, shield bugs and many other small creatures that have all but disappeared in glyphosate-ridden areas.

Mason posed the question "Why are you all protecting the pesticides industry?" to the various agencies responsible for protecting health and the environment, and recapped: "Monsanto has been lying to you for the sake of money ... CEO Hugh Grant and the US EPA knew that glyphosate caused all of these problems. The corporation concealed the carcinogenic effects of PCBs on humans and animals for seven years. They have no plans to protect you and your families from the tsunami of sickness that is affecting us all..."

The same question may be posed by us and the people to this Assembly if this bill is not passed the soonest possible time.

Furthermore, a very recent study entitled *Community Pesticide Action Monitoring in Mindanao, Philippines* conducted by Dr. Romeo F. Quijano, President of the Pesticide Action Network Philippines in collaboration with PAN Asia Pacific, the Kilusang Magbubukid ng Pilipinas, Sentro para sa Tunay na Repormang Agraryo, European Center for Constitutional and Human Rights, Citizens Alliance Unified for Sectoral Empowerment Davao del Sur, Community Primary Health Care-SOCSKSARGEN and other partners revealed disturbing facts:

1. Glyphosate is one of the five most commonly used pesticides in the area, together with another highly hazardous herbicide, Paraquat.
2. Pesticide handlers have inadequate training or none at all. Most are unaware of the hazards of pesticides that very few of them were conscious not to spray against wind direction. One sprayer-respondent even clears the applicator nozzle with his mouth.
3. There are plantations where the washing facilities are off-limits to workers. Thus, workers usually go home unwashed or do their washing at the rivers/streams.
4. There are no accessible comfort rooms that there are women workers who urinate on newly sprayed ground. One woman respondent divulged that she is already experiencing pain while urinating and have sores in her private parts.
5. Provision for masks, gloves, coveralls/aprons and boots is limited. Workers had to resort to the use of bra cups as masks since their employers do not provide them replacements once their masks are worn out. Only one pair of boots is provided, and is not sturdy enough to last a year. There are workers with sores on their legs and who have discoloured nails because they cannot afford to buy boots. Goggles are rarely provided. Most of the workers complained of eye pain/itchiness and tearing. Workers usually wear long sleeves and long pants to work.
6. There is at least one sick member and three types of illnesses per household. There are indications of endocrine disruption as can be deduced from the delayed menarche by most female respondents. There are reports of still births and deaths within the first year of birth which signify pesticide effects on the fetus.
7. Residential houses were found inside and within the 10 m radius of the banana plantations. Respondents from Davao were all exposed to pesticide drift, and there were cases when they were aerially sprayed while eating or on their way to the river to do laundry. Residents also enter newly sprayed areas without adequate protection.
8. There are a sizable number of children at the vulnerable ages of 6 years old and below within the vicinity of the plantations. One respondent recounted that her three-year old child lost consciousness while playing and ended up mentally handicapped. She attributed the cause of the illness to pesticide drift as the incident occurred during an aerial spray.

The UN's International Code of Conduct on Pesticide Management discourages the use of pesticides whose handling and application require the use of personal protective equipment (PPE) that is uncomfortable, expensive or not readily available especially in the case of small-scale users and farm workers in hot climates.

Glyphosate, as a probable human carcinogen and a highly hazardous pesticide, entails the use of PPE and thus, should not be marketed nor sold in the Philippines where hot climate prevails and where companies are not conscientious in providing adequate PPE.

Glyphosate is widely used in herbicide-resistant genetically modified (GM) corn (or commonly known as Roundup Ready corn) in the country. Data from the Bureau of Plant Industry of the Dept of Agriculture states that in 2011, the country plants about 685,317 hectares of GM corn of which 96% (658,846 Ha) is able to resist the said herbicide. In a study made by the Magsasaka at Siyentipiko para sa Pag-unlad ng Agrikultura (MASIPAG) on the socio-economic impacts of genetically modified corn in the Philippines, farmers spray about 4 liters of Glyphosate per hectare twice every season. Thus in one season of GM corn farming in 2011 alone, GM corn farms in the country are being doused with almost 5.3 Million liters of Glyphosate.

During the conduct of the study, it has been observed that GM corn farms are expanding on once forested and public lands as these are quickly being cleared by using Glyphosate. Alternative sources of food such as vegetables are affected by glyphosate drifting into their crops, thus reducing local food sources of farming communities.

With voluminous evidence on the hazards of glyphosate, the severity of its effects on humans and biodiversity on the areas where it is in use, its banning and phasing out in several countries, and the inappropriateness of PPE in the Philippine climate and conditions of use, the sale and use of glyphosate in the country must be stopped.

We are submitting this bill in the 17th Congress to push for a nationwide ban on glyphosate in order to protect life and health, especially women and children, and yet to be born, from its severely hazardous effects.

Approval of this bill is earnestly sought



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**AN ACT PROHIBITING THE DISTRIBUTION, SALE, AND USE OF GLYPHOSATE
IN THE PHILIPPINES**

*Be it enacted by the Senate and House of Representatives of the Philippines in
Congress assembled:*

Section 1. *Title.* This Act shall be known as the ‘Glyphosate Use Prohibition Act of 2017’.

Section 2. *Declaration of State Principles and Policies.* Pursuant to Section 15, Article II of the Philippine Constitution, which declares that the State shall protect and promote the right to health of the people and instill health consciousness among them, as well as Section 16, Article II of the Philippine Constitution, which further declares that the State shall protect and advance the right of the people to a balanced and healthful ecology in accord with the rhythm and harmony of nature, it is hereby the declared policy of the State:

1. To ensure the protection and promotion of these Constitutionally guaranteed rights to health and balanced ecology of the people, including generations yet to be born;
2. To protect the people from the hazards of the environmentally degrading and health threatening agricultural practice of using glyphosate to control weeds; and
3. To adopt the precautionary principle in assessing projects which are environmentally critical.

Section 3. *Definition of terms.* For purposes of this Act, the following terms shall be understood as follows:

A. Back spraying refers to the application of substances, including but not limited to pesticides and any other hazardous substances.

B. Agricultural activity, in relation to this Act, refers to the cultivation of the soil, sowing of seeds, planting of crops, growing of fruit trees, and shall include,

among others, the following activities: land preparation, seeding, planting, cultivation, harvesting, bagging, and other activities and practices performed in conjunction with farming operations.

- C. Agricultural entity** refers to any person, whether natural or juridical, who is involved in agricultural activities.
- D. Banned pesticide or herbicide** is a pesticide or a herbicide for which all registered uses have been prohibited by a government action or for which all requests for registration or equivalent action for all uses have, for health or environmental reasons, not been granted.
- E. Global Positioning System survey** refers to a survey plan to be made with the aid of Global Positioning System showing the metes and bounds of each agricultural farm/plantation that shall be submitted to the Office of the Mayor of the municipality/city which has jurisdiction over concerned agricultural farms/plantations.
- F. Hazardous substances** refer to substances which present either:
- 1. Short-term acute hazards**, such as acute toxicity by indigestion, inhalation or skin absorption, or other skin or eye contact hazards, or the risk of fire or explosion; or
 - 2. Long-term hazards**, including chronic toxicity upon repeated exposure, carcinogenicity, resistant to detoxification process, such as biodegradation, the potential to pollute underground or surface waters, or aesthetically objectionable properties such as offensive odors; or those substances which the Fertilizer and Pesticides Authority (FPA) under the Department of Agriculture and other government agencies will identify as hazardous.
- G. Herbicide** refers to any substance or product, or a mixture thereof, including active ingredients, adjuvants and formulations, intended to control, prevent, destroy, repel, or mitigate, directly or indirectly, any unwanted plant/weed.
- H. Imminent hazard** refers to a situation which exists when the use of a pesticide or herbicide will likely result in unreasonable adverse effects on the public and/or the environment or will involve unreasonable hazards to the survival of species declared endangered by the appropriate authorities.
- I. Glyphosate** refers to herbicides with N-(phosphonomethyl)glycine as the active ingredient (chemical formula $C_3H_8NO_5P$). Technical grade glyphosate is a colorless, odorless crystalline powder, formulated as water-soluble concentrates and granules. Most formulations contain the isopropylamineammonium salt of glyphosate (glyphosate-isopropyl ammonium), but here the term glyphosate is taken to mean all salts of N-(phosphonomethyl)glycine.
- J. Pest** refers to any form of plant or animal life, or any pathogenic agent injurious or potentially injurious to plants or plant products.
- K. Pesticide** refers to any substance or product, or a mixture thereof, including active ingredients, adjuvants and pesticide formulations, intended to control,

prevent, destroy, repel or mitigate, directly or indirectly, any pest. The term shall be understood to include insecticide, fungicide, bactericide, nematocide, herbicide, acaricide, molluscicide, avicide, rodenticide, plant regulator, defoliant, dessicant, and the like.

- L. Restricted pesticide** or herbicide is a pesticide for which virtually all registered uses have been prohibited by final government regulatory action, but for which certain specific registered use or uses remain authorized. It may not be allowed for distribution, sale and use in certain crops and/or areas of the country; and may be used only by and under the supervision of certified applicators, or under such conditions as the FPA executive director may require.
- M. Toxicity** refers to a physiological or biological property determinative of the capacity of a chemical to do harm or produce injury to a living organism through non-mechanical means.
- N. Unauthorized pesticide or herbicide** is a pesticide or herbicide for which registration has been denied by the government.
- O. Weed** refers to any form of plant injurious or potentially injurious or perceived to be injurious to agricultural crops.

Section 4. Ban on the distribution, sale, and use of glyphosate in agriculture and other activities. The distribution, sale, and use of glyphosate for agriculture and other pest management activities are hereby declared as contrary to law. Its distribution, sale, and use in the Philippines are hereby declared illegal and punishable under this Act.

Section 5. Scope and presumption. The provision of this Act shall apply to the distribution, sale, and use of glyphosate in all agricultural and pest management activities; Provided, that the detection of glyphosate residues in the agricultural crops, food, and environment is a *prima facie* evidence of the commission of the act.

Section 6. Liability. Any person, natural or juridical, who distributes, sells, buys, or applies glyphosate shall be held liable and penalized under section 10 hereof. Provided, that if the violator is a corporation, partnership or any other juridical entity, the penal provisions hereof shall be applied to the members of the Board and the officers of the corporation, the managing partner in the case of partnership, or the equivalent head in the case of any other juridical entity or any other person acting on their behalf who have acquiesced or consented to the distribution, sale, use and application of glyphosate. In the case of a corporation, the indictment shall include the manager of the department directly responsible for the commission of the act.

Section 7. Implementing agencies. The Fertilizer and Pesticide Authority (FPA) shall be primarily responsible for the implementation and enforcement of this Act.

Section 8. There shall be created a municipal or city inspection and monitoring committee, to monitor compliance with this Act, to be composed of representatives of farmers'/farmworkers' organizations, environment protection advocates, civil society, church people, and youth organizations. The municipal/city agriculturist, municipal/city health officer, community environmental officer, and the

municipal/city chief of police shall be automatic members of the inspection and monitoring committee.

The municipality/city-based inspection and monitoring committees shall be co-headed by the municipal or city health officer and the municipal or city agriculturist. It shall have inspectorial and investigative powers, with the power to issue subpoena *duces* and *ad testificandum*, in cases where complaint for possible violation of this Act has been reported or filed to the committee.

Any persons who shall delay, prohibit, bar, cause the delay or prohibition of the inspection and investigation of the committee shall be subject the corresponding penalty herein-below provided.

Any person or entity who shall fail to obey the subpoena of the committee may be held liable for contempt and punished accordingly in accordance with the provisions of the Rules of Court on Contempt.

The committee, after conducting inspection or investigation, shall submit its report to the FPA which shall thereafter cause the prosecution of any violator of this Act.

Section 9. Documentation/Inventory. All distributors, suppliers, and sellers of pesticides and herbicides shall be required to submit a list of the products they distribute, supply, or sell to the city or municipality monitoring committee where they are based. The failure to do so shall merit suspension or cancellation of business permit and their operation.

Any person or entity using any pesticide or herbicide shall be required to submit to the monitoring committee a report which shall include, but not limited to the following:

- a. The area covered by these agricultural farms/plantations where the pesticide or herbicide shall be used or applied.
- b. Main crop produced by these agricultural farms/plantations
- c. Pesticides used or intended to be use in the farm or plantation.

Section 10. Penal provisions. The penalty of *prision mayor* shall be imposed upon any person or entity found to have violated section 4 of this Act.

The aerial spraying and similar operations with the use of glyphosate shall be considered an aggravating circumstance and any person or entity found guilty thereof shall be punished with a penalty next higher in degree.

The penalty of *prision correccional* shall be imposed upon any person or entity found to have violated the provision of the third paragraph, of section 8 hereof.

In addition, the following fines shall be imposed:

1. For violation of Section 4, a fine of not less than fifty thousand Philippine pesos (P50,000.00) but not more than one hundred thousand Philippine pesos (P100,000.00) per day shall be imposed upon the owner of the plantation who actually instructed the use of glyphosate;

2. For failure to submit report under Section 9, second paragraph of this Act, a fine of not less than fifty thousand Philippine pesos (P50,000.00) shall be imposed.

The filing of a criminal action under this Act shall be without prejudice to the filing of civil and administrative cases against the violators hereof by the persons or communities affected by the use of glyphosate.

Section 11. *Implementing Rules and Regulations.* Within sixty (60) days after the effectivity of this Act, the Department of Agriculture, through the Fertilizer and Pesticide Authority, in coordination with the DILG, DENREMB, and DOH, shall formulate and issue Implementing Rules and Regulations of this Act.

Section 12. *Separability clause.* If any part or provision of this Act is declared void or unconstitutional, the remaining provisions thereof shall remain in full force and effect.

Section 13. *Repealing clause.* All other laws, decrees, rules and regulations, orders, and issuances inconsistent with the provisions of this Act are hereby repealed or modified accordingly.

Section 14. *Effectivity clause.* This Act shall take effect after fifteen (15) days following its publication in the Official Gazette or in any newspaper of general circulation.

Approved.