HOUSE OF REPRESENTATIVES
TWENTY-NINTH LEGISLATURE, 2017
STATE OF HAWAII

# H.B. NO. 1282

# A BILL FOR AN ACT

RELATING TO INSECTICIDE AND HERBICIDE USE.

**BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:**

SECTION 1. The legislature finds that pollinators, including honeybees, are a vital part of agricultural production in the State of Hawaii. In this State, pollinators are critical to valuable specialty crops, including melons, watermelons, cucumbers, squash, lychee, mango, macadamia nuts, coffee beans, eggplant, avocado, guava, herbs, and some flowering plants, such as sunflowers. In 2007, the department of agriculture estimated that nearly seventy per cent of the State's food crops depend on pollination by bees. In North America, one-third of the food produced depends on pollination by bees, including nearly ninety-five varieties of fruits and other foods of high nutritional value.

Scientists have linked the use of systemic neonicotinoid insecticides to the rapid decline of honeybees and other pollinators and to the deterioration of pollinator health. This class of insecticides damages the central nervous system of insects, causing tremors, paralysis, and death at very low

doses. Systemic insecticides are absorbed into treated plants and distributed throughout their vascular systems. As a result, treating a plant or coating a seed with neonicotinoids can render parts of the plant, including the roots, leaves, stems, flowers, nectar, pollen, and guttation fluid, toxic to insects. The insecticides are persistent in soil and easily transported via air, dust, and water. In addition to the acute lethal effects, neonicotinoid insecticides cause sub-lethal effects, including impaired foraging and feeding behavior, disorientation, weakened immunity, delayed larval development, and increased susceptibility to viruses, diseases, and parasites. The toxins also kill or weaken beneficial invertebrates, birds, and other wildlife, through direct and indirect effects.

Hawaii boasts a variety of native pollinators, including honeycreeper birds, Hawaiian yellow-faced bees, and the Kamehameha butterfly. Unfortunately, these iconic species are in peril. Native bees, beneficial insects of all kinds, and food chains of aquatic invertebrates, insects, birds, bats, and other pollinators in Hawaii are at risk from environmental contamination by highly-persistent neonicotinoids. Twenty

species of honeycreepers are already extinct. In 2016, the United States Fish and Wildlife Service added the following seven species of Hawaiian yellow-faced bees to the federal lists of endangered and threatened wildlife and plants: *Hylaeus anthracinus, Hylaeus longiceps, Hylaeus assimulans, Hylaeus facilis, Hylaeus hilaris, Hylaeus kuakea, and Hylaeus mana.* These native bee species are at even greater risk from the use of neonicotinoid insecticides.

Scientists have also found that seeds coated in neonicotinoids are harmful to birds. The consumption of a single corn kernel coated with a neonicotinoid can kill a medium-sized songbird.

In 2013, the European Union voted to suspend the use of three major neonicotinoids, imidacloprid, clothianidin, and thiamethoxam, on certain agricultural crops pending a review of their safety. States in this country have also restricted some neonicotinoid uses to address their risks.

In 2015, the United States Environmental Protection Agency announced a moratorium on approvals for new outdoor uses of neonicotinoids. Since January 2016, the United States Fish and Wildlife Service has prohibited uses of neonicotinoid pesticides

in agricultural practices within the National Wildlife Refuge System.

The legislature also finds that glyphosate is a broad-spectrum herbicide, meaning the herbicide kills many varieties of green vegetation and is widely used in agricultural, residential, aquatic, and other settings. In fact, glyphosate is the most widely used herbicide globally and within the United States due to the widespread cultivation of "Roundup Ready" crops, i.e., crops that have been genetically engineered to withstand its application. Because of glyphosate's intensive and extensive use, it is regularly found in food, the air, rainfall, and surface waters.

The increased use of glyphosate in genetically engineered agriculture has resulted in the rapid development and proliferation of previously unknown herbicide-tolerant superweeds. As more crops are genetically engineered to resist glyphosate, glyphosate use and resistance in weeds both increase. Superweeds threaten to overtake the habitat of native flora and fauna in uncultivated lands and force farmers and land managers to use increasingly toxic and expensive herbicides,

which further exacerbates the environmental and health-related impacts of the herbicide.

The increased use of glyphosate-based herbicides with glyphosate-resistant crops has substantial environmental impacts, including reduced biodiversity, the loss of milkweed (a plant that the monarch butterfly relies on, which has caused a steady decline in monarch butterfly populations), and potential impacts to water and aquatic life, such as amphibians.

In 2015, the International Agency for Research on Cancer, a division of the World Health Organization and the world's leading authority on cancer, unanimously concluded that glyphosate is a probable carcinogen. The International Agency for Research on Cancer's determination was based on a rigorous assessment that concluded that there is sufficient evidence of carcinogenicity in experimental animals.

In light of glyphosate's proven environmental and human health risks, many jurisdictions have moved to restrict its use. For example, at least two municipalities in California have banned the use of glyphosate herbicides from use on public lands within their localities. These municipalities have found organic alternatives to glyphosate, such as "avenger," to be

effective. California has also proposed listing glyphosate as a possible carcinogen under the state's Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65), which requires California to publish chemicals known to cause cancer or birth defects or other reproductive harm. Finally, in 2016, the European Commission, the executive body of the European Union, made a series of recommendations to restrict the use of glyphosate while the European Chemical Agency concludes its review of the chemical. One of the recommendations calls for minimizing the use of glyphosate herbicides in public parks, public playgrounds, and gardens.

The purpose of this Act is to defend and protect Hawaii's public health, agricultural economy, and natural ecosystems by:

(1) Restricting the exposure of Hawaii's honeybees, native bees, insects, birds, and other pollinators to neonicotinoid insecticides; and

(2) Restricting the exposure of Hawaii's residents, plants, animals, and natural resources to glyphosate herbicides.

SECTION 2. Chapter 149A, Hawaii Revised Statutes, is amended by adding a new section to be appropriately designated and to read as follows:

"**§149A- County authority.** Any county may adopt a rule or ordinance that places stricter limitations on the use of neonicotinoid insecticides or glyphosate herbicides than those placed by this chapter or rules adopted under this chapter. In the case of a conflict between the requirements or limitations of this chapter and any county rule or ordinance regarding the use of neonicotinoid insecticides, the more restrictive requirements shall apply."

SECTION 3. Section 149A-2, Hawaii Revised Statutes, is amended by adding two new definitions to be appropriately inserted and to read as follows:

""Glyphosate" or "glyphosate herbicides" includes all herbicides that contain glyphosate as one of the active ingredients and tank mixes of herbicides containing glyphosate as one of the active ingredients.

"Neonicotinoid insecticides" means a class of systemic pesticides with a common mode of action that affects the central nervous system of insects that includes the following active

ingredients: acetamiprid, clothianidin, dinoteluran, imidacloprid, thiamethoxam, or other new neonicotinoid insecticides as specified by the department pursuant to rule."

SECTION 4. Section 149A-31, Hawaii Revised Statutes, is amended to read as follows:

"**§149A-31 Prohibited acts.** No person shall:

(1) Use any pesticide in a manner inconsistent with its label, except that it shall not be unlawful to:

(A) Apply a pesticide at any dosage, concentration, or frequency less than that specified on the label or labeling; provided that the efficacy of the pesticide is maintained and further provided that, when a pesticide is applied by a commercial applicator, the deviation from the label recommendations must be with the consent of the purchaser of the pesticide application services;

(B) Apply a pesticide against any target pest not specified in the labeling if the application is to a crop, animal, or site specified on the label or labeling; provided that the label or labeling

does not specifically prohibit the use on pests other than those listed on the label or labeling;

(C) Employ any method of application not prohibited by the labeling;

(D) Mix a pesticide or pesticides with a fertilizer when [~~such~~] the mixture is not prohibited by the label or labeling; or

(E) Use in a manner determined by rule not to be an unlawful act;

(2) Use, store, transport, or discard any pesticide or pesticide container in any manner which would have unreasonable adverse effects on the environment;

(3) Use or apply restricted use pesticides unless the person is a certified pesticide applicator or under the direct supervision of a certified pesticide applicator with a valid certificate issued pursuant to rules adopted under section 149A-33(1); provided that it shall be prohibited to use or apply a restricted use pesticide for structural pest control uses for a fee or trading of services, unless the user or applicator is a pest control operator or is employed

by a pest control operator licensed under chapter 460J;

(4) Use or apply pesticides in any manner that has been suspended, canceled, or restricted pursuant to section 149A-32.5;

(5) Falsify any record or report required to be made or maintained by rules adopted pursuant to this chapter; [~~or~~]

(6) Fill with water, through a hose, pipe, or other similar transmission system, any tank, implement, apparatus, or equipment used to disperse pesticides, unless the tank, implement, apparatus, equipment, hose, pipe, or other similar transmission system is equipped with an air gap or a reduced-pressure principle backflow device meeting the requirements under section 340E-2 and the rules adopted thereunder[~~.~~]; <u></u>

<u>(7) After December 31, 2019, apply any neonicotinoid insecticide or glyphosate herbicide, including the planting of any seed or plant pretreated with any</u>

neonicotinoid insecticide, on any public land owned or maintained by the State without a:

(A) License issued by the State or any agency of the federal government to conduct neonicotinoid insecticide research; or

(B) Permit issued by the State to apply any neonicotinoid insecticide or glyphosate herbicide because:

(i) The situation poses an immediate threat to human health and the environment; and

(ii) There is no viable alternative to the use of the proposed neonicotinoid insecticide or glyphosate herbicide."

SECTION 5. Within one year after the effective date of this Act, the department of agriculture shall adopt rules pursuant to section 149A-33, Hawaii Revised Statutes, further defining and implementing the provisions of this Act.

SECTION 6. If any provision of this Act, or the application thereof to any person or circumstance, is held invalid, the invalidity does not affect other provisions or applications of the Act that can be given effect without the

invalid provision or application, and to this end the provisions of this Act are severable.

SECTION 7. This Act shall be liberally construed to effectuate its purpose.

SECTION 8. Statutory material to be repealed is bracketed and stricken. New statutory material is underscored.

SECTION 9. This Act shall take effect upon its approval.

INTRODUCED BY: _____

JAN 24 2017

# H.B. NO. 1282

**Report Title:**
Neonicotinoid Insecticide; Glyphosate Herbicide; Pesticides; Agriculture

**Description:**
Prohibits the application of neonicotinoid insecticides and glyphosate herbicides after December 31, 2019, without a license or permit from the state or federal government.

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