
A BILL FOR AN ACT

RELATING TO INSECTICIDE AND HERBICIDE USE.

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

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

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



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

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



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

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

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

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



1 in agricultural practices within the National Wildlife Refuge
2 System.

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

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



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

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

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

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



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

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

- 14 (1) Restricting the exposure of Hawaii's honeybees, native
15 bees, insects, birds, and other pollinators to
16 neonicotinoid insecticides; and
- 17 (2) Restricting the exposure of Hawaii's residents,
18 plants, animals, and natural resources to glyphosate
19 herbicides.



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

4 "§149A- County authority. Any county may adopt a rule
5 or ordinance that places stricter limitations on the use of
6 neonicotinoid insecticides or glyphosate herbicides than those
7 placed by this chapter or rules adopted under this chapter. In
8 the case of a conflict between the requirements or limitations
9 of this chapter and any county rule or ordinance regarding the
10 use of neonicotinoid insecticides, the more restrictive
11 requirements shall apply."

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

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

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



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

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

6 "**§149A-31 Prohibited acts.** No person shall:

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

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

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



- 1 does not specifically prohibit the use on pests
2 other than those listed on the label or labeling;
- 3 (C) Employ any method of application not prohibited
4 by the labeling;
- 5 (D) Mix a pesticide or pesticides with a fertilizer
6 when [~~such~~] the mixture is not prohibited by the
7 label or labeling; or
- 8 (E) Use in a manner determined by rule not to be an
9 unlawful act;
- 10 (2) Use, store, transport, or discard any pesticide or
11 pesticide container in any manner which would have
12 unreasonable adverse effects on the environment;
- 13 (3) Use or apply restricted use pesticides unless the
14 person is a certified pesticide applicator or under
15 the direct supervision of a certified pesticide
16 applicator with a valid certificate issued pursuant to
17 rules adopted under section 149A-33(1); provided that
18 it shall be prohibited to use or apply a restricted
19 use pesticide for structural pest control uses for a
20 fee or trading of services, unless the user or
21 applicator is a pest control operator or is employed



- 1 by a pest control operator licensed under chapter
2 460J;
- 3 (4) Use or apply pesticides in any manner that has been
4 suspended, canceled, or restricted pursuant to section
5 149A-32.5;
- 6 (5) Falsify any record or report required to be made or
7 maintained by rules adopted pursuant to this chapter;
8 [~~or~~]
- 9 (6) Fill with water, through a hose, pipe, or other
10 similar transmission system, any tank, implement,
11 apparatus, or equipment used to disperse pesticides,
12 unless the tank, implement, apparatus, equipment,
13 hose, pipe, or other similar transmission system is
14 equipped with an air gap or a reduced-pressure
15 principle backflow device meeting the requirements
16 under section 340E-2 and the rules adopted
17 thereunder[~~-~~];
- 18 (7) After December 31, 2019, apply any neonicotinoid
19 insecticide or glyphosate herbicide, including the
20 planting of any seed or plant pretreated with any



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

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

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

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

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

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

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



H.B. NO. 1282


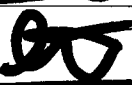

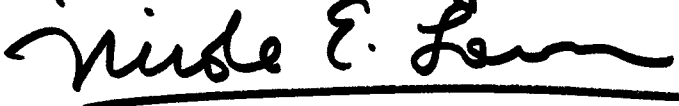

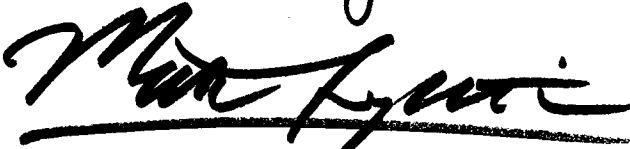

1 invalid provision or application, and to this end the provisions
2 of this Act are severable.

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

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

7 SECTION 9. This Act shall take effect upon its approval.
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INTRODUCED BY:


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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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