

JAN 23 2014

A BILL FOR AN ACT

RELATING TO HEALTH.

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

1 SECTION 1. The legislature finds that the use of chemical
2 pesticides and genetically modified organisms may pose risks to
3 health. Pesticides have the potential to contaminate
4 groundwater, and are often toxic to humans, animals, bees, and
5 other insects. Genetically modified plants could potentially
6 disperse into the environment through pollen drift, seed
7 commingling, and inadvertent transfer of seeds, which could have
8 negative environmental and economic impacts.

9 The purpose of this Act is to establish provisions to
10 inform the public and protect the public from any direct,
11 indirect, or cumulative negative impacts on the health and
12 natural environment by governing the use of pesticides and
13 genetically modified organisms.

14 SECTION 2. Chapter 328, Hawaii Revised Statutes, is
15 amended by adding a new part to be appropriately designated and
16 to read as follows:

17 **"PART . DISCLOSURE OF PESTICIDES AND GENETICALLY**

18 **MODIFIED ORGANISMS**



1 **§328-A Definitions.** As used in this part, unless the
2 context clearly requires otherwise:

3 "Active ingredient" means:

4 (1) In the case of a pesticide other than a plant
5 regulator, defoliant, or desiccant, an ingredient
6 which will prevent, destroy, repel, or mitigate any
7 pest;

8 (2) In the case of a plant regulator, an ingredient which,
9 through physiological action, will accelerate or
10 retard the rate of growth or maturation or otherwise
11 alter the behavior of ornamental or crop plants or the
12 produce thereof;

13 (3) In the case of a defoliant, an ingredient which will
14 cause the leaves or foliage to drop from a plant; and

15 (4) In the case of a desiccant, an ingredient which will
16 artificially accelerate the drying of plant tissues.

17 "Adult family boarding home" means any family home
18 providing for a fee, twenty-four hour living accommodations to
19 no more than five adults, unrelated to the family, who are in
20 need of minimal protective oversight care in their daily living
21 activities, in compliance with state licensing requirements.



1 "Adult family group living home" means any family home
2 providing twenty-four hour living accommodations for a fee to
3 five to eight elderly, handicapped, developmentally disabled, or
4 totally disabled adults, unrelated to the family, who are in
5 need of long-term minimal assistance and supervision in the
6 adult's daily living activities, health care, and behavior
7 management, in compliance with state licensing requirements.

8 "Agriculture" means the breeding, planting, nourishing,
9 caring for, gathering, and processing of any animal or plant
10 organism for the purpose of nourishing people or any other plant
11 or animal organism, or for the purpose of providing the raw
12 material for non-food products; and shall include the growing of
13 flowers and other ornamental crops and the commercial breeding
14 and caring for animals as pets.

15 "Ahupua'a" means a land division usually extending from the
16 uplands to the sea.

17 "Certified pesticide applicator" means any individual who
18 is certified under section 149A-33(1) as authorized to use or
19 supervise the use of any pesticide which is classified for
20 restricted use.

21 "Commercial agricultural entity" means a firm, corporation,
22 association, partnership, or any organized group of persons,



whether incorporated or not, that is engaged in growing, developing, cultivating, or producing agricultural products.

"Crop" means a plant or product thereof that can be grown and harvested for subsistence, profit, or research.

"Day care center" means any facility where seven or more children under the age of eighteen are cared for without overnight accommodations at any location other than their normal place of residence, in compliance with state licensing requirements; includes child care services and other similar uses and facilities consistent with this definition and not covered under the definition of "family child care home".

"Dwelling" means a building or portion thereof designed or used exclusively for residential occupancy and having all necessary facilities for permanent residency such as living, sleeping, cooking, eating, and sanitation.

"Environment" means water, air, land, and all plants and humans and other animals living therein, and the interrelationships which exist among them.

"EPA" means the United States Environmental Protection Agency.

"Experimental genetically modified organisms" means organisms that have not received final approval by the Federal



1 Food and Drug Administration, United States Department of
2 Agriculture, EPA, or the appropriate federal regulatory body for
3 human consumption, release into the environment, or both.

4 "Family care home" means any care home occupied by not more
5 than five care home residents, in compliance with state
6 licensing requirements.

7 "Family child care home" means providing child care
8 services and other similar uses consistent with this definition
9 where six or fewer children under the age of eighteen are cared
10 for in a private dwelling unit without overnight accommodations
11 at any location other than the children's normal place of
12 residence, in compliance with state licensing requirements.

13 "FDA" means the Federal Food and Drug Administration.

14 "General use pesticide" means a pesticide other than one
15 designated as a restricted use pesticide.

16 "Genetically modified" means produced from an organism or
17 organisms in which the genetic material has been genetically
18 engineered through the application of:

- 19 (1) In vitro nucleic acid techniques, which include, but
20 are not limited to: recombinant deoxyribonucleic acid
21 (DNA) techniques; direct injection of nucleic acid



1 into cells or organelles; encapsulation; gene
2 deletion; and doubling; or

- 3 (2) Methods of fusing cells beyond the taxonomic family
4 that overcome natural physiological reproductive or
5 recombinant barriers, and that are not techniques used
6 in traditional breeding and selection such as
7 conjugation, transduction, and hybridization.

8 For purposes of this definition:

- 9 (1) "In vitro nucleic acid techniques" include but are not
10 limited to recombinant DNA or RNA techniques that use
11 vector systems and techniques involving the direct
12 introduction into the organisms of hereditary
13 materials prepared outside the organisms such as
14 micro-injection, macro-injection, chemoporation,
15 electroporation, micro-encapsulation, and
16 liposomelfusion; and

- 17 (2) An animal that has not itself been genetically
18 modified, regardless of whether such animal has been
19 fed or injected with any food or any drug that has
20 been produced through means of genetic modification,
21 shall not be considered "genetically modified" for
22 purposes of this part.



1 "Genetically modified organism" or "GMO" means an organism
2 or organisms whose genetic material has been genetically
3 modified.

4 "Ground cover" means small plants such as salal, ivy,
5 ferns, mosses, grasses, or other types of vegetation that
6 normally cover the ground and includes trees and shrubs less
7 than six inches in diameter.

8 "Medical facility" means a facility licensed by the State
9 to provide medical services.

10 "Nurse practitioner" means a person licensed as an advanced
11 practice registered nurse under chapter 457.

12 "Nursing home" means a facility established for profit or
13 nonprofit, which provides nursing care and related medical
14 services on a twenty-four hour per day basis to two or more
15 individuals because of illness, disease, or physical or mental
16 infirmity, in compliance with state licensing requirements.

17 "Orchard" means the establishment, care, and harvesting of
18 over twenty-five fruit-bearing trees, including but not limited
19 to banana, coffee, guava, papaya, or persimmon, for the purpose
20 of selling the fruit to others.

21 "Organism" means any biological entity capable of
22 replication, reproduction, or transferring genetic material.



1 "Park" means any park, park roadway, playground, beach
2 right-of-way, or other recreational areas under the control,
3 management, and operation of the state.

4 "Perennial waterway" means a natural waterway that has
5 continuous flow in parts of its waterway bed year round during
6 years of normal rainfall.

7 "Pest" means any insect, rodent, nematode, fungus, weed, or
8 any other form of terrestrial or aquatic plant or animal life or
9 virus, bacterium, or any other microorganism, except viruses,
10 bacterium, or any other microorganisms on or in living humans or
11 other living animals, which the administrator of the EPA
12 determines to be a pest.

13 "Pesticide" means any substance or mixture of substances
14 intended for preventing, destroying, repelling, or mitigating
15 any pest, and any substance or mixture of substances intended
16 for use as an attractant, plant regulator, defoliant, or
17 desiccant. A product shall be deemed to be a pesticide
18 regardless of whether it is intended for use as packaged, or as
19 a dilution or mixture with substances such as carriers or baits.
20 Products not considered pesticides include:

- 21 (1) Deodorants, bleaching agents, and cleaning agents for
22 which no pesticidal claims are made or implied;



(2) Embalming fluids;

(3) Building materials which have been treated to protect the material itself against any pest and bear no claims for protection of other surfaces or objects;

(4) Fabrics which have been treated to protect the fabric itself from insects, fungi, or any other pests;

(5) Fertilizer and other plant nutrients; and

(6) Products intended only for use after further processing or manufacturing such as grinding to dust or other operations.

"Physician" means an individual authorized to practice medicine or osteopathy under chapter 453.

"Public roadway" means a roadway on which the public is allowed to generally travel in a vehicle without obtaining special permission or providing advance notice.

"Registered beekeeper" means a person registered with the Hawaii apiary program, through the department of agriculture.

"Residential care home" means any care home facility occupied by more than five care home residents, in compliance with state licensing requirements.

"Restricted-entry interval" means the time after the end of a pesticide application during which entry into the treated area



1 is restricted, as contained within the worker protection
2 standard for agricultural pesticides regulation established by
3 the EPA, and specified on all agricultural plant pesticide
4 product labels.

5 "Restricted use pesticide" means:

6 (1) A pesticide or pesticide use classified by the
7 administrator of the EPA for use by certified
8 applicators or competent persons under their direct
9 supervision and so designated on the label of the
10 pesticide; or

11 (2) A pesticide or pesticide use classified by the board
12 of agriculture for use by certified applicators or
13 competent persons under their direct supervision.

14 "School" means an institution with an organized curriculum
15 offering instruction.

16 "Shoreline" means the upper reaches of the wash of the
17 waves, other than storm and seismic waves, at high tide during
18 the season of the year in which the highest wash of the waves
19 occurs, usually evidenced by the edge of vegetation growth, or
20 the upper limit of debris left by the wash of the waves.

21 "Significant effect" means the sum of effects on the
22 quality of the environment, including actions that irrevocably



1 commit a natural resource, curtail the range of beneficial uses
2 of the environment, are contrary to the State's environmental
3 policies or long-term environmental goals as established by law,
4 or adversely affect the economic welfare, social welfare, or
5 cultural practices of the community and State.

6 "USDA" means the United States Department of Agriculture.

7 "Worker protection standard" means the worker protection
8 standard for agricultural pesticides regulation established by
9 the EPA, which is aimed at reducing the risk of pesticide
10 poisonings and injuries among agricultural workers and pesticide
11 handlers, and contains requirements for pesticide safety
12 training, notification of pesticide applications, use of
13 personal protective equipment, restricted-entry intervals after
14 pesticide application, decontamination supplies, and emergency
15 medical assistance.

16 **§328-B Mandatory disclosure of pesticides and genetically**
17 **modified organisms.** It shall be mandatory for all commercial
18 agricultural entities that purchased or used in excess of five
19 pounds or fifteen gallons of any single restricted use pesticide
20 during the prior calendar year to disclose the use of all
21 pesticides of any kind during the following calendar year.



1 Disclosure requirements shall include worker protection
2 standards and posting of warning signs under section 328-C.

3 **§328-C Disclosure requirements; worker protection**

4 **standard.** (a) Disclosure requirements shall include posting of
5 warning signs:

6 (1) In the area in which pesticides are to be applied no
7 sooner than twenty-four hours before the scheduled
8 application of any pesticide; and

9 (2) During and after the application of any pesticide.

10 (b) Warning signs shall be posted at the time of
11 application according to the worker protection standard
12 established by the EPA. Signs shall remain posted until the
13 expiration of the applicable restricted-entry interval
14 established by the EPA.

15 (c) The size of all signs, and the symbols and wording on
16 all signs, shall conform to the worker protection standard
17 established by the EPA under title 40 Code of Federal
18 Regulations section 170.120(c), as amended. A posting
19 notification area shall be provided daily for workers, and shall
20 conform to the worker protection standard established by the
21 EPA.



(d) Prior to applying pesticides, notices shall be posted to provide pesticide pre-application notification to any of the following requesting persons within one thousand five hundred feet from the property line of the commercial agricultural entity where any pesticide is anticipated to be applied:

(1) Registered beekeepers;

(2) Property owners;

(3) Lessees of property; or

(4) Persons otherwise occupying property within one thousand five hundred feet.

Pre-application notification shall also be provided to any revocable permit holder authorized to enter the property of the commercial agricultural entity.

§328-D Mass notification messages. (a) A mass notification list shall be established and maintained by each commercial agricultural entity, and shall include access to a legible map showing all field numbers and any key, legend, or other necessary map descriptions. Any interested person as described in section 328-C(d) shall submit contact information to the relevant commercial agricultural entity. These interested persons may submit up to three local telephone numbers and two electronic mail addresses.



(b) All mass notification messages shall be sent via telephone, text message, or electronic mail, with the method or methods of transmittal to be determined by each commercial agricultural entity. Each commercial agricultural entity shall provide an alternative method of transmittal for any recipient who does not have access to the technology necessary for the method or methods of transmittal selected by the commercial agricultural entity. Requests to be included on, or removed from, the mass notification list shall be processed within three business days.

(c) Notices shall contain the following information regarding all anticipated pesticide applications:

- (1) Pesticide to be used;
- (2) Active ingredient of pesticide to be used;
- (3) Date;
- (4) Time; and
- (5) Field number.

(d) Each commercial agricultural entity shall send regular mass notification messages at least once during every seven day week period summarizing the anticipated application of any pesticide for the upcoming seven day week.



(e) Whenever a pesticide application that was unforeseen and therefore not contained in the weekly notice is deemed by the commercial agricultural entity to be necessary to alleviate a pest threat, an additional notice shall be generated to all recipients on the mass notification list within twenty-four hours after the application.

§328-E Public disclosure reports. (a) Each commercial agricultural entity shall submit regular public disclosure reports once during every seven day week period compiling the actual application of all pesticides during the prior week. The weekly public disclosure reports shall contain the following information regarding all actual pesticide applications:

- (1) Date;
- (2) Time;
- (3) Field number;
- (4) Total acreage;
- (5) Trade name of pesticide used;
- (6) EPA registration number;
- (7) Active ingredient of pesticide used;
- (8) Gallons or pounds of pesticide used; and
- (9) Temperature, wind direction, and wind speed at time of pesticide application.



(b) Each commercial agricultural entity shall submit all public disclosure reports to the department of agriculture and shall include online access to a legible map showing all field numbers and any key, legend, or other necessary map descriptions for all applicable commercial agricultural entities. All public disclosure reports shall be posted online, and available for viewing and download by any interested persons. The department of agriculture shall develop a standardized reporting form.

§328-F Emergency response hotline. (a) Each commercial agricultural entity shall establish an emergency response hotline to be made available to any licensed physician or nurse practitioner practicing in association with a clinic, medical facility, or emergency center.

(b) Within six hours of a request from any such licensed physician or nurse practitioner who provides a documented medical need, the commercial agricultural entity shall provide the information described in section 328-E(a) regarding all actual pesticide applications related to the alleged incident.

§328-G Annual public reports. (a) All commercial agricultural entities that intentionally or knowingly possess any GMO shall disclose the growing of the GMO in an annual public report.



(b) Annual public reports shall be provided to the department of business, economic development, and tourism and department of agriculture, and shall be posted online on the state website. Direct notification to the department of business, economic development, and tourism and department of agriculture documenting such disclosure shall occur no later than sixty days following the end of each calendar year.

(c) Annual public reports shall include:

(1) A general description of each GMO; for example, "GMO corn" or "GMO soy";

(2) A general description of the geographic location where each GMO is being grown or developed, including, at minimum, the tax map key and ahupua'a; and

(3) The date when each GMO was initially introduced to the land in question.

§328-H Pesticide buffer zones. (a) All commercial agricultural entities that purchased or used in excess of five pounds or fifteen gallons of any single restricted use pesticide during the prior calendar year shall limit the growing of crops with restricted use pesticides. Except ground cover to which no pesticide is applied, no crops with restricted use pesticides shall be grown within:



(1) Five hundred feet of any adult family boarding home, adult family group living home, day care center, family care home, family child care home, medical facility, nursing home, residential care home, or school;

(2) Two hundred fifty feet of any park; provided that crops that grow in a hedge-like manner creating a windbreak effect in a mature orchard, where pesticide application occurs between crop rows from a source no higher than two feet from the ground for the purpose of eliminating weeds in the ground, may be grown within seventy-five feet of any park;

(3) Five hundred feet of any dwelling, unless:

(A) If the commercial agricultural entity has an approved soil and water conservation plan that explicitly demonstrates no pesticide drift on the dwelling, then no crops may be grown within one hundred feet of any dwelling;

(B) If the dwelling is owned by the landowner, and occupied by the landowner or a family member of the landowner, and there are no other dwellings occupied by third parties within five hundred



1 feet of the landowner dwelling, then there shall
2 be no pesticide buffer zone restricting growing
3 of crops in proximity to the landowner dwelling;
4 or

5 (C) For crops that grow in a hedge-like manner
6 creating a windbreak effect in a mature orchard,
7 if pesticide application occurs between crop rows
8 from a source no higher than two feet from the
9 ground for the purpose of eliminating weeds in
10 the ground, then no crops may be grown within
11 seventy-five feet of any dwelling;

12 (4) One hundred feet of any public roadway, except that
13 pesticides may be used within one hundred feet of any
14 public roadway if the commercial agricultural entity
15 posts notification signage on land that is adjacent to
16 the public roadway no sooner than twenty-four hours
17 before the scheduled application; provided that
18 roadway signs shall be located at the start and end of
19 the field along the public roadway where application
20 will occur, shall be of a size that is legible from
21 vehicles traveling at the posted speed limit, and



1 shall comply with all department of transportation
2 requirements; and

3 (5) One hundred feet of any shoreline or perennial
4 waterway that flows into the ocean; provided that this
5 provision shall not apply to any irrigation ditch or
6 drainage canal that does not directly flow to the
7 ocean.

8 (b) Subsection (a) shall not apply to any specific
9 instance where any county, state, or federal government agency
10 has authorized such pesticide use for public health or safety
11 purposes.

12 (c) If this section, or any part thereof, is determined to
13 conflict with any pesticide labeling information, the more
14 restrictive and environmentally protective provisions shall
15 apply.

16 **§328-I Penalties** (a) Any person, firm, or corporation,
17 whether as principal, agent, employee, or otherwise, violating,
18 causing, or permitting the violation of any of the provisions of
19 this part, shall be assessed a civil fine of \$10,000 to \$25,000
20 per day, per violation.

21 (b) In addition to any penalty described in subsection
22 (a), any person, firm, or corporation, whether as principal,



1 agent, employee, or otherwise, violating, causing, or permitting
2 the violation of any of the provisions of this part, shall be
3 guilty of a misdemeanor, and upon conviction thereof shall be
4 punished by a fine of not more than \$2,000, or imprisoned not
5 more than one year, or both, for each offense. The continuance
6 of any violation after conviction shall be deemed a new criminal
7 offense for each day that the violation or violations continue.

8 **§328-J Environmental and public health impacts study.**

9 The department of health shall complete an environmental and
10 public health impact study through a two part community-based
11 process to address key environmental and public health questions
12 related to large-scale commercial agricultural entities
13 utilizing pesticides and GMOs. The first part shall utilize a
14 joint fact finding group convened and facilitated by a
15 professional consultant to determine the scope and design of the
16 environmental and public health impact study by January 1, 2016.
17 In the second part of the process, the environmental and public
18 health impact study shall be conducted by a professional
19 consultant with oversight by the joint fact finding group and
20 shall be completed by January 1, 2017. The environmental and
21 public health impact study may make recommendations that include
22 but are not limited to possible actions the State may take in



1 order to address any significant effects, public health impacts,
2 or both.

3 **§328-K Rules.** The department of agriculture shall adopt
4 rules in accordance with chapter 91 in order to effectuate the
5 purposes of this chapter."

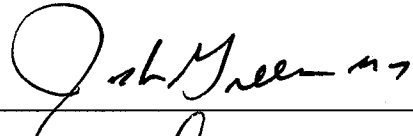



6 SECTION 3. If any provision of this Act, or the
7 application thereof to any person or circumstance, is held
8 invalid, the invalidity does not affect other provisions or
9 applications of the Act that can be given effect without the
10 invalid provision or application, and to this end the provisions
11 of this Act are severable.

12 SECTION 4. This Act does not affect rights and duties that
13 matured, penalties that were incurred, and proceedings that were
14 begun before its effective date.

15 SECTION 5. This Act shall take effect upon its approval.

16

INTRODUCED BY:



Report Title:

Agriculture; Pesticides; Genetically Modified Organisms

Description:

Requires the mandatory disclosure of pesticides and GMOs by commercial agricultural entities that purchased or used in excess of five pounds or fifteen gallons of any single restricted use pesticide. Provides disclosure requirements, including worker protection standards and pesticide application notices. Requires all commercial agricultural entities that possess any GMO to submit annual reports to DBEDT and DOA. Creates pesticide buffer zones by restricting areas where crops can be grown by commercial agricultural entities using restricted use pesticides. Creates civil fines and makes it a misdemeanor to violate any provision of this chapter. Requires an environmental and public health impact study to address concerns related to large scale commercial agricultural entities utilizing pesticides and GMOs.

The summary description of legislation appearing on this page is for informational purposes only and is not legislation or evidence of legislative intent.

