

---

---

# A BILL FOR AN ACT

RELATING TO AGRICULTURE.

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

1           SECTION 1. The legislature finds that an increasing number  
2 of large-scale, outdoor commercial agricultural operations are  
3 using extremely high volumes of pesticides on their fields in  
4 the State. Many of these commercial agricultural operations  
5 cultivate genetically engineered organisms for the production of  
6 crop seed. They also cultivate these genetically engineered  
7 organisms for the development of experimental genetically  
8 engineered organisms that are not approved for human consumption  
9 or release into the open environment. The legislature further  
10 finds:

11           (1) The rapid, long-term, and unregulated growth of  
12 commercial agricultural entities that are engaged in  
13 the testing and production of genetically engineered  
14 organisms and their extensive use of pesticides on  
15 their properties in Hawaii threaten the stability and  
16 growth of Hawaii's agricultural economy, the health of  
17 its citizens, and the overall environment;



- 1           (2) The cultivation of genetically engineered crops can  
2           have serious effects on the environment. For example,  
3           in 2013, ninety-three per cent of all soy grown in the  
4           United States was engineered to be herbicide  
5           resistant. In fact, the vast majority of genetically  
6           engineered crops are designed to withstand herbicides,  
7           and, therefore, promote indiscriminate herbicide use.  
8           As a result, genetically engineered, herbicide  
9           resistant crops have caused 527,000,000 pounds of  
10          additional herbicides to be applied to the nation's  
11          farmland. These toxic herbicides damage the vitality  
12          and quality of our soil, harm wildlife, contaminate  
13          our drinking water, and pose health risks to consumers  
14          and farmworkers;
- 15          (3) Many pesticides used in large-scale, outdoor  
16          commercial agriculture in the State are classified as  
17          restricted use pesticides by the United States  
18          Environmental Protection Agency. Restricted use  
19          pesticides are pesticides that the Agency has  
20          determined likely to cause "unreasonable adverse  
21          effects on the environment" if they are used without



1 additional regulatory restrictions. Many restricted  
2 use pesticides used in large-scale, commercial  
3 agriculture in the State are known to be toxic to  
4 humans, animals, bees, and other insects. Many of  
5 these pesticides are known to contaminate groundwater  
6 or persist in the environment. Some of the pesticides  
7 used in the State are subject to limited local use or  
8 total bans in other states and in other countries;

9 (4) Pesticide-laden dust and drift from both restricted  
10 use pesticides and general use pesticides is often  
11 inevitable and results in long-term exposure to toxic  
12 chemicals harmful to Hawaii's residents, wildlife, and  
13 endangered species, and are sources of pollution to  
14 the natural environment of the State;

15 (5) Increased use of herbicides in genetically engineered  
16 agriculture has resulted in the rapid development and  
17 proliferation of previously unknown herbicide-tolerant  
18 superweeds. The proliferation of these superweeds  
19 threatens to overtake the habitat of native flora and  
20 fauna in uncultivated lands and forces farmers to use



1            increasingly toxic and expensive herbicides to remove  
2            them from cultivated lands;

3            (6) Insect-resistant genetically engineered crops pose a  
4            high risk of fostering rapid evolution of pests  
5            resistant to organic pesticides, to the detriment of  
6            organic farmers, and they also facilitate  
7            agriculturally and environmentally harmful  
8            monoculture, such as growing corn continuously on the  
9            same field year after year;

10           (7) Due to its export value and contribution to the  
11           State's employment and food security, agriculture is a  
12           vital component of Hawaii's economy;

13           (8) Organic production of crops and food is a growing  
14           sector of the agricultural economy in Hawaii. The  
15           organic sector relies on maintaining its reputation  
16           for high quality organic and conventional crops.  
17           Preserving the identity, quality, and reliability of  
18           Hawaii's agricultural products and exports is critical  
19           to its economic well-being;

20           (9) Transgenic contamination can and does occur as a  
21           result of cross-pollination, comingling of



1 conventional and genetically engineered seeds,  
2 accidental transfer by animals or weather events, and  
3 other mechanisms. Transgenic contamination results in  
4 genetically engineered crops growing where they are  
5 not intended;

6 (10) Currently, no mechanisms exist to guarantee that  
7 transgenic contamination will not occur;

8 (11) The contamination of agricultural products with  
9 genetically engineered material can have myriad  
10 significant impacts. Organic and many foreign markets  
11 prohibit genetically engineered crops, and even a  
12 single event of transgenic contamination can and has  
13 resulted in significant economic harm when the  
14 contaminated crops are rejected by buyers. Farmers  
15 and other parties who lose markets through no fault of  
16 their own as a result of transgenic contamination may  
17 not find adequate legal recourse. Further,  
18 contamination causes the loss of the fundamental right  
19 to choose, for the farmer and the public, to sow crops  
20 that are not engineered;



- 1           (12) The genetic engineering of plants and animals often  
2           causes unintended consequences. Manipulating genes  
3           via genetic engineering and inserting them into  
4           organisms is an imprecise process. The results are  
5           not always predictable or controllable. Mixing plant,  
6           animal, bacterial, and viral genes through genetic  
7           engineering in combinations that cannot occur in  
8           nature may produce results that lead to adverse health  
9           or environmental consequences;
- 10          (13) Independent scientists are limited from conducting  
11          safety and risk-assessment research of genetically  
12          engineered materials due to industry restrictions on  
13          research of those materials;
- 14          (14) The rapid development and introduction of genetically  
15          engineered crops, combined with inadequate regulatory  
16          oversight at the state and federal levels, have left  
17          the citizens of Hawaii with significant concerns  
18          regarding the long-term safety of genetically  
19          engineered crops. The United States Food and Drug  
20          Administration does not require or conduct safety  
21          studies of genetically engineered foods. Instead, any



1 safety consultations are voluntary, and genetically  
2 engineered food developers may decide what information  
3 to provide to the agency. Market approval of  
4 genetically engineered food is based on industry  
5 research alone. There have been no long-term or  
6 epidemiological studies in the United States that  
7 examine the safety of human consumption of genetically  
8 engineered foods;

9 (15) The department of agriculture does not have an  
10 adequate regulatory structure in place to monitor  
11 genetically engineered crops and pesticides or to aid  
12 in the understanding of the impacts of genetically  
13 engineered crops and pesticides on the local  
14 agricultural economy, environment, or public health.  
15 The direct, indirect, and cumulative impacts on Hawaii  
16 regarding the long-term intensive cultivation of  
17 genetically engineered organisms and their associated  
18 agricultural practices, including pesticide use, have  
19 not been properly or independently studied;

20 (16) Residents of the State have no choice but to live,  
21 work, and commute daily in close proximity to areas



1 where genetically engineered crops are being  
2 cultivated and where pesticides are being sprayed.  
3 Residents are growing increasingly concerned about the  
4 direct and long-term impacts that the large-scale use  
5 of restricted use pesticides has on the land, on the  
6 natural environment, and on their health; and  
7 (17) Hawaii's county governments and any other political  
8 subdivisions as established under article VIII,  
9 section 1, of the Hawaii constitution, have the right  
10 to respond to the concerns of their constituents and  
11 promulgate regulations regarding genetically  
12 engineered organisms and their associated pesticide  
13 use.

14 The purpose of this Act is to address the health and  
15 welfare and environmental concerns of Hawaii's residents  
16 relating to the use of agricultural genetically engineered  
17 organisms and pesticides, particularly the role of the counties  
18 in addressing those matters.

19 SECTION 2. The Hawaii Revised Statutes is amended by  
20 adding a new chapter to be appropriately designated and to read  
21 as follows:







1           **§ -2 Construction.** The provisions of this chapter shall  
2 be construed liberally so as to effectuate the purpose of this  
3 chapter.

4           **§ -3 Definitions.** As used in this chapter, the  
5 following terms shall have the following meanings unless the  
6 context shall indicate another or different meaning or intent:

7           "Defoliant" means any substance or mixture of substances  
8 intended for causing the leaves or foliage to drop from a plant,  
9 causing or without causing abscission.

10           "Desiccant" means any substance or mixture of substances  
11 intended for artificially accelerating the drying of plant  
12 tissues.

13           "Genetically engineered" means produced from an organism or  
14 organisms in which the genetic material has been changed through  
15 the application of:

16           (1) In vitro nucleic acid techniques that include, but are  
17 not limited to, recombinant deoxyribonucleic acid  
18 (DNA) or ribonucleic acid (RNA), direct injection of  
19 nucleic acid into cells or organelles, encapsulation,  
20 gene deletion, and doubling; or



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

6 "In vitro nucleic techniques" include, but are not limited to,  
7 recombinant DNA or RNA techniques that use vector systems, and  
8 techniques involving the direct introduction into organisms of  
9 hereditary materials prepared outside the organisms such as  
10 biolistics, microinjection, macro-injection, chemoporation,  
11 electroporation, microencapsulation, and liposome fusion.

12 "Organism" means any biological entity capable of  
13 replication, reproduction, or transferal of genetic material.

14 "Pest" means any insect, rodent, nematode, fungus, weed, or  
15 any other form of terrestrial or aquatic plant or animal life or  
16 virus, bacterium, or any other microorganism, except viruses,  
17 bacterium, or any other microorganisms on or in living humans or  
18 other living animals, which the administrator of the United  
19 States Environmental Protection Agency determines to be a pest  
20 pursuant to the Federal Insecticide, Fungicide and Rodenticide  
21 Act.



1 "Pesticide" means:

2 (1) Any substance or mixture of substances intended for  
3 preventing, destroying, repelling, or mitigating any  
4 pest; and

5 (2) Any substance or mixture of substances intended for  
6 use as a plant regulator, defoliant, or desiccant.

7 "Plant regulator" means any substance or mixture of  
8 substances intended, through physiological action, for  
9 accelerating or retarding the rate of growth or maturation or  
10 for otherwise altering the behavior of plants or the produce  
11 thereof, but does not include substances to the extent that they  
12 are intended as plant nutrients, trace elements, nutritional  
13 chemicals, plant inoculants, and soil amendments.

14 **§ -4 Local authority; regulation of genetically**  
15 **engineered organisms.** (a) Any county or any other political  
16 subdivision established pursuant to article VIII, section 1, of  
17 the state constitution may, through authorities and powers  
18 established in its governing charter, choose to regulate  
19 genetically engineered organisms consistent with this section.

20 (b) It shall be within the jurisdiction of any county or  
21 political subdivision established pursuant to article VIII,



1 section 1, of the state constitution to determine the parameters  
2 of its regulation over genetically engineered organisms, which  
3 may include regulations on the production, use, advertising,  
4 sale, distribution, storage, transportation, formulation,  
5 packaging, labeling, certification, registration, propagation,  
6 cultivation, raising, growing, testing, notice, disclosure, or  
7 reporting, or recordkeeping of genetically engineered organisms.

8 (c) Nothing in Hawaii's existing laws governing plant  
9 pests, plant quarantine, noxious weeds, or seed genetic purity  
10 shall preempt or prohibit any county or political subdivision  
11 established pursuant to article VIII, section 1, of the state  
12 constitution from regulating genetically engineered organisms.

13 (d) Nothing in this section shall authorize or empower a  
14 county or any other political subdivision established pursuant  
15 to article VIII, section 1, of the state constitution to adopt a  
16 local law, regulation, ordinance, or policy that is less  
17 stringent than any laws of statewide applicability, any  
18 requirements established by the United States Department of  
19 Agriculture, or any other federal laws in existence at the time  
20 when the local law, regulation, ordinance, or policy is adopted,



1 or that is adopted for statewide or federal applicability after  
2 the local adoption.

3       **§ -5 Local authority; regulation of pesticide use.** (a)

4 Any county or political subdivision established pursuant to  
5 article VIII, section 1, of the state constitution may, through  
6 authorities and powers established in its governing charter,  
7 choose to regulate pesticides consistent with this section.

8       (b) It shall be within the jurisdiction of any county or  
9 political subdivision established pursuant to article VIII,  
10 section 1, of the state constitution to determine the parameters  
11 of its regulations over the sale or use of pesticides, which may  
12 include regulations on the sale, use, recordkeeping, disclosure,  
13 notification, or reporting of pesticides.

14       (c) Nothing in Hawaii's existing statewide pesticide  
15 regulations, codified chapter 149A, shall preempt or prohibit  
16 any county or political subdivision established pursuant to  
17 article VIII, section 1, of the state constitution from  
18 regulating the local sale, use, recordkeeping, disclosure,  
19 notification, or reporting of pesticides.

20       (d) Nothing in this section shall authorize or empower a  
21 county or political subdivision established pursuant to article



1 VIII, section 1, of the state constitution to adopt a local law,  
 2 regulation, ordinance, or policy that is less stringent than any  
 3 laws of statewide applicability, any requirements established by  
 4 the United States Environmental Protection Agency, or any other  
 5 federal laws in existence at the time when the local law,  
 6 regulation, ordinance, or policy is adopted, or that is adopted  
 7 for statewide or federal applicability after the local adoption.

8       **§ -6 Enforcement.** Any county or political subdivision  
 9 established pursuant to article VIII, section 1, of the state  
 10 constitution that chooses to regulate genetically engineered  
 11 organisms or pesticides, or both, may establish terms of  
 12 violation and penalties violation.

13       **§ -7 Severability clause.** If any provision of this  
 14 chapter or the application thereof is held to be invalid, the  
 15 remainder of its application to other situations or persons  
 16 shall not be affected."

17       SECTION 3. This Act shall take effect on July 1, 2015.

18

INTRODUCED BY: *[Signature]*  
*IGW Bm*  
*Ch...*



# H.B. NO. 687

**Report Title:**

County Authority; Genetically Engineered Organisms; Pesticide Use

**Description:**

Authorizes counties to regulate genetically engineered organisms and pesticide use to the extent that the regulations are more stringent than state or federal laws.

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

