
A BILL FOR AN ACT

RELATING TO GENETICALLY MODIFIED ORGANISMS.

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

1 SECTION 1. (a) Kalo (*colocasia esculenta*), the Hawaiian
2 word for taro, is a culturally significant plant to the kanaka
3 maoli, Hawaii's indigenous people. According to the kumulipo,
4 the Hawaiian creation chant, kalo grew from the first-born son
5 of Wakea, the sky father, and Papa, the earth mother, through
6 Wakea's relationship with his and Papa's daughter, Hoohokulani.
7 This son, named Haloa, was stillborn and buried. From Haloa's
8 grave grew the first kalo plant. Wakea and Hoohokulani named
9 their second son Haloa, after his older brother. From the
10 second Haloa came the genesis of man. Kalo provides the kanaka
11 maoli's life-giving sustenance, poi, and is seen as the older
12 brother of mankind.

13 Over three hundred kalo varieties may have existed at the
14 time of the arrival of European explorers. Today, there are
15 approximately seventy varieties of taro and, of these, the
16 majority are unique to the Hawaiian islands due to the
17 horticultural skills of native Hawaiian farmers.



1 The important cultural relationship between kalo and the
2 kanaka maoli continues today in the cultivation of kalo and
3 ohana, the Hawaiian word for family. The cut stalk of the kalo,
4 called the huli, is planted to become the next generation. Huli
5 means to turn or turn-over. When "ohana" is broken into root
6 words, "oha" is the smaller taro corms growing from the older
7 part of the taro plant that is used to feed one's family and
8 "ana" is a conjunctive word connoting regeneration or
9 procreation.

10 Therefore, kalo intrinsically ties the interdependency of
11 the past, the present, and the future, the essence of
12 procreation and regeneration, as the foundation of any
13 sustainable practice. Kalo expresses the spiritual and physical
14 well-being of not only the kanaka maoli and their heritage, but
15 also symbolizes the environmental, social, and cultural values
16 important to the State. This relationship is symbolized in the
17 use of the kalo plant upon the crown of King Kalakaua and today
18 in the logo of the office of Hawaiian affairs and many
19 commercial enterprises throughout the State.

20 This Act recognizes the importance of the kalo to the
21 heritage of the State by imposing a five-year moratorium on:



- 1 (1) Genetically modifying any Hawaiian taro within the
2 State of Hawaii; and
- 3 (2) Testing, planting, or growing any Hawaiian taro within
4 the State that has been genetically modified outside
5 the State.

6 The list of "Hawaiian taro" in this Act consists of varieties of
7 taro known to have been grown in Hawaii over the past sixty
8 years.

9 (b) Taro, however, is not unique to Hawaii. Other
10 countries around the world cultivate taro. Since the taro
11 varieties from those countries are not part of the native
12 Hawaiian culture, those varieties may not be as important in the
13 native Hawaiian culture as Hawaiian taro varieties. Some of
14 these non-Hawaiian taro varieties have economic value because
15 they are grown commercially by farmers in the State. These
16 farmers may someday need to take advantage of improvements to
17 the non-Hawaiian taro varieties that have been genetically
18 modified.

19 Furthermore, other crops are currently being genetically
20 modified, tested, planted, and grown in the State. Seed crop is
21 now the largest agricultural commodity in the State when
22 measured by value. Hawaii has attracted many out-of-state



1 companies to invest in the industry and contribute to the growth
2 and diversification of the State's economy.

3 Those companies need assurance that they will still be able
4 to invest and operate in Hawaii. A moratorium on the genetic
5 modification of Hawaiian taro may be interpreted as a signal to
6 the world that biotechnology will no longer be welcomed in
7 Hawaii. This notion must be negated.

8 Accordingly, this Act also prohibits any state statute,
9 rule, permit condition, or executive or administrative directive
10 or order from:

11 (1) Banning or restricting the genetic modification within
12 the State of any non-Hawaiian taro or other non-taro
13 plant organism if performed in accordance with a valid
14 federal permit; and

15 (2) Banning or restricting in a discriminatory manner the
16 testing, planting, or growing within the State of any
17 genetically modified non-Hawaiian taro or other non-
18 taro plant organism.

19 (c) The legislature has included in this Act another
20 provision intended to better control the regulation of the
21 biotechnology industry in the State. This provision preempts a
22 county ordinance, charter provision, rule, permit condition, or



1 executive or administrative directive or order from banning or
2 otherwise regulating the:

- 3 (1) Genetic modification of any plant organism; or
- 4 (2) Planting, growing, testing, advertisement, labeling,
5 packaging, handling, transportation, distribution,
6 use, notification of use, certification, or
7 registration of any genetically modified plant
8 organism. An exception from this prohibition is
9 provided for a county zoning ordinance or land use
10 permit condition that does not treat the planting or
11 growing of any genetically modified plant organism in
12 a discriminatory manner.

13 This provision is based upon the preemption laws of certain
14 other states.

15 (d) The moratorium imposed in this Act is expressly not
16 severable from the other provisions. If the prohibition on
17 banning the genetic modification within the State of any non-
18 Hawaiian taro or other non-taro plant organism is repealed by a
19 subsequent legislature or ruled invalid by a court, then the
20 moratorium concerning Hawaiian taro shall be automatically
21 terminated. This Act is a compromise between opponents of the
22 genetic modification of Hawaiian taro and advocates of



1 biotechnology. By designating this Act as non-severable, the
2 legislature has formulated a measure under which the moratorium
3 is intended to fall if any other provision falls. The
4 legislature does not intend that there be a "winner" should
5 proponents of the moratorium succeed in altering this Act to the
6 detriment of biotechnology advocates.

7 The legislature recognizes that a subsequent Act may repeal
8 or amend the non-severability language. The legislature,
9 however, expresses the hope that future legislatures will
10 refrain from doing so out of respect for the compromise reached
11 under this Act.

12 SECTION 2. The Hawaii Revised Statutes is amended by
13 adding a new chapter to be appropriately designated and to read
14 as follows:

15 **"CHAPTER**

16 **GENETICALLY MODIFIED TARO AND OTHER PLANT ORGANISMS**

17 § **-A Definitions.** For the purposes of this chapter:

18 "County regulatory action" means a county ordinance,
19 charter provision, rule, permit condition, or executive or
20 administrative directive or order.

21 "Genetic modification" means alteration to a life form or
22 its living progeny at the nucleic acid level using the



1 techniques collectively referred to as recombinant DNA
2 technology.

3 "Growing" includes cultivating, propagating, and raising.

4 "Hawaiian taro" means the following varieties of
5 taro: aweu, mana ula, mana opelu, mana weo, mana ulaula, mana
6 lauloa, mana keokeo, mana kukuluhema, piko lehua-apei, piko
7 ulaula, piko kea, piko keokeo, piko uaua, piko uliuli, piko
8 eleele, elepaio, uahiapele, manapiko, kai uliuli, kai ala, kai
9 kea, apuwai, apu, piialii, paakai, moana, lauloa eleele-omao,
10 lauloa eleele-ula, lauloa palakea-eleele, lauloa palakea-ula,
11 lauloa palakea-papamu, lauloa palakea-keokeo, lauloa keokeo,
12 eleele makoko, eleele naioea, manini-owali, kumu-eleele, nawao,
13 ulaula kumu, ulaula poni, ulaula moano, oopukai, manini uliuli,
14 manini kea, papakolea-koae, ula, nihopuu, manini-opelu,
15 hinupuaa, ohe, lehua maoli, lehua keokeo, lehua eleele, lehua
16 palaii, apowale, wehiwa, papapueo, kuoho, leo, maea, haokea,
17 kalalau, hapuu, laaloa, lauloa uliuli, lihilihimolina, mana
18 eleele, mana okoa, moi, oene, pikoele, pololu, Maui lehua, and
19 red moi.

20 "Recombinant DNA technology" means the transfer of genes,
21 regulatory sequences, or nucleic acid between hosts by the use
22 of vectors or laboratory manipulations and includes the



1 insertion, excision, duplication, inactivation, or relocation of
2 specific genes, regulatory sequences, or sections of nucleic
3 acid. This term does not apply to a material or an organism
4 developed exclusively through traditional methods of breeding,
5 hybridization, or nondirected mutagenesis.

6 "State regulatory action" means a state statute, rule,
7 permit condition, or executive or administrative directive or
8 order.

9 § -B **Moratorium on genetic modification of Hawaiian taro**
10 **and testing, planting, or growing of Hawaiian taro genetically**
11 **modified outside the State; conditions for earlier termination.**

12 (a) Until June 30, 2013:

13 (1) No person shall genetically modify within the State
14 any Hawaiian taro; and

15 (2) No person shall test, plant, or grow within the State
16 any Hawaiian taro that has been genetically modified
17 outside the State.

18 (b) Any person who violates subsection (a) shall be
19 subject to a civil fine of not more than \$1,000 for each day a
20 violation occurs. The department of the attorney general shall
21 enforce this section and may establish procedures to
22 administratively adjudicate an alleged violation and recover



1 from a violator the department's cost to investigate and
2 adjudicate the violation and collect the fine. When requested
3 by the department of the attorney general, the department of
4 agriculture shall assist the department of the attorney general
5 in the performance of these duties.

6 (c) After June 30, 2013, the activities described under
7 subsection (a) shall no longer be prohibited.

8 (d) The prohibitions of subsection (a) shall be terminated
9 before June 30, 2013, without legislative action upon either of
10 the following:

11 (1) The effective date of any state statute or
12 constitutional amendment that expressly or implicitly
13 repeals or supersedes any provision of section -C
14 or section -D; or

15 (2) The entry of judgment by a court of competent
16 jurisdiction that invalidates any provision of section
17 -C or section -D.

18 § -C Prohibition on state regulatory action banning or
19 restricting certain activities relating to genetic modification
20 of plant organisms. (a) No state regulatory action shall ban
21 or restrict a person from genetically modifying within the State
22 any non-Hawaiian taro or other non-taro plant organism if the



1 genetic modification is performed in accordance with a valid
2 permit from the relevant federal agency.

3 (b) Except as provided under subsection (c), no state
4 regulatory action shall ban or restrict a person from testing,
5 planting, or growing within the State any genetically modified
6 non-Hawaiian taro or genetically modified non-taro plant
7 organism; provided that, if a valid permit from a federal agency
8 is required for testing, planting, or growing the genetically
9 modified non-Hawaiian taro or other non-taro plant organism, the
10 person shall perform the testing, planting, or growing in
11 accordance with the permit.

12 (c) A state regulatory action may regulate the testing,
13 planting, or growing of a plant organism in a manner not
14 discriminatory against any genetically modified plant organism.
15 A state regulatory action shall be deemed "discriminatory
16 against any genetically modified plant organism" if the action
17 has a prohibitory or regulatory effect on a genetically modified
18 plant organism that differs from the effect on a similar non-
19 genetically modified plant organism.

20 (d) Any state regulatory action in contravention of this
21 section shall be void as against public policy.



1 § -D Preemption of county regulatory action banning
2 genetic modification of plant organisms or regulating certain
3 other activities relating to genetically modified plant
4 organisms. (a) No county regulatory action shall ban or
5 otherwise regulate the genetic modification of any plant
6 organism.

7 (b) Except as provided under subsection (c), no county
8 regulatory action shall ban or otherwise regulate the planting,
9 growing, testing, advertisement, labeling, packaging, handling,
10 transportation, distribution, use, notification of use,
11 certification, or registration of any genetically modified plant
12 organism.

13 (c) A county zoning ordinance or land use permit condition
14 may regulate agricultural uses and activities at a site in a
15 manner not discriminatory against any genetically modified plant
16 organism. A county zoning ordinance or permit condition shall
17 be deemed "discriminatory against any genetically modified plant
18 organism" if the ordinance or permit condition has a prohibitory
19 or regulatory effect on a genetically modified plant organism
20 that differs from the effect on a similar non-genetically
21 modified plant organism.



1 (d) Any county regulatory action in contravention of this
2 section shall be void as against public policy.

3 § -E Court proceedings to enforce chapter. (a) If the
4 attorney general reasonably believes that a state or county
5 regulatory action violates section -C or section -D, as
6 applicable, the attorney general may commence appropriate action
7 in circuit court to invalidate the state or county regulatory
8 action.

9 (b) Any other person who is or may become aggrieved by a
10 state or county regulatory action that violates section -C or
11 section -D, as applicable, may join in the action filed by
12 the attorney general or file the person's own action in circuit
13 court to invalidate the state or county regulatory action.

14 § -F Chapter not severable. This chapter shall not be
15 severable. If any provision of this chapter or the application
16 thereof to any person or circumstance is held invalid, then all
17 provisions of this chapter shall be invalid."

18 SECTION 3. This Act shall take effect on July 1, 2008.



Report Title:

Genetically Modified Organisms; Taro; Other Plant Organisms

Description:

Places a five-year moratorium on the: (1) genetic modification within the State of any Hawaiian taro; and (2) testing, planting, or growing within the State of any Hawaiian taro that has been genetically modified outside the State. Prohibits any state statute, rule, permit condition, or executive or administrative directive or order that bans or restricts the (1) genetic modification within the State of any non-Hawaiian taro or other non-taro plant organism; or (2) testing, planting, or growing within the State of any genetically modified non-Hawaiian taro or other genetically modified non-taro plant organism. Prohibits certain other types of county regulation of a genetically modified plant organism. Provides that the Act is not severable. Takes effect on 07/01/08. (SB958 HD2)

