

JAN 23 2009

A BILL FOR AN ACT

RELATING TO AGRICULTURE.

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

1 SECTION 1. Kalo (*colocasia esculenta*), the Hawaiian word
2 for taro, is a culturally significant plant to the kanaka maoli,
3 Hawai'i's indigenous peoples. According to the kumulipo, the
4 Hawaiian creation chant, kalo grew from the first-born son of
5 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 More than three hundred kalo varieties may have existed at
14 the time European explorers arrived. 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 huli, is planted to become the next generation. Huli
5 means to turn or curl over. The word ‘ohana is derived from two
6 root words: ‘oha, which is the smaller taro corm growing from the
7 older part of the taro plant used to feed one's family; and ana,
8 a conjunctive word connoting regeneration or procreation.

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

19 The purpose of this Act is to impose a moratorium on
20 genetically modifying any Hawaiian taro within the State of
21 Hawaii and testing, planting, or growing any Hawaiian taro
22 within the State that has been genetically modified outside the



1 State. The list of "Hawaiian taro" in this Act consists of
2 varieties of taro known to have grown in Hawaii over the past
3 sixty years, and the Act shall not apply to non-Hawaiian taro.

4 SECTION 2. Title 11, Hawaii Revised Statutes, is amended
5 by adding a new chapter to be appropriately designated and to
6 read as follows:

7 "CHAPTER

8 GENETICALLY MODIFIED TARO

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

10 "County regulatory action" means a county ordinance,
11 charter provision, rule, permit condition, or executive or
12 administrative directive or order.

13 "Genetic modification" means alteration to a life form or
14 its living progeny at the nucleic acid level using the
15 techniques collectively referred to as recombinant DNA
16 technology.

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

18 "Hawaiian taro" means the following varieties of
19 taro: aweu, mana ulu, mana opelu, mana weo, mana ulaula, mana
20 lauloa, mana keokeo, mana kukulu hema, piko lehua apii, piko
21 ulaula, piko kea, piko keokeo, piko uaua, piko uliuli, piko
22 eleele, elepaio, uahi-a-Pele, manapiko, kai uliuli, kai ala, kai



1 kea, apuwai, apu, piialii, paakai, moana, lauloa eleele-omao,
2 lauloa eleele-ula, lauloa palakea-eleele, lauloa palakea-ula,
3 lauloa palakea-papamu, lauloa palakea-keokeo, lauloa keokeo,
4 eleele makoko, eleele naioea, manini-owali, kumu-eleele, nawao,
5 ulaula kumu, ulaula poni, ulaula moano, oopukai, manini uliuli,
6 manini kea, papakolea-koae, ula, nihopuu, manini-opelu,
7 hinupuaa, ohe, lehua maoli, lehua keokeo, lehua eleele, lehua
8 palaii, apowale, wehiwa, papapueo, kuoho, leo, maea, haokea,
9 kalalau, hapuu, laaloo, lauloa uliuli, lihilihimolina, mana
10 eleele, mana okoa, moi, oene, pikoele, pololu, Maui lehua, and
11 red moi.

12 "Recombinant DNA technology" means the transfer of genes,
13 regulatory sequences, or nucleic acid between hosts by the use
14 of vectors or laboratory manipulations and includes the
15 insertion, excision, duplication, inactivation, or relocation of
16 specific genes, regulatory sequences, or sections of nucleic
17 acid. This term does not apply to a material or an organism
18 developed exclusively through traditional methods of breeding,
19 hybridization, or nondirected mutagenesis.

20 "State regulatory action" means a state statute, rule,
21 permit condition, or executive or administrative directive or
22 order.



1 § -B Moratorium on genetic modification of Hawaiian taro
2 and testing, planting, or growing of Hawaiian taro genetically
3 modified outside the State.

4 (a) No person shall genetically modify Hawaiian taro
5 within the State or test, plant, or grow any Hawaiian taro that
6 has been genetically modified outside the State.

7 (b) Any person who violates subsection (a) shall be
8 subject to a civil fine of not more than \$1,000 for each day a
9 violation occurs. The department of the attorney general shall
10 enforce this section and may establish procedures to
11 administratively adjudicate an alleged violation and recover
12 from a violator the department's cost to investigate and
13 adjudicate the violation and collect the fine. When requested
14 by the department of the attorney general, the department of
15 agriculture shall assist the department of the attorney general
16 in the performance of these duties.

17 (c) Any person who violates subsection (a) shall be
18 civilly liable for damages resulting from the violation,
19 including adverse effects on other crops and the health of other
20 individuals exposed to the genetically modified taro."

21



1 SECTION 3. This Act shall take effect upon its approval.

2

INTRODUCED BY:

4. Kaleri Ghosh
Ⓟ



Report Title:

Genetically Modified Organisms; Taro

Description:

Places a moratorium on the growth of genetically modified taro plants.

