

State of Hawaii

DEPARTMENT OF AGRICULTURE

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SANDRA LEE KUNIMOTO Chairperson, Board of Agriculture

DUANE K. OKAMOTODeputy to the Chairperson



TESTIMONY OF SANDRA LEE KUNIMOTO CHAIRPERSON, BOARD OF AGRICULTURE

BEFORE THE HOUSE COMMITTEE ON HAWAIIAN AFFAIRS WEDNESDAY, MARCH 18, 2009 9:00 A.M. ROOM 329

> SENATE BILL NO. 709, SD2 RELATING TO AGRICULTURE

Chairperson Carroll and Members of the Committee:

Thank you for the opportunity to testify on Senate Bill No. 709, SD2. The purpose of this bill is to prohibit the development, testing, propagation, release, importation, planting, and growing of genetically engineered (GE) taro in the State of Hawaii. The Department respects that the growing of taro is an integral part of the Hawaiian culture. Due to the risks to taro from invasive species and serious concerns that this measure may be used as a means to prevent research and use of biotechnology for other important crops, we must oppose this measure.

The Taro Security and Purity Task Force was established with the signing of Act 211 in July 2008. This task force, comprised of taro farmers, cultural practitioners, regulatory agencies, and the scientific community is finally moving forward with meaningful discussion in hopes that satisfactory non-GE solutions can be found to address many of the issues concerning taro farming in Hawaii.

Taro plants in Hawaii continue to remain vulnerable to the introduction of foreign pests and disease. Due to federal preemptions, the Department is not provided notification of arrivals or information on the origins of foreign taro that is allowed to enter Hawaii without State inspection. Without federal cooperation, we cannot provide assurance about any foreign goods imported into Hawaii. The Department will continue to work with our Congressional Delegation to overcome federal policies even as we continue efforts to build and secure joint federal-state

inspection facilities to deal with both foreign and domestic imports. Only then, will the department have the ability to inspect imported taro from foreign origins. These solutions will not happen quickly and given that the threats to taro and other crops are very real, we caution against limiting the tools available to combat these threats. Attached to this testimony is information received from the USDA reporting the pests intercepted on taro at U.S. ports-of-entry. Taro is grown throughout the world and imported into the U.S. and distributed domestically to the various states, including Hawaii.

Agriculture, from its beginning to present, has suffered from pest and disease infestation causing enormous, unpredictable losses in food production. Biotechnology is a critical tool used in many countries to combat crop threatening insects and diseases. Without the biotech development of the ringspot virus resistant papaya, all papaya production in Hawaii, both conventional and organic would have been devastated by the disease. There is a perception, promoted by opponents to biotechnology, that there is something inherently wrong with the technology which is contrary to what is widely accepted by the scientific community.

The loss of taro or any major industry in agriculture, by any means, would be devastating to Hawaii. However, advancements in biotechnology exist only through continued research. Passage of this bill will take away a valuable tool available to us which may prevent industry losses. Some threats have already arrived, while others are knocking at the door. We hope that serious consideration is given to the known threats of diseases and pests to taro versus the perceived fears of biotechnology.

The Department acknowledges and respects the testimony of the Kauai Taro Growers Association, that in deference to the Hawaiian culture, no genetically engineered research should be done on stated Hawaiian cultivars and that research done on non-Hawaiian cultivars shall be limited to approved facilities only, with no outdoor field testing of GE taro to take place within the State of Hawaii.

Agriculture is already at a critical state as battles rage over water, land and limited resources. Instead of undermining ongoing efforts to seek alternative solutions, let us continue to support co-existence among all agriculture sectors.

97-98

Commodity Risk Assessment

Pest Type	Pest	Rprt?	Origin	Location	Interceptions
Insect	Aleurodicus dispersus Russell (Aleyrodidae)	Y	наwaii	HI Honolulu PIS PPQ	
Insect	Anomala sp. (Scarabaeidae)	Y	Costa Rica	PR San Juan PIS PPQ	1
Insect	Anthomyiidae, species of	Υ	Domínica	VI St. Thomas CBP	1
Insect	Aphididae, species of	Y	Antigua and Barbuda	PR San Juan PIS PPQ	1
Insect	Aphis gossypii Glover (Aphididae) *Non-Rep*	N	Trinidad and Tobago	NY JFK PIS PPQ	1
Insect	Cicadellidae, species of	Y	Cook Islands	HI Honolulu PIS PPQ	1
Insect	Cyclocephala sp. (Scarabaeidae)	Υ	Costa Rica	FL Ft. Lauderdele PPQ	1
Insect	Delphacidae, species of	Υ	Cook Islands	HI Honolulu PIS PPQ	Ĭ
Insect	Delphacidae, species of	Y	Tonga	HI Honolulu PIS PPQ	1
Insect	Diptera, species of	Υ	Brazil	NJ Newark Sea CBP	1
Insect	Eurychilella sp. (Miridae)	Y	Costa Rica	FL Miami PIS PPQ	1
Insect	Ferrisia virgata (Cockerell) (Pseudococcidae) *Non-Rep*	N	Jamaica	FL Orlando PIS PPQ	1
Insect	Fulgoroidea, species of	Y	Cook Islands	HI Honolulu PIS PPQ	1
Insect	Gryllus sp. (Gryllidae)	Υ	Costa Rica	PA Philadelphia PPQ	1
Insect	Hoplandrothrips flavipes Bagnall (Phlaeothripidae) "Non-Rep"	'N	India	GA Atlanta PIS PPQ	1
Insect	Lepidoptera, species of	Υ	India	GA Allanta PIS PPQ	1
Insect	Melanodermus sp. (Pentatomidae)	Υ	Costa Rica	DE Dover (AFB) CBP	1
Insect	Noctuidae, species of	Υ	Trinidad and Tobago	FL Miami PIS PPQ	ī
Insect	Paraputo sp. (Pseudococcidae)	Υ	Fiji	HI Honolulu PIS PPQ	1
Insect	Pentatomidae, species of	Y	Trinidad and Tobago	FL Miami PIS PPQ	1
Insect	Pseudococcidae, species of	Υ	Cook Islands	HI Honolulu PIS PPQ	2
Insect	Pseudococcidae, species of	Y	Fiji	HI Honolulu PIS PPQ	1
Insect	Pseudococcidae, species of	Y	Nigeria	TN Memphis PPQ	1
Insect	Pseudococcidae, species of	Υ	Trinidad and Tobago	FL Miami PIS PPQ	1
Mollusk	Opeas sp. (Subulinidae)	Υ	Hong Kong	CA Long Beach PPQ	1
Weed	Mikania micrantha Humboldt Bonpland, Et Kunth. (Asteraceae)	Y	Dominican Republic	FL Miami PIS PPQ	i

Host Genus: Colocasia Host Part:

Host Species: esculenta Origin:

Date Range: 01/01/1997 thru 01/01/1998

Commodity Risk Assessment

Commodity: Colocasia esculenta

insect	Aleurodicus dispersus Russell (Aleyrodidae) Aphididae, species of Araecerus fasciculatus (De Geer)	Y Y	Hawaii	HI Honolulu PIS PPQ	ina kan sensi enterita kanalik pad danan apara sa
		Υ			
nsect	Aragonis facciculatus (Do Goar)		Dominican Republic	FL Miami PIS PPQ	i
	(Anthribidae) *Non-Rep*	N	Panama	FL Miami PIS PPQ	I.
nsect	Clinodiplosis sp. (Cecidomyiidae) *Non-Rep*	N	Panama	FL Miami PIS PPQ	1
nsect	Colaspis sp. (Chrysomelidae)	Y	Costa Rica	FL Miami PIS PPQ	1
nsect	Cyclocephata sp. (Scarabaeidae)	Y	Costa Rica	FL Miami PIS PPQ	1
nsect	Dyscinetus sp. (Scarabaeidae)	Y	Costa Rica	FL Ft. Lauderdale PPQ	1
nsect	Dyscinetus sp. (Scarabaeidae)	Y	Costa Rica	FL Miami PIS PPQ	1
nsect	Dysmicoccus brevipes (Cockerell) (Pseudococcidae) *Non-Rep*	N	Costa Rica	FL Miami PIS PPQ	1;
nsect	Eubulus sp. (Curculionidae)	Y	Costa Rica	FL Miami PIS PPQ	1
nsect	Heteroderes amplicollis (Gyllenhal) (Elateridae) *Non-Rep*	N	Dominican Republic	FL Miami PIS PPQ	1 "
nsect	Muscidae, species of *Non-Rep*	N	Cyprus	MA Boston PPQ	1
nsect	Mycelophilidae, species of "Non-Rep"	N	Costa Rica	CA Long Beach PPQ	1
nsect	Noctuidae, species of	Υ	Jamaica	NY JFK PIS PPQ	1
nsect	Noctuidae, species of	Υ	Trinidad and Tobago	NY JFK PIS PPQ	į.
nsect'	Plusiinae, species of (Nocluidae)	Y	Dominican Republic	FL Miami PIS PPQ	1
nsect	Pseudococcidae, species of	Y	Fiji	HI Honolulu PIS PPQ	1
nsect	Pseudococcidae, species of	Y	Nigeria	CA San Francisco PIS PPQ	· 1
nsect	Pseudococcidae, species of	Υ	Nigeria	TN Memphis PPQ	2
nsect	Pseudococcidae, species of	Y	Portugal	MA Boston PPQ	1
nsect	Tenebrionidae, species of "Non-Rep"	N	Fiji	CA Los Angeles PIS PPQ	Í
Veed	Tridax procumbens Linnaeus (Asteraceae)	Υ	Dominican Republic	FL Miami PIS PPQ	ì

Carrectonance	Host Genus:	Colocasia		Host Part:	construction from
***************************************	Host Species:	esculenta		Origin:	NEST PROPERTY.
NAMES OF STREET, STREE	Date Range:	01/01/1998	thru	01/01/1999	as de la constante de la const
3,	NORAN (INCOME AND	e Constanting of the Constant	unionalista estatemento		1

Commodity Risk Assessment

Commodity: Colocasia esculenta

Pest Type	Pest	Rprt?	Origin	Location	Interceptions
nsect	Aleyrodidae, species of	Y	Hawaii	HI Honolulu PIS PPQ	2
nsect	Anaxipha sp. (Gryllidae)	Υ	Panama	FL Miami PIS PPQ	1
nsect	Ancistrocercus sp. (Tettigoniidae)	Υ	Domínica	VI St. Thomas CBP	1
rsect	Aphididae, species of	Υ	Dominica	VI St. Thomas CBP	1
nsect	Aphididae, species of	Υ	Grenada	VI St. Thomas CBP	1
nsect	Atherigona sp. (Muscidae)	Y	Cameroon	IL Chicago PPQ	1
nsect	Camponotus sp. (Formicidae) *Non-Rep*	N	Costa Rica	FL Ft. Lauderdale PPQ	1
nsect	Catocalinae, species of (Noctuidae)	Y	Costa Rica	FL Miami PIS PPQ	1
nsect	Chrysomelidae, species of	Y	Costa Rica	PR San Juan PIS PPQ	1
sect	Conotrachelus sp. (Curculionidae)	Y	Costa Rica	FL Ft. Lauderdale PPQ	.i
nsect	Curculionidae, species of	Υ	Costa Rica	PR San Juan PIS PPQ	1
nsect	Cyclocephala sp. (Scarabaeidae)	Υ	Costa Rica	FL Ft. Lauderdale PPQ	1
sect	Cyclocephala sp. (Scarabaeidae)	Υ	Costa Rica	FL Miami PIS PPQ	Í
sect	Cyclocephala sp. (Scarabaeidae)	Y	Ecuador	NY Brooklyn CBP	1
sect	Cydia sp. (Tortricidae)	Υ	India	IL Chicago PPQ	1
sect	Dolichopodidae, species of *Non-Rep*	N	Costa Rica	DE Dover (AFB) CBP	1
sect	Dyscinetus sp. (Scarabaeidae)	Y	Costa Rica	FL Ft. Lauderdale PPQ	1
sect	Gryllus sp. (Gryllidae)	Y	Honduras	FL Ft. Lauderdale PPQ	1
sect	Homoptera, species of	Y	Trinidad and Tobago	NY JFK PIS PPQ	1
sect	Idiarthron sp. (Tettigoniidae)	Υ	Costa Rica	DE Dover (AFB) CBP	ì
sect	Ligyrus sp. (Scarabaeidae)	Y	Trinidad and Tobago	FL Miami PIS PPQ	1
sect	Margarodidae, species of	Υ	Nigeria	TN Memphis PPQ	1
sect	Miridae, species of	Υ	Costa Rica	FL Miami PIS PPQ	ì
nsect	Neopamera albocincta Barber (Rhyparochromidae) "Non-Rep"	N	Jamaica	FL Miami PIS PPQ	
sect	Ozophora sp. (Rhyparochromidae)	Y	Costa Rica	FL Ft. Lauderdale PPQ	ì
sect	Paraputo sp. (Pseudococcidae)	Υ	Fiji	HI Honolulu PIS PPQ	4
sect	Pheidole sp. (Formicidae)	Υ	Costa Rica	DE Dover (AFB) CBP	1
sect	Pheidole sp. (Formicidae)	Υ	Nigeria	MI Detroit CBP	1
sect	Pseudococcidae, species of	Y	Cameroon	KY Erlanger PPQ	1
sect	Pseudococcidae, species of	Υ	Dominica	VI St. Thomas CBP	1
sect	Pseudococcidae, species of	Y	Fiji	HI Honolulu PIS PPQ	1
seci	Pseudococcidae, species of	Υ	Jamaica	NY JFK PIS PPQ	1
sect	Pseudococcidae, species of	Υ	Nigeria	TN Memphis PPQ	1.
sect	Pseudococcidae, species of	Υ	Nigeria	TX Dailas/Ft. Worth PPQ	1
0/4/2007			Page 1 of 2	Agricultural Quarantin	e Activity Systems

	Pest Type	Pest	Rprt?	Origin	Location	Interceptions	
	Insect	Pseudococcidae, species of	Y	Puerto Rico	PR San Juan PIS PPQ	l	
	Insect	Pseudococcidae, species of	Y	Trinidad and Tobago	FL Miami PIS PPQ	1	
	Insect	Scieridae, species of 'Non-Rep'	N	Costa Rica	DE Dover (AFB) CBP		
	Insect	Tineidae, species of	Y	Cameroon	IL Chicago PPQ	1	
	Insect	Tipulidae, species of	Y	Costa Rica	NJ Newark Sea CBP	i	
	Insect	Typophorus sp. (Chrysomelidae)	Y	Costa Rica	FL Ft. Lauderdale PPQ	1	

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1	Host Species:	esculenta			Origin:	coperation and a
ı	Date Range:	01/01/1999	thru	1/01/2000		- Constanting

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Pest Type	Pest	Rprt?	Origin	Location	Interceptions
Insect	Aphididae, species of	Y	Trinidad and Tobago	FL Ft. Lauderdale PPQ	1
Insect	Aphis gossypii Glover (Aphididae) "Non-Rep"	N	Hawaii	HI Hilo PPQ	1
Insect	Argyrogramma verruca (Fabricius) (Noctuidae) *Non-Rep*	N	Dominican Republic	NY JFK PIS PPQ	1
Insect	Aspidiella hartii (Cockerell) (Diaspididae)	Υ	Nigeria	IL Chicago PPQ	i
Insect	Aulacaspis tubercularis Newstead (Diaspididae)	Y	Dominican Republic	FL Miami PIS PPQ	1
Insect	Conoderus sp. (Elateridae)	Υ	Dominican Republic	FL Ft. Lauderdale PPQ	1
Insect	Crambidae, species of	Υ	Dominican Republic	FL Ft Lauderdale PPQ	. 1
Insect	Curculionidae, species of	Y	Fiji	HI Honolulu PIS PPQ	* 1 .
Insect	Cyclocephala sp. (Scarabaeidae)	Y	Costa Rica	FL Miami PIS PPQ	L.
Insect	Delphacidae, species of	Υ	Philippines	CA San Francisco PIS PPQ	1.
Insect	Diaspididae, species of	Y	Laos	CA San Francisco PIS PPQ	1
Insect	Dipropus sp. (Elateridae)	Y	Dominican Republic	FL Miami PIS PPQ	ĭ
Insect	Dynastinae, species of (Scarabaeidae)	Y	Costa Rica	DE Dover (AFB) CBP	ĭ
Insect	Eurychilella sp. (Miridae)	Υ	Costa Rica	DE Dover (AFB) CBP	1
insect	Heteroderes amplicollis (Gyllenhal) (Elateridae) *Non-Rep*	N	Jamaica	FL Miami PIS PPQ	ı
Insect	Lepidoptera, species of	Y	Viet Nam	IL Chicago PPQ	1
Insect	Ligyrus sp. (Scarabaeidae)	Y	Costa Rica	FL Ft. Lauderdale PPQ	2
Insect	Listronotus sp. (Curculionidae)	Υ	Panama	FL Miami PIS PPQ	1
Insect	Nitidulidae, species of *Non-Rep*	N	Fiji	HI Honolulu PIS PPQ	1
Insect	Noctuidae, species of	Y	Dominican Republic	FL Ft. Lauderdale PPQ	3
nsect	Noctuidae, species of	Υ	Dominican Republic.	FL Miami PIS PPQ	2
Insect	Odontomachus troglodytes Santschi (Formicidae) *Non-Rep*	N	Nigeria	MI Detroit CBP	t
nsect	Paragonatas divergens (Distant) (Rhyparochromidae)	Υ	Panama	FL Miami Sea CBP	i
Insect	Parapulo sp. (Pseudococcidae)	Y	Fiji	HI Honolulu PIS PPQ	2
nsect	Pheidole sp. (Formicidae)	Υ	Fiji	Hi Honolulu PIS PPQ	
Insect	Phyllophaga sp. (Scarabaeidae)	Υ	Nicaragua	PR San Juan PIS PPQ	ī
nsect	Pseudococcidae, species of	Y	Fiji	HI Honolulu PIS PPQ	1
nsect	Pseudococcidae, species of	Υ	Grenada	FL Ft. Lauderdale PPQ	1
nsect	Pseudococcidae, species of	Υ	St. Kitts and Nevis	VI St. Thomas CBP	1
Insect	Psyllidae, species of	Υ.	Korea, South	AK Anchorage PPQ	i
Insect	Pyraustinae, species of (Crambidae)	Y	Jamaica	NY JFK PIS PPQ	f

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Pest Type	Pest	Rprt?	Origin	Location	Interceptions
Tanana	to a contrata to a transfer of the contrata and a contrata to the contrata and the contrata	21. 121.5 . 251 .	esa i i como de la com	507.71.473.904 - 15.4.471.271.51.47 - 54.4.	أبع المعارض ليبري والمحاص والممان والمتعاض للباري المتدوي
Insect	Spoladea recurvalis (Fabricius) (Crambidae) *Non-Rep*	N	Jamaica	NJ Newark Sea CBP	1
Insect	Spoladea recurvalis (Fabricius) (Crambidae) ** *Non-Rep*	N	Jamaica	NY JFK PIS PPQ	1
Insect	Thrips fuscipennis Haliday (Thripidae) *Non-Rep*	N	Philippines	CA San Francisco PIS PPQ	1
Mollusk	Achatina (Lissachatina) fulica Bowdich (Achatinidae)	Υ	Hawaii	Hi Honolulu PIS PPQ	1
Mollusk	Veronicella sp. (Veronicellidae)	Υ	St. Kitts and Nevis	VI St. Thomas CBP	1

Host Genus:	Colocasia	TO E ALLACA MILLS	EL LA LINETA PER DE LA CARRE DI CEN	Host Part:	
Host Species:	esculenta			Origin:	
Date Range:	01/01/2000	thru	01/01/2001	•	

Commodity Risk Assessment

Pest Type	Pest	Rprt?	Origin	Location	Interceptions
Disease	No identifiable pathogen found *Non-Rep*	N	Trinidad and Tobago	FL Miami PIS PPQ	1
Insect	Acrolophidae, species of	Y	Ecuador	FL Miami PIS PPQ	1
Insect	Aleuroglandulus malangae Russell (Aleyrodidae) *Non-Rep*	N	Dominica	VI St. Thomas C8P	ī
Insect	Aleyrodidae, species of	Υ	Hawaii	HI Honolulu PIS PPQ	1
Insect	Amnestus sp. (Cydnīdae)	Y	Costa Rica	FL Ft. Lauderdale PPQ	.1
Insect	Anaxipha sp. (Gryllidae)	Υ	Ecuador	FL Miami PIS PPQ	:4
Insect	Aphididae, species of	Υ	Dominican Republic	FL Miami PIS PPQ	1
nsect	Aphididae, species of	Y	Trinidad and Tobago	FL Miami PIS PPQ	1
nsect	Camplomyia sp. (Cecidomyiidae) *Non-Rep*	N	Iran	GA Atlanta PIS PPQ	3
Insect	Ceraspis sp. (Scarabaeidae)	Y	Ecuador	FL Miami PIS PPQ	1
Insect	Cicadellidae, species of	Y	Hawaii	HI Honolulu PIS PPQ	1
nsect	Cicadidae, species of	Y	Dominican Republic	FL Ft. Lauderdale PPQ	i
nsect	Conoderus falli Lane (Elateridae) "Non-Rep"	И	Brazil	FL Miami PIS PPQ	1.
nsect	Cylas sp. (Curculionidae)	Y	Cameroon	KY Erlanger PPQ	3
nsect	Dallasiellus alutaceus Froeschner (Cydnidae)	Y	8razil	FL Miami PIS PPQ	1
nsect	Delphacidae, species of	Υ	Philippines	CA San Francisco PIS PPQ	ì
nsect	Diaphorina citri Kuwayama (Psyllidae)	Y	Cameroon	KY Erlanger PPQ	ĭ
nsect	Dysmicoccus sp. (Pseudococcidae)	Y	Jamaica	MO St. Louis PPQ	1
nsect	Faustinus sp. (Curculionidae)	Y	Samoa	HI Honolulu PIS PPQ	3
nsect	Geococcus coffeae Green (Pseudococcidae)	Υ	Fiji	HI Honolulu PIS PPQ	1
nsect	Geometridae, species of	Y	Mexico	FL Miami PIS PPQ	ì
nsect	Gryllus sp. (Gryllidae)	Y	Costa Rica	DE Dover (AFB) CBP	1
nsect	Gryllus sp. (Gryllidae)	Υ	Ecuador	FL Miami PIS PPQ	1
nsect	Limonia sp. (Tipulidae) *Non-Rep*	N	Dominican Republic	PR San Juan PIS PPQ	1
nsect	Lygaeidae, species of	Y	Hawaii	HI Honolulu PIS PPQ	1
nsect	Manduca sp. (Sphingidae)	Y	Hawaii	HI Honolulu PIS PPQ	1
isect	Miridae, species of	Y	Philippines	CA San Francisco PIS PPQ	1
nsect	Noctuidae, species of	Y	Hawaii	HI Honolulu PIS PPQ	1
nsect	Noctuidae, species of	Y	Philippines	CA San Francisco PIS PPQ	1
nsect	Noctuidae, species of	Y	Trinidad and Tobago	FL Miami PIS PPQ	1
nsect	Paragonatas divergens (Distant) (Rhyparochromidae)	Υ.	Ecuador	FL Miami PIS PPQ	1
sect	Phalacridae, species of *Non-Rep*	N	Philippines	CA San Francisco PIS PPQ	1

Pest Type	Pest	Rprt?	Origin	Location	Interceptions
Insect	Plectris sp. (Scarabaeidae)	Y	Ecuador	FL Miami PIS PPQ	ı
Insect	Psychidae, species of	Y	Hawaii	HI Honolulu PIS PPQ	t.
Insect	Spodoptera latifascia (Walker) (Noctuidae) *Non-Rep*	N	Dominican Republic	NY JFK PIS PPQ	1
Insect	Tetramorium bicarinatum (Nylander) (Formicidae) *Non-Rep*	N	Fiji	HI Honolulu PIS PPQ	ĭ
Mollusk	Levicepolis monodonta (Lea) (Xanthonychidae) *Non-Rep*	N	Dominican Republic	FL Miami PIS PPQ	3
Mollusk	Succinea sp. (Succineidae) *Non-Rep*	N	Dominican Republic	NY JFK PIS PPQ	ì

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	Host Genus:	Colocasia			Host Part:	KOMMINERAL
	Host Species:	esculenta			Origin:	-
	Date Range:	01/01/2001	theu	01/01/2002		AND STREET STREET

Commodity Risk Assessment

Pest Type	Pest	Rprt?	Origin	Location	Interceptions
Insect	Adelus sp. (Cerambycidae) *Non-Rep*	N	Ecuador	FL Miami PIS PPQ	l
Insect	Aphididae, species of	Y	Dominican Republic	FL Miami PIS PPQ	2
nsect	Aphididae, species of	Υ	Hawaii	HI Hilo PPQ	1
nsect	Blapstinus sp. (Tenebrionidae)	Υ	Panama	FL Miami PIS PPQ	1
nsect	Cerambycidae, species of	°Y	Dominican Republic	VI St. Thomas CBP	1
nsect	Cicadellidae, species of	Y	Philippines	CA San Francisco PIS PPQ	3
nsect	Cicadellini, species of (Cicadellidae)	Υ	Ecuador	FL Miami PIS PPQ	£
nsect	Curculionidae, species of	Υ	Costa Rica	NJ Linden PIS PPQ	3
sect	Cyclocephala sp. (Scarabaeidae)	Υ	Dominican Republic	FL Miami PIS PPQ	1
nsect	Dyscinetus sp. (Scarabaeidae)	Y	Dominican Republic	FL Miami PIS PPQ	2
nsect	Dysmicoccus brevipes (Cockerell) (Pseudococcidae) *Non-Rep*	N	Cameroon	KY Erlanger PPQ	Ī
sect	Gryllus sp. (Gryllidae)	Y	Ecuador	FL Miami PIS PPQ	2
nsect	Lepidoptera, species of	Y	Trinidad and Tobago	NY JFK PIS PPQ	1 .
sect	Metamasius sp. (Dryophthoridae)	Y	Dominican Republic	PA Philadelphia PPQ	1
sect	Miogryllus sp. (Gryllidae)	Υ	Ecuador	FL Miami PIS PPQ	1
sect	Molytinae, species of (Curculionidae)	Y	Costa Rica	DE Dover (AFB) CBP	2
sect	Myodocha sp. (Rhyparochromidae)	Y	Ecuador	FL Miami PIS PPQ	ī
sect	Noctuidae, species of	Y	Dominican Republic	FL Miami PIS PPQ	1
sect	Nocluidae, species of	Υ	Dominican Republic	NY JFK PIS PPQ	1
sect	Norape argynorrhoea Huebner (Megalopygidae)	Υ	Costa Rica	FL Ft. Lauderdale PPQ	
sect	Ozophora sp. (Rhyparochromidae)	Y	Dominican Republic	FL Miami PIS PPQ	1
sect	Pentatomidae, species of	Υ	Dominican Republic	NY JFK PIS PPQ	1
sect	Pentatornidae, species of	Y	Trinidad and Tobago	FL Miami PIS PPQ	1
sect	Phyllophaga sp. (Scarabaeidae)	Y	Costa Rica	DE Dover (AFB) CBP	1
sect	Platynola sp. (Tortricidae) *Non-Rep*	N	Ecuador	FL Miami PIS PPQ	1
sect	Plectris sp. (Scarabaeidae)	Y	Ecuador	FL Miami PIS PPQ	1
nsect	Pseudococcidae, species of	Υ	Puerto Rico	PR Mayaguez Pre-Departure PPQ	1
sect	Pseudococcidae, species of	Y	St. Vincent and the Grenadines	FL Miami PIS PPQ	1
sect	Pseudococcus sp. (Pseudococcidae)	Υ	Cameroon	KY Erlanger PPQ	1
sect	Rhizoecus sp. (Pseudococcidae)	Y	Cameroon	KY Erlanger PPQ	3
sect	Scapteriscus sp. (Gryllotalpidae)	Y	Ecuador	FL Miami PIS PPQ	1
sect	Scarabaeidae, species of	Y	Dominican Republic	FL Miami PIS PPQ	1
sect	Scatopsidae, species of 'Non-Rep'	N	Cameroon	KY Erlanger PPQ	1

Pest Type	Pest	Rprt?	Origin	Location	Interceptions
Insect	Spodoptera latifascia (Walker) (Noctuidae) *Non-Rep*	N	Dominican Republic	NY JFK PIS PPQ	
Insect	Spodoptera sp. (Noctuidae)	Y	Dominican Republic	NY JFK PIS PPQ	1
Insect	Tominotus unisetosus Froeschner (Cydnidae) *Non-Rep*	N	Costa Rica	FL Ft. Lauderdale PPQ	l I
Insect	Xyleborus ferrugineus (Fabricius) (Scolytidae) *Non-Rep*	N	Costa Rica	DE Dover (AFB) CBP	1
Mollusk	Achatina (Lissachatina) fulica Bowdich (Achatinidae)	Y	Hawaii	HI Honolulu PIS PPQ	1
Mollusk	Pomacea sp. (Ampullariidae)	Υ	Dominican Republic	FL Miami PIS PPQ	2
Nematode	Ditylenchus sp. (Anguinidae)	Υ	Japan	CA San Francisco PIS PPQ	1
Nematode	Dorylaimus sp. (Dorylaimidae) "Non-Rep"	N	Dominican Republic	FL Miami PIS PPQ	, 1

			kinekelistaininteelekelista		20000
	Host Genus:	Colocasia		Host Part:	Section Server
	Host Species:	esculenta		Origin:	May Michigan American
***************************************	Date Range:	01/01/2002	thru	01/01/2003	A CONTRACTOR OF THE PARTY OF TH

03-04

Commodity Risk Assessment

Pest Type	Pest	Rprt?	Origin	Location	Interceptions
Disease	Fusarium sp. (Hyphomycetes)	Y	Jamaica	GA Atlanta PIS PPQ	2
Disease	No identifiable pathogen found "Non-Rep"	N	Dominican Republic	NJ Newark Sea CBP	1
Disease	No identifiable pathogen found *Non-Rep*	N	Sierra Leone	NC Raleigh PPQ	ì
Insect	Amphiacusta caraibea Saussure (Gryllidae)	Y	Brazil	PA Philadelphia PPQ	1
Insect	Anurogryllus sp. (Gryllidae)	Y	Costa Rica	CA San Diego PIS PPQ	1
Insect	Aphis gossypii Glover (Aphididae) *Non-Rep*	N	Trinidad and Tobago	SC Charleston PPQ	Ĭ.
Insect	Atla sp. (Formicidae)	Y	Costa Rica	FL Miami PIS PPQ	1
Insect	Cacographis osteolalis (Lederer) (Crambidae)	Y	Costa Rica	DE Dover (AFB) CBP	1
Insect	Collembola, species of *Non-Rep*	N	Azores	MA Boston PPQ	ı
Insect	Conoderus sp. (Elateridae)	Y	Dominican Republic	FL Miami PIS PPQ	1
Insect	Curculionidae, species of	Y	Costa Rica	NJ Linden PIS PPQ	6
Insect	Curculionidae, species of	Υ	Costa Rica	NJ Newark Sea CBP	ī
Insect	Curculionidae, species of	Υ	Venezuela	FL Miami PIS PPQ	ì
Insect	Cyclocephala sp. (Scarabaeidae)	Υ	Ecuador	FL Miami PIS PPQ	1
Insect	Dysmicoccus brevipes (Cockerell) (Pseudococcidae) *Non-Rep*	N	Costa Rica	CA San Diego PIS PPQ	1
Insect	Eurychilella sp. (Miridae)	Υ	Costa Rica	DE Dover (AFB) CBP	1
Insect	Gelechiidae, species of	Y	Nigeria	NY JFK PIS PPQ	1
Insect	Gryllus sp. (Gryllidae)	Y	Brazil	FL Miami PIS PPQ	1
Insect	Gryllus sp. (Gryllidae)	Y	Dominican Republic	FL Miami Sea CBP	Ï
Insect	Insecta, species of	Υ	Jamaica	NJ Newark Sea CBP	· 1
Insect	Lepidoptera, species of	Y	Nigeria	GA Atlanta PIS PPQ	ī
Insect	Miogryllus sp. (Gryllidae)	Y	Ecuador	FL Miami PIS PPQ	2
Insect	Myrmicinae, species of (Formicidae)	Y	Nigeria	CA San Francisco PIS PPQ	1
Insect	Noctuidae, species of	Y	Dominican Republic	NY JFK PIS PPQ	3
Insect	Paraputo sp. (Pseudococcidae)	Υ	Fiji	HI Honolulu PIS PPQ	í
Insect	Pentatomoidea, species of	Y	Dominican Republic	FL Miami PIS PPQ	1
Insect	Pseudococcidee, species of	Y	Bangladesh	GA Atlanta PIS PPQ	1
Insect	Pseudococcidae, species of	Y	Cameroon	KY Erlanger PPQ	1
Insect	Pseudococcidae, species of	Υ	Nigeria	GA Atlanta PIS PPQ	1
insect	Spodoptera exigua (Hubner) (Noctuidae) *Non-Rep*	N	Dominican Republic	FL Miami PIS PPQ	1
Insect	Thysanoptera, species of	Υ	Bangladesh	GA Atlanta PIS PPQ	ī
Insect	Tortricidae, species of	Υ	Ghana	NY JFK PIS PPQ	1

Pest Type	Pest	Rprt?	Origin	Location	Interceptions	
Insect	Tortricinae, species of (Tortricidae)	y Y	Nigeria	NY JFK PIS PPQ	ncaninam alma ammanan ammanan ammanan amminasa alma ammanan amminasa ammanan ammanan ammanan ammanan ammanan a L	
Mollusk	No identifiable mollusca found 'Non-Rep'	N	Dominican Republic	NJ Newark Sea CBP	ı	
Mollusk	Praticolella griseola (Pfeiffer) (Polygyridae) *Non-Rep*	N	Dominican Republic	NY JFK PIS PPQ	1	

Si-wearensoness.	Host Genus:	Colocasia	gerigeliselise his kathoris tintet i segoco ul teranista sina dispetiti dia 1960.		Host Part:	2752450
709909090904040	Host Species:	esculenta			Origin:	PARTITION ASSESSED.
**************************************	Date Range:	01/01/2003	thru	01/01/2004		essand desperance

04-05

Commodity Risk Assessment

Pest Type	Pest	Rprt?	Origin	Location	Interceptions
Insect	Aphididae, species of	Y	Dominican Republic	FL Miami PIS PPQ	2
Insect	Aphididae, species of	Y	Jamaica	FL Miami PIS PPQ	1,
Insect	Aphididae, species of	Y	Philippines	CA San Francisco PIS PPQ	1
Insect	Blapstinus sp. (Tenebrionidae)	Υ	Colombia	FL Ft. Lauderdale PPQ	1
Insect	Carabidae, species of *Non-Rep*	N	Dominican Republic	PA Philadelphia PPQ	1
Insect	Cecidomyiidae, species of	Y	Costa Rica	NJ Linden PIS PPQ	1
Insect	Chrysomelidae, species of	Υ	Colombia	FL Ft Lauderdale PPQ	1
Insect	Cicadellidae, species of	Υ	Hawaii	HI Honolulu PIS PPQ	2
Insect	Curculionidae, species of	Y	Costa Rica	NJ Linden PIS PPQ	5
Insect	Delphacidae, species of	Υ Υ	Philippines	CA San Francisco PIS PPQ	1
Insect	Eurychilella sp. (Miridae)	Υ	Costa Rica	PR San Juan PIS PPQ	1
Insect	Galerucinae, species of (Chrysomelidae)	Y	Colombia	FL Miami PIS PPQ	- 1
Insect	Galerucinae, species of (Chrysomelidae)	Υ	Nicaragua	FL Miami PIS PPQ	£
Insect	Gryllus sp. (Gryllidae)	Y	Dominican Republic	FL Miami PIS PPQ	1
Insect	Gryllus sp. (Gryllidae)	Υ	Dominican Republic	PA Philadelphia PPQ	ı
Insect	Lepidoptera, species of	Υ	Hawaii	HI Honolulu PIS PPQ	1
Insect	Margarodidae, species of	Y	Philippines	CA San Francisco PIS PPQ	1
Insect	Melolonthinae, species of (Scarabaeidae)	Y	Ecuador	FL Miami PIS PPQ	1
Insect	Miridae, species of	Y	Philippines	CA San Francisco PIS PPQ	t
Insect	Nitidulidae, species of "Non-Rep"	N	Dominican Republic	PA Philadelphia PPQ	ı
Insect	Noctuidae, species of	Υ	Dominican Republic	NY JFK PIS PPQ	1
Insect	Noctuidae, species of	Y	Jamaica	FL Miami PIS PPQ	1
Insect	Otilidae, species of *Non-Rep*	N	Costa Rica	NJ Linden PIS PPQ	1
Insect	Parapulo leveri (Green) (Pseudococcidae)	Υ	Fiji	HI Honolulu PIS PPQ	i
Insect	Rastrococcus spinosus (Robinson) (Pseudococcidae)	Y	Philippines	CA San Francisco PIS PPQ	1
Insect	Rutelinae, species of (Scarabaeidae)	Υ	Colombia	FL Ft. Lauderdale PPQ	1
Insect	Stenocrates sp. (Scarabaeidae)	Y	Brazil	PA Philadelphia PPQ	1
Insect	Thripidae, species of	Y	Jamaica	FL Miami PIS PPQ	1
Insect	Typhaea stercorea (Linnaeus) (Mycetophagidae) *Non-Rep*	N	Colombia	FL Ft. Låuderdale PPQ	. 1
Mite	Tetranychus sp. (Tetranychidae)	Y	Hawaii	HI Kahului CBP	1
Weed	Colocasia esculenta (Linnaeus) Schott (Araceae) "Non-Rep"	N	Mexico	AZ Nogales PIS PPQ	1

Host Genus: Colocasia

Host Part:

Host Species:

esculenta

Origin:

Date Range:

01/01/2004

thru 01/01/2005

Commodity Risk Assessment

Pest Type	Pest	Rprt?	Origin	Location	Interceptions
nsect	Alegoria dilatata Laporte (Tenebrionidae) *Non-Rep*	N	Costa Rica	DE Dover PPQ	en e
nsect	Aleurodicus dispersus Russell (Aleyrodidae)	Υ	Hawaii	HI Honolulu PIS PPQ	1
nsect	Aleurodicus dispersus Russell (Aleyrodidae)	Υ	Hawaii	HI Kahului CBP	
nsect	Aphididae, species of	Υ	Trinidad and Tobago	NY JFK PIS PPQ	1
nsect	Aphis gossypii Glover (Aphididae) *Non-Rep*	N	Trinidad and Tobago	NY JFK PIS PPQ	2
nsect	Blapstinus sp. (Tenebrionidae)	Y	Ecuador	FL Miami PIS PPQ	1
nsect	Cecidomylidae, species of	Y	Dominica	VI St. Thomas CBP	1
nsect	Curculionidae, species of	Y	Costa Rica	NJ Linden PIS PPQ	7
nsect	Curculionidae, species of	Υ	Costa Rica	TX Housion PIS PPQ	1
nsect	Cyclocephala sp. (Scarabaeidae)	Y	Costa Rica	PR San Juan PIS PPQ	1
nsect	Cyclorrhapha, species of "Non-Rep"	N	Cameroon	KY Erlanger PPQ	<u>,</u> 1
nsect	Diaspididae, species of	Υ	Grenada	PR San Juan PIS PPQ	i
nsect	Euxesta sp. (Otilidae) *Non-Rep*	N	Costa Rica	NY JFK PIS PPQ	1
nsect	Gryllidae, species of	Υ	Costa Rica	DE Dover PPQ	1
nsect	Gryllus sp. (Gryllidae)	Y	Ecuador	CA Port Hueneme CBP	ī
nsect	Gryllus sp. (Gryllidae)	Y	Unknown	FL Miami PIS PPQ	ı
nsect	Heilipodus sp. (Curculionidae)	Υ	Panama	FL Miami PIS PPQ	τ
nsect	Heilipus sp. (Curculionidae)	Υ	Nicaragua	PR San Juan PIS PPQ	1
nsect	Heteroptera, species of	Y	Dominican Republic	NY JFK PIS PPQ	1
nsect	Histeridae, species of *Non-Rep*	N	Ecuador	FL Port Everglades CBP	i
nsect	Lepidoptera, species of	Y	Unknown	IL Chicago PPQ	1
nsect	Neopamera bilobata (Say) (Rhyparochromidae) *Non-Rep*	N	Ecuador	FL Miamî PIS PPQ	ı
nsect	Opogona sp. (Tineidae)	Y	Azores	MA Boston PPQ	2
nsect	Opogona sp. (Tineidae)	Y	Costa Rica	NJ Linden PIS PPQ	ĭ
nsect	Paratrechina longicornis (Latreille) (Formicidae) *Non-Rep*	N	Dominican Republic	PA Philadelphia PPQ	i
nsect	Plusiinae, species of (Noctuidae)	Υ	Costa Rica	PR San Juan PIS PPQ	1
nsect	Pseudococcidae, species of	Υ	Cameroon	KY Erlanger PPQ	1
rsect	Pseudococcidae, species of	Y	Ecuador	CA San Diego PIS PPQ	1
nsect	Pseudococcidae, species of	Y	Puerto Rico	PR San Juan PIS PPQ	2
nsect	Pteronemobius sp. (Gryllidae)	Y	China	CA Long Beach PPQ	3.
nsect	Stenocrates sp. (Scarabaeidae)	Y	Costa Rica	NJ Linden PIS PPQ	Ĭ
nsect	Typhlocybinae, species of (Cicadellidae)	Y	St. Lucia	FL Miami PIS PPQ	1
10/4/2007			Page 1 of 2	Agricultural Quara	ntine Activity Systems

-	Pest Type	Pest	Rprt?	Origin	Location	Interceptions
ļ	a minute comme	en e per e est est est a er e tra e e e e e e e			the second of th	. Grantista describir d
	Insect	Wasmannia auropunctata (Roger) (Formicidae) "Non-Rep"	N	South Africa	GA Atlanta PIS PPQ	1.
	Insect	Zopheridae, species of *Non-Rep*	N	Costa Rica	DE Dover PPQ	1
	Mollusk	Deroceras sp. (Agriolimacidae)	Υ	Azores	MA Boston PPQ	1 1

Host Genus:	Colocasia		Host Part:	
Host Species:	esculenta		Origin:	
Date Range:	01/01/2005	thru	01/01/2006	

16-07

Commodity Risk Assessment

Pest Type	Pest	Rprt?	Origin	Location	Interceptions
Insect	Aphis gossypii Glover (Aphididae) *Non-Rep*	N	Honduras	FL Ft. Lauderdale PPQ	2
insect	Bemisia tabaci Gennadius (Aleyrodidae) *Non-Rep*	N	Unknown	WA Blaine PPQ	ı
insect	Blapslinus sp. (Tenebrionidae)	Υ	Dominican Republic	FL Miami PIS PPQ	1
nsect	Brachypnoea sp. (Chrysomelidae)	Υ	Costa Rica	FL Miami Sea CBP	1
nsect	Cecidomyiidae, species of	Υ	Costa Rica	NJ Linden PIS PPQ	1
nsect	Cistalia sp. (Rhyparochromidae)	Υ	Ecuador	FL Miami Sea CBP	1
nsect	Clinodiplosis sp. (Cecidomyiidae) *Non-Rep*	N	Costa Rica	NY JFK PIS PPQ	2
nsect	Copitarsia sp. (Noctuidae)	Y	Brazil	FL Miami Sea CBP	1
nsect	Curculionidae, species of	Y	Costa Rica	NJ Linden PIS PPQ	9
nsect	Dyscinetus sp. (Scarabaeidae)	Y	Nicaragua	FL Miami Sea CBP	1
nsect	Dysdercus mimus (Say) (Pyrrhocoridae) *Non-Rep*	N	Ecuador	FL Miami Sea CBP	ì
nsect	Dysmicoccus brevipes (Cockerell) (Pseudococcidae) "Non-Rep"	N	Costa Rica	NY JFK PIS PPQ	1
sect	Gryllus sp. (Gryllidae)	Y	Costa Rica	DE Wilmington CBP	1
sect	Gryllus sp. (Gryllidae)	Y	Ecuador	FL Miami Sea CBP	2
sect	Heteroptera, species of	Υ	Hawaii	HI Honolulu Pre-Departure PPQ	2
sect	Homoptera, species of	Y	Hawaii	HI Honolulu Pre-Departure PPQ	1
sect	Insecta, species of	Y	Trinidad and Tobago	NY JFK PIS PPQ	t.
sect	Isoptera, species of	Y	Hawaii	HI Honolulu Pre-Departure PPQ	1
sect	Metamasius sp. (Dryophthoridae)	Y	Costa Rica	DE Dover PPQ	i ·
sect	Miogryllus sp. (Gryllidae)	Y	Ecuador	FL Miami Sea CBP	2
sect	Nasulitermes sp. (Termitidae)	Y	Nicaragua	PR San Juan Sea CBP	1
sect	Nitidulidae, species of *Non-Rep*	N	Bangladesh	OH Cincinnati CBP	* T
sect	Nitidulidae, species of *Non-Rep*	N	Costa Rica	NJ Linden PIS PPQ	ì
sect	Noctuidae, species of	Y	Costa Rica	PR San Juan Sea CBP	1
sect	Noctuidae, species of	Y	Dominican Republic	NY JFK PIS PPQ	1
sect	Opogona sp. (Tineidae)	Y	Dominican Republic	FL Miami Sea CBP	1
sect	Prytanes oblonga (Stat) (Rhyparochromidae) *Non-Rep*	N	Dominican Republic	FL Miami PIS PPQ	1
sect	Pseudococcidae, species of	Υ	Dominica	VI SI. Thomas CBP	1
sect	Pseudococcidae, species of	Y	Hawaii	HI Honolulu PIS PPQ	i
sect	Pseudococcidae, species of	Y	India	TX Dallas/Ft. Worth PPQ	1
sect	Pseudococcidae, species of	Υ	Jamaica	NY JFK CBP	1
sect	Pseudococcidae, species of	Y	Nigeria	CA San Francisco PIS PPQ	i

Pest Type	Pest	Rprt?	Origin	Location	Interceptions
Insect	Pseudococcidae, species of	Υ	St. Vincent and the Grenadines	NY JFK CBP	I.
Insect	Pseudococcidae, species of	Υ	United Kingdom of Great Britain and N. Ireland	FL Miami PIS PPQ	I
Insect	Pseudococcidae, species of	Υ	Unknown	WA Blaine PPQ	1
Insect	Pteronemobius sp. (Gryllidae)	Y	Ecuador	FL Miami Sea CBP	3
Insect	Tenebrionidae, species of *Non-Rep*	N	Dominican Republic	FL Miami PIS PPQ	ĭ
Insect	Tortricidae, species of	Υ	Dominican Republic	NY JFK PIS PPQ	1.
Mile	Steneotarsonemus furcatus Deleon (Tarsonemidae) 'Non-Rep'	N	Costa Rica	NY JFK PIS PPQ	3
Mollusk	Achatina (Lissachatina) fulica Bowdich (Achatinidae)	Y	Hawaii	CA San Francisco PIS PPQ	1 .
Nematode	Rhabditidae, species of 'Non-Rep'	N	Unknown	WA Blaine PPQ	1

-	Host Genus:	Colocasia	esserásásás veletülk segentesse	gazassa medikanya menerang temberan anti dia keteranta	Host Part:	() (dispendential)
oddrownsendstane	Host Species:	esculenta			Origin:	all deliberated by the same
*************	Date Range:	01/01/2006	thru	01/01/2007		Herselesensensen



DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

LINDA LINGLE
GOVERNOR
THEODORE E. LIU
DIRECTOR
MARK K. ANDERSON
DEPLITY DIRECTOR

No. 1 Capitol District Building, 250 South Hotel Street, 5th Floor, Honolulu, Hawaii 96813 Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804 Web site: www.hawaii.gov/dbedt Telephone: (808) 586-2355 Fax: (808) 586-2377

Statement of

THEODORE WITE TESTIMONY

Department of Business, Economic Development, and Tourism before the

COMMITTEE ON HAWAIIAN AFFAIRS

Wednesday, March 18, 2009 9:00 a.m. State Capitol Auditorium Room 329

in consideration of SB 709 SD2
RELATING TO AGRICULTURE.

Chair Carroll, Vice Chair Shimabukuro and Members of the Committee.

The Department of Business, Economic Development, and Tourism (DBEDT) understands the intent of SB 709 SD2, which would prohibit the development, testing, propagation, release, importation, planting, and growing of genetically engineered (GE) taro in the State of Hawaii. Although we have respect for the cultural importance of taro to native Hawaiians, we support the position of the Department of Agriculture in opposition to this measure.

We note however, that HB 1663 HD1, a very similar bill, has considered the concerns of all parties and developed language that restricts the genetic modification of non-Hawaiian taro only to enclosed laboratories where access is denied to the general public and prohibits outdoor field testing or release of genetically modified taro within the State of Hawaii. We support this compromise language and recommend its adoption for SB 709 SD2 if it moves from this committee.

Thank you for the opportunity to provide these comments.



Diane L. Ley

Deputy Director

County of Hawaii

DEPARTMENT OF RESEARCH AND DEVELOPMENT

25 Aupuni Street, Room 109 • Hilo, Hawaii 96720-4252 (808) 961-8366 • Fax (808) 935-1205 E-mail: chresdev@co.hawaii.hi.us

March 18, 2009

The Honorable Mele Carroll, Chair and Members of the House Committee on Hawaiian Affairs State Capitol, Conference Room 329 415 South Beretania Street Honolulu, HI 96813

RE: S.B. NO. 709, SD2 (SSCR736) RELATING TO AGRICULTURE

Dear Chair Carroll and Committee Members:

The County of Hawaii Department of Research and Development supports the intent of S.B. No. 709, SD2 (SSCR736) to respect the cultural and historical significance of taro to the kanaka maoli by prohibiting the development, testing, propagation, release, importation, planting, or growing of genetically engineered taro in the State of Hawaii. Moreover, we hope that the conviction and strong desire of the Hawaiian taro farmers to utilize the traditional breeding and hybridization methods of farming taro will be sufficient to keep the taro industry sustainable.

Thank you for the opportunity to submit testimony on S.B. No. 709, SD2 (SSCR736).

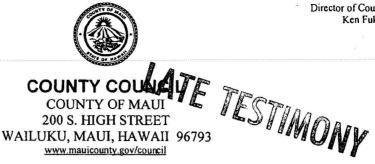
Sincerely,

Randall M. Kurohara Director

Council Chair Danny A. Mateo

Vice-Chair Michael J. Molina

Council Members Gladys C. Baisa Jo Anne Johnson Sol P. Kaho'ohalahala Bill Kauakea Medeiros Wayne K. Nishiki Joseph Pontanilla Michael P. Victorino



March 17, 2009

TO:

Honorable Mele Carroll, Chair

House Committee On Hawaiian Affair

FROM:

Danny A. Mateo

Council Chair

SUBJECT:

HEARING OF MARCH 18, 2009; TESTIMONY IN SUPPORT SB 709, SD2,

RELATING TO AGRICULTURE

Thank you for the opportunity to testify in support this important measure. The purpose of this measure is prohibit the development, testing, propagation, release, importation, planting, or growing of genetically engineered taro in the State of Hawaii.

The Maui County Council has not had the opportunity to take a formal position on this measure. Therefore, I am providing this testimony in my capacity as an individual member of the Maui County Council.

I support this measure for the following reasons:

- Kalo is an integral part of the Native Hawaiian culture. The process of altering, modifying, or changing the cells of this important Hawaiian staple represents a defilement of the Hawaiian culture.
- 2. Kalo has tremendous agricultural, cultural, and traditional significance to the residents of Hawaii. Genetically modified taro is disrespectful of the cultural foundation that taro holds for Hawaii's people.
- 3. The attached Maui County Resolution No. 08-31 is indicative of Maui County's support of State legislation to protect our native taro.

For the foregoing reasons, I support this measure.

ocs:proj:legis:09legis:09testimony: sb709,sd2 paf09-081 ltt

Resolution

No. 08-31

URGING SUPPORT OF SENATE BILL NO. 958, RELATING TO GENETICALLY MODIFIED ORGANISMS

WHEREAS, Senate Bill No. 958, currently pending before the Hawaii State Legislature, will impose a ten-year moratorium on developing, testing, propagating, cultivating, growing, and raising genetically-engineered taro in the State; and

WHEREAS, kalo, the Hawaiian word for taro, is a culturally significant plant to the kanaka maoli, Hawaii's indigenous peoples; and

WHEREAS, kalo is an integral part of the Native Hawaiian culture and represents Haloa, the elder brother of man, and genetically altering the structure of the taro plant represents a defilement of the genealogical link between the two; and

WHEREAS, today, there remain approximately 85 varieties of kalo out of the hundreds that were known in Hawaii and, of these, the majority, approximately 69 varieties, are unique to the Hawaiian islands due to the horticultural skills of native Hawaiian farmers; and

WHEREAS, farmers, Hawaiian groups, and private individuals have expressed their concerns that genetically-modified taro will destroy the genetic strains of native taro species, and is disrespectful of the cultural foundation taro holds for Native Hawaiians and their religious practices; and

WHEREAS, kalo is a healthy and nutritious staple in the diets of many residents throughout the State of Hawaii; and

WHEREAS, the important cultural relationship between kalo and the kanaka maoli expresses the spiritual and physical well-being of not only the kanaka maoli and their heritage, but also symbolizes the environmental, social, and cultural values important to the State of Hawaii; and

WHEREAS, kalo continues to have tremendous agricultural, cultural, and traditional significance to the residents of our County and State; and

WHEREAS, cross-pollination of genetically-modified kalo would place an immeasureable threat on traditional varieties; and

WHEREAS, the amount of usable land for raising kalo is scarce in the County of Maui, and any negative impact would devastate the kalo industry in the County of Maui; and

WHEREAS, experimenting with the genetic engineering of this crop, without thoroughly examining and evaluating the adverse effects of that process, is careless and could have far-reaching, irreversible, and unintended consequences; and

WHEREAS, the purpose of Senate Bill No. 958 is to recognize the importance of kalo in the heritage of the State, by creating a ten-year moratorium on developing, testing, propagating, cultivating, growing, and raising of genetically-engineered kalo in the State of Hawaii; now, therefore,

BE IT RESOLVED by the Council of the County of Maui:

- 1. That it hereby urges support of Senate Bill No. 958, which will protect the biological lifeblood of the State from irreparable harm; and
- 2. That certified copies of this resolution be transmitted to the Honorable Charmaine Tavares, Mayor, County of Maui; the Honorable Linda Lingle, Governor, State of Hawaii; the State House of Representatives; the State Senate; Sandra Lee Kunimoto, Director, State Department of Agriculture; Andrew Hashimoto, Dean, College of Tropical Agriculture and Human Resources (CTAHR), University of Hawaii at Manoa; Harold Keyser, CTAHR, Maui Community College; Penny Levin; Steven Hookano; Pauahi Hookano; Victor Pellegrino; and Walter Ritte.

pwf:misc:069arcso02:scj

COUNCIL OF THE COUNTY OF MAUI

WAILUKU, HAWAII 96793

CERTIFICATION OF ADOPTION

It is HEREBY CERTIFIED that RESOLUTION NO. 08-31 was adopted by the Council of the County of Maui, State of Hawaii, on the 4th day of April, 2008, by the following vote:

MEMBERS	G. Riki HOKAMA Chair	Dennis A. MATEO Vice-Chair	Michelle ANDERSON	Gladys C. BAISA	Jo Anne JOHNSON	William J. MEDEIROS	Michael J. MOLINA	Joseph PONTANILLA	Michael P. VICTORINO
ROLL CALL	Aye	Aye	Excused	Aye	Aye	Aye	Aye	Aye	Aye

COUNTY CLERK





HOUSE COMMITTEE ON HAWAIIAN AFFAIRS

March 18, 2009, 9:00 A.M.

TESTIMONY IN SUPPORT OF SB 709, SD2

Aloha Chair Carroll and Members of the Committee:

The Sierra Club, Hawai'i Chapter, with nearly 5500 dues paying members statewide, supports SB 709 SD2, prohibiting the development, testing, propagation, release, importation, planting, or growing of genetically modified taro plants in Hawai'i.

Genetically modifying organisms—the practice of splicing DNA from bacteria, viruses and other organisms into plants to lend them certain traits, like resistance to chemical weedkillers—poses extreme risks to our common environment. Manipulation of genetic material by inserting bacteria, plant, animal, and human genes into food products is a radical departure from traditional breeding techniques and represents an unprecedented break with natural processes.

In Hawai'i, such genetically modified organism (GMO) biotechnology is mainly experimental. Most of the experiments are taking place not in a laboratory, but in the open air, in locations concealed from the public. In fact, Hawai'i has had more plantings of experimental biotech crops than anywhere else in the nation—or the world.

Hawaii's small size, its close proximity of agricultural and populated areas, and its unique, sensitive, natural environment combine to dramatically raise the stakes of testing GMO crops here. A December 2005 report from the Inspector General of the US Department of Agriculture (USDA), found that USDA's inadequate safeguards "increase the risk that genetically engineered organisms will inadvertently persist in the environment before they are deemed safe to grow without regulation."

While decision makers are just beginning to understand the magnitude of the problem in Hawai'i, Taro is an important, cultural crop that is immediately at risk. This crop is primarily grown by small, local farmers. To adequately protect the environment and the Hawai'i taro industry, a moratorium on genetically modified taro needs to be in place.

Thank you for the opportunity to testify.



Kauai County Farm Bureau

Affiliated with Hawaii Farm Bureau Federation
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808-332-8189 (phone/fax) 808-652-3217 (cell)
kcfb@hawaiiantel.net

The Voice of Kauai's Agriculture

March 18, 2009

ATTN: Rep. Mele Carroll, Chair

Rep. Maile S.L. Shimabukuro, Vice Chair

RE:

SB 709 SD2: Relating to Agriculture

HEARING DATE: March 18, 2009; 9:00am Room 329

Aloha Representative Carroll and members of the committee:

The Kauai County Farm Bureau is strongly opposed to SB709SD2 as written, prohibiting the development, testing, propagation, release, importation, planting, or growing of genetically modified taro in the State of Hawaii.

We do not question the desire to have a population of culturally significant varieties kept in its "pure" form, but ask that the moratorium be limited to identified Hawaiian varieties and not expanded to include all taro. While we recognize the cultural significance of taro, we there is also a commercial role for taro in Hawaii. Before you today are the growers who provide the majority of taro that we eat. We ask that the needs of these farming families also be considered here to ensure sustainability of commercial taro as an industry.

Affiliated with the Hawaii Farm Bureau Federation, the Kauai County Farm Bureau is a non-profit organization representing over 300 farming families on Kauai united for the purpose of analyzing problems and formulating action to ensure the future of agriculture and promoting the well-being of farming. As a general agriculture advocacy organization, we represent commercial farmers and ranchers around the island.

Commercial farmers and ranchers are in constant search of new technologies to advance the long term sustainability and viability of their operations. Genetic modification of crops is the latest technology that has advanced the development of new varieties providing farmers with a tool to outpace the increasing costs faced by the industry. Research is an essential ingredient of innovation, not only to move the industry forward but also to help protect farmers from challenges that arise.

Please support our commercial Taro farmers on Kauai by supporting continued research in this area. GM has demonstrated some benefits already in this area related to other crops. Without GM the papaya industry would not exist and the pockets of organic papaya would not be possible due to the prevalence of the Ringspot virus. This kind of research can be an asset to all growers, even if these farmers never plant GM crops. Farmers already face many challenges to face in developing a viable commercial operation.





We urge that we find a way to work together here, that both preserves identified Hawaiian varieties and ensures the sustainability of commercial taro farming. Having Hawaii dependent upon research by entities outside of our State does not support a path towards self sufficiency or long term sustainability. Techniques are available to protect the genetic integrity of culturally important varieties while helping to preserve and grow our local taro industry through research.

For the reasons noted above, Kauai County Farm Bureau respectfully urges that that SB 709 SD 2 be amended limiting the moratorium to identified Hawaiian varieties while continuing controlled research on all other taro varieties and other crops.

Mahalo for your time and consideration. Please do not hesitate to contact me should you have any questions.

Sincerely,

Roy Oyama, President
On behalf of the Kauai County Farm Bureau board
Personal contacts: 808-332-9426 oyama farm@yahoo.com



TESTIMONY

LATE TESTIMONY RE: SB 709 SD2 RELATING TO TARO SECURITY

Chair Carroll and Members of the Committees:

Hawaii Farm Bureau Federation is Hawaii's general agriculture advocacy organization. We represent commercial farmers and ranchers across the State. HFBF is in strong opposition of SB709SD2 as written, prohibiting the development, testing, propagation, release, importation, planting, or growing of genetically modified taro in the State of Hawaii.

HFBF comes before you today in support of our commercial taro farmers across the State. HFBF and all of our farmers respect the cultural significance of taro. We do not question the desire to have a population of cultural significant varieties kept in its' "pure" form.

While we recognize the cultural significance of the plant, we also believe there is a major commercial role for taro in Hawaii. Before you today are the growers who provide the majority if not all of the taro you and I eat. Commercial farmers and ranchers are in constant search of new technologies to advance the long term sustainability and viability of their operations. Genetic modification of crops is the latest technology that has advanced the development of new varieties providing farmers with a tool to outpace the increasing costs faced by the industry. Contrary to frequent statements, GM crops are among the most tested to be introduced into the fields. They are subjected to experiments and analysis far beyond that for conventional or mutational breeding processes. For us in Hawaii, the results are tangible. Without GM, the papaya industry would not exist and the pockets of organic papaya would not be possible due to the prevalence of the Ringspot virus.

All of these technologies take time. When one recognizes the urgency to develop the technology because of a problem it will be too late. We urge the committee to consider all of the ramifications as decision on this measure is made. What is the decision between having a GM taro or having no taro? The preamble to this measure extols the value of taro. It truly is an

incredible plant that everyone should be able to have access when and if they want it. It would truly be a shame if we are not doing all we can to make sure taro is available for everyone for many generations to come. It is also important that the capacity to develop critical crop characteristics whether it be disease resistance or traits such as improved nutritional value be here in Hawaii. Having Hawaii dependent upon research by entites outside of our State does not support a path towards self sufficiency or long term sustainability. Will a researcher in New York care about the taro as our researchers in Hawaii do?

Despite statements to the contrary, techniques are available to protect the genetic integrity of culturally important varieties and we strongly support the implementation of those practices for cultural plantings in contrast to commercial plantings.

Hawaii Farm Bureau is in support of our commercial taro farmers who provide the majority of taro in the marketplace. They grow the poi everyone eats. We respectfully urge that SB709 be amended limiting the moratorium to identified Hawaiian varieties while continuing the controlled research on all other taro varieties as well as other crops. Thank you for this opportunity to provide comment on this measure.



Testimony Presented before the

COMMITTEE ON HAWAIIAN AFFAIRS

Rep. Mele Carroll, Chair Rep. Maile Shimabukuro, Vice Chair

DATE: Wednesday, March 18, 2009

TIME: 9:00 a.m.

PLACE: Conference Room 329

State Capitol

415 South Beretania Street

by

Richard M. Manshardt, Professor Department of Tropical Plant & Soil Sciences College of Tropical Agriculture and Human Resources University of Hawai'i at Mānoa

SB709 SD2 RELATING TO AGRICULTURE, prohibits the development, testing, propagation, release, importation, planting, and growing of genetically modified taro in the State of Hawaii.

My name is Richard Manshardt. I am a professor and plant geneticist in CTAHR at UH Manoa. I have 25 years of research and teaching experience in crop sciences at UH, including work in conventional crop breeding and the development of genetically engineered virus-resistant papaya varieties for Hawaii growers. I am providing testimony on my own behalf, not officially presenting the position of CTAHR or UH on this bill.

I respectfully oppose SB709 SD2.

Most of the text of this bill tells of the spiritual significance of taro in the Hawaiian culture. The drafters of the bill hold the taro plant in special regard, connecting it with the origin of Hawaiian culture, much as others in our multicultural society place the body and blood of Jesus Christ in the central role of the Christian community. We are guaranteed our freedom of belief by the first amendment to the US Constitution, and this is good and right.

But if one group's beliefs are used to justify restricting the actions of others, that may not be good or right. The stated objective of SB709 is to impose a moratorium on research or production of genetically engineered taro, but there is no logical development of ideas to show why a moratorium is appropriate. The bill doesn't explain the connection between taro's spiritual importance and genetic engineering, so the reader is left to conclude that the drafters of the bill want the moratorium because genetically engineered taro violates their belief in a genealogical relationship to taro. The bill basically says, "You can't use genetic engineering to improve taro, because we don't like that idea, and no other justification is needed."

Because agriculture is dynamic, with crop varieties, weather conditions, and pests that influence production changing from year to year, researchers need all the tools they can get to protect and improve farm production. In my experience, genetic engineering is a useful, effective, and safe tool for crop improvement. Genetic engineering is not appropriate for all breeding objectives and is not going to replace conventional breeding methodologies based on cross-pollination, but a moratorium on its application to taro or any other crop is not going to serve the long term interests of growers or consumers in Hawaii. At a minimum, we need to be able to do genetic engineering research to properly evaluate the risk/benefit ratio of this approach in improving taro. Please remember that new variety development, whether by conventional means or genetic engineering, is a decade-long process and cannot be turned on and off arbitrarily.

The legislature has a clear role here to support the concept that technical problems need to be addressed and resolved in a scientific context, where logical thinking based on experimental data is foremost, rather than religious, cultural, or political considerations.

Thank you for this opportunity to testify, and I ask you to please vote against SB709 SD2.

Rep. Maile Shimabukuro

From:

mailinglist@capitol.hawaii.gov

Sent:

Tuesday, March 17, 2009 4:58 PM

To: Cc: **HAWtestimony** waynen@hawaii.edu

Subject:

Testimony for SB709 on 3/18/2009 9:00:00 AM

Testimony for HAW 3/18/2009 9:00:00 AM SB709

Conference room: 329

Testifier position: oppose Testifier will be present: No Submitted by: Wayne Nishijima

Organization: Individual

Address: 377 Huali Place Hilo, HI 96720

Phone: 808-961-6555

E-mail: waynen@hawaii.edu Submitted on: 3/17/2009

Comments:

LATE TESTIMONY

Rep. Maile Shimabukuro

From:

Mailing List

Sent: To: Thursday, March 19, 2009 7:38 AM HAWtestimony; AGRtestimony

Subject:

FW: Testimony for SB709 on 3/18/2009 9:00:00 AM

Forwarding email

Regards,

Casey Alinan Senate IT HelpDesk

Email: c.alinan@capitol.hawaii.gov



From: Rose Z [mailto:happyjumpingfrog@hotmail.com]

Sent: Wednesday, March 18, 2009 6:08 PM

To: Mailing List

Subject: RE: Testimony for SB709 on 3/18/2009 9:00:00 AM

I don't know if this will be edited or read, but I just realized I made a typo on it! In the first line I meant to say ""I support the ban on genetically engineered taro, and also support **banning** ALL other genetically engineered products.""

I hope this change is received. thank you Rose Zeitler

> From: mailinglist@capitol.hawaii.gov> To: HAWtestimony@capitol.hawaii.gov> CC: happyjumpingfrog@hotmail.com

> Date: Sat, 14 Mar 2009 04:47:53 -1000

> Subject: Testimony for SB709 on 3/18/2009 9:00:00 AM

> Testimony for HAW 3/18/2009 9:00:00 AM SB709

Conference room: 329
 Testifier position: support
 Testifier will be present: No
 Submitted by: Rose Zeitler
 Organization: Individual

> Address: 883 Buena Vista Drive Watsonville

> Phone: 8312954352

> E-mail: happyjumpingfrog@hotmail.com

> Submitted on: 3/14/2009

> Comments:

>

>

> I support the ban on genetically engineered taro, and also support ALL other genetically engineered products. Genetically engineered taro is not neccessary, is not safe or regulated as intensely as it should be. GE crops can cross pollinate with local plants and destroy the biodiversity of local flora and fauna. GE crops are not regulated and monitored as closely as they should be and I do not support their existence on Maui. I support the GE Ban. -Rose Zeitler, born and raised on Maui, currently away at College in CA

LATE TESTIMONY

00:00 AM SB709