

JOSH GREEN, M.D.
GOVERNOR | KE KIA'ĀINA

SYLVIA LUKE
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA



STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAI'I
DEPARTMENT OF LAND AND NATURAL RESOURCES
KA 'OIHANA KUMUWAIWAI 'ĀINA

P.O. BOX 621
HONOLULU, HAWAII 96809

Testimony of
DAWN N. S. CHANG
Chairperson

Before the Senate Committee on
AGRICULTURE & ENVIRONMENT

Wednesday, March 15, 2023
2:00 PM

State Capitol, Conference Room 224

In consideration of
HOUSE BILL 1149, HOUSE DRAFT 2
RELATING TO THE COCONUT RHINOCEROS BEETLE PROGRAM

House Bill 1149, House Draft 2 proposes to appropriate funds for positions and activities related to the coconut rhinoceros beetle infestation control. **The Department of Land and Natural Resources supports this measure provided that its passage does not replace or adversely impact priorities indicated in the University of Hawaii's Executive Budget request.**

The coconut rhinoceros beetle (CRB) is a major pest of coconut palms (*Cocos nucifera*) and African oil palm (*Elaeis guineensis*). It can be also found in betelnut (*Areca catchu*), Pandanus species, banana, pineapple, sugarcane, and even the native Hawaiian palms, loulou. Adults damage living palms, either killing the tree due to direct damage, or opening the tree to mortal damage from other insects or pathogens. On Pacific Islands with no natural enemies of this beetle, the damage can be extreme. In Palau, where the beetle first invaded in 1942, the coconut palm was eradicated entirely on some islands, with overall mortality across the archipelago reaching 50%.

CRB was found on O'ahu in 2013 at the Joint Base Pearl Harbor-Hickam during a routine survey by the Hawai'i Department of Agriculture and the University of Hawai'i-Hilo. An intensive, multi-agency effort was initiated and the CRB Response Team continues monitoring and outreach to this day. The unregulated movement of green waste has led to this species spreading throughout O'ahu, but the efforts to control this pest have been successful at containing CRB to a single island. Continued investment in monitoring, research, and management is necessary to mitigate further damage on O'ahu and prevent CRB's spread to other islands, thus protecting important natural, cultural, and agricultural plant species.

Mahalo for the opportunity to provide testimony in support of this measure.

DAWN N.S. CHANG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE
MANAGEMENT
LAURA H.E. KAAKUA
FIRST DEPUTY
M. KALEO MANUEL
DEPUTY DIRECTOR - WATER
AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE
MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES
ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

JOSH GREEN, M.D.
Governor

SYLVIA LUKE
Lt. Governor



SHARON HURD
Chairperson, Board of Agriculture

MORRIS M. ATTA
Deputy to the Chairperson

State of Hawai'i
DEPARTMENT OF AGRICULTURE
KA 'OIHANA MAHI'AI
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**TESTIMONY OF SHARON HURD
CHAIRPERSON, BOARD OF AGRICULTURE**

BEFORE THE SENATE COMMITTEE ON AGRICULTURE AND ENVIRONMENT

**MARCH 15, 2023
2:00 PM
CONFERENCE ROOM 224**

**HOUSE BILL NO. 1149, HD2
RELATING TO AGRICULTURE**

Chairperson Gabbard and Members of the Committee:

Thank you for the opportunity to testify on House Bill 1149, House Draft 2 relating to the coconut rhinoceros beetle program. This bill appropriates funds for positions and activities related to the coconut rhinoceros beetle (CRB) infestation control. The Department strongly supports this measure.

The state has reached a turning point to protect our palm and culturally related resources from the invasive CRB. Utilizing federal funding through a variety of agencies, the department has formed an interagency program known as the Coconut Rhinoceros Beetle Response (the Response). The Department leads the Response through a unified incident command system. Unfortunately, despite the efforts of the Response over the past nine years, CRB population densities in central Oahu are significantly increasing, most likely through the routine movement of green waste. The fight to eradicate CRB from Oahu is now at a pivotal moment.

Our collaboration with Joint Base Pearl Harbor Hickam (JBPHH) has demonstrated that through the implementation of a comprehensive green waste management plan, landscape level control of CRB populations is achievable, especially



when combined with the judicious and strategic use of pesticide treatments. The state must follow the Navy's lead in environmental protection through the adoption of a comprehensive green waste management program. The Department, with the passing of an interim rule to Hawaii Revised Statutes 4-72 last year, has been working towards a rough legal framework to manage green waste on Oahu, using compliance agreements. However, given the status of CRB populations on Oahu, the compliance agreements must be coupled with strong actions to mitigate and control populations on Oahu.

Current funding received by the University of Hawaii to support the Coconut Rhinoceros Beetle Response is limited in scope to specific areas of infestation (JBPHH or natural areas) or intended to contain infestations on Oahu. Additional funding will allow the Response to continue to prevent the spread of infestations outside of Oahu while working toward regional control and eradication on the island of Oahu through the creation of positions which can be used by the University to pursue funding for control and eradication.

The Department greatly appreciates the legislature's action in the funding of this measure. Funding core staff and programs will allow the Response to properly leverage resources in an effective and sustained manner.

Thank you for the opportunity to testify on this measure.



UNIVERSITY OF HAWAII SYSTEM

‘ŌNAEHANA KULANUI O HAWAII

Legislative Testimony

Hō'ike Mana'o I Mua O Ka 'Aha'ōlelo

Testimony Presented Before the
Senate Committee on Agriculture and Environment
Wednesday, March 15, 2023 at 2:00 p.m.

By

Anna Wieczorek, Interim Dean
College of Tropical Agriculture and Human Resources

And

Michael Bruno, Provost
University of Hawai'i at Mānoa

HB 1149 HD2 – RELATING TO THE COCONUT RHINOCEROS BEETLE PROGRAM

Chair Gabbard, Vice Chair Richards, and Members of the Senate Committee on Agriculture and Environment:

Thank you for the opportunity to provide testimony in support of the intent of HB 1149 HD2 relating to *Oryctes rhinoceros* or coconut rhinoceros beetle (CRB) which adversely impacts palm species that are important to the State's agricultural economy, cultural heritage, and ecosystems.

CRBs feed on emerging palm fronds that cause damage and often severe enough to cause die back and plant mortality. There exists a CRB response program which is a coordinated partnership with the University of Hawai'i, U. S. Department of Agriculture (USDA), Hawai'i Department of Agriculture, and other key organizations.

Since the detection of CRB on O'ahu, funding for CRB response has primarily been through federal partners such as USDA and the U. S. Navy. The purpose of this measure is to appropriate funds out of the general revenues of the State of Hawai'i to support existing CRB response positions and core activities involving research, response, education, and investigative work needed to maintain a successful and effective program to control the spread of CRB.

Specifically, this bill will provide funding for:

- one full-time equivalent (1.0 FTE) permanent junior researcher to serve as the deputy incident commander under HDOA leadership;
- one full-time equivalent (1.0 FTE) permanent administrative professional/technician for program administration and maintenance;
- one full-time equivalent (1.0 FTE) permanent data collection, management, and GIS analysis supervisor;
- three full-time equivalent (3.0 FTE) permanent data technicians;

- two full-time equivalent (2.0 FTE) permanent outreach and education specialists;
- one full-time equivalent (1.0 FTE) permanent canine supervisor for the CRB response canine program;
- two full-time equivalent (2.0 FTE) permanent canine handlers for the CRB response canine program;
- administration and other related costs for the CRB response canine program, including kenneling and veterinary support; and,
- supplies for maintaining research colonies and potential biological control agents.

Thank you for the opportunity to submit testimony in support of the intent of HB 1149 HD2, provided that its passage does not replace or adversely impact priorities as indicated in our Board of Regents approved budget.

HB-1149-HD-2

Submitted on: 3/14/2023 10:10:23 PM

Testimony for AEN on 3/15/2023 2:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Chair Kimeona Kane	Testifying for Waimanalo Neighborhood Board #32	Support	Written Testimony Only

Comments:

March 15, 2023

Testimony in STRONG SUPPORT of HB 1149, HD2

RELATING TO THE COCONUT RHINOCEROS BEETLE PROGRAM

Senate Committee on Agriculture and Environment

Wednesday, March 15, 2023 at 2:00 PM

Via Video Conference and CR 224

Dear Chair Gabbard, Vice Chair Richards and Committee Members,

I am writing on behalf of the Waimānalo Neighborhood Board #32, who through several Committee meetings including the CRB Task Force, forwarded a recommendation in strong support of HB 1149, HD2, Relating to the Coconut Rhinoceros Beetle Program at its Monday March 13, 2023 Regular Board Meeting, which was passed unanimously.

We are extremely concerned about the coconut rhinoceros beetle, among others, infesting Windward O‘ahu, particularly Waimānalo, which is nestled in Ko‘olaupoko, is part of an enterprise zone with fertile soil and with close proximity to the largest markets and transportation hubs on the island.

HB 1149, HD2 proposes to appropriate additional funds for position and mitigation activities to fight against the coconut rhinoceros beetle, commonly known as CRB. The funding for the University of Hawaii to is to support key positions within the CRB response program to help combat this devastating insect. The University of Hawaii has a well established CRB Response team, many of whom work around the state to fight against the widespread devastation this beetle could cause.

The threat of the Coconut Rhinoceros Beetle is of serious concern to Waimānalo as there have been over ten confirmed cases of the CRB in Waimānalo in the last six months alone.

Last week Keith Weiser, Deputy Incident Commander of Hawaii CRB Response shared more information about how to mitigate and fight CRB. Regular regiments of pesticide treatment is one option but it would forego the ability to eat any of the fruit that a tree produced. He also shared a netting technique that a farmer would have to apply to each of its coconut trees to catch CRB and prevent them from burrowing in new spears. While this coconut tree was only 5 feet high making it doable, but imagine coconut trees over 5 stories high – how is a farmer supposed to apply netting to protect their trees? What if a farmer has 100 trees, would they have to apply netting to all of the trees? That would be nearly impossible.

The level of damage the CRB can cause to coconut trees and palms could devastate the landscape industry and particularly, the Waimanalo plant nurseries. The devastation to coconut trees and palms will have grave impact upon Hawaii's unique natural landscape among our most popular destinations in Hawaii including our beaches along Waikiki's gold coast, world class golf courses and hotels and resorts statewide.

In addition, CRB presents a substantial threat to other species, which it will turn to, once all palms are impacted. The list of species is unknown, however there have been additional impacts reported in other crop items, including banana and even possibly taro.

More attention and resources are necessary to address this invasive pest and we sincerely request that you pass HB 1149, HD2.

Mahalo nui for your consideration.

Kimeona Kane

Chair, Waimānalo Neighborhood Board #32



EAST OAHU COUNTY FARM BUREAU

910 CALIFORNIA AVE., WAHIAWA, HI 96786

March 12, 2023

Senator Mike Gabbard, Chair
Senator Herbert M. "Tim" Richards, Vice Chair
Senate Committee on Agriculture and Environment
State Capitol, 415 S. Beretania St.
Honolulu, Hawai'i 96813

Dear Chair Gabbard, Vice Chair Richards, and Members of the Committee,

The East O'ahu County Farm Bureau, which represents approximately 420 farmers and supporters of agriculture from Waimanalo to Kahuku, **strongly supports HB 1149 HD2**, "Relating to the Coconut Rhinoceros Beetle," which would provide funding to support the CRB control program.

First noticed on O'ahu in 2013, the coconut rhinoceros beetle is now widespread on this island. It feeds not only on coconut trees, but also on ornamental palms and on other commercially valuable species including bananas, sugarcane, papayas, and pineapples. The beetle has been found in traps in the Waimanalo area at least ten times since 2021, and two dozen larvae were recently found in a mulch pile nearby. Waimanalo is home to many of East O'ahu County Farm Bureau's members, including ornamental and fruit growers whose crops are at risk from this devastating pest.

The CRB response program helps to monitor and contain the beetle infestation on O'ahu, reducing damage to crops and ornamental trees, and minimizing the risk of the beetle's spread to other Hawaiian islands. We therefore respectfully urge your committee to support the CRB response program by passing HB 1149 HD2.

Thank you for the opportunity to testify on this matter of great importance to Hawai'i's agricultural community.

Sincerely,

Frederick M. Mencher
for Grant Hamachi, President
East O'ahu County Farm Bureau

HB-1149-HD-2

Submitted on: 3/13/2023 7:19:35 PM

Testimony for AEN on 3/15/2023 2:00:00 PM

Submitted By	Organization	Testifier Position	Testify
William W. Steiner	Testifying for Pacific Agricultural Land Management Systems	Support	Written Testimony Only

Comments:

My greetings to Chairman Gabbard, the vice Chair, and committee members: I represent Hawaii Oil Seed Producers (HOSPRO) whose goal is to develop a vegetable oil source in Hawaii based on hybrid oil palm trees. We are a 501c5 agricultural cooperative of growers with a shared, long term vision of seeing 500,000 acres of oil palm producing 600 gallons of vegetable oil/acre as determined in our tests. This oil, and wastes from producing it, would enable development of new industries, businesses and jobs in Hawaii to replace imports of petroleum and petroleum based products. The trees would be planted on available and underutilized agricultural land abandoned when sugar and later pineapple left the islands. These industries include biodiesel, ethanol, animal feed, organic compost, bioplastics, cosmetics, pharmaceuticals, biofibers, and more. Edible cooking oils useful in baking and cooking would also be a product as would the 17 tons of carbon stored/acre of palms. Billions of dollars could be saved or remain in Hawaii to further the development of a sustainable, resilient bioeconomy, lessening the reliance on tourism as the pandemic taught us was necessary for our island's longterm survival. Coconut beetle is a deadly enemy of our palms; in SE Asia there is a constant battle to control it. The beetle could stop the development of a truly tropical crop that could restore Hawaii as an agricultural powerhouse and independent of international market as all the oil could be utilized locally. Please do take the important steps that guarantee a bioeconomy for Hawaii's future. MaHALO,

DR. William Moekahi Steiner

General Manager and Founder, HOSPRO

HB-1149-HD-2

Submitted on: 3/13/2023 8:32:41 PM

Testimony for AEN on 3/15/2023 2:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Taylor	Testifying for Palakamoon Farms	Support	Written Testimony Only

Comments:

Dear Chair Gabbard, Vice Chair Richards and Committee Members,

I am writing in strong support of HB 1149, HD2, Relating to the Coconut Rhinoceros Beetle Program. I am a second generation farmer in Waimanalo. We have been stewards of this patch of land for nearly thirty years. Of the threats we've seen, the coconut rhinoceros beetle is perhaps the most grave and alarming. If you're not familiar with the coconut rhinoceros beetle (CRB) it is an incredibly invasive and prolific beetle that feeds primarily on coconut and palm varieties, but can also feed on sugarcane, hala and pineapple. These beetles will ultimately kill the plant it feeds on, whether it be from the beetles themselves, or from outside pathogens entering the bore holes that the beetles have created. If the funding is not made available to continue fighting this beetle, it is a very real likelihood that our coconut trees could become completely wiped out-- which is what has already happened in Guam and parts of Kunia. Can you imagine our island with little to no coconut trees? No hala trees? Two of the original canoe plants essential to native Hawaiians. These beetles are not just a threat to our landscape, but to our culture and iconography.

I urge you to support this bill, which will give us more of a fighting chance to protect our island's landscape and agriculture.

Thank you,

Taylor Campbell of Palakamoon Farms



P.O. Box 253, Kunia, Hawai'i 96759
Phone: (808) 848-2074; Fax: (808) 848-1921
e-mail info@hfbf.org; www.hfbf.org

March 15, 2023

HEARING BEFORE THE
SENATE COMMITTEE ON AGRICULTURE AND ENVIRONMENT

TESTIMONY ON HB 975, HD2
RELATING TO SUSTAINABLE AGRICULTURE

Conference Room 224 & Videoconference
2:00 PM

Aloha Chair Gabbard, Vice-Chair Richards, and Members of the Committee:

I am Brian Miyamoto, Executive Director of the Hawai'i Farm Bureau (HFB). Organized since 1948, the HFB is comprised of 1,800 farm family members statewide and serves as Hawai'i's voice of agriculture to protect, advocate and advance the social, economic, and educational interests of our diverse agricultural community.

The Hawai'i Farm Bureau supports HB 975, HD2, which clarifies the requirements for participation under the cover crop reimbursement pilot program that was established in Act 312, Session Laws of Hawai'i 2022, which established a pilot program to provide up to 75 percent cost reimbursement to farming operations in the State for the acquisition of cover crop seeds, green manure, or compost.

HFB agrees that the use of cover crops and green manure increases agricultural productivity and is a beneficial management practice. We strongly support the concept of building soil structure and nutrient capacity. Caring for the soil is a cornerstone to having multigenerational farms that continue to provide for the people of Hawai'i. Many of our farms add compost made off-site as well as utilize short-term fallow between crop cycles to increase organic content in their soils. HFB recognizes and supports the diversion of discarded food and other useful wastes away from landfills. The benefits of this and composting are well-known.

Farming is a tough business. High production costs are a major driver of narrow profit margins for Hawai'i's farmers. Land, water, labor, taxes, transportation, utilities, inputs, invasive species, and food safety regulations are all costs of doing business that often results in our farmers just being able to break even. HFB supports this initiative that could reduce the cost of production for local farmers by incentivizing, with a 75% match, cover crops seeds, green manure, and compost material. This is another mechanism that can help locally produced goods compete with imported products, strengthening our local economy.

Thank you for this opportunity to testify on this important subject.



PO Box 42
Waimanalo, HI 96795-0042
<http://waimanaloag.com>

Waimanalo Agricultural Association

March 15, 2023

**Testimony in STRONG SUPPORT of HB 1149, HD2
RELATING TO THE COCONUT RHINOCEROS BEETLE PROGRAM**

Senate Committee on Agriculture and Environment
Wednesday, March 15, 2023 at 2:00 PM
Via Video Conference and CR 224

Dear Chair Gabbard, Vice Chair Richards and Committee Members,

The Waimanalo Agricultural Association (WAA) is writing in **strong support of HB 1149, HD2, Relating to the Coconut Rhinoceros Beetle Program**. WAA was originally formed in 1995 to address agricultural theft in Waimanalo and has since grown to represent agribusiness in Waimanalo, including plant nurseries, flower and turfgrass farms, growers of fruit and vegetables, equestrian ranches, and distributors of agricultural supplies. WAA is dedicated to the preservation and perpetuation of agriculture in Waimanalo. HB 1149, HD2 proposes to appropriate additional funds for position and mitigation activities to fight against CRB at the University of Hawaii. These funds are necessary to address the CRB issue to help combat this devastating insect.

The threat of the Coconut Rhinoceros Beetle is of serious concern to the Waimanalo community as there have been over ten confirmed cases of the CRB in Waimanalo in the last six months alone. The most recent infestation of a live breeding site was found just last month. In November 2022, WAA hosted a Kunia farmer and heard firsthand of the devastation his farm is facing due to CRB. While some farmers have opted to voluntarily comply with the Hawaii Department of Agriculture's monitoring program pursuant to an interim rule, most of Hawaii is not familiar with important and necessary best practices to help mitigate the beetle's spread.

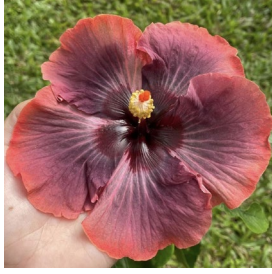
Last week at WAA's bi-monthly meeting Keith Weiser, Deputy Incident Commander of Hawaii CRB Response shared a netting technique that a farmer would have to apply to each of its coconut trees to catch CRB and prevent them from burrowing in new spears. While this coconut tree was only 5 feet high making the application of the netting doable – imagine coconut trees over 6 to 7 stories high – how is a farmer, a golf course, or a hotel supposed to apply netting to protect their trees? What if a farmer has 100 trees, would they have to apply netting or pesticides to all of the trees? That would be nearly impossible. Are we giving up on fighting these beetles? If we are we will have to live without the beauty of coconut trees, and their benefits – and many other palms that appear to be CRB's favorite feeding sources.

Per the Hawaii Department of Agriculture "CRB is a serious pest of palm trees, primarily coconut palms, as the adult beetles bore into the crowns of the palms to feed on the tree's sap. New unopened fronds are damaged in this way and when fully opened, may break and fall unexpectedly. If CRB kill or damage the growing point of the palm, the tree may die. Secondary fungal or bacterial pathogens may also attack the wounds caused by CRB, thereby killing the tree as well. Tree mortality after CRB attack

has been reported to be anywhere from 10 percent to 50 percent. Dead trees then become a safety hazard as they may fall unexpectedly after the trunk rots, potentially resulting in bodily injury or property damage.” This level of damage to coconut trees and palms could devastate the landscape industry and the Waimanalo plant nurseries in particular. The devastation to coconut trees and palms will have grave impact upon the natural landscape among our most popular destinations in Hawaii including our beaches along Waikiki’s gold coast, world class golf courses and hotels and resorts statewide.

More attention is necessary to address this invasive pest and we sincerely request that you pass HB 1149, HD2, so more resources can be dedicated to fight this pest at the University of Hawaii. Thank you for your consideration.

Coconut Rhinoceros Beetle Best Management Practices for O’ahu		Coconut Rhinoceros Beetle Best Management Practices for O’ahu	
 <p>CRB are about 2-2.5 inches long</p>		MULCH <ul style="list-style-type: none">- Chip green waste on site & transport to dump site immediately.- Do not hold material in trucks overnight.- Spread mulch 2 inches or less.- If mulch and green waste piles cannot be removed:<ul style="list-style-type: none">• turn piles once a month and check for CRB.• keep mulch (including bags) in sealed containers. 	
<p>Detected in 2013, Coconut Rhinoceros Beetle (CRB) is the largest beetle on O’ahu. Native to Southeast Asia, CRB has invaded the Western Pacific Region. Early detection and containment are essential to prevent the spread of CRB throughout Hawai’i.</p>		PROPER DISPOSAL AND SANITATION <ul style="list-style-type: none">- Do not move green waste from infested to un-infested areas.- Inspect trucks, buckets & tools for hitchhiking pests.- Dump green waste at <u>approved sites listed below</u>:	
 <p><i>Oriental Flower Beetle is a common look-a-like for CRB. However, it's only 1 inch long, has no horn, and is active during the day.</i></p>		<p>Hawaiian Earth Products Waimanalo 41-740 Mokulama St. (808) 208-1121 Wahiawa 65-1101 Wilikina Dr. (808) 682-5895 Kapolei 91-400 Malakole Rd. (808) 682-5895</p>	
<p>CRB grubs (larval stage of beetles) can grow up to 3 inches long, but look similar to the Oriental flower beetle grubs in their smaller stages. Grubs live in decaying material like dead trees, compost, and mulch. Below are some key differences:</p>		REPORT <p>Suspect CRB damage, beetles, and larvae should be reported to the CRB Response at 643-PEST (7378) or email: BeetleBustersHI@gmail.com</p>	
 <p>CRB grubs crawl on their sides in a C-shape.</p>		 <p>Oriental Flower Beetle grubs straighten out and crawl on their backs.</p>	
 <p>CRB have no line</p>		 <p>Oriental Flower Beetle have line on raster</p>	
 <p>Coconut Rhinoceros Beetle- large head</p>		 <p>Oriental Flower Beetle- small head</p>	
		 <p>Bore holes caused by CRB</p>  <p>V-Cuts caused by CRB</p>	
		<p>For the latest information about CRB, visit: http://hdoa.hawaii.gov/pi/main/crb/</p> <p><small>This publication was made possible with a grant from the Hawai'i Invasive Species Council</small></p>	



Happy Plants

41-724 Kumuhau Street

Waimanalo, Hawaii 96795

March 15, 2023

Testimony in STRONG SUPPORT of HB 1149, HD2 RELATING TO THE COCONUT RHINOCEROS BEETLE PROGRAM

Senate Committee on Agriculture and Environment

Wednesday, March 15, 2023 at 2:00 PM

Via Video Conference and CR 224

Dear Chair Gabbard, Vice Chair Richards and Committee Members,

I am writing in **strong support of HB 1149, HD2, Relating to the Coconut Rhinoceros Beetle Program**. My name is Lena McCormack from Happy Plants Nursery in Waimanalo and also a member of the Waimanalo Agriculture Association. I am extremely concerned about the coconut rhinoceros beetle that are infesting our island and now have been found in Waimanalo. In our Waimanalo Valley, we have the largest and most concentrated nurseries in all Oahu.

HB 1149, HD2 proposes to appropriate much needed funds for our fight against this devastating beetle. We desperately need the funds to declare an all-out war against the CRB. We cannot stand by and watch the beetles take over our island. At a recent WAA meeting we listened to a farmer and his firsthand devastation of his farm due to the CRB. It was heartbreaking and scary to hear his story. I realize how this Beetle can harmfully impact on the Waimanalo Plant Nurseries who supply a good number of plants throughout the island but the beetles are also known to attack some food plants such as banana, pineapple, taro and other food producing plants.

It is imperative that we provide funding to help reign in this huge, huge beetle problem. Secondly, I am support of HB 1149, HD2 which helps to provide more funds for this program. Waimanalo has been hugely affected by these little ants and need more funds to hire more help. It is not feasible to eradicate or at the very least control the ants with only a few part time workers to cover the whole island. The ants are increasing and moving into communities island wide. We need help, period. I thank you for any support that you can give me and my fellow nursery members. It is of utmost importance that we try to nip these two horrible and problematic problems before it really does become too late. If it becomes too late we all lose. Please help to protect the aina, our tourism and life in general.

Let me close in saying that Waikiki, with the ancient coconut trees, are in jeopardy. Can you envision the island without palm trees. Our food sources will be changing as well. We need help right now!

Thank you and Aloha,
Lena McCormack
Happy Plants Nursery
Member of Waimanalo Agriculture Association



Island Grower Supplies, LLC
41-1143 Waikupanaha Street
Waimanalo, Hawaii 96795

March 15, 2023

**Testimony in STRONG SUPPORT of HB 1149, HD2
RELATING TO THE COCONUT RHINOCEROS BEETLE PROGRAM**

Senate Committee on Agriculture and Environment
Wednesday, March 15, 2023 at 2:00 PM
Via Video Conference and CR 224

Dear Chair Gabbard, Vice Chair Richards and Committee Members,

My name is Fred Humphrey from Island Grower Supplies LLC and I am writing in **strong support of HB 1149, HD2, Relating to the Coconut Rhinoceros Beetle Program**. Island Grower Supplies LLC is located in Waimanalo and we grow lime, avocado and coconut trees which we sell to the landscape industry and we are extremely concerned about the coconut rhinoceros beetle infesting Windward Oahu, particularly Waimanalo.

HB 1149, HD2 proposes to appropriate additional funds for position and mitigation activities to fight against the coconut rhinoceros beetle, commonly known as CRB. The funding for the University of Hawaii. Last week Keith Weiser, Deputy Incident Commander of Hawaii CRB Response shared more information about how to mitigate and fight CRB. Regular regiments of pesticide treatment is one option but it would forego the ability to eat any of the fruit that a tree produced. He also shared a netting technique that a farmer would have to apply to each of its coconut trees to catch CRB and prevent them from burrowing in new spears. While this coconut tree was only 5 feet high making it doable, but imagine coconut trees over 5 stories high – how is a farmer supposed to apply netting to protect their trees? What if a farmer has 100 trees, would they have to apply netting to all of the trees? That would be nearly impossible.

While some farmers have opted to voluntarily comply with the Hawaii Department of Agriculture's monitoring program, most of Hawaii is unfamiliar with the pest's threat - and important best practices that would mitigate the beetle's spread.

This level of damage to coconut trees and palms could devastate the landscape industry and particularly, the Waimanalo plant nurseries. The devastation to coconut trees and palms will have grave impact upon Hawaii's unique natural landscape among our most popular destinations in Hawaii including our beaches along Waikiki's gold coast, world class golf courses and hotels and resorts statewide.

More attention is necessary to address this invasive pest and we sincerely request that you pass HB 1149, HD2 to provide the University of Hawaii the additional resources to get this pest under control. Thank you for moving this bill forward.

Aloha
Fred H Humphrey

Sandro Toffola
Natura Nursery

March 15, 2023

**Testimony in STRONG SUPPORT of HB 1149, HD2
RELATING TO THE COCONUT RHINOCEROS BEETLE PROGRAM**

Senate Committee on Agriculture and Environment
Wednesday, March 15, 2023 at 2:00 PM
Via Video Conference and CR 224

Dear Chair Gabbard, Vice Chair Richards and Committee Members,

My name is Sandro Tassan Toffola from Natura Nursery and I am writing in **strong support of HB 1149, HD2 Relating to the Coconut Rhinoceros Beetle Program**. Natura Nursery is located in Waimanalo and we grow palm trees and we are extremely concerned about the coconut rhinoceros beetle infesting Windward Oahu, particularly Waimanalo, which is nestled in Ko'olaupoko, is part of an enterprise zone with fertile soil and with close proximity to the largest markets and transportation hubs on the island.

HB 1149, HD2 proposes to appropriate additional funds for position and mitigation activities to fight against the coconut rhinoceros beetle, commonly known as CRB. The funding for the University of Hawaii to is to support key positions within the CRB response program to help combat this devastating insect. The threat of the Coconut Rhinoceros Beetle is of serious concern to Waimanalo as there have been over ten confirmed cases of the CRB in Waimanalo in the last six months alone. While some farmers have opted to voluntarily comply with the Hawaii Department of Agriculture's monitoring program, most of Hawaii is unfamiliar with the pest's threat - and important best practices that would mitigate the beetle's spread.

The level of damage that CRB can cause to coconut trees and palms could devastate the landscape industry, especially the Waimanalo plant nurseries. The devastation to coconut trees and palms will have grave impact upon Hawaii's unique natural landscape among our most popular destinations in Hawaii including our beaches along Waikiki's gold coast, world class golf courses and hotels and resorts statewide.

More attention is necessary to address this invasive pest and we sincerely request that you pass HB 1149, HD2.

HB-1149-HD-2

Submitted on: 3/14/2023 9:09:51 AM

Testimony for AEN on 3/15/2023 2:00:00 PM

Submitted By	Organization	Testifier Position	Testify
George Fleming	Testifying for Coastline Landscaping	Support	Remotely Via Zoom

Comments:

Please pass HB 1149, HD2. The Coconut Rhinoceros Beetle is a serious pest and I have been battling this pest on my farm in Kunia. This bill will provide the resources necessary to fight this pest and provide more tools to mitigate and eradicate it. Thank you for your consideration.



The Senate
Committee on Agriculture and Environment
March 15, 2023
2:00 p.m. Conference Room 224
State Capitol

Testimony in Support of HB 1149 HD2

Aloha Chair Gabbard, Vice Chair Richards, and Members of the Committee,

The Coordinating Group on Alien Pest Species (CGAPS) is in strong support of HB 1149, HD2 Relating to the Coconut Rhinoceros Beetle Program.

As set out in House Bill 1149 HD2 the coconut rhinoceros beetle (CRB) is a devastating invasive pest that impacts palm species, including coconut trees, native loulu palm species, and, potentially, crops in Hawaii. CRB was first detected on O‘ahu in 2013, and the State and Federal Departments of Agriculture launched an immediate and unprecedented multi-agency response. Although the response did not succeed in eradicating this pest, it has kept the population out of the interisland transportation network.

In 2022, the Hawaii Department of Agriculture (HDOA) adopted an interim rule intended to reduce the risk of spreading CRB in Hawaii.¹ The rule requires businesses on O‘ahu (e.g. nurseries, landscapers, and green waste processors, etc.) that work with CRB host materials (e.g. dead or dying plant material like tree trimmings, leaves, mulch, compost, stumps, greenwaste, and CRB host palms, etc.) to enter into compliance agreements and take steps to prevent inadvertently spreading CRB. The compliance agreements and associated training require businesses to enclose or cover CRB host material when it is moved on O‘ahu and to report detections of suspected CRB. The compliance agreements also require employees that work with CRB host materials to receive training to ensure they understand the compliance agreement requirements, the risks posed by CRB, and how to identify the life stages of CRB and evidence of CRB damage.

HB1149, HD2 could provide funding to continue to operate the compliance agreement and training work, to continue operating the response work island-wide, and to continue to develop detection and control methods that can further reduce harm and the likelihood of spread to new areas and to neighbor islands.

The compliance agreement program is new to affected businesses and the CRB Response is doing the outreach and has developed and conducted the training to promote its success. CRB

¹ §4-22.1-1 Hawaii Administrative Rules

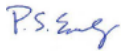
Response provides the boots-on-the-ground to educate businesses and the public on how to detect and prevent the spread of CRB. CRB Response has field crews that monitor thousands of CRB traps and apply treatments to CRB-infested areas and researchers working to develop new treatments and best practices to respond to CRB. The work CRB Response does is critical to protecting Hawai'i from the impacts of CRB. In addition, state funds are needed to leverage federal funding to ensure there is no lapse at this critical time as HDOA continues to roll out its permanent CRB program.

Thank you for the opportunity to comment on this measure.

Aloha,



Christy Martin, CGAPS Program Manager



Stephanie Easley, CGAPS Legal Fellow

March 14th, 2023

**Testimony in Support of HB 1149
RELATING TO THE COCONUT RHINOCEROS BEETLE PROGRAM**

House Committee on Agriculture
March 15th, 2023

Dear Chair Gates, Vice Chair Kahaloa and Committee Members,

My Name is Justin Franzmeier representing Waimanalo Agricultural Association and Island Foodscaping and am writing in **strong support of HB 1149, relating to the Coconut Rhinoceros Beetle Program**. As a landscaping contractor, Waimanalo Agricultural Association Ambassador and farmer in Waimanalo I can honestly say I have been blessed not having to deal first hand with this pest yet, unlike others and want to keep it that way.

In early February an infestation in Waimanalo was found just down the road from our farm and I am guessing this is going to be the beginning of more populations found if we don't act with haste. HB 1149 proposes to appropriate additional funds for position and mitigation activities to fight against the coconut rhinoceros beetle, commonly known as CRB. The funding for the University of Hawaii to is to support key positions within the CRB response program to help combat this devastating insect.

This level of damage to coconut trees and palms could devastate the landscape industry and particularly, the Waimanalo plant nurseries. An important note is that these beetles not only attach coconut trees but other palm varieties and even bananas. The devastation to coconut trees and palms will have grave impact upon Hawaii's unique natural landscape among our most popular destinations in Hawaii including our beaches along Waikiki's gold coast, world class golf courses and hotels and resorts statewide.

More attention is necessary to address this invasive pest and we sincerely request that you pass HB 1149. Thank you for your consideration.



ISLANDFOODSCAPING



Waimanalo Agricultural Association



The Committee on Agriculture and Environment
March 15, 2023
2:00 PM
Room 224 & Videoconference

RE: **HB 1149, HD2, Relating to the Coconut Rhinoceros Beetle**

Attention: Chair Mike Gabbard, Vice Chair Tim Richards and Members of the
Committee

The University of Hawaii Professional Assembly (UHPA) appreciates the opportunity to testify in **support of HB 1149, HD2**, Relating to the Coconut Rhinoceros Beetle Program.

HB1149, HD2 appropriates funding for ten full-time positions, as well as funding for administrative costs and supplies for the purpose of decreasing the spread of new coconut rhinoceros beetle infestations and other invasive species. This bill provides for the essential staffing vital to the research, response, education, and investigative work needed to maintain the effective program required to tackle the infestation on Oahu.

UHPA supports and encourages the committee to **pass HB 1149, HD 2**.

Respectfully submitted,

Christian L. Fern
Executive Director
University of Hawaii Professional Assembly

HB-1149-HD-2

Submitted on: 3/10/2023 7:31:38 PM

Testimony for AEN on 3/15/2023 2:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Jari S.K. Sugano	Individual	Support	Written Testimony Only

Comments:

Chair Gabbard, Vice Chair Richards, and Honorable Members of the Senate Agriculture and Environment Program

CRB is a devastating and economic pest in Hawaii. Timely management and dedication of funding will help to safeguard neighbor islands from the movement of this pest to sites off Oahu.

HB-1149-HD-2

Submitted on: 3/10/2023 9:11:42 PM

Testimony for AEN on 3/15/2023 2:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Dana Keawe	Individual	Support	Written Testimony Only

Comments:

support

HB-1149-HD-2

Submitted on: 3/12/2023 8:47:56 PM

Testimony for AEN on 3/15/2023 2:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Elizabeth Conlon	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Gabbard, Vice Chair Richards, and committee members,

As a concerned citizen, I support HB1149. Coconut rhinoceros beetle populations have exploded on O‘ahu this year and threaten culturally and ecologically important loulu (Hawaiian palms), which are already imperiled by invasive species and ecosystem degradation. Eradication efforts have failed on O‘ahu, so it is vital that the CRB response team receives consistent funding to keep the beetles from spreading to neighboring islands. Sufficient funding is also critical to mitigate the devastating impacts of CRB on O‘ahu palm populations. Control by the CRB response team is essential to reduce impacts on O‘ahu and decrease the likelihood of accidental transport off O‘ahu.

Mahalo,

Elizabeth Conlon

HB-1149-HD-2

Submitted on: 3/13/2023 10:18:45 AM

Testimony for AEN on 3/15/2023 2:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Will Caron	Individual	Support	Written Testimony Only

Comments:

Please support HB1149 HD2.

HB-1149-HD-2

Submitted on: 3/13/2023 11:40:26 PM

Testimony for AEN on 3/15/2023 2:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Joshua Marcus	Individual	Support	Written Testimony Only

Comments:

The Coconut Rhinoceros Beetle is an incredibly invasive species that can destroy our coconuts, palm trees, hala, sugarcane and pineapple. I would not like our entire island to be wiped out of such resources. Please please please we need more funding for this

March 15, 2023

**Testimony in STRONG SUPPORT of HB 1149, HD2
RELATING TO THE COCONUT RHINOCEROS BEETLE PROGRAM**

Senate Committee on Agriculture and Environment
Wednesday, March 15, 2023 at 2:00 PM
Via Video Conference and CR 224

Dear Chair Gabbard, Vice Chair Richards and Committee Members,

I am writing to express my **strong support for HB 1149, HD2, Relating to the Coconut Rhinoceros Beetle Program**. As a local farmer, I understand the devastating impact that the Coconut Rhinoceros Beetle (CRB) can have on plant health, which in turn increases the risk to people and property across Oahu.

CRB poses a significant threat to the agricultural industry in Hawaii. Many farmers have orchards of target species such as palms and hala planted in anticipation of future re-developments and new construction projects. If CRB infestations persist, future construction developments will likely exclude these target species, leaving farmers with a significant loss in sunken costs and no buyers for their crops. Additionally, the CRB management tools currently available are not sufficient to contain the spread of this invasive pest.

Not only does CRB pose a threat to agriculture, but it also affects tourism and Hawaii's financial future. Invasive species such as CRB and Little Fire Ants (LFA) can damage the natural environment and discourage visitors, negatively impacting Hawaii's economy.

I urge you to support HB 1149, HD2, and to provide the necessary funding to find biological solutions for the invasive plants that threaten our economy. With your help, we can work together to protect our agriculture and natural resources, ensuring a sustainable future for Hawaii.

Thank you for considering my testimony.

Mahalo,
Brian Boltz

HB-1149-HD-2

Submitted on: 3/14/2023 10:05:27 PM

Testimony for AEN on 3/15/2023 2:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Kimeona Kane	Individual	Support	Written Testimony Only

Comments:

March 15, 2023

Testimony in STRONG SUPPORT of HB 1149, HD2

RELATING TO THE COCONUT RHINOCEROS BEETLE PROGRAM

Senate Committee on Agriculture and Environment

Wednesday, March 15, 2023 at 2:00 PM

Via Video Conference and CR 224

Dear Chair Gabbard, Vice Chair Richards and Committee Members,

I am writing in strong support of HB 1149, HD2, Relating to the Coconut Rhinoceros Beetle Program. We are extremely concerned about the coconut rhinoceros beetle infesting Windward Oahu, particularly Waimānalo, which is nestled in Ko’olaupoko, is part of an enterprise zone with fertile soil and with close proximity to the largest markets and transportation hubs on the island.

HB 1149, HD2 proposes to appropriate additional funds for position and mitigation activities to fight against the coconut rhinoceros beetle, commonly known as CRB. The funding for the University of Hawaii to is to support key positions within the CRB response program to help combat this devastating insect. The University of Hawaii has a well established CRB Response team, many of whom work around the state to fight against the widespread devastation this beetle could cause.

The threat of the Coconut Rhinoceros Beetle is of serious concern to Waimānalo as there have been over ten confirmed cases of the CRB in Waimānalo in the last six months alone.

Last week Keith Weiser, Deputy Incident Commander of Hawaii CRB Response shared more information about how to mitigate and fight CRB. Regular regiments of pesticide treatment is one option but it would forego the ability to eat any of the fruit that a tree produced. He also shared a netting technique that a farmer would have to apply to each of its coconut trees to catch CRB and prevent them from burrowing in new spears. While this coconut tree was only 5 feet high making it doable, but imagine coconut trees over 5 stories high – how is a farmer supposed to apply netting to protect their trees? What if a farmer has 100 trees, would they have to apply netting to all of the trees? That would be nearly impossible.

The level of damage the CRB can cause to coconut trees and palms could devastate the landscape industry and particularly, the Waimanalo plant nurseries. The devastation to coconut

trees and palms will have grave impact upon Hawaii's unique natural landscape among our most popular destinations in Hawaii including our beaches along Waikiki's gold coast, world class golf courses and hotels and resorts statewide.

In addition, CRB presents a substantial threat to other species, which it will turn to, once all palms are impacted. The list of species is unknown, however there have been additional impacts reported in other crop items, including banana and even possibly taro. More attention and resources are necessary to address this invasive pest and we sincerely request that you pass HB 1149, HD2.

Mahalo nui for your consideration.

Kimeona Kane

HB-1149-HD-2

Submitted on: 3/15/2023 6:05:10 AM

Testimony for AEN on 3/15/2023 2:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Michael Melzer	Individual	Support	Written Testimony Only

Comments:

Coconut Rhinoceros Beetle represents a major threat to native and introduced palms in Hawaii and the Pacific. Hawaii/UH needs to be leader in efforts against CRB for the benefit of Hawaii and Pacific Island culture and the economic returns that healthy palms provide.