



UNIVERSITY OF HAWAII SYSTEM

‘ŌNAEHANA KULANUI O HAWAII

Legislative Testimony

Hō'ike Mana'o I Mua O Ka 'Aha'ōlelo

Testimony Presented Before the
House Committee on Finance
Wednesday, March 29, 2023 at 3:00 p.m.

By

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

And

Michael Bruno, Provost
University of Hawai'i at Mānoa

SB 646 SD1 HD1 – RELATING TO ORNAMENTAL GINGER

Chair Yamashita, Vice Chair Kitagawa, and Members of the House Committee on Finance:

Thank you for the opportunity to provide testimony in support of SB 646 SD1 HD1, which provides funding to continue studying the diseases affecting ornamental ginger on O'ahu and the neighbor islands.

Ornamental ginger is a valued plant that can be used as a shrub or as a cut flower. The College of Tropical Agriculture and Human Resources' scientists have been able to identify three different viruses and one fungal pathogen that are infecting ornamental ginger. In addition, the Hawai'i Department of Agriculture (HDOA) experts have established the existence of fourteen additional pathogens.

What has been achieved so far is as follows:

- The islands of O'ahu, Kaua'i, Maui and Hawai'i have been surveyed multiple times in order to document the magnitude and spread of the decline. This has resulted in the discovery of two new viruses never before identified.
- Symptoms have been characterized based on visual identification and genetic sequencing. Symptom categorization has been presented to stakeholders.
- Virus-free plants have been identified and a quarantine facility was built to house them at Komohana Research and Extension Center.
- Virus-free plants were given to Hawai'i Agriculture Research Center, who received a small amount of funding to trial tissue culture experiments.
- The impact of co-infection by two dominant viruses is being investigated.
- Vectors of the viruses are being investigated. While not definitive, mealy bugs and aphids are suspected. More investigation is required.
- It is still unclear which viruses, and how the presence of co-infections can explain the dieback. More investigation is required.

- An Extension publication was produced outlining the current information and the research publication is ready for submission.
- Outreach efforts with HDOA and industry groups continue. More is required.

We respectfully request that the appropriation in the original version of the bill be restored to support the following budget which would promote a better understanding and mitigation of the disease.

Budget Item	Year 1	Year 2	TOTAL
Mileage (Mileage is required for farm visits, average farm travel is 50 miles round trip. This would fund 8 farm visits a month at the current mileage rate of .655.)	\$ 3,200	\$ 3,200	\$ 6,400
Travel (Principal Investigator will be required to perform lab work at UH Manoa campus, this requires overnight travel. Graduate Student hire will be required to travel to neighbor islands to perform research and outreach.)	16,400	16,400	32,800
Tissue Culture Lab Fees (Fees are required for mass propagation of red ginger. Labs to be utilized to be determined.)	38,500	38,500	77,000
Supplies (Supplies include lab supplies, supplies for graduate student research and insect exclusion houses for virus free production.)	15,380	15,380	30,760
Student Hire (Student hire required to carry out research and extension objective, 6 hours a week.)	10,560	10,560	21,120
Graduate Student Hire (Graduate student hire required to perform research on virus spread in virus free fields and virus free production.)	40,960	40,960	81,920
	\$125,000	\$125,000	\$250,000

Thank you for the opportunity to submit testimony in support of SB 646 SD1 HD1 provided that its passage does not replace or adversely impact priorities as indicated in our Board of Regents Approved Budget.

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
1428 South King Street
Honolulu, Hawai'i 96814-2512
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**TESTIMONY OF SHARON HURD
CHAIRPERSON, BOARD OF AGRICULTURE**

BEFORE THE HOUSE COMMITTEE ON FINANCE

**MARCH 29, 2023
3:00 PM
CONFERENCE ROOM 308**

**HOUSE BILL 646, SD1 HD1
RELATING TO ORNAMENTAL GINGER**

Chairperson Yamashita and Members of the Committees:

Thank you for the opportunity to testify on House Bill 306, Senate Draft 1 House Draft 1 relating to ornamental ginger. This bill appropriates funds for statewide research into ornamental ginger pathogens, prevention of the spread of ornamental ginger pathogens, production and distribution of pathogen-free plants and outreach to ornamental ginger growers. The department strongly supports this bill and offers the following comments.

Commercial production of ornamental ginger has been in decline for several years. In 2018. A team from the College of Tropical Agriculture and Human Resources (CTAHR), the Hawaii Farm Bureau and HDOA did site visits. CTAHR virologists identified three plant viruses affecting and the HDOA Pathology Unit of the Plant Pest Control Branch, working with the US Department of Agriculture's National Identification Services (NIS) identified 12 other diseases including fungal and bacterial pathogens. The Department dedicated funding through a contract (Contract number 67623) for delimiting the distribution of the viral diseases, associate the viral symptoms with viral



infections and the effects of multiple viral infections, identify viral vectors, and determine the cause of decline of ornamental ginger. After this funding support to the University in 2019, the Plant Pest Control Branch lost the Plant Pathologist responsible for supporting this work through retirement and the position was subsequent deleted by the Legislature during the 2021 session.

The Department supports the allocation of funds for the University. This support will be vital for the industry to reverse its negative growth trend and thrive through the development of virus-free ginger plants, mass-production of virus-free plants, improve diagnostics and better management techniques.

Thank you for the opportunity to provide testimony on this bill.



**RE: SUPPORT for SB646 SD1 HD1
RELATING TO ORNAMENTAL GINGER**

Aloha Chair, Vice Chair, and Committee Members,

The Synergistic Hawai'i Agriculture Council (SHAC) stands in support of this Bill. Our consortium represents 1,500 agribusinesses, from growers to processors and shippers, stretching across the State. Floriculture is one of our key constituent groups and we work with them closely on science-based grants, marketing and infrastructure projects to protect and sustain producers

The rise in infectious floriculture diseases impacts one of our largest crops in the state. **Iconic plants, such as ornamental ginger, define a vision of Hawaii to the larger world, and have supported hundreds of agribusinesses around the state.**

Research and development of pest management protocols by UH is needed quickly to prevent the loss of our local industry. Propagation of disease-free plants via local tissue culture is also a necessary step in floriculture. Creating the capacity through Hawaii Agriculture Research Center and University of Hawaii will have benefits well beyond just ginger.

Mahalo nui loa for supporting this bill!

Suzanne Shriner
Administrator



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March 29, 2023

HEARING BEFORE THE
HOUSE COMMITTEE ON FINANCE

TESTIMONY ON SB 646, SD1, HD1
RELATING TO ORNAMENTAL GINGER

Conference Room 308 & Videoconference
3:00 PM

Aloha Chair Yamashita, Vice-Chair Kitagawa, 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 SB 646, SD1, HD1, which appropriates funds for statewide research into ornamental ginger pathogens, prevention of the spread of ornamental ginger pathogens, production and distribution of pathogen-free ornamental ginger plants, and outreach to ornamental producers.

Alpinia purpurata, known commonly as ornamental ginger, is a popular plant that is commonly used in tropical landscape designs. Commercial production of ornamental ginger has been on the decline for over a decade on Oahu. Red ginger growers in Windward Oahu have recently experienced a further decline in the growth of their ornamental red ginger plant production due to a variety of unknown viruses and fungi

Producers in the affected areas are excavating their lands as they can no longer economically produce ornamental ginger in these areas. Neighboring farmers and off-island customers are concerned about the spread of pathogens. Reports of crop decline which originally started in the Kahaluu area of Oahu have spread to surrounding areas such as Waihole and Waikane Valley.

In response, researchers and extension agents at CTAHR performed a statewide survey and causal agent identification study. The study determined that a combination of six viruses, including two viruses never before identified, is the cause of the red ginger decline, with other pathogens and ornamental ginger genetic variation as possible contributing factors. The viruses are found statewide but are most prevalent on Oahu and Hawai'i Islands. Virus-infected plants cannot be cured, and virus-infected plants are currently the main plants being propagated for more plantings, worsening the problem. Most large-scale operations have virus-infected plants.

Without more research and prevention protocols through a multi-agency outreach approach, these pathogens could spread further and impact the profitability and long-term sustainability of the local ornamental and landscape production industries.

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



March 28, 2023

Representative Kyle T. Yamashita, Chair
Representative Lisa Kitagawa, Vice Chair
House Committee on Finance

Testimony in Support of SB 646, S.D. 1, H.D. 1, Relating to Ornamental Ginger (Appropriates funds to the University of Hawaii for statewide research into ornamental ginger pathogens, prevention of the spread of ornamental ginger pathogens, production and distribution of pathogen-free ornamental ginger plants, and outreach to ornamental ginger producers. Effective 6/30/3000.)

**Wednesday, March 29, 2023, 3:00 p.m.
State Capitol, Conference Room 308, Via Videoconference**

The Land Use Research Foundation of Hawaii (LURF) is a private, non-profit research and trade association whose members include major Hawaii landowners, developers, and utility companies. LURF's mission is to advocate for reasonable, rational, and equitable land use planning, legislation and regulations that encourage well-planned economic growth and development, while safeguarding Hawaii's significant natural and cultural resources, and public health and safety.

LURF appreciates the opportunity to express its **support of SB 646, S.D. 1, H.D. 1.**

SB 646, S.D. 1, H.D. 1. This bill proposes to make an appropriation to the University of Hawaii (UH) for statewide research of pathogens affecting ornamental ginger and prevention of pathogen spread.

LURF's Position. Invasive species such as insects, disease-bearing organisms, snakes, weeds, and other pests pose the greatest threat to Hawaii's economy, tourism, agriculture, the natural environment, native species and to the health and lifestyle of Hawaii's people.

Invasive species already cause millions of dollars in crop losses, the extinction of native species, the destruction of native wet, moist, and dry land forests, and the spread of disease, but even more harmful viral, fungal, and bacterial pathogens, including two

viruses never before identified, are causing devastating crop decline in ornamental ginger most prevalently on Oahu and Hawaii Island, but threaten to invade all of the

Hawaiian Islands and wreak further damage. LURF understands that virus-infected plants cannot be cured and are currently the main plants being propagated for more plantings, thus worsening the problem, and that most large-scale operations have virus-infected plants.

Despite efforts by the UH college of tropical agriculture to study and address this critical situation, more statewide research and a multi-agency outreach approach is necessary to avoid further damage to the profitability and long-term sustainability of local ornamental ginger, as well as other flora and landscape production industries.

For the above reasons, LURF **supports SB 646, S.D. 1, H.D. 1** and respectfully urges your favorable consideration.

Thank you for the opportunity to present testimony regarding this matter.



WRITTEN TESTIMONY ONLY

March 29, 2023

Representative Kyle T. Yamashita, Chair
Representative Lisa Kitagawa, Vice Chair
House Committee on Finance

RE: Senate Bill 646, S.D. 1, H.D. 1 – RELATING TO ORNAMENTAL GINGER
Hearing date: March 29, 2023, 3:00 p.m.

Aloha Chair Yamashita, Vice Chair Kitagawa, and Members of the Committee:

Thank you for the opportunity to submit testimony on behalf of Young Brothers, LLC (“YB”) offering **SUPPORT** for Senate Bill 646, S.D. 1, H.D. 1 – Relating to Ornamental Ginger.

YB is a common carrier by water, transporting property by tug and barge between the islands of Oahu, Hawaii, Kauai, Maui, Molokai, and Lanai. YB is currently the only water common carrier authorized to transport property under Chapter 271G, Hawaii Revised Statutes (“HRS”) (i.e., the Hawaii Water Carrier Act), subject to the regulatory authority of the Public Utilities Commission of the State of Hawaii (“PUC”). Since 1900, customers across Hawaii have relied on YB’s frequent, regular, and universal sailings to serve as the bridge that connects all communities in this island-state.

This measure would appropriate funds to the University of Hawaii (“UH”) for statewide research into ornamental ginger pathogens, prevention of the spread of ornamental ginger pathogens, production and distribution of pathogen-free ornamental ginger plants, and outreach to ornamental ginger producers.

YB supports local agricultural producers and is in favor of efforts by UH to research issues affecting local agriculture, as proposed by this measure.

For the reasons stated above, YB offers **SUPPORT** for this measure. Thank you for your service to the State of Hawaii and for the opportunity to testify on this measure.

Sincerely,

Kris Nakagawa
Vice President, External and Legal Affairs

SB-646-HD-1

Submitted on: 3/27/2023 2:35:26 PM

Testimony for FIN on 3/29/2023 3:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Gordon Inouye	Individual	Support	Written Testimony Only

Comments:

The floriculture industry needs this bill to survive. If not, no one can grow ginger in Hawaii.

Gordon Inouye

SB-646-HD-1

Submitted on: 3/27/2023 9:50:57 PM

Testimony for FIN on 3/29/2023 3:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Aileen K . F. Yeh	Individual	Support	Written Testimony Only

Comments:

I am in support

SB-646-HD-1

Submitted on: 3/28/2023 10:56:17 AM

Testimony for FIN on 3/29/2023 3:00:00 PM

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

Comments:

My name is Jari Sugano and I am the Oahu County Administrator at CTAHR. I served as an Extension Agent for 20 years and have witnessed first hand the effects of plant viruses on our Ornamental ginger industry. My personal testimony is below for your consideration.

I support SB646 which appropriates funds for statewide research into ornamental ginger pathogens, prevention of the spread of ornamental ginger pathogens, production and distribution of pathogen-free ornamental ginger plants, and outreach to ornamental producers.

Alpinia purpurata, known commonly as ornamental ginger, is a popular plant that is commonly used in tropical landscape designs. Commercial production of ornamental ginger has been on the decline for over a decade on Oahu.

Red ginger growers in Windward Oahu have recently experienced a further decline in the growth of their ornamental red ginger plant production due to a variety of unknown viruses and fungi. Producers in the affected areas are excavating their lands as they can no longer economically produce ornamental ginger in these areas. Neighboring farmers and off-island customers are concerned about the spread of pathogens. Reports of crop decline which originally started in the Kahaluu area of Oahu have spread to surrounding areas such as Waihole and Waikane Valley.

In response, researchers and extension agents at CTAHR performed a statewide survey and causal agent identification study. The study determined that a combination of six viruses, including two viruses never before identified, is the cause of the red ginger decline, with other pathogens and ornamental ginger genetic variation as possible contributing factors. The viruses are found statewide but are most prevalent on Oahu and Hawai'i Islands. Virus-infected plants cannot be cured, and virus-infected plants are currently the main plants being propagated for more plantings, worsening the problem. Most large-scale operations have virus-infected plants.

Without more research and prevention protocols through a multi-agency outreach approach, these pathogens could spread further and impact the profitability and long-term sustainability of the local ornamental and landscape production industries.

Thank you for the opportunity to testify on this important subject

SB-646-HD-1

Submitted on: 3/28/2023 2:05:25 PM

Testimony for FIN on 3/29/2023 3:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Brian Boltz	Individual	Support	Written Testimony Only

Comments:

Support this!

SB-646-HD-1

Submitted on: 3/28/2023 2:16:18 PM

Testimony for FIN on 3/29/2023 3:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Randy Cabral	Individual	Support	Written Testimony Only

Comments:

Strong support

SB-646-HD-1

Submitted on: 3/28/2023 2:30:50 PM

Testimony for FIN on 3/29/2023 3:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Janet Ashman	Individual	Support	Written Testimony Only

Comments:

Please pass this measure. Without research to better understand and combat plant diseases, we risk losing major parts of the agricultural sector.

Thank you.