

JOSH GREEN, M.D.
Governor

SYLVIA LUKE
Lt. Governor



SHARON HURD
Chairperson, Board of Agriculture

DEXTER KISHIDA
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 HOUSE COMMITTEE ON FINANCE

MARCH 27, 2024

3:30 PM

CONFERENCE ROOM 308 & VIDEOCONFERENCE

SENATE BILL NO. 2362, SD1, HD1
RELATING TO ORNAMENTAL GINGER

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

Thank you for the opportunity to testify on Senate Bill 2362, SD1, HD1 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 so long as it does not impact the budget priorities set forth in the Executive Budget Submittal 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 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.



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 27, 2024 at 3:30 p.m.

By

Parwinder Grewal, Dean
College of Tropical Agriculture and Human Resources

And

Michael Bruno, Provost
University of Hawai'i at Mānoa

SB 2362 SD1 HD1 – RELATING TO ORNAMENTAL GINGER

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

Thank you for the opportunity to provide testimony in support of SB 2362 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 is one of Hawaii's most commonly used shrub and cut flowers. Red ginger production has declined significantly over the past 10 years due to what is now known to be viral pathogens. The College of Tropical Agriculture and Human Resources' scientists have been able to identify six 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 14 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 characterization has been presented to stakeholders.
- Two Extension publications were produced outlining the current information and the research publication is ready for submission.
- Outreach efforts with HDOA and industry groups continue; thus far, 764 stakeholders have been contacted directly as the demand for assistance grows.
- Virus-free plants have been identified and a quarantine facility was built to house them at Komohana Research and Extension Center, USDA Pacific Basin Ag Research Center and Hawaii Agriculture Research Center.
- The impact of co-infection by two dominant viruses is being investigated, and requires funding to support full investigation.

- 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 affect yield of plants. More investigation is required.

We respectfully request the appropriation of \$125,000 to support the following budget which would promote a better understanding and mitigation of the disease.

Budget Item	FY24-25
Mileage (Mileage is required for farm visits, average farm travel is 50 miles round trip. This would fund 7 farm visits a month at the current mileage rate of 0.67/mile.)	\$ 2,800
Travel (Principal Investigator will be required to perform lab work at UH Mānoa campus, and perform outreach statewide. This requires overnight travel.)	\$ 12,400
Tissue Culture Lab Fees (Fees are required for mass propagation of red ginger. Labs to be utilized to be determined.)	\$ 35,200
Supplies (Supplies include lab supplies, supplies for graduate student research and insect exclusion houses for virus free production.)	\$ 19,000
Student Hire (Student hire required to carry out research and extension objective, 6 hours a week.)	\$ 10,600
Plot Allocation (Pays for a long-term plot for the red ginger trials at a Hawai'i Island UH Mānoa CTAHR research station.)	\$ 7,000
Plot Allocation (Pays for a casual hire employee to perform trials on red ginger production.)	\$ 38,000
	\$125,000

Thank you for the opportunity to submit testimony in support of SB 2362 SD1 HD1, provided that its passage does not impact priorities as indicated in our Board of Regents Approved Budget.



LAND USE RESEARCH
FOUNDATION OF HAWAII

1100 Alakea Street, Suite 408
Honolulu, Hawaii 96813
(808) 521-4717
www.lurf.org

March 25, 2024

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

Testimony in Support of SB 2362, S.D. 1, H.D. 1 (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 ginger producers. Effective 7/1/3000.)

Wednesday, March 27, 2024, 3:30 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 2362, S.D. 1, H.D. 1.**

SB 2362, S.D. 1, H.D. 1. This bill proposes to appropriate funds to the University of Hawaii for statewide research and prevention of pathogens affecting ornamental ginger.

LURF's Position. LURF understands that production of ornamental ginger has been declining throughout the State since 2014, and that further decline has resulted in producers in affected areas clearing their lands as ornamental ginger can no longer be economically produced. Farmers are concerned about the spread of the disease pathogens and have consulted with the department of agriculture, University of Hawaii college of tropical agriculture and human resources (UHCTAHR), and various farm bureaus. Research conducted has identified a combination of different viruses as well as other pathogens as possible contributing causes that are infecting ornamental ginger, which is a highly valued plant. Virus-infected plants cannot be cured.

Plant diseases and 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 unidentified bacterial pathogens such as these unknown pathogens causing devastating crop decline in ornamental ginger, now threaten to invade plants throughout all of the Hawaiian Islands and wreak further uncontrolled damage.

Despite efforts by the UHCTAHR and the State Department of Agriculture to address this critical situation, more research and a multi-agency outreach approach, including development of protocols amongst cultivators, producers and distributors; establishment of cultural management strategies for managing virus-infected plants; and educating growers about those strategies and the importance of virus-free plants, are necessary to avoid further damage to the profitability and long-term sustainability of local ornamental flora and landscape production industries.

For the above reasons, LURF **supports SB 2362, S.D. 1, H.D. 1** and respectfully urges your favorable consideration.

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



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March 27, 2024

HEARING BEFORE THE
HOUSE COMMITTEE ON FINANCE

TESTIMONY ON SB 2362, SD1, HD1
RELATING TO ORNAMENTAL GINGER

Conference Room 308 & Videoconference
3:30 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 2362, 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.



**HOUSE OF REPRESENTATIVES
THE THIRTY-SECOND LEGISLATURE
REGULAR SESSION OF 2024**

**COMMITTEE ON FINANCE
Rep. Kyle T. Yamashita, Chair
Rep. Lisa Kitagawa, Vice Chair**

Wednesday, March 27, 2024 3:30 p.m.

VIA VIDEOCONFERENCE

**Conference Room 308
State Capitol
415 South Beretania Street**

RE: SB2362 SD1, HD1 RELATING TO ORNAMENTAL GINGER

My name is Eric S. Tanouye and I am the President for the Hawaii Floriculture and Nursery Association. HFNA is a statewide umbrella organization with approximately 350 members. Our membership is made up with breeders, hybridizers, propagators, growers, shippers, wholesalers, retailers, educators, and the allied industry, which supports our efforts in agriculture.

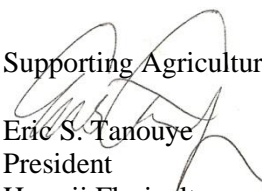
The Hawaii Floriculture and Nursery Association (HFNA) **STRONGLY SUPPORTS SENATE Bill 2362 SD1. HD1.**

Ornamental ginger is a popular tropical flower that could be considered as a symbol of the beauty of Hawaii. For our Nurserymen and women to continue to grow and provide this product it is important we find solutions to the pathogens that threaten the ornamental ginger and avoid the spreading of these viruses to growers statewide. Currently there is no cure for infected plants and the best option would be to have virus free ginger plants available for our industry.

An important way to combat these threats is to have and share the knowledge with growers on how to contain this virus through best management practices. We ask that you support our industry and agriculture by supporting these efforts for statewide research into pathogens, production and distribution of pathogen-free ornamental ginger plants and outreach to our ornamental producers.

If you have any questions at this time, I would be happy to discuss them and can be reached by phone at 808-959-3535 ext 2627, cell 960-1433 and email eric@greenpointnursery.com.

Supporting Agriculture and Hawaii,


Eric S. Tanouye
President
Hawaii Floriculture and Nursery Association



**HOUSE OF REPRESENTATIVES
THE THIRTY-SECOND LEGISLATURE
REGULAR SESSION OF 2024**

**COMMITTEE ON FINANCE
Rep. Kyle T. Yamashita, Chair
Rep. Lisa Kitagawa, Vice Chair**

Wednesday, March 27, 2024 3:30 p.m.

VIA VIDEOCONFERENCE

**Conference Room 308
State Capitol
415 South Beretania Street**

RE: SB2362 SD1, HD1 RELATING TO ORNAMENTAL GINGER

My name is Thong Teng Neo and am the current President of the Hawaii Tropical Flower Council (HTFC). HTFC is a statewide association of commodity organizations, i.e.: anthurium, orchid, protea, tropic flowers and foliages, blooming and foliage plants. The Hawai'i Tropical Flower Council directs promotion and supports research of Hawaii's tropical flower industry. Each of the state's major flower commodity groups (anthuriums, orchids, proteas, tropic flowers and foliages, blooming and foliage plants) is represented on the council's board of directors. HTFC serves as a non-profit Hawaii Corporation to promote for its commodity groups and other producers of tropical horticulture grown in the State of Hawaii.

HTFC supports SB2362, SD1, HD1 Relating to Ornamental Ginger.

We believe it is important to our industry to be able to grow and produce our products disease and pest free so that we can export within the state and to the world.

HTFC ■ P.O. Box 4400 ■ Hilo, HI 96720 ■ www.hawaiitropicalflowercouncil.org

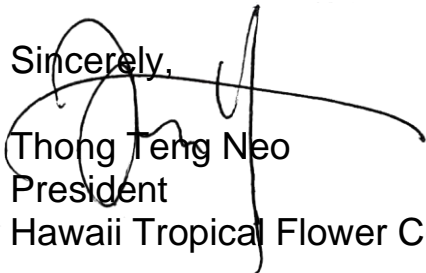
www.Hawaii'sFlowers.com
Share the Aloha!



Ornamental ginger is considered one of the classic flowers of Hawaii's Tropical flowers and to maintain Hawaii as a one stop shop for purchasers of tropical flowers, we need to be able to keep growing this iconic flower.

We ask that you help support our floriculture industry by supporting this Bill.

Thank you for taking the time to read this testimony and if you have any questions, I can be reached at neo@greenpointnursery.com or 808 959 3535 ext. 2615.

Sincerely,

Thong Teng Neo
President
Hawaii Tropical Flower Council



HOUSE OF REPRESENTATIVES
THE THIRTY-SECOND LEGISLATURE
REGULAR SESSION OF 2024

COMMITTEE ON FINANCE
Rep. Kyle T. Yamashita, Chair
Rep. Lisa Kitagawa, Vice Chair

Wednesday, March 27, 2024 3:30 p.m.

VIA VIDEOCONFERENCE

Conference Room 308
State Capitol
415 South Beretania Street

RE: SB2362 SD1, HD1 RELATING TO ORNAMENTAL GINGER

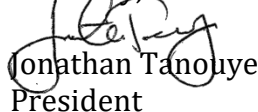
My name is Jon Tanouye and I am the current President of the Orchid Growers of Hawaii (OGOH).

OGOH Strongly supports **SB2362 SD1, HD1 Relating to Ornamental Ginger.**

The orchid industry understands how important it is to help move our products with the help of other floriculture and ornamentals that are available in Hawaii. We ask that you help our fellow growers and producers, who understand that diseases and pathogens that put our flowers at risk. How important it is for growers to be able to start with a 'clean slate' and procure a source of virus free material.

If you have any other questions you may contact me to discuss and I can be reached by phone at 808-959-3535 and email jon@greenpointnursery.com.

Sincerely,



Jonathan Tanouye
President

Orchid Growers of Hawaii (OGOH)

SB-2362-HD-1

Submitted on: 3/26/2024 7:21:35 PM

Testimony for FIN on 3/27/2024 3:30:00 PM

Submitted By	Organization	Testifier Position	Testify
Warren Watanabe	Maui County Farm Bureau	Support	Written Testimony Only

Comments:

The Maui County Farm Bureau is in strong support of SB2362 SD1 HD1. Mahalo.