



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
Senate Committee on Higher Education
Wednesday, February 14, 2024 at 1:00 p.m.

By

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And

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SB 2362 – RELATING TO ORNAMENTAL GINGER

Chairs Gabbard and Kim, Vice Chairs Richards and Kidani, and Members of the Committees:

Thank you for the opportunity to provide testimony in support of SB 2362 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 Hawai'i 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 Hawaii Island UH Manoa 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, provided that its passage does not impact priorities as indicated in our Board of Regents Approved Budget.