UNIVERSITY OF HAWAIʻI SYSTEM
ʻŌNAEHANA KULANUI O HAWAIʻI

Legislative Testimony
Hōʻike Manaʻo I Mua O Ka ʻAhaʻōlelo

Testimony Presented Before the
House Committee on Finance
Wednesday, March 29, 2023 at 3:00 p.m.
By
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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 Oʻahu 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 Hawaiʻi 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 Oʻahu, Kauaʻi, Maui and Hawaiʻi 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 Hawaiʻi 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 <u>support</u> 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.