

DAVID Y. IGE
Governor

DOUGLAS S. CHIN
Lt. Governor



State of Hawaii
DEPARTMENT OF AGRICULTURE
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SCOTT E. ENRIGHT
Chairperson, Board of Agriculture

PHYLLIS SHIMABUKURO-GEISER
Deputy to the Chairperson

**TESTIMONY OF SCOTT E. ENRIGHT
CHAIRPERSON, BOARD OF AGRICULTURE**

BEFORE THE SENATE COMMITTEE ON WAYS & MEANS

**FEBRUARY 23, 2018
11:00 A.M.
CONFERENCE ROOM 211**

**SENATE BILL NO. 2069
MAKING AN APPROPRIATION FOR RESEARCH, DEVELOPMENT, MARKETING
AND CONSERVATION OF 'ULU**

Chairperson Dela Cruz and Members of the Committee:

Thank you for the opportunity to testify on Senate Bill No. 2069, which makes an appropriation for research, development, marketing and conservation of 'ulu. The Department supports this bill and offers a comment.

The Department recognizes that it lacks the scientific technologies, tools and expertise to develop micropropagation methods for rapid expansion of plantings, to develop shelf-stable products for retail sale, and to develop uses for the latex and inflorescence for insect repellent properties. The Department, however, has been actively engaged in the marketing of 'ulu, through collaboration with agencies such as the Breadfruit Institute of the National Tropical Botanical Garden, Hawaiian Homegrown Food Network, Hawaii 'Ulu Producers Cooperative and Mililani Agricultural Park, on projects to achieve commercial success for Hawaii-grown 'ulu. In July 2016, the Hawaii 'Ulu Producers Cooperative introduced their ready-to-eat, vacuum-packed, 'ulu value-added product to the hotel, restaurant and institutional sectors in the Department's section at the Hawaii Lodging, Hospitality and Foodservice Expo. The Cooperative reports that because of their participation, through contacts made at the show, they are



currently working with the Department of Education to provide 10,000 pounds of their value-added product for school lunches across the State.

The Department comments that the marketing of 'ulu should be assigned to the Agricultural Development Division (ADD), as they are responsible for the marketing of Hawaii agricultural products. The additional funding will allow ADD to expand the promotion and marketing of 'ulu to local, domestic and international consumers. The Department believes that it is both practicable and advantageous to assign the marketing portion to ADD as they have had success with marketing 'ulu and will be able to continue to work in collaboration with the University of Hawaii, College of Tropical Agriculture and Human Resources, agricultural associations and non-profit organizations to achieve commercial success for Hawaii-grown 'ulu through state and federally funded projects.

Thank you for the opportunity to testify on this measure.



UNIVERSITY OF HAWAII SYSTEM

Legislative Testimony

Testimony Presented Before the
Senate Committee on Ways and Means
Friday, February 23, 2018 at 11:00 a.m.

By
Nicholas Comerford
Dean, College of Tropical Agriculture and Human Resources
And
Michael Bruno
Interim Vice Chancellor for Academic Affairs
Vice Chancellor for Research
University of Hawai'i at Mānoa

SB 2069 – RELATING TO 'ULU

Chair Dela Cruz, Vice Chair Keith-Agaran, and members of the Senate Committee on Ways and Means:

Thank you for this opportunity to submit testimony in support of SB 2069.

Breadfruit is indeed a commercial crop in Hawai'i that has not met its commercial potential. Statewide surveys show that the number of commercial trees is growing. It is culturally and historically significant to the state. Early signs of potential industry engagement are the recent establishment of processors, of a breadfruit cooperative, and of farm-to-school programs.

The College of Tropical Agriculture and Human Resources has expertise that can address the tasks itemized in Section 2.

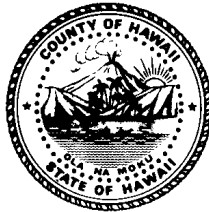
- (1) Developing breadfruit businesses that have demonstrated significant product sales – CTAHR has edible crop Extension Agents throughout the state that can help individual farmers with existing information on the production of this crop. CTAHR has recently hired a faculty member to work on value added food products, who could potentially work on breadfruit issues.
- (2) Performing research that is directly supporting farmers and industry development – CTAHR has researchers that are currently working with 'ulu. Most notable is the work of Dr. Noa Lincoln that has developed a citizen research program statewide to better understand the growth and development of the tree and its crop. One of the objectives of this program is to boost local 'ulu production (<https://www.Hawaii.edu/news/2017/11/06/local-breadfruit-citizen-project/> ; <http://www.Hawaiinewsnow.com/story/36779251/citizen-scientists-wanted-to->

[help-study-the-ulu-plant](#)) . In addition, CTAHR has expertise in fruit tree management, post-harvest treatment, and related soil management.

- (3) Providing ancillary support such as tree production, marketing and public education – CTAHR, through its Extension program can promote the crop through its educational programs by translating research into actionable practices. Currently, CTAHR has a publication entitled – “Breadfruit; ethnobotany, nutrition, and human ecology” as an example of current information that can immediately be brought to the issue.

We support SB 2069 under the conditions that it does not affect, and is in addition to, the UH budget request.

County of Hawai'i
Council District 9 -
North and South Kohala



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Chair: Committee on Agriculture,
Water & Energy

Vice Chair: Committee on
Environmental Management

HERBERT M. "TIM" RICHARDS, III
HAWAI'I COUNTY COUNCIL
District 9
25 Aupuni Street, Ste. 1402, Hilo, Hawai'i 96720

February 22, 2018

Senate Committee on Ways and Means

Honorable Senator Donovan M. Dela Cruz, Chair

Email: sendelacruz@capitol.hawaii.gov

Honorable Senator Gilbert S.C. Keith-Agaran, Vice Chair

Email: senkeithagaran@capitol.hawaii.gov

RE: **Support of SB2069**

Hearing Date/Time: February 23, 2018 at 11:00 a.m.

Dear Senators:

Thank you for the opportunity to submit **testimony in STRONG SUPPORT of SB2069**, which appropriates funds for the research, development, marketing, and conservation of 'ulu.

The passing of and the implementation of this bill is significant in that Hawai'i has a huge opportunity to further develop and create a thriving industry with a sought-after staple such as 'ulu. As agriculture plays a huge economic footprint for Hawai'i Island and the state, we should continue to support measures that provide a large potential to increase and advance our agriculture industry. I therefore strongly urge the enactment of SB2069.

Please feel free to contact me should you need to discuss my position and knowledge of this matter further.

Sincerely,

A handwritten signature in black ink, appearing to read "Tim Richards", written over a light yellow background.

TIM RICHARDS

Hawai'i County Council, District 9

SB-2069

Submitted on: 2/20/2018 10:17:30 PM

Testimony for WAM on 2/23/2018 11:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
De MONT R. D. CONNER	Testifying for Ho'omanapono Political Action Committee (HPAC)	Support	Yes

Comments:

We continue to STRONGLY SUPPORT this bill. Mahalo.

SB-2069

Submitted on: 2/21/2018 1:25:07 PM

Testimony for WAM on 2/23/2018 11:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Rachel L. Kailianu	Testifying for Ho`omana Pono, LLC	Support	Yes

Comments:

SB-2069

Submitted on: 2/22/2018 2:27:19 AM

Testimony for WAM on 2/23/2018 11:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Melodie Aduja	Testifying for OCC Legislative Priorities Committee, Democratic Party of Hawai'i	Support	No

Comments:

SB-2069

Submitted on: 2/21/2018 3:36:43 PM

Testimony for WAM on 2/23/2018 11:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Noa Lincoln	Individual	Support	No

Comments:

My name is Noa Kekuewa Lincoln, a researcher at the University of Hawai'i, testifying as an individual today. I have multiple research projects on 'ulu, and wanted to provide information on the emergin 'ulu industry that is emergin from my research. First of all is the growth in tree planting, where through statewide farmer surveys I have seen an exponentila increase in commercial tree plantings, from 515 trees established 10 or more years ago, to 1,016 establised more than 5 years ago, to 2,251 established 2 or more years ago, and a total 3,274 trees established to present. This survey also indicated an additional 3,000 trees planned to be planted by farmers in teh next 5 years. This information demonstrates that there is a rapidly growing commercial supply of breadfruit in the state. Extrapolating this information indicates that statewide production in anticipated to grow from ~200,000 lbs today to ~600,000 lbs in five years and ~1,200,000 lbs in ten years. This huge increase in production needs to be accompanied by farmer support and market development if this burgeonding industry is to succeed. Furthermore, there is substantial interest and investment that may greatly increase the pace of breadfruit estblishment (from Ulu Pono, Patagonia, and other social investment organizations). While these aspects of investment are not garuanteed in any way, investment into the industry at the state level would encourage these types of private investment to follow through on the conversations that are happening now. Breadfruit represents a significant opportunity to significnatly contribute to local food security. It is one of the most productive crops on the planet, with yields of 6 dry metric tons per hectare already beng realized in Australia, Trinidad, and elsewhere in the tropics. This extraordinary figure is being realized with virtually no reserach investment into the crop. Therefore, the gains that could be made with focused agronomic reserach support are, hypothetically, very large. As a tree crop, breadfruit provdes the opportuntiy to create greater resilience to climate variations, and to realize environmental benefits such as carbon capture, increased soil health/reduced erosion, and higher levels of agro-biodiversity. Furthermore, breadfruit is a healthy, gluten-free carbohydrate that is culturally significant to our native populations. Breadfruit has a key role to play in local food security, particularly in responce to the govenor's charge to increase local food production.

Breadfruit in the state has made key gains in the past year. For the first itme breadfruit will be supplied to the Hawai public school system. We have seen the emergence of multiple small breadfruit processors and products, and multiple restaurants include breadfruit on thier menus. Despite these gains, there is still significant barriers to the growht of the breadfruit industry, which can be alleviated through state support.

SB-2069

Submitted on: 2/21/2018 3:47:28 PM

Testimony for WAM on 2/23/2018 11:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Javier Mendez-Alvarez	Individual	Support	No

Comments:

SB-2069

Submitted on: 2/21/2018 6:14:57 PM

Testimony for WAM on 2/23/2018 11:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Benton Kealii Pang, Ph.D.	Individual	Support	No

Comments:

As a native Hawaiian and ethnobotanist, I support SB2069. The results of the research discovered with this funding will be important for the health and traditions of our Pacific Island and Native Hawaiian communities as well as the greater population within our State.

SB-2069

Submitted on: 2/21/2018 10:56:59 PM

Testimony for WAM on 2/23/2018 11:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Lydi Morgan Bernal	Individual	Support	No

Comments:

I strongly support this bill. Investment in the development of 'ulu as a food staple in Hawaii is important to the success of Hawaii's farm to school movement, as 'ulu can be included as part of the federally reimbursable school meal programs. Thank you for your support of this important measure for Hawaii!