SB 228

Testimony file in support of SB228

Date: 2/1/2017

Submitted by: Dana Shapiro, HUPC Manager

Contact info: (808) 2388-8869, info@eatbreadfruit.com

The Hawaii Ulu Producers Cooperative is a farmer-owned and operated business dedicated to revitalizing breadfruit as a sustainable, viable food source for Hawaii. Breadfruit is one of the very few crops on the planet that is both a staple and a tree, making it more sustainable and adaptable to climate change than annual crops – with yields of up to 1,000 lbs of nutritious fruit per tree per year.

Our grassroots cooperative was formed in July 2016 with 10 pilot members from around Hawaii Island, and have already received additional inquiries about joining from over a dozen other farmers around the state (including on Oahu, Kaui and Maui). In the past 6 months we have processed and sold over 12,000 lbs. of ulu to customers including local restaurants and schools.

We strongly and enthusiastically support this bill as it will provide sorely needed funds to support the development of Hawaii's fledgling breadfruit industry. Specific activities that would benefit our organization and farmers include: research geared to advance agronomic understanding of sustainable breadfruit production best practices in the diverse microclimates of Hawaii; nutritional analysis, food science and product development support; marketing, promotion and consumer education.

As the state's pioneer breadfruit production and processing business we are largely dependent on grant funds in our first few years of operation and would also benefit from direct support to strengthen and enhance our vertically integrated, democratically controlled, cooperative model on which business framework is based - which also serves as a model for other islands and industries.

Please contact us should you have any questions about our support for this important bill. Mahalo for considering our testimony.

As Director of the Breadfruit Institute at the National Tropical Botanical Garden I am pleased to submit testimony in support of SB228, "MAKING AN APPROPRIATION FOR RESEARCH, DEVELOPMENT, MARKETING, AND CONSERVATION OF 'ULU." Agriculture is at a critical juncture in Hawaii and breadfruit has the potential to be an important crop plant to address food security and economic security issues for our island state.

The Breadfruit Institute at the National Tropical Botanical Garden has taken a leadership role since 2003 in the conservation, study, and use of breadfruit for food and reforestation. Through our efforts and collaborations with myriad organizations throughout the state, including the Ho'oulu ka 'Ulu project, nearly 15,000 new breadfruit trees have been planted. The Pacific Business Center at the University of Hawaii has led efforts to develop local and regional economies around breadfruit flour and other value-added products.

It is the responsibility of the University of Hawaii, as a land-grant institution, to support local agriculture through research, extension, and training. It is essential that the State of Hawaii recognize and support this critical mission. As a graduate of the College of Tropical Agriculture & Human Resources (Masters & PhD), Affiliate Faculty in the Department of Tropical Plants & Soil Sciences and CTAHR's 2015 Distinguished Alumna, I applaud the legislature's proposed support for breadfruit.

Breadfruit provides a unique opportunity for Hawaii by creating a practical model utilizing regenerative agriculture practices around breadfruit to improve soils, nutrition, the environment, our citizens' health and economic well being, and the economic vitality of our state, while celebrating the cultural importance of this staple crop.

Regards,

Diane Ragone, PHD Director, Breadfruit Institute 3530 Papalina Road Kalaheo, HI 96741

808 332-7324 ext 221

From: mailinglist@capitol.hawaii.gov

Sent: Monday, February 6, 2017 10:18 AM

To: AEN Testimony Cc: brian@hfbf.org

Subject: *Submitted testimony for SB228 on Feb 7, 2017 13:00PM*

SB228

Submitted on: 2/6/2017

Testimony for AEN/HRE on Feb 7, 2017 13:00PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing	
Randy Cabral	Hawaii Farm Bureau	Support	Yes	

Comments:

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov



P.O. Box 99, Wailuku, HI 96793-0099

February 5,2017

HFUU Board of Directors

Legislative Testimony in support of SB 228

Executive Committee Vincent Mina

> President HFIIII

Testimony presented to the Senate Committee on Agriculture and the Environment Tuesday, February 7 2017 at 1:00 PM

Simon Russell, Chairperson, HFUU Legislative Committee

Ray Maki Vice-President HFUU

Aloha Chairman Gabbard, Vice Chair Riviere and members of the Committee,

Anny Bruch Secretary **HFUU**

Hawaii Farmers Union United strongly supports SB 228.

We have great admiration for the UH CTAHR and it's programs that support food production. We believe that your support for this measure will positively impact local food production, and possibly could lead to the replacement of some of the

Karen Reid Treasurer **HFUU**

carbohydrates and starches in our diets.

Directors

Christian Zukerman Wai'anae

This measure before you will research into Ulu, or breadfruit. Ulu is one of the most versatile food crops in the world, and it grows well in Hawaii. We need a lot more of it, and it needs to be eaten on a much more regular basis than it currently is.

Sean Anderson Waimanalo

We appreciate your support for this important step forward for Hawaii's agricultural future.

Simon Russell Haleakalā

Respectfully Submitted,

Mikala Minn Hāna

HAWAII FARMERS UNION UNITED

James Simpliciano Mauna Kahalawai

Simon Russell

Steve Sakala

HFUU State Legislative Committee Chairperson

Kona

Greg Smith Ka'u

The Hawai'i Farmers Union United and its Chapters is a nonprofit corporation formed under Hawai'i law. It advocates for the sovereign right of farmers ranchers and fishers to create and sustain vibrant and prosperous agricultural communities for the benefit of all Hawai'i through cooperation, education and legislation.

Clarence Baber Kohala

From: mailinglist@capitol.hawaii.gov

Sent: Wednesday, February 1, 2017 7:10 PM

To: AEN Testimony

Cc: yoshitol@yahoo.com

Subject: Submitted testimony for SB228 on Feb 7, 2017 13:00PM

SB228

Submitted on: 2/1/2017

Testimony for AEN/HRE on Feb 7, 2017 13:00PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing	
Yoshito L'Hote	Aina Ho'okupu o Kilauea	Support	No	

Comments: Ulu might be a great potential crop not to be overlooked

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov

From: mailinglist@capitol.hawaii.gov
Sent: Friday, February 3, 2017 9:37 AM

To: AEN Testimony

Cc: pamelaboyar@gmail.com

Subject: *Submitted testimony for SB228 on Feb 7, 2017 13:00PM*

SB228

Submitted on: 2/3/2017

Testimony for AEN/HRE on Feb 7, 2017 13:00PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Pamela Boyar	Farm Lovers Farmers Markets	Support	No

Comments:

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

From: mailinglist@capitol.hawaii.gov
Sent: Sunday, February 5, 2017 2:23 PM

To: AEN Testimony

Cc: tracy.emills@gmail.com

Subject: *Submitted testimony for SB228 on Feb 7, 2017 13:00PM*

SB228

Submitted on: 2/5/2017

Testimony for AEN/HRE on Feb 7, 2017 13:00PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Tracy E Mills	Individual	Support	No

Comments:

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

From: mailinglist@capitol.hawaii.gov
Sent: Sunday, February 5, 2017 12:48 PM

To: AEN Testimony

Cc: nataliejeanf@gmail.com

Subject: *Submitted testimony for SB228 on Feb 7, 2017 13:00PM*

SB228

Submitted on: 2/5/2017

Testimony for AEN/HRE on Feb 7, 2017 13:00PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing	
natalie	Individual	Support	No	

Comments:

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

From: mailinglist@capitol.hawaii.gov
Sent: Sunday, February 5, 2017 11:59 AM

To: AEN Testimony

Cc: deborah@imaginariums.com

Subject: *Submitted testimony for SB228 on Feb 7, 2017 13:00PM*

SB228

Submitted on: 2/5/2017

Testimony for AEN/HRE on Feb 7, 2017 13:00PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Deborah Davis	Individual	Support	No

Comments:

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

From: mailinglist@capitol.hawaii.gov
Sent: Sunday, February 5, 2017 11:38 AM

To: AEN Testimony
Cc: raphiell@gmail.com

Subject: *Submitted testimony for SB228 on Feb 7, 2017 13:00PM*

SB228

Submitted on: 2/5/2017

Testimony for AEN/HRE on Feb 7, 2017 13:00PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Raphiell Nolin	Individual	Support	No

Comments:

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

From: mailinglist@capitol.hawaii.gov
Sent: Sunday, February 5, 2017 10:49 AM

To: AEN Testimony

Cc: sharedpleasures@hawaii.rr.com

Subject: Submitted testimony for SB228 on Feb 7, 2017 13:00PM

SB228

Submitted on: 2/5/2017

Testimony for AEN/HRE on Feb 7, 2017 13:00PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing	
vicki levin	Individual	Support	No	

Comments: strongly support this bill

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

From: mailinglist@capitol.hawaii.gov
Sent: Sunday, February 5, 2017 10:30 AM

To: AEN Testimony

Cc: alohalways@gmail.com

Subject: *Submitted testimony for SB228 on Feb 7, 2017 13:00PM*

SB228

Submitted on: 2/5/2017

Testimony for AEN/HRE on Feb 7, 2017 13:00PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Tanja Miller	Individual	Support	No

Comments:

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

From: mailinglist@capitol.hawaii.gov
Sent: Sunday, February 5, 2017 9:37 AM

To: AEN Testimony
Cc: molivit@yahoo.com

Subject: *Submitted testimony for SB228 on Feb 7, 2017 13:00PM*

SB228

Submitted on: 2/5/2017

Testimony for AEN/HRE on Feb 7, 2017 13:00PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Isabelle Olivit	Individual	Support	No

Comments:

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

From: mailinglist@capitol.hawaii.gov
Sent: Sunday, February 5, 2017 9:11 AM

To: AEN Testimony
Cc: ihemphi@live.com

Subject: *Submitted testimony for SB228 on Feb 7, 2017 13:00PM*

SB228

Submitted on: 2/5/2017

Testimony for AEN/HRE on Feb 7, 2017 13:00PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Denise Key	Individual	Support	No

Comments:

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

From: mailinglist@capitol.hawaii.gov
Sent: Sunday, February 5, 2017 8:29 AM

To: AEN Testimony

Cc: bmurphy420@mail.com

Subject: Submitted testimony for SB228 on Feb 7, 2017 13:00PM

SB228

Submitted on: 2/5/2017

Testimony for AEN/HRE on Feb 7, 2017 13:00PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Brian Murphy	Individual	Support	No

Comments: Please, ban all GMOs!

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

From: mailinglist@capitol.hawaii.gov
Sent: Sunday, February 5, 2017 8:24 AM

To: AEN Testimony

Cc: reneeariley@hotmail.com

Subject: Submitted testimony for SB228 on Feb 7, 2017 13:00PM

SB228

Submitted on: 2/5/2017

Testimony for AEN/HRE on Feb 7, 2017 13:00PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Renee Riley	Individual	Support	No

Comments: Breadfruit could be a solution to help end world hunger. I support CTAHR increasing Breadfruit (Ulu) research and production.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

From: mailinglist@capitol.hawaii.gov
Sent: Sunday, February 5, 2017 7:09 AM

To: AEN Testimony

Cc: mary@mauivortex.com

Subject: Submitted testimony for SB228 on Feb 7, 2017 13:00PM

SB228

Submitted on: 2/5/2017

Testimony for AEN/HRE on Feb 7, 2017 13:00PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Mary Overbay	Individual	Support	No

Comments: I totally support organic farming. Please, ban all GMO's!

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

From: mailinglist@capitol.hawaii.gov
Sent: Sunday, February 5, 2017 7:01 AM

To: AEN Testimony

Cc: taragrace808@gmail.com

Subject: *Submitted testimony for SB228 on Feb 7, 2017 13:00PM*

SB228

Submitted on: 2/5/2017

Testimony for AEN/HRE on Feb 7, 2017 13:00PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Tara Grace	Individual	Support	No

Comments:

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

From: mailinglist@capitol.hawaii.gov
Sent: Sunday, February 5, 2017 6:09 AM

To: AEN Testimony

Cc: katc31999@gmail.com

Subject: *Submitted testimony for SB228 on Feb 7, 2017 13:00PM*

SB228

Submitted on: 2/5/2017

Testimony for AEN/HRE on Feb 7, 2017 13:00PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Kat Culina	Individual	Support	No

Comments:

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.





COMMITTEE ON AGRICULTURE AND ENVIRONMENT

2/2/2017

Senator Mike Gabbard, Chair Senator Gil Riviere, Vice Chair COMMITTEE ON HIGHER EDUCATION Senator Kaiali'i Kahele, Chair Senator Michelle N. Kidani, Vice Chair

Regarding SB 228 MAKING AN APPROPRIATION FOR RESEARCH, DEVELOPMENT, MARKETING, AND CONSERVATION OF 'ULU.

Dear Committees,

Two years ago we began developing recipes with Ulu as the main ingredient for our Gluten Free menu items. They have become instant successes, probably because of the flavor, texture and the fact that it is locally grown. Let's put some resources behind this crop, it's will pay off for the growing, local food supply chain.

Thank you,

Thomas S. Pickett President Kilauea Bakery & Pau Hana Pizza 808-639-4689

Kilauea Bakery





P.O. Box 630, Kilauea, Hi., 96754 e'mail; kbakery@aloha.net Fax; 1-808-828-1261 Phone; 1-808-828-1019

Kilauea School PTSA P.O. Box 37 Kilauea, HI. 96754 Tel. (808) 828-1212

From: mailinglist@capitol.hawaii.gov

Sent: Wednesday, February 1, 2017 7:11 PM

To: AEN Testimony

Cc: yoshitol@yahoo.com

Subject: Submitted testimony for SB228 on Feb 7, 2017 13:00PM

SB228

Submitted on: 2/1/2017

Testimony for AEN/HRE on Feb 7, 2017 13:00PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing	
Yoshito L'Hote	Individual	Comments Only	No	

Comments: Ulu has great potential

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

From: mailinglist@capitol.hawaii.gov

Sent: Wednesday, February 1, 2017 3:26 PM

To: AEN Testimony

Cc: cindywalsh@hawaii.rr.com

Subject: Submitted testimony for SB228 on Feb 7, 2017 13:00PM

SB228

Submitted on: 2/1/2017

Testimony for AEN/HRE on Feb 7, 2017 13:00PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing	
cynthia Walsh	Individual	Support	No	

Comments: I support this bill, Hawaii needs a source of high calorie food for its food security. Food from trees is appropriate for tropical ecology.. Ways to save breadfruit need to be researched.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

From: mailinglist@capitol.hawaii.gov
Sent: Tuesday, January 31, 2017 4:05 PM

To: AEN Testimony

Cc: mendezj@hawaii.edu

Subject: *Submitted testimony for SB228 on Feb 7, 2017 13:00PM*

SB228

Submitted on: 1/31/2017

Testimony for AEN/HRE on Feb 7, 2017 13:00PM in Conference Room 224

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

Comments:

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

From: mailinglist@capitol.hawaii.gov

Sent: Tuesday, January 31, 2017 10:17 AM

To: AEN Testimony

Cc: mkhan@hawaiiantel.net

Subject: Submitted testimony for SB228 on Feb 7, 2017 13:00PM

SB228

Submitted on: 1/31/2017

Testimony for AEN/HRE on Feb 7, 2017 13:00PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Leimomi Khan	Individual	Support	No

Comments: Strongly support this bill.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

From: mailinglist@capitol.hawaii.gov

Sent: Monday, February 6, 2017 6:54 AM

To: AEN Testimony

Cc: alohapowers@gmail.com

Subject: *Submitted testimony for SB228 on Feb 7, 2017 13:00PM*

SB228

Submitted on: 2/6/2017

Testimony for AEN/HRE on Feb 7, 2017 13:00PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
megan powers	Individual	Support	No

Comments:

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

From: mailinglist@capitol.hawaii.gov
Sent: Sunday, February 5, 2017 10:10 PM

To: AEN Testimony
Cc: chris@mentzel.com

Subject: *Submitted testimony for SB228 on Feb 7, 2017 13:00PM*

SB228

Submitted on: 2/5/2017

Testimony for AEN/HRE on Feb 7, 2017 13:00PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Chris Mentzel	Individual	Support	No

Comments:

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

From: mailinglist@capitol.hawaii.gov
Sent: Sunday, February 5, 2017 8:08 PM

To: AEN Testimony

Cc: neil.vonhof@gmail.com

Subject: *Submitted testimony for SB228 on Feb 7, 2017 13:00PM*

SB228

Submitted on: 2/5/2017

Testimony for AEN/HRE on Feb 7, 2017 13:00PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Neil Vonhof	Individual	Support	No

Comments:

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

From: mailinglist@capitol.hawaii.gov

Sent: Monday, February 6, 2017 3:38 PM

To: AEN Testimony

Cc: tulsigreenlee@icloud.com

Subject: *Submitted testimony for SB228 on Feb 7, 2017 13:00PM*

SB228

Submitted on: 2/6/2017

Testimony for AEN/HRE on Feb 7, 2017 13:00PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Tulsi Greenlee	Individual	Support	No

Comments:

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

DAVID Y. IGE Governor

SHAN S. TSUTSUI Lt. Governor



SCOTT E. ENRIGHT Chairperson, Board of Agriculture

PHYLLIS SHIMABUKURO-GEISER
Deputy to the Chairperson

State of Hawaii **DEPARTMENT OF AGRICULTURE**

1428 South King Street Honolulu, Hawaii 96814-2512 Phone: (808) 973-9600 FAX: (808) 973-9613

TESTIMONY OF SCOTT E. ENRIGHT CHAIRPERSON, BOARD OF AGRICULTURE

BEFORE THE SENATE COMMITTEES ON AGRICULTURE & ENVIRONMENT & HIGHER EDUCATION

FEBRUARY 7, 2017 1:00 P.M. CONFERENCE ROOM 224

SENATE BILL NO. 228

MAKING AN APPROPRIATION FOR RESEARCH, DEVELOPMENT, MARKETING
AND CONSERVATION OF 'ULU

Chairpersons Gabbard and Kahele and Members of the Committees:

Thank you for the opportunity to testify on Senate Bill 228, 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 the 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 as a result of their participation, through contacts made at the show, they have sold their harvest through June.

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. 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.

From: mailinglist@capitol.hawaii.gov

Sent: Monday, February 6, 2017 2:58 PM

To: AEN Testimony
Cc: johnnaylor@kula.us

Subject: *Submitted testimony for SB228 on Feb 7, 2017 13:00PM*

SB228

Submitted on: 2/6/2017

Testimony for AEN/HRE on Feb 7, 2017 13:00PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
John NAYLOR	Individual	Support	No

Comments:

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

Testimony for SB228

By:

Noa Kekuewa Lincoln (808) 217-7710 hawaiianhomegrown@gmail.com

This testimony is in support of SB228. I am testifying as an individual, but wearing multiple hats am someone who has their finger on the pulse of the emerging breadfruit industry in Hawai'i. Beyond the significant historical and cultural importance of this crop, on which I have published peer-reviewed papers on, my comments here relate to the current status and future potential of the breadfruit industry.

Over the past ten years there has been a steadily increasing interest in the farming and processing of breadfruit, powered in large-part by educational efforts by the Breadfruit Institute and partners. During this time there has always been a small industry regarding breadfruit, with some direct fruit sales from farmers to restaurants, retail markets, and consumers. There has also been some very small scale processing of products such as breadfruit baking mixes, ulu poi, and others. The scale of both the processing and production has typically been very small.

About five years ago a distinct shift occurred, where the establishment of larger plantations became increasingly common. Around this time also emerged the first highly successful breadfruit processor in the state (Maui Breadfruit Company). Since then we have seen a growing interest and buzz around breadfruit, however the industry itself remains highly undeveloped, and is still dominated by small producers.

Currently we continue to see the establishment of new breadfruit plantings. My conservative estimate on known orchards, shows that there are ~1,000 trees actively producing, with another ~3,500 trees in the ground that will become productive within the next five years. This is in addition to the hundreds of trees represented by smaller producers (<20 trees). Taking a conservative estimate of 300 lbs per tree, this means that currently some 300,000 lbs/year are produced by orchards, with that number swelling to 1.35 million lbs/year in the next five years. These are breadfruit farmers that anticipate making revenues, if not a living, from these orchards.

Most recently we have finally seen increased development of breadfruit processing, which will be an essential aspects to growing a true breadfruit based industry. While many of these new processors are small scale, there has also been the development of the first large-scale cooperative that seeks to create an organized development of the breadfruit industry. Representing over 2000 trees the Hawaii Ulu Producers Cooperative is processing freezer-safe breadfruit for year-round consumption, developing new products, and partnering with multiple

organizations to get breadfruit into the community while simultaneously capturing markets to create a secure economic base.

While I hope this testimony shows that there is great growth potential for the breadfruit industry, there is also a significant amount of hurdles and unknowns that need to be addressed. Because breadfruit has never been grown in orchards, there are significant questions regarding production. Even the simplest questions such as fertilization rates have not been answered, and we are seeing crop abortion in different settings for reasons not totally understood. Questions regarding different varieties and their climate suitability is also a major concern. On the processing side individuals are having to go through a steep learning curve when it comes to processing protocols, equipment that can be used, and essential information such as nutritional content and variability needed to satisfy labeling requirements.

Ultimately, I feel that the breadfruit industry is at a critical junction. If the processing and market side is not developed soon, the flood of trees into the marketplace could be detrimental to the fledgling industry. Conversely, if growers are not supported and the industry developments, the production base could drop out due to unforeseen problems in production. CTAHR and the Breadfruit Institute continue to conduct essential research and development, working with growers to continue the growth of this industry, and I strongly support of legislature supporting these efforts in a meaningful way.

Thank you,

Noa Lincoln

From: mailinglist@capitol.hawaii.gov

Sent: Monday, February 6, 2017 12:01 PM

To: AEN Testimony

Cc: breezybees808@Gmail.com

Subject: Submitted testimony for SB228 on Feb 7, 2017 13:00PM

SB228

Submitted on: 2/6/2017

Testimony for AEN/HRE on Feb 7, 2017 13:00PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Briana Hurley	Individual	Support	No

Comments: Aloha, I fully support research on ulu. Ulu is a great food source especially in times of need. I think the state would greatly benefit from the research this bill will provide funds for. Thank you for your time.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.