



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 HOUSE COMMITTEE ON AGRICULTURE
THURSDAY, JANUARY 30, 2014
9:20 A.M.
Conference Room 312

HOUSE BILL NO. 2180
RELATING TO AGRICULTURE

Chairperson Wooley and Members of the Committee,

Thank you for the opportunity to provide testimony on HB 2180 relating to agriculture. This bill appropriates funds to the University of Hawaii, College of Tropical Agriculture and Human Resources (CTAHR) for a pilot project to create new technologies for sustainable agriculture in the State through scientific research and support services.

Sustainable agriculture practices is an essential component of food security in Hawaii, and the Hawaii Department of Agriculture is pleased that this measure supports and promotes research on new technologies for sustainable agriculture practices.

The HDOA supports the intent of this bill, but defers to CTAHR.

Thank you, again, for the opportunity to testify on this measure.



Personal Testimony Presented before the
House Committee on Agriculture

HB 2180 -- relating to funding a pilot project at the College of Tropical Agriculture and Human Resources at the University of Hawaii at Manoa to create new technologies for sustainable agriculture in the State through scientific research and support services.

Chair Woolly, Vice Chair Onishi, and members of the House Committee on Agriculture, Awana, Tokioka, Brower, Tsuji, Cachola, Matsumoto, Choy, Ward, and Ohno

My name is Anne Alvarez. I am a professor at UH Mānoa, but now I am providing personal testimony. I strongly support this bill provided that its passage does not replace or adversely impact priorities as indicated in the University's Board of Regents Approved Executive Biennium Budget.

I support this bill because it addresses the critical factors necessary to achieve balance between agriculture, the community and the environment. A stable, sustainable relationship between agriculture and the community depends on preservation of pristine coastal waters, appropriate recycling of agricultural wastes, modernization of agricultural practices for efficient production while at the same time avoiding contamination of ground water and coastal waters due to excess fertilizer. The entire ecosystem of the North Shore of Oahu is in delicate balance, which can be disrupted unintentionally unless a comprehensive approach is taken to all aspects of the farming operations, including waste disposal. Preservation of our agricultural lands also is essential to beauty, a healthy local community as well as tourism. A concerted effort to attain environmental stability at the agricultural-urban interface, especially on an island, is critical to our state's economy. The State of Hawaii through support of this pilot project has a unique opportunity to support teams of researchers and educators at the University of Hawaii who will help develop new technologies and sustainable practices.

Written Testimony Presented Before the
House Committee on Agriculture
Thursday, January 30, 2014; 9:20 am

by

Devin Takara
Jr. Researcher

College of Tropical Agriculture and Human Resources
University of Hawai'i at Mānoa

Chair Wooley, Vice Chair Onishi, and members of the House Committee on Agriculture, I humbly thank you for this rare opportunity for me to genuinely express my utmost, strongest support of HB 2180, which would grant funding to the pilot project aimed at demonstrating and facilitating new technologies for sustainable agriculture in Hawaii through scholarly research and support services. My support, of course, is predicated on the condition that the bill, HB 2180, does not replace or adversely impact the priorities as indicated in the University's Board of Regents Approved Executive Biennium Budget.

s

Although my academic training has been rigorously centered around the technical aspects pertaining to the project described in this bill, it is my intention to offer a contrasting testimony from the perspective of one who has been born and educated in the public and private school system of Hawaii. As I am sure that my colleagues and superiors will attest to, the research implications of the proposed pilot project will undoubtedly facilitate procurement of future funding from federal and non-governmental entities, however, there also exists an opportunity to utilize the facility as an educational component to advocate interests in science, technology, engineering, and mathematics (STEM) for kindergarten to twelfth graders. It has been my personal experience that early exposure and interest in science leads to post-graduate education and an insatiable desire to push the boundaries of cutting edge technology.

Thus, in addition to the inherent quantifiable benefits that the proposed project can deliver (namely bioremediation of organic waste with the simultaneous co-generation of clean, bioenergy to promote Hawaii's sustainable independence), I am in strong support of developing interest and excitement in Hawaii's youth to further advance the technologies that we have today. Before concluding, I would like to note here that this is a personal testimony and in no way reflects the opinion and/or views of the University. Many thanks and much mahalo for your time and in allowing me to voice my support for HB 2180.

Written Personal Testimony Presented
Before the House Committee on Agriculture
Thursday, January 30, 2014; 9:20 am
by
Eunsung Kan
Assistant Professor
College of Tropical Agriculture and Human Resources
University of Hawai'i at Mānoa

HB 2180 RELATING TO AGRICULTURE

Dear Chair Wooley, Vice Chair Onishi, and members of the House Committee on Agriculture:

I am so pleased to testify **in support of HB 2180**, which would fund a pilot project at the College of Tropical Agriculture and Human Resources, University of Hawai'i at Mānoa.

My name is Eunsung Kan. I am an assistant professor at College of Tropical Agriculture and Human Resources, UH Mānoa. I have been teaching and researching wastewater/water treatment, reuse of wastewater and environmental health at UH Manoa.

However, today, I am providing personal testimony regarding HB 2180. I strongly support this bill because it will definitely fund several pilot projects to clean up the contaminated water resources used for agricultural irrigation and generate biofuels from organic wastes in Hawaii.

Agriculture in Hawaii has faced critical challenges such as contaminated water resources, water scarcity, toxic waste in surface/ground waters and high energy costs. These limitations have resulted in serious problems in agricultural productivity, food safety, environmental sustainability, and ultimately economical profitability of farming and ranching in Hawaii.

HB 2180 supports several projects including my research project which will clean up the land, sea water, sediments and groundwater contaminated by toxic contaminants while providing clean and safe water to local farms, ranches and residents.

As seen in other states, the land, ground water and coastal areas in Hawaii are fully contaminated with endocrine disruptors and pharmaceutical wastes which cause disruption of human hormone systems and various cancers at very low concentration. The current reports showed many municipal wastewater treatment plants hardly removed these pollutants which contaminated our water resources. As an effort to solve this problem, my pilot project (the solar light and

biological systems to treat the toxic contaminants in coastal area, sediments and groundwater) is proposed as one of the projects in HB 2180. This project will remove the endocrine disrupting compounds and pharmaceutical wastes completely to protect water sources for local agriculture and drinking water. Thus, it will help to provide clean and safe water to local agricultural industries and residents. It will be an outstanding model to demonstrate clean and environmentally sustainable water management for agricultural industry in Hawaii.

In overall, I would like to support HB 2180 which will benefit the local farms, local community and the State of Hawaii.

Thank you so much.

Chair Wooley, Vice Chair Onishi, and members of the House Committee on Agriculture:

My name is Dr. Samir K Khanal. I am an Associate Professor of Biological Engineering in CTAHR at UH Mānoa. However, today, I am providing personal testimony in support of HB 2180, relating to *New Technologies for Sustainable Agriculture Pilot Project*.

I strongly support this bill provided that its passage does not replace or adversely impact priorities as indicated in the University's Board of Regents Approved Executive Biennium Budget.

Maintaining a sustainable Hawaii that provides a safe, secure, healthy life for all people in our fragile ecosystem represents an unprecedented challenge of our time. We live on a planet that has a finite supply of resources and carrying capacity, and in less than a century, we have nearly exhausted millions of years of preserved energy resources. We are equally facing mounting challenges such as food security, energy security, climate change, environmental pollution, water quality and quantity, among many others that are endangering the very survival of mankind. This is critically important for geographically isolated communities like Hawaii. Thus, HB 2180, *New Technologies for Sustainable Agriculture Pilot Project*, will play critical role to help us address many of the aforementioned challenges.

The term “**sustainability**” or “**sustainable development**”, which was coined by the World Commission on Environment and Development in 1987, is defined as “*a process of change in which the exploitation of resources, the direction of investments, the orientation of technical development, and institutional change are all in harmony and enhance both current and future potential to meet needs and aspirations.*” In other words, sustainability essentially refers to meeting the needs of the present without compromising the ability of future generations to meet their own needs. The grand challenges that we are facing today cannot be solved by political or social reforms alone, but rather, it requires the implementation of science and technology. I believe we also need to educate our students and general public about the basic principles of sustainability through “***involvement, engagement and exploration, and through system approaches.***” Thus, the *New Technologies for Sustainable Agriculture Pilot Project* will also serve as a ***learning and discovery center*** for our middle/high school students who would be able to learn sustainability, bioenergy, value-added processing, and waste remediation; thereby enhancing their ***Science, Technology, Engineering and Mathematics (STEM) skills.***

This testimony does not represent the position of the University of Hawaii. Thank you for your time.

Written Testimony Presented Before the
House Committee on Agriculture
Thursday, January 30, 2014; 9:20 am

By

Wei Wen Su

HB 2180 RELATING TO AGRICULTURE

Chair Wooley, Vice Chair Onishi, and members of the House Committee on Agriculture, I thank you for this opportunity to provide my personal testimony in support of HB 2180, which would fund a pilot project at the College of Tropical Agriculture and Human Resources, University of Hawai'i at Mānoa, to create new technologies for sustainable agriculture in the State through scientific research and support services.

My name is Wei Wen Su, and I am a faculty member in the College of Tropical Agriculture and Human Resources, the University of Hawaii at Mānoa. I am pleased to provide personal testimony today on HB 2180, and this testimony does not represent the position of the University of Hawaii.

As a researcher in agricultural technology, and as a long-time resident of the State of Hawaii, I strongly support this bill provided that its passage does not replace or adversely impact priorities as indicated in the University's Board of Regents Approved Executive Biennium Budget.

It is important for the State of Hawaii to invest in development of state-of-the-art technologies that advance both environmental sustainability and the economic vitality of Hawaii's agriculture community. Converting agricultural wastes and byproducts into value-added products, energy, and alternative fuels using environmentally sustainable and cost effective technologies has the clear potential to not only solve possible environmental pollution problems posed by agricultural wastes, but also generates additional revenue streams for local agriculture.

The research and development activities proposed in bill HB 2180 will help achieve this noble goal, to create a cleaner and healthier Hawaii.

onishi2-Micah-Seth

From: mailinglist@capitol.hawaii.gov
Sent: Tuesday, January 28, 2014 1:02 PM
To: AGRtestimony
Cc: sherrianwitt@aol.com
Subject: Submitted testimony for HB2180 on Jan 30, 2014 09:20AM

HB2180

Submitted on: 1/28/2014

Testimony for AGR on Jan 30, 2014 09:20AM in Conference Room 312

| Submitted By | Organization | Testifier Position | Present at Hearing |
|---------------------|---------------------|---------------------------|---------------------------|
| sherrian witt | Individual | Oppose | No |

Comments: I oppose any research, monies and manpower to be spent on GMO's or any modified seed research..

Please note that testimony submitted less than 24 hours prior to the hearing, 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

onishi2-Micah-Seth

From: mailinglist@capitol.hawaii.gov
Sent: Tuesday, January 28, 2014 11:08 PM
To: AGRtestimony
Cc: lynhowe1946@yahoo.com
Subject: *Submitted testimony for HB2180 on Jan 30, 2014 09:20AM*

HB2180

Submitted on: 1/28/2014

Testimony for AGR on Jan 30, 2014 09:20AM in Conference Room 312

| Submitted By | Organization | Testifier Position | Present at Hearing |
|---------------------|---------------------|---------------------------|---------------------------|
| Lyn Howe | Individual | Support | No |

Comments:

Please note that testimony submitted less than 24 hours prior to the hearing, 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