



UNIVERSITY OF HAWAII SYSTEM

Legislative Testimony

Written Testimony Submitted to the
Senate Committee on Ways and Means
Wednesday, April 2, 2014 at 9:05 a.m.

by

Maria Gallo, Dean

and

J. Kenneth Grace, Interim Associate Dean
College of Tropical Agriculture and Human Resources
University of Hawai'i at Mānoa

HB 154 HD2 SD1 PROPOSED SD2 – RELATING TO INDUSTRIAL HEMP

Chair Ige, Vice Chair Kidani, and members of the Senate Committee on Ways and Means, thank you for this opportunity to offer comments in support of HB 154 HD2 SD1 PROPOSED SD2, which would authorize the Dean of the College of Tropical Agriculture and Human Resources (CTAHR) at the University of Hawai'i at Mānoa to establish a two-year industrial hemp remediation and biofuel research program.

HB 154 HD2 SD1 PROPOSED SD2 is one of three bills currently under consideration for the same purpose.

We support the intent of HB 154 HD2 SD1 PROPOSED SD2, based on our understanding that research on industrial hemp may now be conducted under Section 7606 of the Agricultural Act of 2014, also known as Public Law 113-79.

Our sole concerns with all three similar bills are (1) that adequate funding be provided in order for any research to be conducted, (2) that such research and funding not replace nor adversely impact any priorities as indicated in the University's Board of Regents' Approved Executive Biennium Budget, (3) and that a minimum two-year period be allowed in order to obtain meaningful research results. We have determined that the costs of a two-year research program are \$150,000.



**DEPARTMENT OF BUSINESS,
ECONOMIC DEVELOPMENT & TOURISM**

NEIL ABERCROMBIE
GOVERNOR

RICHARD C. LIM
DIRECTOR

MARY ALICE EVANS
DEPUTY DIRECTOR

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Statement of
RICHARD C. LIM
Director

Department of Business, Economic Development, and Tourism
before the
SENATE COMMITTEE ON WAYS AND MEANS

Wednesday, April 2, 2014
9:05 a.m.

State Capitol, Conference Room 211

in consideration of
HB 154, HD 2, PROPOSED SD 2
RELATING TO INDUSTRIAL HEMP.

Chair Ige, Vice Chair Kidani, and Members of the Committee.

The Department of Business, Economic Development, and Tourism (DBEDT) supports proposed HB 154, HD 2, SD 2, which authorizes the Dean of the College of Tropical Agriculture and Human Resources at the University of Hawaii at Manoa to establish a two-year industrial hemp remediation and biofuel crop research program.

Our state Energy Policy seeks to leverage Hawaii's position in the Asia Pacific region as a test bed for clean energy innovation in order to create new jobs and opportunities for investment here in Hawaii. DBEDT supports this initiative to determine the potential of industrial hemp to serve as a feedstock for alternative renewable energy or fuel in furtherance of Hawaii's Renewable Portfolio Standards mandate and transportation goals.

We defer to the University of Hawaii at Manoa on the implementation and fiscal aspects of this measure.

Thank you for the opportunity to offer these comments in support of this measure.



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 COMMITTEE ON WAYS AND MEANS
WEDNESDAY, APRIL 2, 2014
9:05 A.M.
ROOM 211**

**HOUSE BILL NO. 154, HOUSE DRAFT 2, SENATE DRAFT 1 AND
SENATE DRAFT 2 (PROPOSED)
RELATING TO INDUSTRIAL HEMP**

Chairperson Ige and Members of the Committee:

Thank you for the opportunity to testify on House Bill No. 154, Senate Draft 1. This bill authorizes the College of Tropical Agriculture and Human Resources at the University of Hawaii to establish a two-year industrial hemp remediation and biofuel crop research program under specified conditions and with an appropriation. The Hawaii Department of Agriculture (HDOA) supports the intent of this measure; however, we note Senate Draft 1 predates the enactment of Section 7606 of the United States Agricultural Act of 2014 which authorizes institutions of higher education and state departments of agriculture to conduct industrial hemp research.

Senate Draft 2 (Proposed) includes reference to the aforementioned Section 7606. The Department of Agriculture supports SD2, but we defer to the University of Hawaii's College of Tropical Agriculture and Human Resources in regards to the implementation of such a pilot project.

Thank you, again, for the opportunity to present our testimony.



From: [Alexa Hatton](#)
To: [WAM Testimony](#)
Subject: HB 154, HD2, Proposed SD2
Date: Monday, March 31, 2014 8:46:52 AM

YES YES YES! I SUPPORT:

INDUSTRIAL HEMP ON MAUI!

LET'S LEAD THE NATION IN THIS SUSTAINABLE CROP! NO MORE CANE
BURNING, PESTICIDES, SUGAR RUINING OUR HEALTH!!!

MAHALO, Alexa Hatton

From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: mauibrad@hotmail.com
Subject: Submitted testimony for HB154 on Apr 2, 2014 09:05AM
Date: Friday, March 28, 2014 4:53:21 PM

HB154

Submitted on: 3/28/2014

Testimony for WAM on Apr 2, 2014 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Brad Parsons	Individual	Support	No

Comments: SUPPORT HB 154, HD2, SD1 AND/OR Proposed SD2.

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.

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From: [Martha Harden](#)
To: [WAM Testimony](#)
Subject: support SB 2175 SD 2 HD 1 hemp
Date: Saturday, March 29, 2014 1:12:11 PM

Aloha legislators,

Please support SB 2175 SD 2 HD 1 re. industrial hemp. This would help us become more self-sufficient.

aloha, Cory Harden

From: [Limu](#)
To: [WAM Testimony](#)
Subject: HB 154, HD2, Proposed SD2
Date: Monday, March 31, 2014 2:12:12 PM

I support this I hope you will to. So we all can help to reduce toxic chemicals from our Aina.

<http://www.hemp.com/2012/06/soil-contamination-phytoremediation-with-hemp/>

Phytoremediation is the environmentally friendly science of using plants and trees to remove heavy metals and other toxins from contaminated soil. By planting specific plants and trees, called hyper-accumulators, in polluted areas, the contaminants can be reduced.

The science is simple, and basic to plant life.

Toxins can enter the soil through a multitude of paths, from chemical fertilizer applications to urban runoff. The toxins can then become embedded in the Earth and are considered bio-accumulates. These bio-accumulates may include metals, pesticides, solvents, explosives, crude oil and its derivatives.

As the remediating plant grows, it develops a root system. The roots draw the bio-accumulates along with beneficial nutrients as part of its nourishment, and concentrate them in its stems, shoots, and leaves, which can then be harvested and disposed of safely.

The marvel is how the plants can flourish while simultaneously rendering the toxins harmless through the nutrient uptake process, resulting in clean, balanced and nutrient rich soil, which can then be safely used for agriculture or improving the wildlife habitat.

Mustard, alpine pennycress, and pigweed are all phytoremediators, but one particular plant shows potential above the rest; [Hemp](#).

Hemp's industrial uses in the production of food, fuel, and fiber are widely documented, but few people are aware of Hemp's potential as a remediator. Why is Hemp superior to other phytoremediators? Hemp grows quickly, reaching full harvest in just 180 days and produces a root ball extending into the ground from 6 to 8 feet. At that level, toxins can be extracted without the need to remove any of the contaminated top soil, thus avoiding the expense of transportation to offsite disposal facilities. Other factors making Hemp the champion of remediates are its ability to grow unaffected by the toxins it accumulates, its fast rate of absorption and its ability to bind compound contaminants from the air and the soil. Hemp actually removes CO2 from the air as it removes heavy metals and other pollutants from the soil.

Current laws prohibiting Cannabis production in the United States make it impossible for Biotechnologists to plant Hemp for research purposes, even though the Environmental Protection Agency has estimated there are over 30,000 hazardous sites in need of clean up in the United States, including Hanford and Three Mile Island. Seventeen states currently have voter approved initiatives allowing farmers to grow Hemp, but Federal regulation has seemingly superseded any attempts to plant a crop. Those who have planted Hemp fields have been met with Federal Interference and tactics including the destruction of their crops and the real threats of prosecution using obscure asset forfeiture laws and property seizure.

Recently, the State of Colorado took the initiative to come up with legislation allowing researchers to plant and study Hemp, specifically to research its use in cleaning contaminated soil. The Colorado HB12-1099 Industrial Hemp Pilot Program sponsored by Representative Wes McKinley (D) and Representative Jerry Sonnenberg (D) was unanimously approved by the 11 Colorado State Representatives present on February 13, 2012 during a House Committee on Local Government.

The program will allow a committee of experts to be assembled, and one to three contaminated locations to be designated for planting. Due to extensive mining of Colorado lands, there is no shortage of space needing clean up. Target areas considered will include farmland, mill sites, and landfills affected by

chemical, sludge, and effluent runoff.

Once the sites are approved, planting will begin and the committee will study and report back on the components of the process, including the rate and mode of contaminant uptake from soil and water, the rate and location (stems, roots, leaves) of carbon contaminant fixation and what contaminants are stabilized in the plants versus what requires additional treatment. Different disposal methods will be tested once the plants reach harvest, including encasement, incineration, burial and composting.

Growing Industrial Hemp is currently prohibited by Federal Law and requires a special permit from the Drug Enforcement Administration. Colorado is invoking their 10th Amendment rights to rule on this matter outside of the Federal Government and cites Article 28 of the Single Convention on Narcotic Drugs amended by the 1972 protocol that states, "This Convention shall not apply to the cultivation of the Cannabis plant exclusively for industrial purposes (fiber and seed) or horticultural purposes". For this reason, Colorado will proceed with the program without seeking special permissions from the DEA.

The Industrial Hemp Remediation Pilot Program is expected to run for approximately a decade. Data collected is expected to show hemp's effectiveness as a soil and water remediator, and the economic benefits of using hemp to clean the environment. Researchers are expecting the results to exceed expectations and hope the project will encourage other States to follow suit.

Dana G. Moss
PO Box 551730
Kapaau, HI 96755
808 884 5681

From: [L.Osterer](#)
To: [WAM Testimony](#)
Subject: SUPPORT for HB 154, HD2, Proposed SD2
Date: Monday, March 31, 2014 9:36:11 PM

SUPPORT Industrial Hemp.

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Eleanor Olin, Koloa, Hi 96756, registered voter

Lorraine Osterer, Koloa, Hi 96756, registered voter

From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: kadc31999@gmail.com
Subject: Submitted testimony for HB154 on Apr 2, 2014 09:05AM
Date: Monday, March 31, 2014 7:45:42 AM

HB154

Submitted on: 3/31/2014

Testimony for WAM on Apr 2, 2014 09:05AM in Conference Room 211

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

Comments: Aloha, Please support HD2 SD2 version of this bill. Mahalo! Katarina Culina P.O. Box 2142 Pahoia, HI, 96778

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.

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From: [L.Osterer](#)
To: [WAM Testimony](#)
Subject: SUPPORT for HB 154, HD2, Proposed SD2
Date: Monday, March 31, 2014 9:36:11 PM

SUPPORT Industrial Hemp.

.

Eleanor Olin, Koloa, Hi 96756, registered voter

Lorraine Osterer, Koloa, Hi 96756, registered voter

From: [Margaret Guiler](#)
To: [WAM Testimony](#)
Subject: SB154, HD2, Proposed SD2
Date: Saturday, March 29, 2014 11:41:53 AM

I strongly support the passage of these bills as they underline a need for crops as an alternative to GMO industrial farm crops. Industrial hemp would seem to be a good choice for our Hawaiian islands.

-,
Margaret

From: [Michael de Ycaza](#)
To: [WAM Testimony](#)
Subject: support HB154, HD2, SD2 industrial hemp
Date: Saturday, March 29, 2014 12:11:40 PM

Dear Legislators, Please support HB154, HD2, SD2 to create an industrial hemp project. Please also consider industrial hemp processing facilities which could lessen our reliance on imports and strengthen our resilience and our economy.
Sincerely, Mike deYcaza

From: [Shirin Hunt](#)
To: [WAM Testimony](#)
Subject: SUPPORT for HB 154, HD2, Proposed SD2
Date: Monday, March 31, 2014 10:56:05 PM

PLEASE **SUPPORT** for **HB 154, HD2, Proposed SD2**

We need to implement the solutions that we already have in hand. Thank you for your good work.

Shirin Hunt

From: [Ululani Poepoe](#)
To: [WAM Testimony](#)
Subject: Support HB 154, HD2, Proposed SD2
Date: Monday, March 31, 2014 7:49:59 AM

I'm allergic to GMO foods and experience pain after I eat GMO foods. If I eat the same foods, but non-GMO, I don't experience pain.

Please support replacement crops to GMO foods, such as industrial hemp. There are MANY non-GMO crops we could be growing in Hawaii.

Mahalo,
Ululani Poepoe

From: [William Harris](#)
To: [WAM Testimony](#)
Subject: Support HB 154, HD2, Proposed SD2
Date: Monday, March 31, 2014 11:04:02 PM

SUPPORT for HB 154, HD2, Proposed SD2 Scheduled for Hearing in Senate WAM
Committee at
http://www.capitol.hawaii.gov/measure_indiv.aspx?billtype=HB&billnumber=154&year=2014 -
SUPPORT Industrial Hemp

Sincerely,

William Harris, M.D.
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