

DAVID Y. IGE
Governor

JOSH GREEN
Lt. Governor



PHYLLIS SHIMABUKURO-GEISER
Acting Chairperson
Board of Agriculture

State of Hawaii
DEPARTMENT OF AGRICULTURE
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Honolulu, Hawaii 96814-2512
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**TESTIMONY OF THE DEPARTMENT OF AGRICULTURE
BEFORE THE SENATE COMMITTEE ON WAYS & MEANS**

**FEBRUARY 19, 2019
9:30 A.M.
CONFERENCE ROOM 211**

**SENATE BILL NO. 1353 SD1
RELATING TO INDUSTRIAL HEMP**

Chairperson Dela Cruz and Members of the Committee:

Thank you for the opportunity to testify on Senate Bill 1353 SD1 which authorizes the department of agriculture to establish a new program for commercial hemp regulation in the state according to the 2018 Federal Farm bill's guidelines regarding hemp production, while also providing greater flexibility for the industrial hemp pilot program. The Department supports this bill.

Thank you for the opportunity to testify on this measure.



SB-1353-SD-1

Submitted on: 2/18/2019 7:28:24 AM

Testimony for WAM on 2/19/2019 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Melodie Aduja	Testifying for O`ahu County Committee on Legislative Priorities of the Democratic Party of Hawai`i	Support	No

Comments:



Akamai Cannabis Clinic

3615 Harding Ave, Suite 304
Honolulu, HI 96816

TESTIMONY ON SENATE BILL 1353 SD1
RELATING TO INDUSTRIAL HEMP

By
Clifton Otto, MD

Senate Committee on Ways and Means
Senator Donovan M. Dela Cruz, Chair
Senator Gilbert S.C. Keith-Agaran, Vice Chair

Tuesday, February 19, 2019; 9:30 AM
State Capitol, Conference Room 211

Thank you for the opportunity to provide testimony on this measure. Please consider the following comments related to this bill:

1 – It is still unclear whether Cannabidiol (CBD) is a controlled substance in Hawaii, and whether the unregulated CBD products that are flowing into our state are safe or legal for human consumption. The Legislature is currently considering an amendment to our Uniform Controlled Substances Act that would place FDA-approved CBD products, such as Epidiolex, into state Schedule V, the least restrictive of our controlled substance schedules.

However, in the meantime, our Department of Public Safety (PSD) is refusing to tell us the scheduling status of non-FDA approved CBD, which makes it impossible to regulate the imported CBD products that are being sold in smoke shops, health food stores, and ink cartridge stores throughout the state. Even imported dried hemp flowers with questionable levels of THC are being sold in our smoke shops without any oversight.

While the unresolved situation with CBD in Hawaii continues to put our residents at risk, states like California are starting to take action. In July of 2018, the [California Department of Public Health](#) issued a FAQ on Industrial Hemp and CBD in food products based on federal law, which clearly prohibits the use of hemp-derived CBD as a food additive or dietary supplement in that state.

“An Accepted Medical Use Supporter”

New York's [Department of Health and Mental Hygiene](#) has also started prohibiting the addition of CBD to food products, a signal that other states are starting to recognize that regulation in this area is necessary in order to protect consumers and comply with federal law.

The [Food and Drug Administration](#) (FDA) is very clear about the status of CBD and THC as food additives or dietary supplements:

“Under the FD&C Act, it’s illegal to introduce drug ingredients like these into the food supply, or to market them as dietary supplements. This is a requirement that we apply across the board to food products that contain substances that are active ingredients in any drug.”

In order to insure that Hawaii’s future hemp program will comply with the Agricultural Improvement Act of 2018 and provide for the safe marketing of hemp-derived CBD products, the Legislature needs to address this issue. Perhaps a good place to start is by requiring that PSD provide testimony on this matter in order to answer the following question before this bill passes through your committee.

Is Cannabidiol (CBD) a tetrahydrocannabinol or a derivative of a tetrahydrocannabinol ?

[HRS 329-14. Schedule I.](#) (a) The controlled substances listed in this section are included in Schedule I.

(g) Any of the following cannabinoids, their salts, isomers, and salts of isomers, unless specifically excepted, whenever the existence of these salts, isomers, and salts of isomers is possible within the specific chemical designation:

(1) Tetrahydrocannabinols; meaning tetrahydrocannabinols naturally contained in a plant of the genus Cannabis (cannabis plant), as well as synthetic equivalents of the substances contained in the plant, or in the resinous extractives of Cannabis, sp. or synthetic substances, **derivatives**, and their isomers with similar chemical structure and pharmacological activity to those substances contained in the plant, such as the following: Delta 1 cis or trans tetrahydrocannabinol, and their optical isomers; Delta 6 cis or trans tetrahydrocannabinol, and their optical isomers; and Delta 3,4 cis or trans tetrahydrocannabinol, and its optical isomers (since nomenclature of these substances is not internationally standardized, compounds of these structures, regardless of numerical designation of atomic positions, are covered);

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6154432/pdf/can.2018.0030.pdf>

Delta-8-THC (Delta-6-THC):

<https://pubchem.ncbi.nlm.nih.gov/compound/2977#section=Top>

Delta-9 THC (Delta-1-THC):

<https://pubchem.ncbi.nlm.nih.gov/compound/Dronabinol#section=Top>

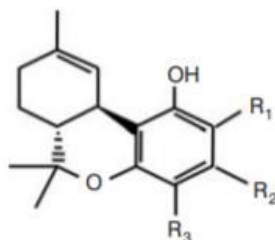
8

JOURNAL OF CANNABIS THERAPEUTICS

TABLE 1. Cannabinoids of the Δ^9 -*trans*-tetrahydrocannabinol Type (Turner et al. 1980)

Cannabinoid	Abbreviation	R ₁	R ₂	R ₃
Δ^9 - <i>trans</i> -tetrahydrocannabinolic acid A	Δ^9 -THCA	COOH	C ₅ H ₁₁	H
Δ^9 - <i>trans</i> -tetrahydrocannabinolic acid B	Δ^9 -THCA	H	C ₅ H ₁₁	COOH
Δ^9 - <i>trans</i> -tetrahydrocannabinol	Δ^9 -THC	H	C ₅ H ₁₁	H
Δ^9 - <i>trans</i> -tetrahydrocannabinolic acid-C ₄		COOH or H	C ₄ H ₉	H or COOH
Δ^9 - <i>trans</i> -tetrahydrocannabinol-C ₄	Δ^9 -THC-C ₄	H	C ₄ H ₉	H
Δ^9 - <i>trans</i> -tetrahydrocannabivarinic acid		COOH	C ₃ H ₇	H
Δ^9 - <i>trans</i> -tetrahydrocannabivarin	Δ^9 -THCV	H	C ₃ H ₇	H
Δ^9 - <i>trans</i> -tetrahydrocannabiorcolic acid		COOH or H	CH ₃	H or COOH
Δ^9 - <i>trans</i> -tetrahydrocannabiorcol	Δ^9 -THC-C ₁	H	CH ₃	H

FIGURE 3. Cannabinoids of the Δ^9 -THC type. The most widespread cannabinoids are the phenolic Δ^9 -THC with 21 carbon atoms and a C₅ side chain (R₂ = C₅H₁₁) and its two corresponding carboxylic acids A and B (see Table 1).



<https://cannabis-med.org/data/pdf/2003-01-1.pdf>

2 – The proposed definition of industrial hemp does not specifically exempt viable hemp seeds, which could lead to an interpretation that only infertile hemp seeds are legal under state law. In order to prevent such misinterpretation, the following amendment needs to be made to the definition of hemp in this bill:

Page 2, Line 7:

“Industrial hemp” means the plant *Cannabis sativa* L. and any part of that plant, including the viable seeds thereof and all derivatives, extracts, cannabinoids, isomers, acids, salts, and salts of isomers, whether growing or not, with a delta-9 tetrahydrocannabinol concentration of not more than 0.3 percent on a dry weight basis, or a tetrahydrocannabinol concentration that is allowed by Federal law, whatever is greater.

3 – The outdoor cultivation of hemp in Hawaii will inevitably mean that the dispersion of male hemp pollen will be widespread wherever hemp is being cultivated. Potential cross pollination could severely restrict the ability of patients and dispensaries to produce high quality outdoor cannabis flowers, which will only increase the costs of medical use production and further reduce patient access.

This is something the Legislature will need to address in order to protect our patients and Hawaii’s Medical Use of Cannabis Program. One solution would be to restrict hemp cultivation to least 10 miles away from any dispensary cultivation facility or patient collective.

4 – Hawaii’s hemp pilot program was unwilling to address the marketing piece of the 2014 Federal Farm Bill, which rendered the program non-functional and resulted in the current unregulated importation of Hemp-CBD products. In order to provide for a robust hemp program that can comply with the Agricultural Improvement Act of 2018 and provide the necessary regulation at the state level, the following amendment needs to be made to this section:

Page 10, Line 3:

141-G Rulemaking. (a) The department shall adopt rules to chapter 91 that include but are not limited to:

(8) The marketing and regulation of locally produced and imported hemp products, including hemp crude extracts, distillates, and isolates, in order to protect consumer safety and insure compliance with the Agricultural Improvement Act of 2018;

(9) Any other rules and procedures necessary to carry out this part.

SB-1353-SD-1

Submitted on: 2/17/2019 5:11:00 PM

Testimony for WAM on 2/19/2019 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Brian Miyamoto	Testifying for Hawaii Farm Bureau	Support	Yes

Comments:

SB-1353-SD-1

Submitted on: 2/18/2019 1:51:43 AM

Testimony for WAM on 2/19/2019 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Ric Wirick	Testifying for Hawaii Island Hemp Collective	Support	No

Comments:

Frederic (Ric) Wirick on behalf of Hawaii Island Hemp Collective and as Chairperson of the Hawaii Island Portuguese Chamber of Commerce Business and Economics Committee.

Hemp, hemp, hooray – on December 20th the 2018 Farm Bill was signed into law. The 81-year prohibition was lifted on “industrial hemp,” it is now an “agricultural commodity” regulated by the USDA.

A 1938 issue of Popular Mechanics referred to “industrial hemp” as the upcoming Billion-dollar crop -- and CBD hemp was not even in the picture back then. Now with CPD hemp “legalized” -- if we were allowed to grow 5000 acres of quality CPD hemp on the Big Island of Hawaii today -- the CPD drying and processing facilities on island would pay the industrial hemp farmers up to one-half a Billion dollars (\$100,000 per acre) for their first crop (minimally 3 crops per year).

The Hawaii Island Hemp Collective farmers demand the right grow our “legal” CBD hemp economy NOW! To get back out farming, tending our crops and to hiring our neighbors as tenders for the year around grows. In addition, the hemp plant regenerates the soil, no need for herbicides or pesticides, and the terpenes it releases helps to heal our atmosphere. In time, Hawaii Hemp farmers will likely receive Federal tax credits (oxygen, carbon and terpene) for growing industrial hemp.

Starting today -- the State of Hawaii (HDOA) could readily adopt the “hemp friendly” State of Oregon’s “industrial hemp pilot program.” In 2018, Oregon harvested about 8000 acres of industrial hemp, while Hawaii harvested less than one acre.

The 2018 Farm Bill was intended to give every Industrial Hemp farmer in the United States an “equal right” to grow our Hemp economy. For the HDOA to continue to restrict us from growing our Hemp economy, to limit permits/ licenses, and to deny agricultural wealth when CPD hemp is “legal” and “profitable” to grow – is a violation of our civil rights as farmers!

The 81-year prohibition on “Industrial Hemp” has been lifted by the U.S. Government. The Hawaii Island Hemp Collective demands our legal right to grow NOW – and to

encourage the immediate construction of drying and processing facilities to accommodate our future Hemp farmers.

Let's plant the CPD hemp seeds and grow our new Hawaii Hemp Economy 2019 – it is a multi-Billion-dollar industry NOW!

The Thirtieth Legislature
Regular Session of 2019

THE SENATE

Committee on Ways and Means

Senator Donovan M. Dela Cruz, Chair

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

State Capitol, Conference Room 211

Tuesday, February 19, 2019; 9:30 a.m.

**STATEMENT OF THE ILWU LOCAL 142 ON S.B. 1353, S.D.1
RELATING TO HEMP**

The ILWU Local 142 **supports** S.B. 1353, S.D.1, which authorizes the department of agriculture to establish the industrial hemp program, repeals the industrial hemp special fund under section 141-41, HRS, when the industrial hemp pilot program is repealed on 6/30/2021 and authorizes the chairperson of the board of agriculture to submit a proposed state plan to monitor and regulate hemp production to the United States Secretary of Agriculture

Hawaii used to have a thriving sugar and pineapple industry until the passage of free trade agreements resulting in the loss of thousands of jobs and a vibrant agricultural industry. It was a tragic loss for Hawaii but fortunately a new crop could blossom in Hawaii creating the potential for hundreds of new agricultural jobs.

Industrial hemp has the ability to generate up to \$60,000 dollars or more per acre and see to the creation of new jobs that extend beyond the service sector and tourism industry. Hemp diversifies Hawaii's agriculture and has the ability to flourish all year around due to our warm, tropical climate. Hemp has major economic potential for Hawaii and is worth considering.

The ILWU urges passage of S.B. 1353, S.D.1. Thank you for the opportunity to offer testimony on this measure.

SB-1353-SD-1

Submitted on: 2/17/2019 9:45:08 PM

Testimony for WAM on 2/19/2019 9:30:00 AM

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

Comments:

SB-1353-SD-1

Submitted on: 2/18/2019 6:39:16 AM

Testimony for WAM on 2/19/2019 9:30:00 AM

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

Comments:

Aloha Lawmaers,

I SUPPORT this bill - with an amendment to reject the federal marijuana prohibition in it's entirety.

Hawaii lawmakers have ignored federal law, when it comes \$elling medical marijuana, but you enforce the same federal law against cannabis consumers, and farmers wanting to grow hemp. This is not eqaul application of the law.

The "REEFER MADNESS" prdjudice of Hawaii's lawmakers must END!!!!!!

PLEASE - completely reject the the racial prejudice, and econmically discrimanatory, marijuana prohibition!

Please DO NOT continue the prejudice against cannabis consumers,

Brian Murphy

Maui, Hawaii

SB-1353-SD-1

Submitted on: 2/18/2019 7:15:57 AM

Testimony for WAM on 2/19/2019 9:30:00 AM

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

Comments:

Aloha Lawmakers,

I SUPPORT this bill - with an amendment to reject the federal marijuana prohibition in it's entirety.

Hawaii lawmakers have ignored federal law, when it comes to \$elling medical marijuana, but you enforce the same federal law against cannabis consumers, and farmers wanting to grow hemp. This is not equal application of the law.

The "REEFER MADNESS" prejudice of Hawaii's lawmakers must END!!!!!!

PLEASE - completely reject the the racial prejudice, and economically discriminatory, marijuana prohibition!

Please, END the prejudice against cannabis consumers,

Mary Whispering Wind

Puunene, Hawaii



SB-1353-SD-1

Submitted on: 2/18/2019 11:24:34 AM

Testimony for WAM on 2/19/2019 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Millicent Cox	Individual	Support	No

Comments:

Aloha,

I am writing in support of SB1353.

My name is Millicent Cox and I live in Manoa.

Hemp has lots of value as an agricultural commodity for industrial uses. The state of Kentucky, for example, has successfully replaced tobacco with hemp. It is time for Hawaii to catch up with the change in federal laws regarding hemp.

Mahalo for your consideration.

LATE

SB-1353-SD-1

Submitted on: 2/18/2019 11:40:17 AM

Testimony for WAM on 2/19/2019 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Sherry Pollack	Individual	Support	No

Comments:



SB-1353-SD-1

Submitted on: 2/18/2019 11:53:31 AM

Testimony for WAM on 2/19/2019 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Wendy Arbeit	Individual	Support	No

Comments:

Please support SB 1353, which is designed to accelerate the process that will allow farmers in Hawaii to grow and market hemp products, and help Hawaii diversify its economy.

I believe we should free our farmers from the burdens imposed by Hawaii's current hemp laws and instead allow them to proceed as permitted by new federal decriminalization. Let us move forward with a plan for hemp research and production. Allowing unfettered growing of hemp will provide a positive result for both our small farmers and the state coffers. It is certainly a better use of our state land than growing seed corn by big ag.

Wendy Arbeit

Makiki, O'ahu

LATE

SB-1353-SD-1

Submitted on: 2/18/2019 11:53:47 AM

Testimony for WAM on 2/19/2019 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Michelle Blake	Individual	Support	No

Comments:

Please support SB 1353, which is designed to accelerate the process that will allow farmers in Hawaii to grow and market hemp products, and help Hawaii diversify its economy.

The recent passage of Farm Bill in December presents Hawaii with a monumental opportunity to usher in a successful new hemp agricultural industry. While other states had the requisite ag plans prepared and ready to submit to the feds prior to the passage of the Farm Bill, our state has dragged its heels. Our economy cannot afford to delay any longer. We should pass the requisite legislation to allow the state to move forward on the opportunity to generate millions of dollars in profits, create new jobs and enable entrepreneurial opportunities.

New cottage industries around hemp are cropping up left and right. Hemp is now being used for clothing, paper, building materials, foods, health supplements and a variety of other value-added products. The potential for the growth of small business is exponential. In fact, current industry estimates report U.S. hemp product sales at nearly \$820 million in 2017.

In addition to its potential for agricultural commerce, hemp has the potential to remediate our contaminated soils. The toxic legacy of sugar, pineapple and more recently the pesticide intensive biotech industry has left large acreages of our ag land contaminated. Through phytoremediation hemp can undo some of this damage.

Thank you for your consideration!

LATE

SB-1353-SD-1

Submitted on: 2/18/2019 12:14:43 PM

Testimony for WAM on 2/19/2019 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Patricia Blair	Individual	Support	No

Comments:

LATE

SB-1353-SD-1

Submitted on: 2/18/2019 1:20:56 PM

Testimony for WAM on 2/19/2019 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
B.A. McClintock	Individual	Support	No

Comments:

Aloha Chair Dela Cruz, Vice Chair Keith-Agaran and Members of the Committee

I am testifying in strong support of SB 1353.

Please support SB 1353, which is designed to accelerate the process that will allow farmers in Hawaii to grow and market hemp products, and help Hawaii diversify its economy.

The recent passage of Farm Bill in December presents Hawaii with a monumental opportunity to usher in a successful new hemp agricultural industry. While other states had the requisite ag plans prepared and ready to submit to the feds prior to the passage of the Farm Bill, our state has dragged its heels. Our economy cannot afford to delay any longer. We should pass the requisite legislation to allow the state to move forward on the opportunity to generate millions of dollars in profits, create new jobs and enable entrepreneurial opportunities.

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In addition to its potential for agricultural commerce, hemp has the potential to remediate our contaminated soils. The toxic legacy of sugar, pineapple and more recently the pesticide intensive biotech industry has left large acreages of our ag land contaminated. Through phytoremediation hemp can undo some of this damage.

Mahalo.

From: Mark Perry paka18081@gmail.com
Subject: Strong SUPPORT for SB 1353
Date: February 18, 2019 at 11:17 AM
To: WAMtestimony@capitol.hawaii.gov
Cc: Mark Perry paka18081@gmail.com



SENATE COMMITTEE ON WAYS & MEANS

RE: SUPPORT SB 1353

Aloha Chair Dela Cruz, Vice Chair Keith-Agaran and Members of the Committee

My name is Mark Perry, and I live in Kapolei, Hawaii. I am testifying in strong support of SB 1353.

Please support SB 1353, which is designed to accelerate the process that will allow farmers in Hawaii to grow and market hemp products, and help Hawaii diversify its economy.

The recent passage of Farm Bill in December presents Hawaii with a monumental opportunity to usher in a successful new hemp agricultural industry. While other states had the requisite ag plans prepared and ready to submit to the feds prior to the passage of the Farm Bill, our state has dragged its heels. Our economy cannot afford to delay any longer. We should pass the requisite legislation to allow the state to move forward on the opportunity to generate millions of dollars in profits, create new jobs and enable entrepreneurial opportunities.

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In addition to its potential for agricultural commerce, hemp has the potential to remediate our contaminated soils. The toxic legacy of sugar, pineapple and more recently the pesticide intensive biotech industry has left large acreages of our ag land contaminated. Through phytoremediation hemp can undo some of this damage.

Thank you for your consideration!

Mahalo,
Mark Perry Kapolei, Hawaii

LATE

SB-1353-SD-1

Submitted on: 2/18/2019 2:32:02 PM

Testimony for WAM on 2/19/2019 9:30:00 AM

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

Comments:

RE: SUPPORT SB 1353

Aloha Chair Dela Cruz, Vice Chair Keith-Agaran and Members of the Committee

My name is John Naylor, and I live in Makawao. I am testifying in strong support of SB 1353.

Please support SB 1353, which is designed to accelerate the process that will allow farmers in Hawaii to grow and market hemp products, and help Hawaii diversify its economy.

The recent passage of Farm Bill in December presents Hawaii with a monumental opportunity to usher in a successful new hemp agricultural industry. While other states had the requisite ag plans prepared and ready to submit to the feds prior to the passage of the Farm Bill, our state has dragged its heels. Our economy cannot afford to delay any longer. We should pass the requisite legislation to allow the state to move forward on the opportunity to generate millions of dollars in profits, create new jobs and enable entrepreneurial opportunities.

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In addition to its potential for agricultural commerce, hemp has the potential to remediate our contaminated soils. The toxic legacy of sugar, pineapple and more recently the pesticide intensive biotech industry has left large acreages of our ag land contaminated. Through phytoremediation hemp can undo some of this damage.

Thank you for your consideration!

Mahalo,
John Naylor Makawao



HAWAI'I
CENTER FOR
FOOD SAFETY

LATE

Senate Committee on Ways and Means

Hawai'i Center for Food Safety supports: SB1353(SD1)

Dear Chair Dela Cruz, Vice Chair Keith-Agaran, and members of the committee,

My name is Lauryn Rego and I am the Hawai'i program co-director for the Center for Food Safety (CFS). CFS is a nationwide public interest, sustainable agriculture nonprofit organization whose mission centers on furthering the public's right to know how their food is produced, through labeling and other means. We have over 1 million farmer and consumer members across the country, including nearing 11,000 in Hawai'i. On behalf of CFS and our members, I thank you for the opportunity to provide testimony regarding this important bill.

I am writing today, in support of SB1353(SD1) which authorizes the department of agriculture to establish the industrial hemp program.

While I have many concerns about how the new program rules will be laid out, including how licenses will be distributed, how the list of approved cultivars will be formed, and more, I understand that most of these concerns can be taken up in the rulemaking process. However, under the section of this bill, 141-G Rulemaking, I would really prefer to see "a procedure for corrective action or disposal" included in section (6) in place of the word "disposal" as written.

Hawai'i's hemp farmers are going to need support and flexibility, when it comes to accidental violations. Hemp seeds which have historically produced low THC levels in other regions can suddenly behave differently under Hawai'i's tropical growing conditions. These farmers are going to need the option to retest or recondition crops that accidentally test over. We hope to see these accommodations adopted by the Department of Agriculture in their hemp plan. Crop destruction, license suspension and revocation should be used only as a measure of last resort.

On the topic of industrial licensing, the language in the bill that continues to allow the DOA to limit licenses based on their limited program resources, is not ideal. Hawai'i should be lifting the chains off industrial hemp, not looking for excuses to limit production. Let's make sure the Department is properly funded in order to facilitate this emerging market.

Thank you for the opportunity to testify.

Respectfully,
Lauryn Rego
Hawai'i Program Co-Director
Center for Food Safety

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Multiple Testifiers

Malcolm Mackey
Marta Greenleaf
Marilyn Mick
Aj Jaeger
Dave Kisor
Maha Conyers
Roger Christie
John Naylor
Minda Goodman
Kay patrizio
Sulara James
William H. Chang, Hana
Meredith Cross
Amy Teresa Lynn
Joan Lander
Momi Vee
Linda Grazier
B.A. McClintock
Joe Schwartz
Lisa Insalata
A. Russell
April Peterson
Mark A. Koppel
Yvette Celiz

Denise Woods
Deborah Bond-Upson
Anita Glass
Valerie Hafford
Patricia Blair
Donald Erway
Wendy Beckett
Govinda Rubin
Mark Sheehan
Michael deYcaza
Allan Rachap
Tlaloc Tokuda
Marjorie Dente
Michelle Blake
Lisa Kerman
Deborah Lynn
Randy Ching
Paula Cohen
Mark Perry
Claudia Herfurt
Jonathan Boyne
Martha E. Martin
Elle Cochran
Leilani Clark

Aloha Chair Dela Cruz, Vice Chair Keith-Agaran and Members of the Committee

My name is (INSERT NAME), and I live in (INSERT RESIDENCE). I am testifying in strong support of SB 1353.

Please support SB 1353, which is designed to accelerate the process that will allow farmers in Hawaii to grow and market hemp products, and help Hawaii diversify its economy.

The recent passage of Farm Bill in December presents Hawaii with a monumental opportunity to usher in a successful new hemp agricultural industry. While other states had the requisite ag plans prepared and ready to submit to the feds prior to the passage of the Farm Bill, our state has dragged its heels. Our economy cannot afford to delay any longer. We should pass the requisite legislation to allow the state to move forward on the opportunity to generate millions of dollars in profits, create new jobs and enable entrepreneurial opportunities.

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In addition to its potential for agricultural commerce, hemp has the potential to remediate our contaminated soils. The toxic legacy of sugar, pineapple and more recently the pesticide intensive biotech industry has left large acreages of our ag land contaminated. Through phytoremediation hemp can undo some of this damage.

Thank you for your consideration!

Mahalo



SB-1353-SD-1

Submitted on: 2/18/2019 7:18:23 PM
Testimony for WAM on 2/19/2019 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Yoshito L'Hote	Testifying for Aina Ho'okupu o Kilauea	Support	Yes

Comments:

I am in strong support of this measure as it relates to creating a viable industry in the state, as a licensee I need the support of the Department of agriculture, to draft a plan that reflects the change of status of hemp in the farm bill.

I understand there are many unfilled positions in the DOA but this particular pilot project for hemp is critically underfunded and needs to get the funding necessary to draft a plan to be submitted to the federal government, as well as supporting the one and only person, Shelly Choi, to grow the project and be able to handle the growth of the pilot as the interest in the crop is growing by the day.

The interest is growing for this crop as the demand for CBD and CBJ is on the rise and the financial gains are incredible. But if we do not act now to support this pilot, we will miss an opportunity of a lifetime. This is the specialty crop that we have all been waiting for.

Please fund this project and help us pass this bill.

Mahalo a nui loa.

LATE

SB-1353-SD-1

Submitted on: 2/18/2019 3:59:34 PM

Testimony for WAM on 2/19/2019 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Dave Kisor	Individual	Support	No

Comments:

SENATE COMMITTEE ON WAYS & MEANS RE: SUPPORT SB 1353

Aloha Chair Dela Cruz, Vice Chair Keith-Agaran and Members of the Committee

My name is Dave Kisor, and I live in Pahoia, HI. I am testifying in strong support of SB 1353. Please support SB 1353, which is designed to accelerate the process that will allow farmers in Hawaii to grow and market hemp products, and help Hawaii diversify its economy. The recent passage of Farm Bill in December presents Hawaii with a monumental opportunity to usher in a successful new hemp agricultural industry. While other states had the requisite ag plans prepared and ready to submit to the feds prior to the passage of the Farm Bill, our state has dragged its heels.

Our economy cannot afford to delay any longer. We should pass the requisite legislation to allow the state to move forward on the opportunity to generate millions of dollars in profits, create new jobs and enable entrepreneurial opportunities. New cottage industries around hemp are cropping up left and right. Hemp is now being used for clothing, paper, building materials, foods, health supplements and a variety of other value-added products. The potential for the growth of small business is exponential. In fact, current industry estimates report U.S. hemp product sales at nearly \$820 million in 2017.

In addition to its potential for agricultural commerce, hemp has the potential to remediate our contaminated soils, especially the depleted uranium in the PTA and on O'ahu. The toxic legacy of sugar, pineapple and more recently the pesticide intensive biotech industry has left large acreages of our ag land contaminated. Through phytoremediation hemp can undo some of this damage. Mahalo for your consideration!

LATE

SB-1353-SD-1

Submitted on: 2/18/2019 4:36:08 PM

Testimony for WAM on 2/19/2019 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Ann Strong	Individual	Support	No

Comments:

LATE

SB-1353-SD-1

Submitted on: 2/18/2019 4:39:28 PM

Testimony for WAM on 2/19/2019 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Barbara Barry	Individual	Support	No

Comments:

Aloha Lawmakers,

I strongly support this Bill.

Please allow all farmers access to this permit if they qualify. Do not discriminate towards wealthy land owners. If a farmer submits the paperwork, completed to the letter of the rules, that farmer should be allowed to grow hemp. Period.

This bill will do more for our local farmers than anything else that is available. Be bold and allow all who are qualified to grow. Do not add burdens on our farmers to come up with large amounts of money to qualify. We have learned with the cannabis licenses issued in Hawaii that those with the big bucks get the license. This must not be the same with hemp.

Mahalo,

Ms. Barbara Barry



SB-1353-SD-1

Submitted on: 2/18/2019 5:31:11 PM
Testimony for WAM on 2/19/2019 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
marta greenleaf	Individual	Support	No

Comments:

Aloha Chair Dela Cruz, Vice Chair Keith-Agaran and Members of the Committee

My name is Marta Greenleaf and I live in Makawao, HI. I am testifying in strong support of SB 1353.

Please support SB 1353, which is designed to accelerate the process that will allow farmers in Hawaii to grow and market hemp products, and help Hawaii diversify its economy.

The recent passage of Farm Bill in December presents Hawaii with a monumental opportunity to usher in a successful new hemp agricultural industry. While other states had the requisite ag plans prepared and ready to submit to the feds prior to the passage of the Farm Bill, our state has dragged its heels. Our economy cannot afford to delay any longer. We should pass the requisite legislation to allow the state to move forward on the opportunity to generate millions of dollars in profits, create new jobs and enable entrepreneurial opportunities.

New cottage industries around hemp are cropping up left and right. Hemp is now being used for clothing, paper, building materials, foods, health supplements and a variety of other value-added products. The potential for the growth of small business is exponential. In fact, current industry estimates report U.S. hemp product sales at nearly \$820 million in 2017.

In addition to its potential for agricultural commerce, hemp has the potential to remediate our contaminated soils. The toxic legacy of sugar, pineapple and more recently the pesticide intensive biotech industry has left large acreages of our ag land contaminated. Through phytoremediation hemp can undo some of this damage.

Thank you for your consideration!

Mahalo,
Marta Greenleaf
[310 Hoopalua Dr](mailto:marta@hemp-hawaii.com)
[Makawao, HI 96768](mailto:marta@hemp-hawaii.com)

LATE

SB-1353-SD-1

Submitted on: 2/18/2019 5:41:47 PM

Testimony for WAM on 2/19/2019 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Joanna Weber	Individual	Support	No

Comments:

SB-1353-SD-1

Submitted on: 2/18/2019 6:04:46 PM

Testimony for WAM on 2/19/2019 9:30:00 AM



Submitted By	Organization	Testifier Position	Present at Hearing
Jun Shin	Individual	Support	No

Comments:

Aloha Chair Dela Cruz, Vice Chair Keith-Agaran, Members of the Senate Committee on Ways & Means,

My name is Jun Shin, I am a freshman at UH Manoa and I live in the Ala Moana area. I am testifying in strong support of SB 1353.

Please support SB 1353, which is designed to accelerate the process that will allow farmers in Hawaii to grow and market hemp products, and help Hawaii diversify its economy.

The recent passage of Farm Bill in December presents Hawaii with a monumental opportunity to usher in a successful new hemp agricultural industry. While other states had the requisite ag plans prepared and ready to submit to the feds prior to the passage of the Farm Bill, our state has dragged its heels. Our economy cannot afford to delay any longer. We should pass the requisite legislation to allow the state to move forward on the opportunity to generate millions of dollars in profits, create new jobs and enable entrepreneurial opportunities.

New cottage industries around hemp are cropping up left and right. Hemp is now being used for clothing, paper, building materials, foods, health supplements and a variety of other value-added products. The potential for the growth of small business is exponential. In fact, current industry estimates report U.S. hemp product sales at nearly \$820 million in 2017.

In addition to its potential for agricultural commerce, hemp has the potential to remediate our contaminated soils. The toxic legacy of sugar, pineapple and more recently the pesticide intensive biotech industry has left large acreages of our ag land contaminated. Through phytoremediation hemp can undo some of this damage. Please support this while listening to the needs and concerns of our local small farmers.

Thank you for your consideration!

LATE

SB-1353-SD-1

Submitted on: 2/18/2019 7:05:04 PM

Testimony for WAM on 2/19/2019 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Joan Lander	Individual	Support	No

Comments:

The Hawaiian Kingdom used to export hemp as a commodity. It can again!

LATE

SB-1353-SD-1

Submitted on: 2/19/2019 2:12:40 AM

Testimony for WAM on 2/19/2019 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Kim Coco Iwamoto	Individual	Support	No

Comments:

Support SB1353 SD1 with Amendments:

If the purpose of this bill is to **permanently establish** an industrial hemp program, then why are we perpetuating the current pilot-status for so long, including exemptions to Chapt. 91 rule-making and unchecked discretion for the chairperson? Why would a large investor want to risk all of their money on the arbitrary decisions of one single person, with no framework for decisions and no appeal process identified.

Remove the Chairperson's power to limit number of licenses issued annually.

Remove the Chairperson's power to limit maximum acreage.

Thank you for your consideration,

Kim Coco Iwamoto

Paul R. Cassidy Jr.
Trustee, Mary N. Lucas Estate

1029 Iiwi Street.
Honolulu, Hawaii
U.S.A. 96816

(808) 291-4407 cell
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February 19, 2019

To: Senate Committee on Ways & Means
Testimony in support of SB 1353

My name is Paul Cassidy Jr. (Ricky), and I am one of the two trustees for the Mary Lucas Trust. The trust is the steward of some 900 acres of land on the north shore of Kauai. Since the demise of Kilauea Sugar Plantation in 1970, the trust has long searched to find a sustainable crop suitable for agricultural production on this former sugar land. Earlier this year, we made contact with a number of groups growing hemp in other states and were educated as to the potential of this crop for being grown in Hawaii. We strongly believe there is a future in this crop for our beneficiaries, and as such I write to show my support of SB 1353, RELATING TO INDUSTRIAL HEMP.

By way of context, the legislature supported the trust in 2016 by passing a bill, HB2680, RELATING TO THE ISSUANCE OF SPECIAL PURPOSE REVENUE BONDS FOR KALOKO RESERVOIR. The bill would help the trust in financing the restoration and expansion of a system to store and deliver water for present and new farm operations.

The intent and purpose to establish a viable crop, the purpose of SB1353, fits hand in glove with HB2680.

My hope here is to engage you at the legislature in order to obtain your support for this bill.

Thank you for your consideration,

Paul R Cassidy Jr.
TRUSTEE, MARY N. LUCAS ESTATE

LATE



Board of Directors:

Senate Committee on Ways & Means

Gary L. Hooser
President

**Hawaii Alliance for Progressive Action (HAPA)
strongly supports: SB 1353**

Andrea N. Brower
Ikaika M. Hussey
Co-Vice Presidents

Tuesday, February 19th, 2019, 9:30am p.m., Conference Room 211

Kim Coco Iwamoto
Treasurer

Aloha Chair Dela Cruz, Vice Chair Keith-Agaran and Members of the Committee,

Bart E. Dame
Secretary

My name is Anne Frederick and I am the Executive Director for the Hawaii Alliance for Progressive Action (HAPA). HAPA is a statewide environmental, social and economic justice organization. HAPA's fair and sustainable food systems work focuses on protecting Hawaii's environment and the health of its residents from potentially harmful pesticide impacts. HAPA engages over 10,000 local residents annually through its work.

Paul Achitoff

Nancy Aleck

Laura Harrelson

I am writing in support SB 1335, which is designed to accelerate the process that will allow farmers in Hawai'i and market hemp products, and help diversify Hawai'i's economy.

Kaleikoa Ka'eo

Michael Miranda

Walter Ritte Jr.

The recent passage of the Farm Bill in December presents Hawai'i with a monumental opportunity to usher in a successful new hemp agricultural industry. Current industry estimates place the total retail value of hemp products sold in the U.S. in 2017 to be at least \$820 million.[1]

Pua Rossi-Fukino

Karen Shishido

Leslie Malulani Shizue Miki

While other states had the requisite ag plans prepared to submit to the feds prior to the passage of the Farm Bill, our state dragged its heels. Our economy cannot afford to delay any longer. We should pass the requisite legislation to allow the state to move forward on the opportunity to generate millions of dollars in profits, create new jobs and enable entrepreneurial opportunities.

Hemp yields three crops yearly in balmy Hawai'i, where climate provides a distinct advantage over competitors in other states. There is no reason that Hawai'i's ag sector should not be participating in this dynamic new market. The estimated gross value of hemp production per acre is about \$21,000 from seeds

The Hawai'i Alliance for Progressive Action (HAPA) is a public non-profit organization under Section 501(c)(3) of the Internal Revenue Code. HAPA's mission is to catalyze community empowerment and systemic change towards valuing 'aina (environment) and people ahead of corporate profit.

and \$12,500 from stalks. And, since 2011, U.S. hemp retail sales have increased from about 10% to over 20% annually.

And this is just the beginning. The potential for growth of small business is exponential. Hemp is now being used for clothing, paper, building materials, foods, health supplements and a variety of other value-added products.

In addition to its potential for agricultural commerce, hemp has the potential to remediate our contaminated soils. Hemp's high biomass, long roots and short life-cycle make it a premium candidate for phytoremediation. In 1999, it was planted in the contaminated soils of the Chernobyl disaster site in the Ukraine, where it was revealed that the plant can take up considerable amounts of heavy metals, including lead, nickel, zinc, chromium, and cadmium. [2]

Further, a 2012 scientific study proved that hemp successfully absorbs cadmium from the soil.[3] Left untreated in soil, cadmium can enter the food chain, and consumption can cause severe joint and spinal pain. Another study found hemp to be the best bioaccumulator of cadmium out of eight potential energy crops.[4]

Hawai'i's soil, which has been severely compromised by the toxic legacy of pesticide-dependent agriculture, could greatly benefit from the phytoremediation properties of hemp.

Hawai'i needs to expedite the production and marketing of this valuable crop. Thank you for consideration. I urge you to support SB 1353.

Mahalo,



Anne Frederick
Executive Director

[1] "In Kentucky, Farmers Find Hemp May Be More Profitable Than Tobacco," *Forbes*, August 28, 2018.

[2] "Phytoremediation and Potential of Hemp (*Cannabis sativa* L.): Identification and Characterization of Heavy Metals Responsive Genes," *CLEAN – Soil Air Water* 44(2), August 2015.

[3] *Applied Biochemistry and Biotechnology*, "Cadmium Tolerance and Bioaccumulation of 18 Hemp Accessions," Sept. 2012, Vol. 168, pp. 163-173.

[4] "Cadmium tolerance and accumulation in eight potential energy crops," *Biotechnol Adv.* 2009 Sep-Oct;27(5):555-61.