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Governor

JOSH GREEN
Lt. Governor



PHYLLIS SHIMABUKURO-GEISER
Chairperson, Board of Agriculture

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DEPARTMENT OF AGRICULTURE
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TESTIMONY OF PHYLLIS SHIMABUKURO-GEISER
CHAIRPERSON, BOARD OF AGRICULTURE

BEFORE THE HOUSE COMMITTEE ON AGRICULTURE

MARCH 13, 2020
8:30 A.M.
CONFERENCE ROOM 312

SENATE BILL NO. 2704, SENATE DRAFT 2
RELATING TO SUSTAINABLE AGRICULTURE

Chairperson Creagan and Members of the Committee:

Thank you for the opportunity to testify on Senate Bill No. 2704 SD2 to establish and implement a three-year crop reimbursement pilot program to reimburse farming operations in the State for the costs of acquiring cover crop seeds or green manure.

The Department supports fully the intent of this measure as long it does not adversely impact priorities listed in the Executive Budget. Subsidy programs at 50% - 75% have worked best when the farmer has ownership, however small.

We agree with this measure that cover crops and green manure can provide many benefits to agricultural operations such as increasing crop yields and reducing high input costs for fertilizer, pesticides, and herbicides.

Cover crops have been found to mimic soil-building and microbial-friendly conditions in diverse soils, conserve moisture, prevent erosion, runoff, and reduce the crop consumption of irrigation water.

As local farmers face some of the highest production costs in the country, the goal of this measure to adopt cover crops and green manure as cost-cutting practices with potentially higher yields is highly desirable.

Thank you for the opportunity to testify on this bill.





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March 13, 2020

HEARING BEFORE THE
HOUSE COMMITTEE ON AGRICULTURE

TESTIMONY ON SB 2704, SD2
RELATING TO SUSTAINABLE AGRICULTURE

Room 312
8:30 AM

Aloha Chair Creagan, Vice Chair DeCoite, and Members of the Committee:

I am Brian Miyamoto, Executive Director of the Hawaii Farm Bureau (HFB). Organized since 1948, the HFB is comprised of 1,800 farm family members statewide, and serves as Hawaii's voice of agriculture to protect, advocate and advance the social, economic and educational interests of our diverse agricultural community.

The Hawaii Farm Bureau supports SB 2704, SD2, which establishes a cover crop reimbursement pilot program to provide up to one hundred per cent cost reimbursement to farming operations in the State for acquiring cover crop seeds or green manure, and establishes a cover crop reimbursement pilot program manager position within the Department of Agriculture to administer the program.

HFB agrees that the use of cover crops and green manure increases agricultural productivity and is a beneficial management practice. We do have some concern however, about how this program may be prioritized among the many essential and urgent agricultural needs competing for the same pot of money.

Thank you for your support of Hawaii agriculture.



SIERRA CLUB OF HAWAI'I

HOUSE COMMITTEE ON AGRICULTURE

March 13, 2020 8:30 AM Room 312

In SUPPORT of SB2704 SD2: Relating to Sustainable Agriculture

Aloha Chair Creagan, Vice Chair DeCoite, and members of the committee,

On behalf of our 20,000 members and supporters, the Sierra Club of Hawai'i **supports SB2704**, which establishes and appropriates funding for a cover crop reimbursement pilot program within the state Department of Agriculture to provide up to 100% reimbursement to farmers for purchase of cover crop seed. Support for practices that foster healthy soils, such as the planting of cover crops, is a priority of the Sierra Club during the 2020 legislative session.

Improved soil health is good for agriculture

The United States Department of Agriculture affirms that managing soil health is “one of the most effective ways for farmers to increase crop productivity and profitability while improving the environment.” Both small and large producers who implement practices to improve soils see benefits such as increased crop production from encouraging soils rich in organic matter and nutrients, increased profit from optimizing inputs by reducing the need for fertilizers, pesticides, and water, and reduced farm labor and machinery fuel expenses.¹

Improved soil health benefits the climate

Studies from the Intergovernmental Panel on Climate Change show that agriculture, forestry, and other types of land use account for 23% of human greenhouse gas emissions, making it a significant contributor to the climate crisis. At the same time, natural land processes absorb carbon dioxide equivalent to almost a third of carbon dioxide emissions from fossil fuels and industry practices.² Modern agricultural practices can be improved to harness the natural power of photosynthesis in plants to pull carbon from the atmosphere and sequester it in the ground.

Cover crops improve soil health and support local farms

Incorporation of cover crops into production systems can have economic and environmental benefits. So much so that the USDA Natural Resource Conservation Service's Environmental Quality Incentive Program (EQIP) supports land managers to implement conservation best practices like cover cropping. In fact, cover cropping is one of the top ten most commonly used conservation practices in EQIP contracts in Hawai'i and there are existing USDA resources that

¹ <https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/soils/health/>

² https://www.ipcc.ch/2019/08/08/land-is-a-critical-resource_srccl/

show which cover crops are most suitable for the Pacific.^{3 4} However, not nearly all local farms are able to access conservation planning and federal funding programs. We support this bill as a low cost means to enable and expand the adoption of conservation practices on Hawai'i farms.

Achieving sustainability in our food and agricultural systems requires not just the stable foundation of research and willingness of producers, but governmental support and leadership. Programs such as this simultaneously combat local crises of degraded soil restoration and the global carbon calamity by reducing the cost burden to farmers adopting agroecological production methods.

Thank you very much for this opportunity to provide testimony in **support of SB2704**.

³ https://www.nrcs.usda.gov/Internet/FSE_PLANTMATERIALS/publications/hipmstn14436.pdf

⁴ <https://conservation.ewg.org/eqip.php?fips=15000>



House Committee on Agriculture
Hawai'i Center for Food Safety strongly supports: SB2704 SD2

Aloha Chair Creagan, Vice Chair Decoite , and members of the committee,

My name is Lauryn Rego and I am the Director for the Hawai'i Center for Food Safety (CFS). CFS is a nationwide public interest, sustainable agriculture nonprofit organization whose missions include the promotion of agricultural production methods that are beneficial to the ecosystem. We have over 950,000 farmer and consumer members across the country, including nearly 14,000 in Hawai'i. On behalf of CFS and our members, I thank you for the opportunity to submit testimony today regarding this important bill.

CFS has been dedicated to addressing the human health and environmental impacts of our increased reliance on pesticide use in food production, both in the State of Hawai'i and nationally. We were instrumental in providing legal and communications support in the passage of numerous ordinances relating to pesticide use and disclosure, such as Kaua'i's Bill 2491 and Act 45 (Session Laws of Hawai'i 2018). Since 2014, we have worked closely with community members across the state, in all counties.

I am writing in strong support of SB2704 SD2 which establishes a cover crop reimbursement pilot program to provide up to 100% cost reimbursement to farming operations in the State for acquiring cover crop seeds or green manure.

Ensuring healthier soil by increasing the carbon content and soil organic matter can help enhance the long-term sustainability of Hawaii's agriculture and its resiliency to climate change. Improving soil health also improves and increases the soil's water holding capacity and water infiltration rate, enhances food crop yields and soil fertility, and beneficial biological microbial diversity and population, reduces soil erosion, and can even reduce atmospheric greenhouse gases by sequestering carbon.

Numerous sources, both internationally and nationally, have recognized the importance of healthy soils as a critical resource for supplying food security, diverse habitats, water storage, and climate resiliency. For example, the Food and Agriculture Organization of the United Nations and nations around the world, including the United States Department of Agriculture, has set soil health as a "building block" for climate smart agriculture and forestry. According to the French Ministry of Agriculture, even a small increase in soil carbon stock such as 0.4 percent annual growth rate of the soil carbon stock would make it possible to stop the present increase in atmospheric carbon dioxide, improve soil fertility, increase local agricultural production, and contribute to building climate resiliency.

Several agricultural practices have been shown to improve soil health, including, but not limited to, the use of cover crops, minimal soil disturbance, the utilization of compost and manure, and properly-managed rotational grazing of livestock.

It is in the interest of the State of Hawaii to provide incentives for the use of agricultural land management practices that will provide greenhouse gas benefits, enhance the sustainability of Hawaii's agricultural lands, decrease sedimentation of the marine environment, and improve the sustainability and climate resilience of Hawaii's agricultural sector through sequestering the carbon content or increasing organic matter of the soil.

We strongly support SB2704 SD2, which will help establish a state program to incentivize cover cropping to serve Hawai'i's many small farmers who may not qualify for existing national programs due to the length of their leases.

Thank you for this opportunity to provide testimony,

Respectfully,

A handwritten signature in black ink, appearing to read "Lauryn Rego", is placed on a light gray rectangular background.

Lauryn Rego
Director, Hawai'i Center for Food Safety



Pono Hawai'i Initiative

Josh Frost - President • Patrick Shea - Treasurer • Kristin Hamada
Nelson Ho • Summer Starr

Friday, March 13, 2020

Relating to Sustainable Agriculture
Testifying in Support

Aloha Chair and members of the committee,

The Pono Hawai'i Initiative (PHI) **supports SB2704, SD2 Relating to Sustainable Agriculture**, which creates a cover crop reimbursements pilot program that would reimburse a 100% of the costs to farming operations that acquire cover crop seeds or green manure.

This measure aligns with the State's sustainability goals and will help encourage good agricultural practices. It is in the State's best interest to encourage and incentivize good agricultural management practices.

For all these reasons, we urge you to move this bill forward.

Mahalo for the opportunity,
Gary Hooser
Executive Director
Pono Hawai'i Initiative



Environmental Caucus of The Democratic Party of Hawai'i

Friday, March 13, 2020

Senate Bill 2704 SD 2 Relating to Sustainable Agriculture
Testifying in Support

Me ke Aloha, Chair Creagan, Vice-Chair DeCoite, and members of the Agriculture Committee

The Environmental Caucus of the Democratic Party **supports passage of SB2704 SD2, Relating to Sustainable Agriculture**. This bill is part of the initiative to embrace Aloha 'Aina through a Green New Deal for Hawaii working families, anticipating disruptions resulting from climate change already upon us. It is altogether fitting that your committees hear this important bill to build resilience of Hawaii agriculture, fortifying and regenerating soil capacity to produce more nutritious food and greater self-reliance on local agriculture.

Many in Hawaii find it difficult to comprehend the nature of accelerating change. Every report announces new feedback loops already kicking in to accelerate climate change beyond our control. Every report from climate scientists raises additional alarm about the imperative need to stave off catastrophic change while we can. As change accumulates and disasters mount, they will no longer appear isolated, and not always somewhere else. Hawaii recently experienced a run of an unprecedented seven hurricanes throttling in to the islands. As the new hurricane season approaches, we can only hope that this time around we do not have so many scares, or that this time it will not finally claim food-producing regions of the State or the south shore of O'ahu that connects relief to the rest of our family of islands.

Meanwhile, neglect of sound soil regeneration depletes Hawaii's soil fertility. Ample agricultural research supports the approach represented in this bill – the provision of cover crops and green manure to maintain soil stability and regenerate fertility. This bill provides serious support for our agricultural lands and boosts Hawaii food production potential.

It will become increasingly essential for Hawaii to demonstrate proof-of- concept pilot projects in virtually every field. This bill represents 21st Century infrastructural support that Hawaii will be proud to herald as our legacy of forward thinking. The small amounts that will support this pilot far outweigh the losses sure to follow if we fail to act.

As an element of the initiative to assure a stable and productive environment for all Hawaii working families, the Environmental Caucus Green New Deal Working Group strongly urges prompt passage of this bill.

Mahalo for this opportunity to testify,

/s/

Charley Ice, Green New Deal Working Group, Environmental Caucus of the Democratic Party of Hawai'i



LATE

Board of Directors:

House Committee on Agriculture

Gary L. Hooser
President

Friday, March 13, 2020, 8:30 a.m., Conference Room 312

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

Hawai'i Alliance for Progressive Action strongly supports: SB 2704

Kim Coco Iwamoto
Treasurer

Aloha Chair Creagan, Vice Chair DeCoite and Members of the Committee,

Bart E. Dame
Secretary

I am submitting testimony on behalf of the Hawai'i Alliance for Progressive Action (HAPA) in strong support of SB 2704 which establishes a cover crop reimbursement pilot program to provide up to 100% cost reimbursement to farming operations in the State for acquiring cover crop seeds or green manure.

Paul Achitoff

Farmers are currently facing the most difficult agricultural economy since the 1980s. At the same time, many states are wrestling with the necessity of addressing environmental challenges. Many agricultural conservation practices offer multiple environmental and economic benefits for farmers and society. However, any farm management transition involves a certain amount of cost and risk, and some conservation practices offer purely public benefits. For these reasons, public programs that support farmers in adopting agricultural conservation practices are a critical element in advancing conservation broadly. [1]

Laura Harrelson

Kaleikoa Ka'eo

Michael Miranda

Walter Ritte Jr.

Pua Rossi-Fukino

Karen Shishido

Cover cropping is one such conservation practice that has been proven to provide multiple environmental and economic benefits. Cover crops have the potential to provide multiple benefits in a cropping system. They prevent erosion, improve soil's physical and biological properties, supply nutrients, suppress weeds, improve the availability of soil water, and break pest cycles along with various other benefits. [2]

Leslie Malulani Shizue Miki

Some farmers in Hawaii are already able to benefit from federal cover crop incentive programs administered by the Natural Resources Conservation Services (NRCS), Environmental Quality Incentives Program (EQIP) or the conservation stewardship program. A state-funded incentives program would complement federal programs by reaching farmers not currently meeting NRCS eligibility due to the length of their lease or other factors.

Please consider supporting SB 2704 which will both the economic viability of our local farmers as well as environmental conservation efforts.

Respectfully,



Anne Frederick,
Executive Director

[1] Innovative State-Led Efforts to Finance Agricultural Conservation: John Feldmann and Vincent Gauthier Master of Environmental Management candidates (2019) Nicholas School of the Environment, Duke University Maggie Monast and Mark Rupp Environmental Defense Fund Britt Aasmundstad National Association of State Departments of Agriculture;
<https://www.edf.org/sites/default/files/documents/innovative-state-led-efforts-finance-agricultural-conservation.pdf>

[2] Cover cropping to improve climate resilience; USDA Northeast Climate Hub;
<https://www.climatehubs.usda.gov/hubs/northeast/topic/cover-cropping-improve-climate-resilience>

SB-2704-SD-2

Submitted on: 3/11/2020 11:26:51 AM

Testimony for AGR on 3/13/2020 8:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Hunter Heavilin	Individual	Support	No

Comments:

SB-2704-SD-2

Submitted on: 3/12/2020 9:39:44 PM

Testimony for AGR on 3/13/2020 8:30:00 AM

LATE

Submitted By	Organization	Testifier Position	Present at Hearing
Naomi Melamed	Individual	Support	Yes

Comments: