DAVID Y. IGE Governor

JOSH GREEN Lt. Governor



PHYLLIS SHIMABUKURO-GEISER Chairperson, Board of Agriculture

MORRIS M. ATTA
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 PHYLLIS SHIMABUKURO-GEISER CHAIRPERSON, BOARD OF AGRICULTURE

BEFORE THE SENATE COMMITTEE ON WAYS AND MEANS

TUESDAY, FEBRUARY 25, 2020 12:40 P.M. CONFERENCE ROOM 211

SENATE BILL NO. 2704 SD1 RELATING TO SUSTAINABLE AGRICULTURE

Chairperson Dela Cruz and Members of the Committee:

Thank you for the opportunity to testify on Senate Bill No. 2704 SD1 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.

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.



LARRY JEFTS FARMS, LLC PO BOX 27 KUNIA, HAWAII 96759 (808) 688-2892

SB2704sd1, Relating to Sustainable Agriculture Sen WAM Decision Making Hearing Tuesday, February 25, 2020 12:40pm Conference Room 211

Testimony by: Larry Jefts Position: Support

Chair Dela Cruz, Vice Chair Keith-Agaran and Members of the Sen WAM Committee:

I am Larry Jefts, owner and operator of Larry Jefts Farms, LLC, which is part of our family-run business of farms on Oahu and Molokai, under the administrative umbrella of Sugarland Growers, Inc. We have more than 35 years of Hawaii farm experience on Molokai and Oahu. I am a volunteer director for the West Oahu Soil and Water Conservation District (SWCD).

As a soil conservation participant and from my own farming experience, I know that cover crop planting is an important and effective method of increasing crop production by replenishing soil nutrients, preventing erosion and nonpoint source pollution. Establishing the proposed pilot cover crop reimbursement program will increase the number of farmers who can then afford to buy cover crop seeds. This fits in well with overall farm production best practices.

Your support of this program is appreciated and needed. Thank you for consideration of this testimony.



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

Tuesday, February 25, 2020

Relating to Sustainable Agriculture Testifying in Support

Aloha Chair and members of the committee,

The Pono Hawai'i Initiative (PHI) **supports SB2704, SD1 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



P.O. Box 253, Kunia, Hawai'i 96759 Phone: (808) 848-2074; Fax: (808) 848-1921 e-mail info@hfbf.org; www.hfbf.org

February 25, 2020

HEARING BEFORE THE SENATE COMMITTEE ON WAYS AND MEANS

TESTIMONY ON SB 2704, SD1 RELATING TO SUSTAINABLE AGRICULTURE

Room 211 12:40 PM

Aloha Chair Dela Cruz, Vice Chair Keith-Agaran, 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, SD1, which establishes and appropriates funds for a cover crop reimbursement pilot program under the Department of Agriculture to provide up to 100% cost reimbursement to farming operations in the State for acquiring cover crop seeds or green manure.

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.

SB-2704-SD-1

Submitted on: 2/24/2020 11:10:42 AM

Testimony for WAM on 2/25/2020 12:40:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
NANCY JONES	Testifying for The Jones Family Farm	Support	No

Comments:

Hearing: Wednesday, Feb.25, 2020 a 12:40 PM – Senate Ways and Means Committee

TESTIMONY IN STRONG SUPPORT OF SB 2704, SD 1 – Relating to Cover Crops

Aloha Chair Dela Cruz, Vice-Chair Keith-Agaran and Honorable Committee Members:

Our testimony fully supports SB 2704, SD 1, as amended, to establish a cover crop reimbursement program within the Hawai`i Department of Agriculture (HDOA) and fully fund a position to handle the administration of such a program. Cover crops and green manures by definition in general and as outlined in the University of Hawai`i's College of Tropical Agriculture database provide valuable resources to Hawai`i's farmers in terms of improving soil health and mitigating erosion issues.

Accordingly, there is a definite need to support cover crops for Hawai`i's farmers and the reimbursement of those related costs under the program proposed by this bill. For these reasons, we respectfully urge your committee to pass this bill with sufficient funding to the HDOA to move this program forward. Thank you very much for this opportunity to present this testimony supporting SB 2704, SD 1 and Hawai`i's farmers.

Warm aloha from the Jones Family

Wai`anae Farm, P.O. Box 1462, Wai`anae, HI 96792/Tel: 808-228-3450



SENATE COMMITTEE ON WAYS AND MEANS

February 25, 2020 12:40 PM Room 211

In SUPPORT of SB2704 SD1: Relating to Sustainable Agriculture

Aloha Chair Dela Cruz, Vice Chair Keith-Agaran, 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

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/

conservation practices in EQIP contracts in Hawai'i and there are existing USDA resources that show which cover crops are most suitable for the Pacific.³ 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**.

Mahalo, Hunter Heaivilin Oʻahu Group Executive Committee Chair Volunteer, Sierra Club of Hawaiʻi

PhD Student in Political Agroecology Department of Geography & Environment University of Hawai'i at Manoa

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

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





Senate Committee on Ways and Means Hawai'i Center for Food Safety <u>strongly supports</u>: SB2704 SD1

Aloha Chair Dela Cruz, Vice Chair Keith-Agaran, 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 SD1 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 SD1, 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,

Lauryn Rego

Director, Hawai'i Center for Food Safety