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, MARCH 2, 2021 9:30 A.M.

VIA VIDEOCONFERENCE

SENATE BILL NO. 337 S.D. 1 RELATING TO SUSTAINABLE AGRICULTURE

Chairperson Dela Cruz and Members of the Committee:

Thank you for the opportunity to testify on Senate Bill No. 337 S.D. 1 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 this measure provided it does not adversely impact the priorities 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 including fertilizer, pesticides, and herbicides.

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

Thank you for the opportunity to testify on this bill.



Testimony Presented Before the
Senate Committee on Ways and Means
Tuesday, March 2, 2021 at 9:30 a.m.
By
Nicholas Comerford, Dean
College of Tropical Agriculture and Human Resources
University of Hawai'i at Mānoa

SB 337 SD1 – RELATING TO SUSTAINABLE AGRICULTURE

Chair Dela Cruz, Vice Chair Keith-Agaran, and members of the Senate Committee on Ways and Means:

Thank you for this opportunity to testify in <u>support</u> of SB 337 SD1 relating to the use of cover crops and green manure. A cover crop is defined as a crop grown for the protection and enrichment of the soil; while green manure is defined as a cover crop that is used to fertilize the soil by either fixing a nutrient like nitrogen (a legume) or being plowed back into the soil.

It has been well established for decades that cover crops provide strong and long-lived benefits to agriculture and environmental quality. A cover crop reduces the amount and speed of runoff. The result is reduced erosion and loss of surface soil. A cover crop increases soil structure through the action of its roots; and thereby can increase water holding capacity. A cover crop, because many have two-thirds of its biomass below-ground, can have a strong influence on soil carbon sequestration thereby promoting soil health and storing atmospheric carbon in the soil.

The best use of a cover crop is when it is accompanied by conservation tillage, such as no till or strip till processes. A green manure crop has a potential disadvantage if it is plowed back into the soil, because of the effect that plowing/cultivation has on carbon loss and soil structure destruction.

SB 337 SD1 references a CTAHR database for crops that would be eligible under this bill for reimbursement. The website

https://cms.ctahr.hawaii.edu/soap/SOFT/Resources/Sustainable-and-Organic-Topics/cc-gm is a source that would be useful to mention.

The University of Hawai'i (UH) supports the intent of this bill but is aware of the current financial climate of the State of Hawai'i and realizes that state funding is reduced. For the next fiscal biennium, the University of Hawai'i Board of Regents approved a budget request for the University that was flat and did not seek any increased funding to the University. UH defers to the Department of Agriculture on their priorities.

UH suggest that given the role that both of these materials have on protecting soil from erosion and that this is a pilot project, that farming operations which encompass large acreages be given preference. This would allow the maximum benefit for the environment and for improving soil health.



Senate Committee on Ways and Means

Hawai'i Alliance for Progressive Action (HAPA) Supports: SB 337 SD1

Tuesday, March 2nd 2021 9:30 a.m.

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

HAPA strongly supports SB 337 SD1, relating to sustainable agriculture, which would establish 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.

HAPA believes that SB 337 is part of the solution to establishing a sustainable, profitable and regenerative agriculture system for Hawai'i while improving our land management practices for the better.

SB 337 will help encourage the use of cover crops which create closed loop systems and eliminate the cost of synthetic inputs while recycling, and even fixing, nutrients within the soil. Good healthy soil is one of the important factors to increase local food production and support regenerative farming practices.

Cover crops improve water quality, soil health, and build resiliency in the face of climate change. They are one of the most common, accessible agricultural strategies for improving soil health and water retention and preventing nitrogen pollution in water and erosion—to the benefit of both the environment and the farmer^[1].

Covered crops are considered a Best Management Practice (BMP) widely used in agriculture for nutrient loss reduction and soil conservation^[2].

Cover crops are crucial to the nutrient cycle and the development of fertile soil and because of this trait are sometimes referred to as "green manure." This is because cover crops are used to manage a range of soil macronutrients and micronutrients^[3]. Of the various nutrients, the impact that cover crops have on nitrogen management has received the most attention from researchers and farmers, because nitrogen is often the most limiting nutrient in crop production^[4].

In the same way that allelopathic properties of cover crops can suppress weeds, they can also break disease cycles and reduce populations of bacterial and fungal diseases and parasitic nematodes. For example, species such as mustards, have been shown to suppress fungal disease through the release of naturally occurring toxic chemicals. Similarly, some cover crops are used as so-called "trap crops", to attract pests away from the crop of value and intentionally toward the cover crop.

The many benefits of cover crops include that they:

- Grow our agriculture sector through cover crop seed production;
- Support sustainable farming practices and healthy soil;
- Remediate depleted soil from industrial farming systems;
- Build organic matter (soil quality) and improve soil fertility (nutrients);
- Reduce the need for synthetic fertilizers and save farmers money in inputs;
- Support native species and biodiversity;
- Increase water infiltration and water retention:
- Suppress weeds resulting in less herbicide use;
- · Provide disease and pest management;
- Reduce wind and water erosion and conserves top soil; and
- Prevent runoff from impacting sensitive environments, water sources, nearshore reefs and fisheries.

Similar cover crop reimbursement programs to SB 337 have been successfully implemented in other states and work to incentivise cover crop planting and growth^[1,2].

HAPA strongly supports SB 337 SD1 and believes it is part of the solution to growing our local food production and economy and a more regenerative agricultural system for Hawai'i.

Thank you for your consideration.

Respectfully,

Anne Frederick
Executive Director

[1] Civil Eats: Held, Lisa (2020) *Two States are Leading a Cover Crop Revival* https://civileats.com/2020/02/11/two-states-are-leading-a-cover-crop-revival/

[2] NASDA (2019) *Innovative State-Led Efforts to Finance Agricultural Conservation*, https://s3.amazonaws.com/nasda2/media/innovative-state-led-efforts-finance-agricultural-conservation.pdf

[3] USDA Natural Resource Conservation Service; *Healthy Soils: Are Covered All The Time* https://nrcspad.sc.egov.usda.gov/distributionCenter/pdf.aspx?productID=1026

[4] The New York Times: Strom, Stephanie (2016) Cover Crops, a Farming Revolution with Deep Roots in the Past https://www.nytimes.com/2016/02/07/business/cover-crops-a-farming-revolution-with-deep-roots-in-the-past.html? r=0

<u>SB-337-SD-1</u> Submitted on: 2/27/2021 11:58:15 AM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
laurel brier	Testifying for Kauai Climate action coalition	Support	No

Comments:

Regenerative farming practices are essential for addressing the Climate Crisis and also a way to remediate our soils after decades of abuse and grow healthier food for local consumption

Submitted on: 2/27/2021 3:43:04 PM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Nancy Redfeather	Testifying for Ka Ohana O Na Pua	Support	No

Comments:

Let's provide encouragement and support for our farmers to build healthy soil, add organic nitrogen and carbon improving the soil carbon sponge, mitigate and capture more CO2, while improving soil and food health. These soils will help build our food future.

Submitted on: 2/28/2021 9:26:46 AM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Mike Dandurand	Testifying for Kauai Food Hub	Support	No

Comments:

- I STRONGLY SUPPORT SB337:
- IT DOES THE FOLLOWING:
- Supports sustainable farming practices
- Cover crops conserve soil and water and prevent runoff impacting nearshore reefs and fisheries
- Cover crops build organic matter and improve soil health and nutrients
- Reduces the need for synthetic fertilizers, saves farmers money in inputs
- Similar programs have already been implemented successfully in other states
- Many of Hawaii's agricultural lands are depleted from long-term industrial farming practices which deplete soil health. Cover crops can help to rebuild soil over time.

IT'S GOOD FOR HAWAII!

Submitted on: 2/28/2021 2:02:55 PM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Helen Cox	Testifying for Kauai Climate Action Coalition	Support	No

Comments:

Aloha Kakou,

I am writing to strongly support SB337 to establish a cover crop reimbursement pilot program to provide up to seventy-five percent cost reimbursement to farming operations in the State for acquiring cover crop seeds or green manure.

Past agricultural practices in the state have left much of agricultural land depleted and in poor soil health. The use of cover crops conserves soil and water and helps to restore depleted soils to a healthy condition. Also, less run-off means that the impact to earshore reefs and fisheries is minimized. In addition to being environmentally sound, the use of cover crops is economically sound since it reduces the need for synthetic fertilizers, and pesticides thereby saving farmers money. Similar programs have already been implemented successfully in other state.

As former chancellor of Kauai Community College, I am well aware of the good work the Go Farm program has achieved on our island. The program is committed to training new farmers not just to farm and to markert their products, but to farm in a sustainable way which means maintaining healthy soils. If we are increase our agricultural production, we must ensure the health of our soils.

We all know that our farmers are struggling; we also know that we need to increase local food production. This bill both supports farmers and increases healthy soils for producing food and other crops.

Mahalo,

Helen Cox

Chair, Kauai Climate Action Coalition

<u>SB-337-SD-1</u>

Submitted on: 2/28/2021 2:27:04 PM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
David Mulinix	Testifying for Our Revolution HawaiiAlo	Support	No

Comments:

Aloha Committee,

On behalf of Our Revolution Hawaii's 7,000 members and supporters, we are in SUPPORT of SB337 because it supports sustainable farming.

Please vote in support of SB337.

Mahalo for your kind attention,

Dave Mulinix

Hawaii State Community Organize

Our Revolution Hawaii



February 28, 2021

Hawai'i SEED Supports: SB 337, SD1

Relating to Agriculture & State Departments Sourcing Local Food And Cover Crop Reimbursement Senate Committee on Ways and Means

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

Hawai'i SEED strongly supports SB 337, SD1, to establish a cover crop reimbursement pilot program providing cost reimbursement to farming operations to help acquire initial seed costs for the best suited variety of cover crops.

We have long advocated that the use of green manure (plant matter) is a benefit in a variety of ways. Besides the benefits of soil nutrients that cover crop root systems create, and the aeration to the soil when the plant matter is incorporated into the area, it also provides a great cost savings to farmers who have been needing costly imported soil amendments.

A pilot program will be a welcome start to acquiring seed collection for subsequent plantings. An investment in initial seeds will provide exponential seed production. Also, over time, the saved seeds will generationally be locally adapted to the area in which they were grown. They will be stronger and more abundant with each planting.

Cover crops are a great part to encouraging fallowing of plots and rotational plantings. They are attractive a great learning opportunity for young student farmers to understand the importance of good soil, which then create an eco-system for food crops that are strong, healthy and more resistant to pests naturally. Once again, the stronger the plants are from good soil, the fewer synthetic inputs need to be purchased from offsite.

Cover crops are also a great way to suppress weeds and lessen soil erosion and run-off. Building organic matter and supporting improving soil fertility is essential as we transition towards a return to the traditional indigenous farming methods, and strive towards a local food economy.

Cover crops are successfully used worldwide, and Bill SB 337 will be very helpful in getting the first crops in the ground. We strongly support this bill and an economy of more regenerative agricultural systems for our finite island lands.

Mahalo, Jeri Di Pietro, President

Submitted on: 2/28/2021 6:07:00 PM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Ted Bohlen	Testifying for Climate Protectors Hawaii	Support	No

Comments:

To: The Honorable Donovan Dela Cruz, Chair, The Honorable Gilbert Keith-Agaran, Vice Chair, and members of the Senate Committee on Ways and Means

From: Climate Protectors Hawaii (by Ted Bohlen)

Re: Hearing SB337 SD1 RELATING TO SUSTAINABLE AGRICULTURE.

Hearing: Tuesday, March 2, 2021, 9:30 a.m., Rm. 211 and by videoconference

Aloha Chair Dela Cruz, Vice Chair Keith-Agaran, and members of the Senate Committee on Ways and Means:

The Climate Protectors Coalition is a group focused on reversing the climate crisis. The Climate Protectors **STRONGLY SUPPORT SB 337 SD1!** As a tropical island State, Hawaii will be among the first places harmed by the global climate crisis, with more intense storms, loss of protective coral reefs, food insecurity, and rising sea levels destroying our shorelines. **We must do all we can to reduce our carbon footprint and become carbon negative as soon as possible by reducing greenhouse gas emissions AND by growing more local food and sequestering more carbon in our soil and trees!**

This bill would establish a three year cover crop reimbursement pilot program to provide up to seventy-five per cent cost reimbursement to farming operations in the State for acquiring cover crop seeds or green (plant) manure. It requires the convening of a review panel to screen and rate applicants on the quality of their cover crop and green manure practices. The review panel should consider how much of a farming operation's land is using cover crops. The bill establishes a cover crop reimbursement pilot program manager position within the department of agriculture. It requires a report to the legislature and appropriates funds.

Cover crops are an essential step in regenerative agriculture which is the most promising avenue to sequestering carbon and addressing the Climate Crisis in a substantial way. To address the Climate Crisis, **Hawaii needs to do more than just**

eliminate emissions of greenhouse gases; we also need to sequester substantial amounts of carbon in our soil and trees.

Cover crops provide strong and long-lived benefits to agriculture and environmental quality. They reduce the need for fossil fuel based soil amendments, preserve water, and reduce the amount and speed of runoff. The result is reduced erosion and loss of surface soil, which protects the reefs. A cover crop increases soil structure through the action of its roots and thereby can increase water holding capacity. A cover crop, because many have two-thirds of its biomass below- ground, can have a strong influence on soil carbon sequestration thereby promoting soil health and storing atmospheric carbon in the soil. Cover crops build healthier soils for healthier food.

The best use of a cover crop is when it is accompanied by conservation tillage, such as no till or strip till processes. A green manure crop has a potential disadvantage if it is plowed back into the soil, because of the effect that plowing/cultivation has on carbon loss and soil structure destruction.

This measure incentivizes the use of management practices that enhance the quality and sustainability of Hawaii's agricultural lands.

Please pass this bill to encourage regenerative farming and carbon sequestration. Mahalo!



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

March 2, 2021

HEARING BEFORE THE SENATE COMMITTEE ON WAYS AND MEANS

TESTIMONY ON SB 337, SD1 RELATING TO SUSTAINABLE AGRICULTURE

Conference Room 211 9:30 AM

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 337, SD1, which establishes a cover crop reimbursement pilot program to provide up to seventy-five percent 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 very limited funding.

Thank you for your support of Hawaii agriculture.

<u>SB-337-SD-1</u> Submitted on: 3/1/2021 8:28:57 AM

Testimony for WAM on 3/2/2021 9:30:00 AM

 Submitted By	Organization	Testifier Position	Present at Hearing
Walter Ritte	Testifying for aina momona	Support	No

Comments:

Aina Momona is in strong support of sb337. Good farming practices is esential to Hawaii's ability for long term survival of our soils and prevention of run offs and soil loss into our prestein shore lines and reefs.

Submitted on: 3/1/2021 9:21:17 AM

Testimony for WAM on 3/2/2021 9:30:00 AM

Sub	omitted By	Organization	Testifier Position	Present at Hearing
Jef	f Mcknight	Testifying for DPH Environmental Caucus	Support	No

Comments:

The DPH Envirnmental Caucus **STRONGLY SUPPORT SB 337 SD1!** As a tropical island State, Hawaii will be among the first places harmed by the global climate crisis, with more intense storms, loss of protective coral reefs, food insecurity, and rising sea levels destroying our shorelines. **We must do all we can to reduce our carbon footprint and become carbon negative as soon as possible by reducing greenhouse gas emissions AND by growing more local food and sequestering more carbon in our soil and trees!**

This bill would establish a three year cover crop reimbursement pilot program to provide up to seventy-five per cent cost reimbursement to farming operations in the State for acquiring cover crop seeds or green (plant) manure. It requires the convening of a review panel to screen and rate applicants on the quality of their cover crop and green manure practices. The review panel should consider how much of a farming operation's land is using cover crops. The bill establishes a cover crop reimbursement pilot program manager position within the department of agriculture. It requires a report to the legislature and appropriates funds.

Cover crops are an essential step in regenerative agriculture which is the most promising avenue to sequestering carbon and addressing the Climate Crisis in a substantial way. To address the Climate Crisis, **Hawaii needs to do more than just eliminate emissions of greenhouse gases**; we also need to sequester substantial amounts of carbon in our soil and trees.

Cover crops provide strong and long-lived benefits to agriculture and environmental quality. They reduce the need for fossil fuel based soil amendments, preserve water, and reduce the amount and speed of runoff. The result is reduced erosion and loss of surface soil, which protects the reefs. A cover crop increases soil structure through the action of its roots and thereby can increase water holding capacity. A cover crop, because many have two-thirds of its biomass below- ground, can have a strong influence on soil carbon sequestration thereby promoting soil health and storing atmospheric carbon in the soil. Cover crops build healthier soils for healthier food.

The best use of a cover crop is when it is accompanied by conservation tillage, such as no till or strip till processes. A green manure crop has a potential disadvantage if it is

plowed back into the soil, because of the effect that plowing/cultivation has on carbon loss and soil structure destruction.

This measure incentivizes the use of management practices that enhance the quality and sustainability of Hawaii's agricultural lands.

Please pass this bill to encourage regenerative farming and carbon sequestration. Mahalo!

Submitted on: 3/1/2021 9:25:10 AM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Hunter Heaivilin	Testifying for Supersistence	Support	No

Comments:

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

This bill was created to support farmer adoption of conservation agriculture practices. A review of best management practices utilized by Hawaii farms as a result of conservation planning found cover crops to be among the most common. Analysis also found cover cropping a beneficial practice for adding soil carbon and mitigating climate effects from agriculture. Recent review of cover crop incentives in other states (https://www.wvik.org/post/more-farmers-are-planting-cover-crops-thanks-state-incentive-programs#stream/0) found these programs an effective tool to facilitate adoption of cover cropping by producers. For these reasons I support SB337 and hope that this pilot program will be created to support conservation agriculture and soil health on farms across the islands.

Mahalo for the opportunity to testify.

-Hunter Heaivilin

Submitted on: 2/25/2021 8:30:28 PM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Laura Ramirez	Individual	Support	No

Comments:

Much of Hawaii's agricultural lands are depleted from long-term industrial farming practices which deplete soil health. Cover crops can help to rebuild soil over time by building organic matter and improving soil health and nutrients. This reduces the need for synthetic fertilizers which saves farmers money and is a sustainable farming practice. These types of programs have already been put in place in other states. It's time for Hawaii now!

<u>SB-337-SD-1</u> Submitted on: 2/26/2021 8:00:57 AM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing	
Ashleigh Loa	Individual	Support	No	1

Comments:

N/a

<u>SB-337-SD-1</u> Submitted on: 2/26/2021 8:11:53 AM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Ruta Jordans	Individual	Support	No

Comments:

Together with applying compost, this is the best way to make land more fertile while also sequestering carbon.

Submitted on: 2/26/2021 8:48:11 AM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing	
Nanea Lo	Individual	Support	No	

Comments:

Hello,

My name is Nanea Lo. I am writing in support of SB337 because of the following reasons:

- Supports sustainable farming practices
- Cover crops conserve soil and water and prevent runoff impacting nearshore reefs and fisheries
- Cover crops build organic matter and improve soil health and nutrients
- Reduces the need for synthetic fertilizers, saves farmers money in inputs
- Similar programs have already been implemented successfully in other states
- Many of Hawaii's agricultural lands are depleted from long term industrial farming practices which deplete soil health. Cover crops can help to rebuild soil over time.

Support this bill.

me ke aloha 'Ä• ina,

Nanea Lo

Submitted on: 2/26/2021 10:07:37 AM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing	
claudia rosenbaum	Individual	Support	No	

Comments:

Aloha,

Im Claudia Rosenbaum, and I strongly favor bill SB337. Cover cropping is a good method to limit runoff posing less damage to our reefs and water. We could also use this new {old} system of regenerating our soils and building new top soil that has been blown away over the years of using harsh chemicals which dried and made our land more susceptible to top soil being blown away. We as a people need to protect our resources for future generations by having a vision of preserving and restoring our land. Seeing this, protecting our agricultural lands, as not a financial burden for the present, rather an investment for the future well-being of our state.

Sincerely,

Claudia Rosenbaum

Kula, HI

<u>SB-337-SD-1</u> Submitted on: 2/26/2021 10:18:36 AM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Kelsey Amos	Individual	Support	No

Comments:

We need to incentivize sustainable farming practices to counter climate change and take care of aina.

Submitted on: 2/26/2021 10:24:32 AM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Sorcha McCarrey	Individual	Support	No

Comments:

Hello, my name is Sorcha McCarrey. I originally grew up in LÄ• 'ie, on the North Shore, but currently live in KÄ• ne'ohe.

Like many young people of my generation, the plunder of the earth and impending doom due to climate change weigh heavily on my mind. This bill provides a framework for starting to rethink some of our damaging practices and reducing the harms we are imposing on Hawai'i. Cover crops are more sustainable, and will rebuild Hawai'i's agricultural lands, giving nutrients to the soil and improving overall health. The cover crops would also protect fisheries and reefs from runoff pollution which harms those ecosystems.

For years, I have felt a profound anxiety and depression about the state of our natural environment and what we as humans are doing to it. My despair over the likely course of this world (without an enormous turnaround) even contributed to the end of my first romantic relationship. This is the tip of the tip of the iceberg of what humans should and could be doing in order to stop damaging the environment. And other states have already done it! Let's start doing something, anything in the here and now to protect Hawai'i for future generations. Thank you.

<u>SB-337-SD-1</u> Submitted on: 2/26/2021 10:56:24 AM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Shannon Rudolph	Individual	Support	No

Comments:

Support!

<u>SB-337-SD-1</u> Submitted on: 2/26/2021 11:12:10 AM

Testimony for WAM on 3/2/2021 9:30:00 AM

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

Comments:

Support our `Ä∙ ina

Submitted on: 2/26/2021 2:55:44 PM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Jessica Kuzmier	Individual	Support	No

Comments:

I support SB 337 as cover crops do many beneficial things for the aina in supporting sustainable farming practices. They conserve soil and water and prevent runoff impacting nearshore reefs and fisheries, build organic matter and improve soil health and nutrients, and reduce the need for synthetic fertilizers, which saves farmers money in inputs. They can help to rebuild soil, which is needed to assist Hawaii's soil to heal after being depleted by destructive industrial farming practices. Thank you.

<u>SB-337-SD-1</u> Submitted on: 2/26/2021 7:01:28 PM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing	
Christopher Dean	Individual	Support	No	ı

Comments:

Taking care and restoring ag land that has been damaged by industril ag or other human activity is essential.

Submitted on: 2/26/2021 7:24:10 PM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Alani Bagcal	Individual	Support	No

Comments:

My name is Alani Bagcal and I am writing today in support for SB337.

I highly support this bill that would support sustainable farming practices and reduces the need for synthetic fertilizers which saves farmers money in inputs.

Thank you for the opportunity to testify in support for this bill,

Alani Bagcal

96815

<u>SB-337-SD-1</u> Submitted on: 2/27/2021 12:52:01 AM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Dana Keawe	Individual	Support	No

Comments:

I support sb337 sd1

<u>SB-337-SD-1</u> Submitted on: 2/27/2021 7:02:23 AM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Rexann Dubiel	Individual	Support	No

Comments:

Soil is everything.

Repair our soil. Make it healthy with sustainable practices.

Support creating a living, thriving soil.

Submitted on: 2/27/2021 9:02:19 AM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
cheryl hendrickson	Individual	Support	No

Comments:

- Supports sustainable farming practices
- Cover crops conserve soil and water and prevent runoff impacting nearshore reefs and fisheries
- Cover crops build organic matter and improve soil health and nutrients
- Reduces the need for synthetic fertilizers, saves farmers money in inputs
- Similar programs have already been implemented successfully in other states
- Many of Hawaii's agricultural lands are depleted from long-term industrial farming practices which deplete soil health. Cover crops can help to rebuild soil over time.

<u>SB-337-SD-1</u> Submitted on: 2/27/2021 10:45:02 AM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Sunny Savage	Individual	Support	No

Comments:

yes, less inputs...smarter, building resiliency.

<u>SB-337-SD-1</u> Submitted on: 2/27/2021 11:15:39 AM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Valerie Weiss	Individual	Support	No

Comments:

Please support this measure.

<u>SB-337-SD-1</u> Submitted on: 2/27/2021 11:54:06 AM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing	
Barbara L. George	Individual	Support	No	

Comments:

SUPPORT!

Submitted on: 2/27/2021 11:55:58 AM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Rona Bennett	Individual	Support	No

Comments:

I support this bill. We need to have more regenerative farming practices and using less chemicals would be better for our water supply and our health. As someone who is currently battling heavy metals poisoning, I strongly believe we need to reduce the amount of chemicals we are using on our food. Cover crops will do this.

Submitted on: 2/27/2021 12:06:37 PM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Momi Ventura	Individual	Support	No

Comments:

Alohamai My Name Is Momi Ventura, I Currently Have No Home But Do Own A Tablet. Id Like To Speak On Behalf Of My Family And Friends About Sustainable Farming Practices. And Reduce The Uses Of Synthetic Fertilizers, And Soil Erosion. Please Consider That Many Of Hawai'l's Agricultural Lands Have Been Depleted From Long-Term Industrial Practice's Which Deplete Soil Health And Usefulness. Crops Can Help Rebuild Soil Health. Please Support And Consider This Decision For The Communities Of Hawai'l Nei. Mahalo For Your Time And Consideration.

<u>SB-337-SD-1</u> Submitted on: 2/27/2021 12:48:23 PM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Deborah Sevy	Individual	Support	No

Comments:

Please let us support practices that create healthy farming, food and people!

Submitted on: 2/27/2021 12:54:34 PM

Testimony for WAM on 3/2/2021 9:30:00 AM

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

Comments:

I am in favor of SB337 SD1, which supports regenerative farming practices so needed in Hawaii, and all over the earth.

- Supports sustainable farming practices
- Cover crops conserve soil and water and prevent runoff impacting nearshore reefs and fisheries
- Cover crops build organic matter and improve soil health and nutrients
- Reduces the need for synthetic fertilizers, saves farmers money in inputs
- Similar programs have already been implemented successfully in other states
- Many of Hawai'i's agricultural lands are depleted from long-term industrial farming practices which deplete soil health. Cover crops can help to rebuild soil over time.

Mahalo for helping Hawaii move toward sustainability and healthy soil, water and reefs.

Sherry Pollock, Anahola, HI

Submitted on: 2/27/2021 1:03:34 PM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing	
Claire Kamalu Carroll	Individual	Support	No	

Comments:

Aloha,

Mahalo for supporting sustainable farming practices. Cover crops conserve soil and water and help prevent runoff impacting our reefs and fisheries. This will also help reduce the need for synthetic fertilizers and saves farmers money. I am in support of SB337

Sincerely,

Claire Kamalu Carroll

Submitted on: 2/27/2021 2:51:05 PM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Donna Maltz	Individual	Support	No

Comments:

Cover Crops have proved to be the most regenerative way to preserve agricultural lands. Farms have a hard enough time earning a living. Anything that can be done to preserve the land and the farming community is essential to the wellbeing of the people on the islands. Why would we NOT do all we can to ensure food security and protect the soil that sustains us?

<u>SB-337-SD-1</u> Submitted on: 2/27/2021 3:06:37 PM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Dee Green	Individual	Support	No

Comments:

I support this bill. Agricultural productivity and sustainability on the islands is essential. Supporting farmers in that goal is also necessary. Enhancing the quality of Hawaii's agricultural land should be a priority.

<u>SB-337-SD-1</u> Submitted on: 2/27/2021 3:37:45 PM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Chezlani Casar	Individual	Support	No

Comments:

Cover crops are a great way to enrich soil, prevent runoff, and withstand drought. Let's support making them a commonplace part of our agricultural practices.

<u>SB-337-SD-1</u> Submitted on: 2/27/2021 3:48:00 PM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
jeanne wheeler	Individual	Support	No

Comments:

This is a great idea - please pass bill :) Mahalo

<u>SB-337-SD-1</u> Submitted on: 2/27/2021 4:25:44 PM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Joe Dalessandro	Individual	Support	No

Comments:

I support the passage of this bill. Cover crops are scientifically proven to support regenerative agriculture. Mahalo.

<u>SB-337-SD-1</u> Submitted on: 2/27/2021 4:43:10 PM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Jane E Arnold	Individual	Support	No

Comments:

Cover crops will promote sustainable agriculture. Please support this bill. Thank you.

Submitted on: 2/27/2021 7:41:49 PM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Cory Harden	Individual	Support	No

Comments:

Aloha legislators,

Please help local farmers!

Please support this bill to establish a cover crop reimbursement pilot program for up to 75% reimbursement to farming operations in the State for acquiring cover crop seeds or green manure.

mahalo,

Cory Harden

Submitted on: 2/27/2021 8:37:16 PM

Testimony for WAM on 3/2/2021 9:30:00 AM

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

Comments:

Hi Joan here from West Hawaii supporting SB337. This bill establishes a cover crop reimbursement to farming operaters for acquiring over crop seeds and green manure. Supports sustainability and conserves soil and water.

Thank ayou Joan Gannon

Submitted on: 2/27/2021 8:57:07 PM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing	
Elizabeth Hansen	Individual	Support	No	

Comments:

Aloha Senators: Please support this bill as it will enhance sustainable farming practices, since cover crops conserve soil and water and prevent runoff impacting nearshore reefs and fisheries. Similar programs have already been implemented successfully in other states.

Thank you, Elizabeth Hansen, Hakalau, HI

Submitted on: 2/27/2021 9:40:41 PM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Rodger Hansen	Individual	Support	No

Comments:

Aloha Senators: Please support this bill as it will enhance sustainable farming practices, since cover crops conserve soil and water and prevent runoff impacting nearshore reefs and fisheries. Similar programs have already been implemented successfully in other states.

Thank you.

<u>SB-337-SD-1</u> Submitted on: 2/28/2021 12:53:03 AM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Scott Valkenaar	Individual	Support	No

Comments:

There should be support at every level for local farmers.

Submitted on: 2/28/2021 1:22:19 AM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing	
Cynthia Hathaway	Individual	Support	No	

Comments:

Hello!

It's necessary to advocate for grownd cover because it is essential to healthy land and sustainable farming.

I built my home in Hawaiian Paradise Park, Puna, Big Island, 34 years ago. I did not doze my land. I hand clear what is necessary to plant fruit trees, squash, sweet potatoes. I mulch and create my own soil, by all organic methods. I am profoundly committed to sustainable land use. The future health of our planet is the most important thing to me. I would like to see the use of chemical fertilizers eliminated. Cover crops feed the soil and creat organic nutrients. Cover crops help prevent runoff that impacts reefs and fisheries. The list goes on!

Please support and pass SB337. Thank you.

Cynthia Hathaway

HC1 Box 5377, Keaau, HI 96749

<u>SB-337-SD-1</u> Submitted on: 2/28/2021 5:50:26 AM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Anne Freeman	Individual	Support	No

Comments:

This bill will encourage farmers to reduce their need for synthetic fertilizers, making healthier soil for the future.

<u>SB-337-SD-1</u> Submitted on: 2/28/2021 9:34:05 AM

Testimony for WAM on 3/2/2021 9:30:00 AM

	Submitted By	Organization	Testifier Position	Present at Hearing	
Ī	M. Llanes	Individual	Support	No	

Comments:

Dear Senate members:

Please support SB337 for the sake of our 'Ä• ina and to reduce the old toxic forms of farming, especially non-food farming.

Mahalo,

MeleLani Llanes

Kapolei resident

Submitted on: 2/28/2021 10:12:20 AM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
marianne george	Individual	Support	No

Comments:

- One of the main hurdles farmers often cite is lack of access to affordable land. This measure will help expand farmers access to affordable land in Hawai'i

 • Will help reduce our dependence on imported food
- Will support the growth of our agricultural and local food economy

<u>SB-337-SD-1</u> Submitted on: 2/28/2021 10:23:08 AM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Diane Ware	Individual	Support	No

Comments:

Dear committee members,

I strongly support this bill.

Please pass,

Diane Ware 99-7815 Kapoha Volcano

Submitted on: 2/28/2021 10:48:52 AM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Jennifer Noelani Ahia	Individual	Support	No

Comments:

I support this bill for the following reasons:

- Supports sustainable farming practices
- Cover crops conserve soil and water and prevent runoff impacting nearshore reefs and fisheries
- Cover crops build organic matter and improve soil health and nutrients
- Reduces the need for synthetic fertilizers, saves farmers money in inputs
- Similar programs have already been implemented successfully in other states
- Many of Hawaii's agricultural lands are depleted from long-term industrial farming practices which deplete soil health. Cover crops can help to rebuild soil over time.

<u>SB-337-SD-1</u> Submitted on: 2/28/2021 10:50:11 AM

Testimony for WAM on 3/2/2021 9:30:00 AM

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

Comments:

Hawaii needs to be sustainable. For as much as possible.

Submitted on: 2/28/2021 11:05:46 AM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
jeanne lindgren	Individual	Support	No

Comments:

Dear Members of the Ways and Means Committee,

I am writing in support of SB337 for the following reasons:

- Supports sustainable farming practices
- Cover crops conserve soil and water and prevent runoff impacting nearshore reefs and fisheries
- Cover crops build organic matter and improve soil health and nutrients
- Reduces the need for synthetic fertilizers, saves farmers money in inputs
- Similar programs have already been implemented successfully in other states
- Many of Hawai'i's agricultural lands are depleted from long-term industrial farming practices which deplete soil health. Cover crops can help to rebuild soil over time

Mahalo for your time and consideration,

Jeanne Lindgren

2122 Hillcrest St,

Honolulu, HI 96817

Submitted on: 2/28/2021 11:17:37 AM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
tlaloc tokuda	Individual	Support	No

Comments:

SB337 SD1 is a good start to transition Hawaii to a more sustainable regenerative agriculture. Cover crops are a no brainer for they reduce land degradation, soil erosion, controls weeds-which reduces herbicides use, (depending on cover crop) they can bring nitrogen to the soil, organic matter to the soil, farmers can select cover crops that are good fodder for their grazing animals, cover crops recycle nutrients within the soil Depending on the cover crop, farmers can prescribed grazing or forage harvest, or farmers can incorporate the fallow/rest period with a cover crop. Please get the bill to the floor for passage.

Mahalo for your consideration,

Tlaloc Tokuda

Kailua Kona, HI 96740

Submitted on: 2/28/2021 11:18:59 AM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Nathan Leo Braulick	Individual	Support	No

Comments:

February 28, 2021

Members of the Committee:

I support SB337 which establishes a cover crop reimbursement pilot program to provide up to seventy-five per cent cost reimbursement to farming operations in the State for acquiring cover crop seeds or green manure.

In doing so, it:

- supports sustainable farming practices
- saves farmers money in inputs
- conserves soil and water
- prevents runoff that negatively impacts nearshore reefs and fisheries
- improves soil health and nutrients by building organic matter
- reduces the need for synthetic fertilizers
- builds on similar programs implemented successfully in other states
- helps to rebuild soil on Hawaii's agricultural lands, which are depleted from longterm industrial farming practices

I hope you will also support SB337.

Sincerely,

Nathan Leo Braulick

2333 Kapiolani Blvd.

Honolulu, HI 96826

<u>SB-337-SD-1</u> Submitted on: 2/28/2021 12:07:10 PM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing	
Michael Bursack	Individual	Support	No	

Comments:

Yea

Submitted on: 2/28/2021 12:13:10 PM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Susan Stayton	Individual	Support	No

Comments:

Aloha Senators,

I am writing in support of SB337. I believe it is very important for the State to support sustainable agriculture practices so we can grow mor of our food on the islands. Reducing the need for chemical fertilizers is important to make farming more affordable and sustainable.

Thanks for yor consideration,

Susan

Lawai, HI

Submitted on: 2/28/2021 12:48:13 PM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Marsha Hee	Individual	Support	No

Comments:

I support SB337 because it supports sustainable farming practices. The specific use of cover crops conserves the quality and health of our soil, land, water that impacts the nutrients of food we eat and the health of our people. These types of practices also reduce need for synthetic fertilizers which benefits farmers and helps to rebuild our depleted soil over time from long-term industrial farming practices. Similar programs have already been implemented successfully in other states. This measure impacts us now and in the future as we strive to protect and preserve our natural resources, build a robust food security for a healthy community and economy in Hawaii.

Submitted on: 2/28/2021 1:56:11 PM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Chelle Galarza	Individual	Support	No

Comments:

Aloha I support SB337. I am a mother of 2 living in Maui. As a family of 4 we shop at local farmers markets. This bill supports sustainable farming practices. We need these practices so farmers thrive and not just survive. We need to produce foods locally and not rely on imports. We need to use increase organic matter, improve soil health, nutrients and reduce synthetic fertilizers. I believe the ocean and waters should be protected to prevent runoff impacting nearshore reefs and fisheries, this bill aims to do this. It is important to note that in other places similar programs have been successful. Please consider supporting this bill.

Thanks, Chelle Galarza

Submitted on: 2/28/2021 1:58:54 PM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Melia Leslie	Individual	Support	No

Comments:

I support this bill because:

Supports sustainable farming practices

Cover crops conserve soil and water and prevent runoff impacting nearshore reefs and fisheries

Cover crops build organic matter and improve soil health and nutrients

Reduces the need for synthetic fertilizers, saves farmers money in inputs

Similar programs have already been implemented successfully in other states. Many of Hawai'i's agricultural lands are depleted from long-term industrial farming practices which deplete soil health. Cover crops can help to rebuild soil over time.

Submitted on: 2/28/2021 2:32:15 PM

Testimony for WAM on 3/2/2021 9:30:00 AM

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

Comments:

- This bill is key for reviving the soil and getting rid of pesticides
- It Supports sustainable farming practices
- Cover crops conserve soil and water and prevent runoff impacting nearshore reefs and fisheries
- Cover crops build organic matter and improve soil health and nutrients
- Reduces the need for synthetic fertilizers, saves farmers money in inputs
- Similar programs have already been implemented successfully in other states
- Many of Hawaii's agricultural lands are depleted from long-term industrial farming practices which deplete soil health. Cover crops can help to rebuild soil over time.
- This bill simply makes sense!

Submitted on: 2/28/2021 2:37:16 PM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Sydney Millerd	Individual	Support	No

Comments:

Aloha,

My name is Sydney Millerd and I am writing to express support for SB337. As a student of the University of Hawaii - West Oahu's Sustainable Community Food Systems program, I understand the important role cover crops play in agriculture. Cover crops provide beneficial ecosystem services that include providing nutrients, attracting beneficial organisms, and reducing social loss. Additionally, cover crops greatly benefit farmers as they help to maintain the health and vitality of the soil. Further, if Hawaii hopes to double local food production, providing support for cover crops will help local farmers which, in turn, will aid in achieving the larger goal of increasing local food production.

As a 22-year old soon-to-be college graduate, I look to our legislative leaders to make the right choices now to create a brighter future for Hawaii for my fellow youth and me to live in. This brighter future for Hawaii should include support for our local agriculture industry such as in the form of cover crop reimbursements.

Mahalo for this opportunity to provide testimony.

<u>SB-337-SD-1</u> Submitted on: 2/28/2021 3:11:58 PM

Testimony for WAM on 3/2/2021 9:30:00 AM

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

Comments:

Aloha Senators,

Please, SUPPORT this vital legislation.

Submitted on: 2/28/2021 3:23:42 PM

Testimony for WAM on 3/2/2021 9:30:00 AM

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

Comments:

Aloha,

I totally support SB337 SD1. Protecting one of most valuable resources, the 'Ä€ina by using cover crops is a sound agricultural practice. It benefits the health of the soil, helps to prevent erosion and protects the reefs from excessive runoff of topsoil during big rain events. It also benefits everyone living downwind of the ag fields because the topsoil won't get whipped up into the air like I was watching this past week with our high wind watch and the Mahi Pono fields. I was shocked how much soil was blowing across island and how high it was in the sky. It was really very bad.

I was feeling bad for all the people living downwind from the fields.

Mahalo for considering and passing this Bill,

Ms. Barbara Barry

<u>SB-337-SD-1</u> Submitted on: 2/28/2021 3:28:58 PM

Testimony for WAM on 3/2/2021 9:30:00 AM

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

Comments:

Aloha Senators,

Please, SUPPORT this vital legislation.

Submitted on: 2/28/2021 3:29:39 PM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Deborah Ward	Individual	Support	No

Comments:

Aloha,

I am a small farmer. I grow food for the local table and pay state GE taxes. I would have farmed all my life if I had acces to land, but I worked until I was in my late forties before I could buy land to farm. When I began my farm I planted groundcover, and as a result I have regenerated the depleted cane land to the point that I have healthy orchards. I NEVER use herbicide, and I have a healthy sustainable farm as a result. This bill would encourage young farmers to use groundcovers, reduce erosion and soil runoff, and protect coastal waterways and drinking water from pollution. Please support this bill!

Sincerely, Deborah Ward, Laiku Farm, Kurtistown, HI

Thank you, Deborah Ward, Laiku Farm, Kurtistwon HI

Submitted on: 2/28/2021 5:00:53 PM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing	
Will Caron	Individual	Support	No	

Comments:

Aloha committee members, please support SB337 SD1, which would provide local farmers with a substantial reminbursement for costs associated with cover crop farming operations.

This bills supports sustainable farming practices. Cover crops conserve soil and water and prevent runoff impacting nearshore reefs and fisheries. These crops build organic matter and improve soil health and nutrients, reducing the need for synthetic fertilizers. This, in turn, saves farmers money in input costs.

Many of Hawai'i's agricultural lands are depleted from longterm industrial farming practices which deplete soil health. Cover crops can help to rebuild soil over time, strengethening our resiliency and food independence.

Mahalo for the opportunity to testify.

<u>SB-337-SD-1</u> Submitted on: 2/28/2021 6:06:20 PM

Testimony for WAM on 3/2/2021 9:30:00 AM

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

Comments:

Aloha mai,

I am writing to inform the WAM committee that I fully supoprt SB337. Mahalo.

Brian "loane" Jahn

<u>SB-337-SD-1</u> Submitted on: 2/28/2021 6:32:33 PM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Lanny Sinkin	Individual	Support	No

Comments:

Food security is a major contributor to population well being. Sustainable agriculture should be encouraged whenever possible.

<u>SB-337-SD-1</u> Submitted on: 2/28/2021 7:28:42 PM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Emma Trainor	Individual	Support	No

Comments:

I live in Pahoa HI and am in support of SB337

<u>SB-337-SD-1</u> Submitted on: 2/28/2021 7:39:33 PM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing	
Thomas Brandt	Individual	Support	No	

Comments:

Support.

Submitted on: 2/28/2021 8:09:36 PM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing	
Uma Nagendra	Individual	Support	No	

Comments:

Aloha,

I am writing to SUPPORT SB337, which provides incentives for food producers to be able to use cover crops or green manure.

This bill would help food producers use sustainable farming practices that are shown to conserve soil, prevent runoff, and reduce the need for synthetic fertilizers. These programs are necessary to help establish long-term local agriculture and food production industry.

Thank you for your consideration,

Uma Nagendra

<u>SB-337-SD-1</u> Submitted on: 2/28/2021 8:17:04 PM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Meredith Buck	Individual	Support	No

Comments:

I strongly support SB337. Cover cropping is a vital strategy toward sustainability that I would love to see incentivized in our state. Let's work together to meet our climate and food resilience goals!

<u>SB-337-SD-1</u> Submitted on: 2/28/2021 8:36:58 PM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Tane Datta	Individual	Support	No

Comments:

I support this bill.

<u>SB-337-SD-1</u> Submitted on: 2/28/2021 8:44:16 PM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Chandra Radiance	Individual	Support	No

Comments:

Please vote to help subsidize more cover cropping for maximim soil and therefore food health and thus human health---> Obviously Very basic common sense!

Submitted on: 2/28/2021 9:23:17 PM

Testimony for WAM on 3/2/2021 9:30:00 AM

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

Comments:

Testimony in strong SUPPORT of SB 337 SD 1. In these times of climate change, Hawai'i needs to be enhancing its soils and protecting waterways by mitigating soil erosion with closed loop systems that help eliminate the cost of synthetic inputs.

Cover crops reduce soil erosion because soil coverage provided by these crops reduces both wind and water erosion and prevents runoff into our precious streams, rivers, and nearshore reefs.

Cover cropping supports endangered species habitat, and some cover crops provide direct food resources to wildlife if managed properly. Here is a cover crop factsheet from the

USDA: : https://nrcspad.sc.egov.usda.gov/distributionCenter/pdf.aspx?productID=1026

Additionally, cover crops increase water filtration and reduce ponding on the soil's surface while recycling nutrients within the soil, providing remediation that is sorely needed after over a century and a half of industrial farming practices.

<u>SB-337-SD-1</u> Submitted on: 2/28/2021 9:47:10 PM

Testimony for WAM on 3/2/2021 9:30:00 AM

Subn	nitted By	Organization	Testifier Position	Present at Hearing	
Mar	lies Lee	Individual	Support	No	

Comments:

Yes support

soil health:

Cover crops build organic matter and improve soil health and nutrients

Support Organic:

Reduces the need for synthetic fertilizers, saves farmers money in inputs

Marlies Lee

Submitted on: 2/28/2021 10:40:48 PM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Elizabeth Laliberte	Individual	Support	No

Comments:

Aloha kakou,

I strongly support SB337 in favor of sourcing local cover crop re-imbursements. This bill will help to build organic matter and increase soil health. Soil is a critically important, yet often overlooked resource. On average, 100 years is needed to produce 1 inch of topsoil. Once topsoil is formed, it should be protected from erosion and depletion through the use of cover crops. This bill will incentivize practices that will conserve critically-important soil as well as reduce the need for synthetic fertlizers. Please pass this bill in it's current form. Thank you.

Sincerely yours,

Liz Laliberte

Hilo, HI

<u>SB-337-SD-1</u> Submitted on: 2/28/2021 11:40:44 PM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Kristen Alice	Individual	Support	No

Comments:

Please support this bill.

Submitted on: 3/1/2021 4:42:55 AM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Janet Pappas	Individual	Support	No

Comments:

Dear Chair Dela Cruz, Vice Chair Keith-Agaran and WAM Committee members,

I am in strong support of SB337 SD1 to establish a cover crop pilot program for Hawaii farmers.

Cover crops are a core feature of sustainable farming. Cover crops enrich the soil, help grow healthier crops, sequester carbon better than soil itself and save farmers money on fetilizer and other soil additives. Cover crops are key to resolving our climate crisis.

Establishing the pilot program will teach farmers the value of the various plants that help restore unfertile soil. Every farmer who learns about cover crops becomes a climate crisis mitigation expert whose plants remove carbon from the air and sequester it safely away. We will need lots of these newly-enlightened people!

Please support this bill and the farmers you will in turn be supporting. This is critical ag and climate work.

Thank you for the opportunity to testify.

Sincerely,

Jan Pappas - Aiea, Hawaii

<u>SB-337-SD-1</u> Submitted on: 3/1/2021 9:14:01 AM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
James McCay	Individual	Support	No

Comments:

Aloha Chair Dela Cruz, Vice Chair Keith-Agaran, and members of the WAM Committee, SUPPORT for SB337 is another important foundational step for a more sustainable Hawaii.

Please support this bill and mahalo for your service,

James McCay Honolulu

<u>SB-337-SD-1</u> Submitted on: 3/1/2021 9:20:51 AM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Raelyn Reyno Yeomans	Individual	Support	No

Comments:

Strong support!

Submitted on: 3/1/2021 9:30:04 AM

Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Ingrid Peterson	Individual	Support	No

Comments:

Please support this bill that supports agriculture, a sector of our economy we need to promote as we work toward diversifying our economy. Doing so also lessens our vulnerability of being so heavily reliant on food from outside Hawaii. (From a Windward O'ahu resident since 1963.)

Submitted on: 3/1/2021 12:52:19 PM

Testimony for WAM on 3/2/2021 9:30:00 AM



Submitted By	Organization	Testifier Position	Present at Hearing	
Linda Kay Ross	Individual	Support	No	

Comments:

Lets decrease the 86% to 95% that we import to at least half...we have all the resources to do that...and if Armageddon comes around the near corner..

who is going to make sure all those boxes of food, supplies, gasoline..etc...will get on the boat to this tiny speck of dirt in the middle of the ocean...who will fight, who will give up their life for that?

Submitted on: 3/1/2021 2:06:49 PM

Testimony for WAM on 3/2/2021 9:30:00 AM



Submitted By	Organization	l estifier Position	Present at Hearing
Michelle K.	Individual	Support	No

Comments:

Many of Hawaii's agricultural lands are depleted from long-term industrial farming practices which deplete soil health. Cover crops can help to rebuild soil over time. Please pass this bill into law. Mahalo for your consideration!



<u>SB-337-SD-1</u> Submitted on: 3/1/2021 3:51:26 PM Testimony for WAM on 3/2/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing	
Laura Gray	Individual	Support	No	Ī

Comments:

We must work on becomming independent from the mainland in all thing we do, but most importantly in our food production. It will be the farmers who will save us when we are cut off due to a natural or man-made disaster.

Submitted on: 3/1/2021 5:57:03 PM Testimony for WAM on 3/2/2021 9:30:00 AM



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

Comments:

Aloha,

I strongly support this cover crop bill because it helps our farmers defray costs between plantings and helps them create healthy soil between plantings. Here on Maui things are horrible because Mahi Pono does not have cover crops on their barren fields. The dust blows through Kihei and it is terrible. I doubt they need help planting cover crops, but if we can defray any of the over head as they get started up maybe they would plant cover crops so we do not face a dust bown every day of the summer.

Mahalo, Fitz

<u>SB-337-SD-1</u> Submitted on: 3/1/2021 6:08:07 PM Testimony for WAM on 3/2/2021 9:30:00 AM



Submitted By	Organization	Testifier Position	Present at Hearing
Jennifer Rodwell	Individual	Support	No

Comments:

I thoroughly support this Bill.