

JOSH GREEN, M.D.
Governor

SYLVIA LUKE
Lt. Governor



SHARON HURD
Chairperson, Board of Agriculture

MORRIS M. ATTA
Deputy to the Chairperson

State of Hawai'i
DEPARTMENT OF AGRICULTURE
KA 'OIHANA MAHI'AI
1428 South King Street
Honolulu, Hawai'i 96814-2512
Phone: (808) 973-9600 FAX: (808) 973-9613

TESTIMONY OF SHARON HURD
CHAIRPERSON, BOARD OF AGRICULTURE

BEFORE THE HOUSE COMMITTEE ON AGRICULTURE AND FOOD SYSTEMS

FRIDAY, MARCH 17, 2023
ROOM 325
9:30 A.M.

SENATE BILL NO. 660 SENATE DRAFT 2
RELATING TO AGRICULTURE

Chairperson Gates and Members of the Committee:

Thank you for the opportunity to testify on Senate Bill No. 660, SD2 that requires the Department of Agriculture (Department) to establish a healthy soils program. There is an appropriation for FY 23-24 and the same amount for FY24-25 to establish the program and the required financial incentives. The Department offers comments and has concerns.

The fully developed Healthy Soils Program (Program) is expected to implement and manage a system of awards, financial incentives, and educational and technical assistance to farmers to implement selected farm management practices that will achieve improving soil health and building carbon stocks by small farmers, ranchers, and landowners. Notwithstanding the appropriations contained in this measure, the Department does not possess the elements of a science-based soil management and education program and neither the expertise nor other resources to establish what is needed to operate a responsible, transparent, and effective statewide program envisioned in this measure.

We note that the Program establishes "...standards to phase out the use of petrochemical synthetic fertilizers over a period of five to ten years" (Page 2, lines 5-16) and requires the Department to assist farmers with adopting alternative practices. This phase out of the use of petrochemical fertilizers and requiring the Program's standards and practices on "all state lands leased for agricultural use" (Page 3, lines 1-7) are



inconsistent with the Program's voluntary participation described elsewhere and will impede the majority of Hawaii's agricultural producers from maintaining current production that supports local food self-sufficiency.

This bill does not provide guidance on what public and private collaboration is needed to collect and analyze data and information to establish the necessary baselines and reasonable metrics of achievement that is necessary for the Department to establish standards on which to base preferred farm management practices and educate farmers and landowners who undertake them with awards and financial incentives from the Program.

The Green House Gas Sequestration Task Force (GHGS Task Force) (Section 225P-4) has been in existence since 2018 and is charged with addressing numerous objectives including building healthy soils, sequestering carbon, increasing water-holding capacity, and increasing crop yields. This bill significantly duplicates the outcomes expected from the GHGS Task Force with respect to:

- Identifying agricultural practices to provide greenhouse gas benefits, identifying short-term and long-term benchmarks to indicate how effective these identified agricultural practices have been in reaching the goal;
- Identify criteria to be used in a certification program to measure baseline levels and increases in carbon sequestration, improvements in soil health, and so forth; and
- Identify what incentives, grants, research, and assistance are needed to promote identified agricultural practices.

Conceptually, the Healthy Soils Program as proposed in this measure makes sense as part of the State's overall effort to increase greenhouse gas sequestration which includes carbon and increase soil health. The Department recommends that consideration be given to improving the capacity of existing coordinating programs such as the Greenhouse Gas Sequestration Task Force to undertake their comprehensive responsibilities which includes soil health and sequestering carbon.

Further, this measure appears to be largely duplicative of SB419 that seeks to fund the three-year Hawaii Carbon Smart Land Management Assistant Pilot Program (Act 185, SLH 2022) established in the Department of Land and Natural Resources that has among its responsibilities, the sequestering of greenhouse gases and improving soil health by use of incentive contracts based on to-be established compensation rates.

Thank you for the opportunity to present our testimony.



**TESTIMONY OF
THE DEPARTMENT OF THE ATTORNEY GENERAL
KA 'OIHANA O KA LOIO KUHINA
THIRTY-SECOND LEGISLATURE, 2023**

ON THE FOLLOWING MEASURE:

S.B. NO. 660, S.D. 2, RELATING TO AGRICULTURE.

BEFORE THE:

HOUSE COMMITTEE ON AGRICULTURE AND FOOD SYSTEMS

DATE: Friday, March 17, 2023 **TIME:** 9:30 a.m.

LOCATION: State Capitol, Room 325

TESTIFIER(S): Anne E. Lopez, Attorney General, or
Jodi K. Yi or Bryan C. Yee, Deputy Attorneys General

Chair Gates and Members of the Committee:

The Department of the Attorney General opposes this bill in its current form.

This bill would appropriate money and establish a program to promote healthy soils statewide by, among other things, having the Department of Agriculture "issue awards and other financial incentives" to implement farm management practices that contribute to healthy soils. (Page 2, lines 17-19.) These awards and other financial incentives appear to be grants, and the program would be subject to article VII, section 4, of the Constitution of the State of Hawaii.

Article VII, section 4, of the Constitution of the State of Hawaii provides, "[n]o grant of public money or property shall be made except pursuant to standards provided by law." (Emphasis added.) As we have discussed previously, this bill does not contain sufficient standards for grants of public money. Therefore, for the Department of Agriculture to be able to issue awards and other financial incentives to implement farm management practices that contribute to healthy soils, the bill needs to be amended to include appropriate standards. Examples of existing statutes that provide standards for agencies to issue grants are part II of chapter 9 and sections 10-17, 210D-11, and 383-128, Hawaii Revised Statutes. Additionally, we have attached draft standards to this testimony, which could be inserted as subparagraphs under paragraph (6) at page 2, line 20.

Thank you for the opportunity to present this testimony.

POSSIBLE STANDARDS FOR THE GRANTS IN THIS BILL

- (A) Any grant shall be used exclusively for the purposes of this program.
- (B) The applicant shall indicate capability to properly use the grant to implement farm management practices that contribute to healthy soils.
- (C) The applicant shall comply with all applicable federal and state laws prohibiting discrimination against any person on the basis of race, color, national origin, religion, creed, sex, age, sexual orientation, disability, or any other characteristic protected under applicable federal or state law.
- (D) The grant shall not be used for purposes of entertainment or perquisites.
- (E) The applicant shall comply with other requirements as the department may prescribe.
- (F) All activities undertaken with funds received shall comply with all applicable federal, state, and county statutes and ordinances.
- (G) The applicant shall indemnify and save harmless the State of Hawai'i and its officers, agents, and employees from and against any and all claims arising out of or resulting from activities carried out or projects undertaken with funds provided hereunder, and procure sufficient insurance to provide this indemnification if requested to do so by the department.
- (H) The applicant shall agree to make available to the department all records the applicant may have relating to the grant, to allow state agencies to monitor the applicant's compliance with this section.



Food+ Policy Internship 2023

food@purplemaia.org

March 15, 2023

To: Chair Gates, Vice Chair Kahaloa, and the House Committee on Agriculture and the Food System

Re: SB660, RELATING TO AGRICULTURE

I, Kahealani Acosta, testify **IN SUPPORT** of **SB660**, relating to agriculture.

Hawai'i is positioned as a model ecosystem, especially for having 10 of the 12 soils of the world -- all of which originate from one basaltic, parent source. Soil health, or the capacity for soil to function, is critical for human survival [1]. Soil can be considered as a living organism and requires active nurturing and protection to secure and ensure resources for future generations. Soil health is defined by the balance of chemical, physical, and biological properties [2]. Maintaining these properties, and remediation of degraded soils, is a key strategy towards ecological restoration, positive environmental impact, and addressing soil as an endowment to future generations of the Hawaiian people [3]. In order to reach Hawai'i's state goals of doubling food production, we as an island community must prioritize the health and abundance of our soils.

As a budding farmer, and advocate for sustainable and resilient food systems, I urge the committee to **SUPPORT SB660**. On behalf of the Hawai'i Food+ Policy Internship, I would like to thank Chair Gates, Vice Chair Kahaloa, and the House Committee on Agriculture and Food Systems, for considering the comments made herein.

Me ka mahalo nui (with deep gratitude),

Kahealani & the Food+ Interns

#fixourfoodsystem

References

[1] <http://soilhealth.cals.cornell.edu>

[2] <https://soilhealthhawaii.org/what-is-soil-health/>

[3] Enos, Kameula. (2018). Director of Indigenous Innovations, University of Hawai'i at Mānoa. Personal Communication. Interview for OHA's Conceptual Master Plan for 511-acre property in Wahiawā.

The Food+ Policy internship develops student advocates who learn work skills while increasing civic engagement to become emerging leaders. We focus on good food systems policy because we see the importance and potential of the food system in combating climate change and increasing the health, equity, and resiliency of Hawai'i communities.

In 2023, the cohort of interns are undergraduate and graduate students from throughout the UH System. They are a mix of traditional and nontraditional students, including parents and veterans, who have backgrounds in education, farming, public health, nutrition, and Hawaiian culture.



HAWAI'I FOREST INDUSTRY ASSOCIATION (HFIA)

P. O. Box 66 ❖ 'O'ōkala, HI
96774 Phone: 808-933-9411
Email: hfia@hawaiiiforest.org
Website: www.hawaiiiforest.org

Date: 03/15/2023

TO: AGR Chair Gates, Vice Chair Kahaloa and AGR Committee Members

FROM: The Hawai'i Forest Industry Association (HFIA)

SUBJECT: In Support of SB660 SD2 Relating to Agriculture

Dear Chair Gates and Committee Members,

On behalf of the Directors and members of the Hawai'i Forest Industry Association (HFIA), please support SB660 SD2 Relating to Agriculture.

As an association, we work toward promoting and actualizing Healthy and Productive Forests across the state. We understand the importance of soil health, plant biodiversity and the carbon sequestering capabilities soil and forests ultimately have. For these reasons we also see, understand and empathize with the need to optimize Hawaii's soil health on agricultural lands as well.

Allowing farmers, ranchers and property owners to maintain autonomy over their land and practices is important, which is why SB660's call to provide education, assistance and possibly funding to farmers/landowners is key.

Please support SB660 SD2 to support Hawaii's farmers and landowners in maintaining best practices relevant to soil health and building soil carbon stocks, which will benefit all of Hawaii's residents, visitors today and in the future.

Mahalo for your time and consideration,

Guy Cellier, Acting President

Hawaii Forest Industry Association

Established in 1989, HFIA's is a nonprofit organization founded by people committed to sustainable forest management. HFIA's mission is to promote healthy and productive forests and a sustainable forest industry through management, education, planning, information exchange, and advocacy. HFIA has over 130 members including woodworkers, landowners, sawyers, foundations, foresters, growers, educators, environmentalists, architects, millers, ranchers, and others interested in HFIA's mission and goals.

HFIA Board of Directors

Officers: Acting President/Vice-President Guy Cellier, Secretary Peter D. Simmons, Treasurer Wade Lee
Directors: Thomas Calhoun, Jeremy Campbell, Aaron Hammer, Nickolas Koch, Tai Lake, Michael Sowards, Irene Sprecher, Michael Tam, Jorma Winkler, Ron Wolfe, Aileen Yeh

SB-660-SD-2

Submitted on: 3/15/2023 5:46:58 PM

Testimony for AGR on 3/17/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Colehour Bondera	Kanalani Ohana Farm	Support	Written Testimony Only

Comments:

Aloha Chair & Committee Members:

As a lifetime small-scale farmer and someone who has worked in agriculture my entire life, it is important to recognize that soil is the basis from which things grow.

Not having a Soils Program or Department in the HDOA is contrary to every aspect of supporting farmers from the ground up!

Please seriously consider the fact that by establishing that the HDOA must have such a component, you will be ensuring that when farmers seek assistance that the HDOA cannot refuse due to no Program on the books, which they have done in the past.

While coffee is our farms primary crop, all of our other crops, from table taro, to avocados, to citrus to bananas all flourish in the healthy soils we maintain. We do this certified organically and want to continue to do so with the HDOA as an entity to work with and to seek support and collaboration with henceforth.

Support this legislation and ensure funding and Hawaii can continue to flourish and feed ourselves once again.

Sincerely,

Colehour Bondera

KANALANI OHANA FARM

colemel2@gmail.com

SB-660-SD-2

Submitted on: 3/15/2023 6:11:26 PM

Testimony for AGR on 3/17/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Una Greenaway	Kuaiwi Farm	Support	Written Testimony Only

Comments:

Chair Gabbard, and Vice chair Richards;

Please pass this very important bill. Soils are the foundation of agriculture, and HDOA would be the perfect place to house such a department.

mahalo

Una Greenaway

Kuaiwi Farm

SB-660-SD-2

Submitted on: 3/15/2023 10:02:02 PM

Testimony for AGR on 3/17/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Johann Besserer	Kona Restoration Farm (KCFA member)	Support	Written Testimony Only

Comments:

Soil is the bedrock of all agriculture. But not only is it the medium that we grow our food in, it is also the only readily available and immediately scalable solution to climate change. The World Economic Forum suggests that by increasing soil carbon from 1 to 3 percent on the world's Ag land, we could sequester 1 teraton of carbon from the atmosphere (roughly the amount cumulatively emitted since 1850). Other, peer-reviewed studies put the value at 0.5 -1 tons per hectare per year, a similarly impressive number when multiplied by the ~3.5bn acres of agricultural land on earth.

Soils are our food and our climate solution.



IN SUPPORT OF SB660
RELATING TO AGRICULTURE

Department of Agriculture; Healthy Soils Program; Carbon Sequestration; Appropriation

Aloha Chair, and Esteemed Committee Members,

The Kona Coffee Farmers Association stands in strong support of SB660. The KCFA represent over 170 farms and agribusinesses in the Kona districts and our mission is to protect the economic interests of our growers.

Healthy soils are the baseline requirement for on-farm success and a foundation for sustainable agribusinesses. We cannot increase our food independence if we do not understand and protect our soil ecosystems. Healthy soils translate to healthy plants that are disease resistant. Each island presents unique challenges to maintaining and improving soil health.

Empowering the Department of Agriculture to establish a Healthy Soils program is a necessary first step in bringing Hawaii in line with cutting-edge agriculture states such as California, New Mexico and Washington. Educating and incentivizing stakeholders to protect our soil and better sequester carbon will improve crop yields, boost incomes, reduce diseases, and provide an added buffer for our reef ecosystems.

Thank you for considering this bill. Your attention makes a difference in the lives of hundreds of farmers.

Mahalo nui loa!

Mark Petersen
President



To: The House Committee on Agriculture & Food Systems (AGR)
From: Sherry Pollack, Co-Founder, 350Hawaii.org
Date: Friday, March 17, 2023, 9:30 am

In strong support of SB660 SD2

Aloha Chair Gates, Vice Chair Kahaloa, and AGR Committee members;

I am Co-Founder of the Hawaii chapter of 350.org, the largest international organization dedicated to fighting climate change. 350Hawaii.org **strongly supports SB660 SD2** that would require the Department of Agriculture to establish a Healthy Soils Program. This bill would incentivize regenerative farming, ranching, and land management practices that improve soil health and sequester carbon, as well as educating farmers and providing technical assistance to achieve these goals. By providing farmers with education, technical assistance, and financial incentives to implement farm management practices that contribute to healthy soils, we can ensure that our state's farmland remains fertile, productive, and sustainable for future generations.

350Hawaii endorses the **suggested amendments** to this measure that have been previously offered by the Hawaii Farmers Union United, (HFUU). These amendments seek to have this measure adopt the language from HB443 HD1 which clarifies program function, structuring, and funding approach.

If we are to meet Hawaii's food security goals, assessing and restoring soil health is critical to increasing local food production. Supporting carbon sequestration efforts such as those delineated in this Healthy Soils Program is a win-win for the climate and local food production. To address the climate crisis, we need to move forward on efforts such as those described in SB660 SD2, and we need to do them in earnest.

Mahalo for the opportunity to testify in **strong support** of this important legislation.

Sherry Pollack
Co-Founder, 350Hawaii.org



Testimony from Scott Dahlman, CropLife America

In Opposition to SB 660 SD 1 – Relating to Agriculture

House Committee on Agriculture

Friday, March 17, 9:30 am, rm. 325

Aloha Chair Gates and members of the committee,

CropLife America (CLA) is the national association representing manufacturers, formulators, and distributors of crop enhancement products used in agriculture production. We support and promote scientific-based policy in the regulation of those products at both the state and federal level. We are in opposition to SB 660 SD 1.

First and foremost – farmers need and support healthy soil initiatives, but farmers also need flexibility to utilize the tools that ensure their viability and sustainability. Soil health is one of the backbones of a healthy agricultural system and food supply. CLA supports science-based approaches that contribute to maintenance and improvement of healthy soils. These practices however must fit holistically into systems that maintain a vibrant agricultural industry and affordable food supply. And they must support the farmer. SB 660 does not do that.

Fertilizer nutrients are critical inputs for farmers that help maintain productive and economically viable crop production. Synthetically-produced fertilizers are an economically efficient way for growers to supply the nutrients that their crops demand. They are one of many tools that help enable an affordable food supply that allows for access by the greatest number of people, contributing positively to food security.

SB 660 mandates a shift to natural and organic fertilizers will result in much higher costs to farmers, and subsequently to consumers. Natural and organic fertilizers have much lower nutrient content than synthetic fertilizers. Growers have to apply four to eight times as much fertilizer on a weight basis to satisfy the nutrient requirements of plants, compared to synthetic fertilizers. **This would result in dramatic increase in input costs.**

Because the state of Hawaii imports most of our agricultural inputs, this would also result in increased shipping costs. Ocean freight increased five to six fold since the onset of the pandemic. It has moderated somewhat, but remains three to four times higher than it was several years ago. Importing more fertilizer at these higher costs further compounds the cost issue. Taken together, the higher costs associated with more fertilizer and high freight rates jeopardizes the economic sustainability of an already fragile system of agricultural, food supply, and food security.

There are many synthetic Enhanced Efficiency Fertilizers that release nutrients over time, allowing plants to use them most efficiently. Greater nutrient uptake by plants also means reducing undesirable nutrient loss to the environment. Use of these products should be promoted as a way to make agricultural production more efficient while protecting soil and environmental quality. **Many specialty**

Representing the Crop Protection Industry

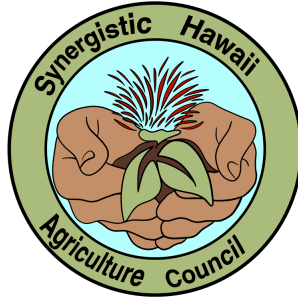
4201 Wilson Boulevard, Suite 700 Arlington, VA 22203 • 202.296.1585 phone 202.463.0474 fax www.croplifeamerica.org



crop producers utilize fertigation or drip irrigation as a way to efficiently supply nutrients to crops with specialized nutrient demands. Natural or organic fertilizers are generally not water soluble by nature. Many growers would be forced to change their entire production systems if soluble synthetic fertilizers were no longer available.

Many horticultural crops also have unique micronutrient needs. Natural and organic fertilizers often do not contain micronutrients in adequate amounts to satisfy plant demand. Synthetically processed and produced micronutrient fertilizers are therefore often critical in supplying required nutrients.

SB 660 impedes farmers from having access to developing technologies in agriculture including development of more effective and affordable fertilizer alternatives. Passing SB 660 does a disservice to the future of agriculture and the ability of farmers to remain viable. SB 660 closes the door to technology. Farmers deserve better.



IN SUPPORT OF SB660
RELATING TO AGRICULTURE

Department of Agriculture; Healthy Soils Program; Carbon Sequestration; Appropriation

Aloha Chair, Vice Chair and Esteemed Committee Members,

The Synergistic Hawai'i Agriculture Council (SHAC) stands in support of this Bill. Our consortium represents 1,500 agribusinesses, from growers to processors and shippers, stretching across the State

Healthy soils are the baseline requirement for on-farm success and a foundation for sustainable agribusinesses. We cannot increase our food independence if we do not understand and protect our soil ecosystems. Each island presents unique challenges to maintaining and improving soil health.

Empowering the Department of Agriculture to establish a Healthy Soils program is a necessary first step in bringing Hawaii in line with cutting-edge agriculture states such as California, New Mexico and Washington. Educating and incentivizing stakeholders to protect our soil and better sequester carbon will improve crop yields, boost incomes, reduce diseases, and provide an added buffer for our reef ecosystems.

Thank you for considering this bill.

Mahalo nui loa!

Suzanne Shriner
Administrator



House Committee on Agriculture & Food Systems

Hawai'i Alliance for Progressive Action (HAPA) Supports: SB660 SD2

Friday, March 17, 2023 9:30am Conference Room 325

Aloha Chair Gates, Vice Chair Kahaloa and Members of the Committee,

HAPA supports SB660 SD2 which would create a healthy soils program within the HDOA.

SB660 SD2 is a comprehensive bill that would provide soil health assessments with a list of practices that are most effective in improving soil health and building soil carbon stocks. Additionally, the program would identify mechanisms for incentivizing practices which build soil health and capture carbon.

We support a sound program and plan to build our soil structure, nutrient capacity and biodiversity. These practices prevent soil erosion by wind and water, which can further enhance air and water quality and have cascading positive impacts in our environment.

We understand we must provide farmers with education and technical assistance to implement farm management practices that contribute to healthy soils and issue awards and other financial incentives to implement farm management practices that contribute to healthy soils.

In recent decades we have learned a great deal about the importance of microbial life, and soil biodiversity in over soil "health". As we realize the impacts heavy industrial practices have in depleting our local soil health for over a century, we must move away from the outdated practices of sterilizing lands with pesticides and herbicides and killing the soil microbes and life¹, and instead support the biodiversity of insects and microbes that are beneficial to soil health². Healthy soils support more pest and climate change resistant crops.

In addition to important things like composting, crop rotation, covercropping and other ways that we can increase organic content, we need to be looking at rehabilitation of old and previously cleared and graded soils to restore soil biodiversity along with organic content. A well-structured program would include qualified soil biologists that could bring these new scientific understandings about soil ecology into the program.

¹ <https://www.scientificamerican.com/article/pesticides-are-killing-the-worlds-soils/>

² <https://www.emnz.com/article/how-pesticides-affect-soil-microbes>



Soil biodiversity provides fertile ground for advancing global sustainability because it integrates so many challenges including climate regulation, water quality, pollution remediation, food and fiber production, and habitat for organisms aboveground and underwater.³

Healthy soil is by far the most biologically diverse part of Earth. The soil food web includes beetles, springtails, mites, worms, spiders, nematodes, fungi, bacteria, and other organisms. These organisms improve the entry and storage of water, resistance to erosion, plant nutrition, and break down of organic matter. These vital ecosystem services are often forgotten and even destroyed through intensive industrialized agriculture⁴.

The Healthy Soils Program is intended to house multiple incentives, like those for cover crops and compost. This approach is similar to California and New Mexico Healthy Soils Programs which fund demonstration and implementation grants that support myriad conservation agriculture practices.

HAPA believes that SB660 SD2 can help to address a range of important issues we face related to degraded and damaged soils, restore and improve soil biodiversity, while also improving the overall quality of our environment and working to sequester carbon. SB660 SD2 is therefore not just important for our local food production agricultural sector but is good for our local environment.

HAPA supports the amendments requested by Hawai'i Farmers Union United (HFUU) based on testimony from the 2022 legislative session (see attached).

Please support SB660 SD2 and healthy soils for Hawai'i.

Thank you for your consideration.

Respectfully,

A handwritten signature in black ink, appearing to read 'Anne Frederick', is written over a light blue horizontal line.

Anne Frederick
Executive Director

³ <https://www.sciencedirect.com/topics/earth-and-planetary-sciences/soil-biodiversity>

⁴ https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_050947.pdf



Proposed Amendments:

SECTION 2. Chapter 141, Hawaii Revised Statutes, is amended by adding a new section to part I to be appropriately designated and to read as follows:

"§141- Healthy soils program; established. (a) The department of agriculture shall establish a healthy soils program. The healthy soils program shall:

- 1) Create a healthy soil assessment and education program
- (2) Provide farmers with education and technical assistance to implement farm management practices that contribute to healthy soils, and
- (3) operate the healthy soil grants program which shall be funded by the state, with the amount of funding available each year determined by the state legislature;
- (4) Administer existing financial incentives to implement farm management practices that contribute to healthy soils, including §141-16 Compost Reimbursement Program and the Cover Crop Reimbursement Pilot program established by Act 312, SLH 2022.
- (5) Establish other programs to accomplish the purposes of the Healthy Soils Program Act based on the based on the findings of the greenhouse gas sequestration task force established pursuant to section 225P-4.

(b) In administering the healthy soil assessment and education program, the department shall:

- (1) work through technical assistance providers or eligible entities to:
 - (a) encourage farmers and ranchers and land managers to undertake voluntary soil health measurements;
 - (b) raise awareness about desirable soil health characteristics;
 - (c) facilitate on-site, producer-led workshops and training sessions to promote and engender soil health stewardship; and

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



(d) complete a baseline soil health assessment by testing the organic matter, water infiltration rate, microbiology and aggregate stability of soils, in addition to analyzing phospholipids and monitoring soil cover;

(2) establish a statewide network of champions to promote soil health stewardship, offer guidance to producers and land managers and encourage teamwork;

(3) create a program to provide ongoing training in soil health stewardship and workshop facilitation for champions and eligible entities;

(4) in collaboration with technical assistance providers, sponsor soil health workshops and training sessions at research centers and learning sites throughout the state; and

(5) educate students and the general public about the importance of soil health stewardship.

(c) In administering the healthy soil grant program, the department shall:

(1) award grants to eligible entities to provide technical assistance to producers and land managers in advancing soil health principles and implementing supported methods;

(2) award grants as financial assistance to eligible farmers, ranchers, and other land managers who implement soil health practices on their lands.

(3) develop a user-friendly grant program application and application and reporting processes;

(4) develop criteria for the award of grants; provided that grants shall be awarded equitably and priority may be given to eligible entities serving young producers, veterans, small farms or ranches or for projects that benefit economically or socially disadvantaged communities; and

(5) ensure that grant funds are only used to advance soil health and soil health stewardship.

(d) The department shall encourage producer, land manager, landowner and interagency collaboration in the management of healthy soils and shall:



(1) work with technical assistance providers to advance soil health stewardship across private, state, and federal land jurisdictions by fostering collaboration among producers, land managers and landowners; and

(2) conduct outreach to producers and land managers to promote the program and other federal, state or local grant opportunities that support and promote healthy soils.

(e) The department of agriculture shall submit a report detailing the status and progress of the healthy soils program, including the number of grants awarded, the types of soil health practices being implemented, and the benefits to soil health and agricultural productivity, to the legislature no later than twenty days prior to the convening of each regular session."



Officers

Kaipo Kekona
State President

Anabella Bruch
Vice-President

Maureen Datta
Secretary

Reba Lopez
Treasurer

Chapter Presidents

Madeline Ross
Kohala, Hawai'i

Odysseus Yacalis
East Hawai'i

Puna, Hawai'i

Andrea Drayer
Ka'u, Hawai'i

Chantal Chung
Kona, Hawai'i

Fawn Helekahi-Burns
Hana, Maui

Reba Lopez
Haleakala, Maui

Kaiea Medeiros
Mauna Kahalawai,
Maui

Kaipo Kekona
Lahaina, Maui

Rufina Kaauwai
Molokai

Negus Manna
Lāna'i

Brynn Foster
North Shore, O'ahu

Christian Zuckerman
Wai'anae, O'ahu

Ted Radovich
Waimanalo, O'ahu

Vincent Kimura
Honolulu, O'ahu

Ray Maki
Kauai

Aloha Chair Gates, Vice Chair Kahaloa, and Members of the House Agriculture & Food Systems Committee,

The Hawaii Farmers Union United (HFUU) is a 501(c)(5) agricultural advocacy nonprofit representing a network of over 2,500 family farmers and their supporters across the Hawaiian Islands. **HFUU strongly supports and seeks to amend SB660.**

Our state's agricultural sector is a vital component of our economy, and it is important that we take steps to support and promote sustainable farming practices. By providing farmers with education, technical assistance, and financial incentives to implement farm management practices that contribute to healthy soils, we can ensure that our state's farmland remains fertile, productive, and sustainable for future generations.

The Healthy Soils Program is intended to house multiple incentives, like those for cover crops and compost. This approach is similar to California and New Mexico Healthy Soils Programs which fund demonstration and implementation grants that support myriad conservation agriculture practices.

The Healthy Soils Program proposed in SB660 takes a comprehensive and holistic approach to soil health and sustainability. By establishing standards and goals for soil health, as well as incentives for small farmers, ranchers, and landowners to take carbon negative actions, this program will help ensure that our agricultural sector remains strong and resilient in the face of changing environmental conditions. We urge the legislature to pass SB660 and invest in the future of our state's agricultural sector by creating a Healthy Soils Program.

Mahalo for the opportunity to testify.

Kaipo Kekona, President HFUU/HFUF

Based on previous testimony and review of healthy soils programs in other states, HFUU requests the adoption of amendments below to clarify program structure, function, and funding allocation, currently articulated in HB443 HD2:

SECTION 2. Chapter 141, Hawaii Revised Statutes, is amended by adding a new section to part I to be appropriately designated and to read as follows:

"§141- Healthy soils program; established. (a)
The department of agriculture shall establish a healthy soils program. The healthy soils program shall:

(1) Create a healthy soil assessment and education program

(2) Provide farmers with education and technical assistance to implement farm management practices that contribute to healthy soils, and

(3) operate the healthy soil grants program which shall be funded by the state, with the amount of funding available each year determined by the state legislature;

(4) Administer existing financial incentives to implement farm management practices that contribute to healthy soils, including §141-16 Compost Reimbursement Program and the Cover Crop Reimbursement Pilot program established by Act 312, SLH 2022.

(5) Establish other programs to accomplish the purposes of the Healthy Soils Program Act based on the based on the findings of the greenhouse gas sequestration task force established pursuant to section 225P-4.

(b) In administering the healthy soil assessment and education program, the department shall:

(1) work through technical assistance providers or eligible entities to:

(a) encourage farmers and ranchers and land managers to undertake voluntary soil health measurements;

(b) raise awareness about desirable soil health characteristics;

(c) facilitate on-site, producer-led workshops and training sessions to promote and engender soil health stewardship; and

(d) complete a baseline soil health assessment by testing the organic matter, water infiltration rate, microbiology and aggregate stability of soils, in addition to analyzing phospholipids and monitoring soil cover;

(2) establish a statewide network of champions to promote soil health stewardship, offer guidance to producers and land managers and encourage teamwork;

(3) create a program to provide ongoing training in soil health stewardship and workshop facilitation for champions and eligible entities;

(4) in collaboration with technical assistance providers, sponsor soil health workshops and training sessions at research centers and learning sites throughout the state; and

(5) educate students and the general public about the importance of soil health stewardship.

(c) In administering the healthy soil grant program, the department shall:

(1) award grants to eligible entities to provide technical assistance to producers and land managers in advancing soil health principles and implementing supported methods;

(2) award grants as financial assistance to eligible farmers, ranchers, and other land managers who implement soil health practices on their lands.

(3) develop a user-friendly grant program application and application and reporting processes;

(4) develop criteria for the award of grants; provided that grants shall be awarded equitably and priority may be given to eligible entities serving young producers, veterans, small farms or ranches or for projects that benefit economically or socially disadvantaged communities; and

(5) ensure that grant funds are only used to advance soil health and soil health stewardship.

(d) The department shall encourage producer, land manager, landowner and interagency collaboration in the management of healthy soils and shall:

(1) work with technical assistance providers to advance soil health stewardship across private, state, and federal land jurisdictions by fostering collaboration among producers, land managers and landowners; and

(2) conduct outreach to producers and land managers to promote the program and other federal, state or local grant opportunities that support and promote healthy soils.

(1) Any grant shall be used exclusively for the purposes of this program.

(2) The applicant shall indicate capability to properly use the grant to implement farm management practices that contribute to healthy soils.

(3) The applicant shall comply with all applicable federal and state laws prohibiting discrimination against any person on the basis of race, color, national origin, religion, creed, sex, age, sexual orientation, disability, or any other characteristic protected under applicable federal or state law.

(4) The grant shall not be used for purposes of entertainment or perquisites.

(5) The applicant shall comply with other requirements as the department may prescribe.

(6) All activities undertaken with funds received shall comply with all applicable federal, state, and county statutes and ordinances.

(7) The applicant shall indemnify and save harmless the State of Hawaii and its officers, agents, and employees from and against any and all claims arising out of or resulting from activities carried out or projects undertaken with funds provided hereunder, and procure sufficient insurance to provide this indemnification if requested to do so by the department. (8) The applicant shall agree to make available to the department all records the applicant may have relating to the grant, to allow state agencies to monitor the applicant's compliance with this section.

(e) The department of agriculture shall submit a report detailing the status and progress of the healthy soils program, including the number of grants awarded, the types of soil health practices being implemented, and the benefits to soil health and agricultural productivity, to the legislature no later than twenty days prior to the convening of each regular session."

also seeks inclusion of the following language to clarify grant administration:

(3) Applications for grants shall be made to the department of agriculture and contain such information as the department of agriculture shall require. At a minimum, the applicant shall show:

- (A) The name of the requesting entity or individual;
- (B) The purpose for the grant;
- (C) The service to be supported by the grant;
- (D) The target group to be benefited;
- (E) The cost of the grant; and
- (F) That the grant shall be used for activities that are consistent with the purposes of this program;

(4) Grants shall only be awarded if:

- (A) The applicant has applied for or received all applicable licenses and permits, when such is required to conduct the activities or provide the services for which a grant is awarded;
- (B) The applicant agrees to comply with applicable federal, state, and county laws;
- (C) The grant is not used for purposes of entertainment or perquisites;
- D) All activities and improvements undertaken with funds received comply with all applicable federal, state, and county statutes and ordinances, including applicable building codes and agency rules; and
- (E) The applicant procures sufficient insurance to provide indemnification if requested to do so by the department of agriculture;

(5) To receive a grant, an applicant shall:

(A) Be:

- (i) A for-profit entity incorporated under the laws of the State;
- (ii) A nonprofit community-based organization determined to be exempt from federal income taxation by the Internal Revenue Service;
- (iii) A cooperative association; or

(iv) An individual, who in the department of agriculture's determination, is able to provide the services or activities proposed in the application for a grant;

(B) In the case of a nonprofit organization, have a governing board whose members have no material conflict of interest and serve without compensation, have bylaws or policies that describe the manner in which business is conducted and policies relating to nepotism and management of potential conflict of interest situations, and not employ or contract with two or more members of a family or kin of the first or second degree of consanguinity unless specifically permitted by the department of agriculture;

(C) Agree to make available to the department of agriculture all records the applicant may have relating to the operation of the applicant's activity, business, or enterprise to allow the department of agriculture to monitor the applicant's compliance with the purpose of this program; and

(D) Establish, to the satisfaction of the department of agriculture, that sufficient funds are available for the effective operation of the activity, business, or enterprise for the purpose for which the grant is awarded;

(6) Every grant shall be:

(A) Monitored by the department of agriculture to ensure compliance with this program and the purposes and intent of the grant; and

(B) Evaluated annually to determine whether the grant attained the intended results in the manner contemplated; and

(7) Grants made by the department of agriculture under this Act may be made without regard to chapters 103D and 103F, Hawaii Revised Statutes."

SB-660-SD-2

Submitted on: 3/16/2023 10:06:29 AM

Testimony for AGR on 3/17/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Erika Zemby	Kona Bae Farm	Support	Written Testimony Only

Comments:

Thanks for supporting SB660. As a small farmer, soil is step one for successful output.

Emily Emmons

Emily@hoolafarms.org
808-494-2613



March 16, 2023

The Honorable Mike Gabbard
Chairman
Committee on Agriculture and Environment
Hawaii State Senate, Room 201
415 South Beretania Street
Honolulu, Hawaii 96813

The Honorable Herbert M. "Tim" Richards, III
Vice Chairman
Committee on Agriculture and Environment
Hawaii State Senate, Room 202
415 South Beretania Street
Honolulu, Hawaii 96813

Aloha Chair Gabbard, Vice-Chair Richards, and Senators DeCoite, Rhoads, and Awa:

Subject: Strong Support of SB660 Healthy Soil Program

By way of introduction, my name is Emily Emmons. I am the co-founder and Executive Director of Ho'ōla Veteran Services 501c3 dba Ho'ōla Farms, established in 2015 to provide natural agriculture educational training and hands-on experiences for military Veterans, their families, and the community in hopes of creating a more sustainable community for all. Over the last two years Ho'ōla Farms has expanded services to adopt a full agribusiness incubator model, with programs including Hawai'i Farm to Car online farmers market, and Hilo Food Hub with commercial kitchen, supporting over 100 Hawai'i Island farmers, producers and agribusinesses.

Our state's agricultural sector is a vital component of our economy, and it is important that we take steps to support and promote sustainable farming practices. By providing farmers with education, technical assistance, and financial incentives to implement farm management practices that contribute to healthy soils, we can ensure that our state's farmland remains fertile, productive, and sustainable for future generations.

The Healthy Soils Program is intended to house multiple incentives, like those for cover crops and compost. This approach is similar to California's Healthy Soils Program which funds demonstration and implementation grants that support myriad conservation agriculture practices.

The Healthy Soils Program proposed in SB660 takes a comprehensive and holistic approach to soil health and sustainability. By establishing standards and goals for soil health, as well as incentives for small farmers, ranchers, and landowners to take carbon negative actions, this program will help ensure that our agricultural sector remains strong and resilient in the face of changing environmental conditions. We are in strong support of SB660 and the investment in the future of our state's agricultural sector by creating a Healthy Soils Program.

With gratitude,

Emily Emmons
Emily E. Emmons
Executive Director



March 16, 2023

Rep. Cedric Asuega Gates, Chair
Rep. Kirstin Kahaloa, Vice Chair
Committee on Agriculture & Food Systems
Friday, March 17, 2023
9:30 am
Via Videoconference

RE: **SB660 SD2** Relating to Agriculture (**Support**)

Dear Chair Gates, Vice Chair Kahaloa & Members of the Committee,

The Chamber of Sustainable Commerce (CSC) testifies in strong support of SB660 SD2, which establishes the Healthy Soils program within the Department of Agriculture, appropriates funds and requires an annual report to the Legislature.

As business owners who believe we can strengthen our economy without hurting workers, consumers, or the environment, we urge this committee to pass SB660 SD2 because it will move us toward greater food security, reduce carbon emissions through sequestration, improve the stewardship of our land and protect our water. This bill will positively impact the economic and physical health of farmers, consumers, and the communities that relies on a healthy environment.

This bill demonstrates an impressive understanding of just how foundational healthy soil is to a sustainable economy. It is evident in some of the testimony in opposition to this bill that farmers could benefit from more education and technical assistance to implement farm management practices that contribute to healthy soils; passage of this bill with sufficient funding could fulfill this need.

It is about time we repair the soil damage left by prior businesses and short-sighted policy makers – from the ground up.

SB-660-SD-2

Submitted on: 3/16/2023 11:17:01 AM

Testimony for AGR on 3/17/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Sharlene Gee	Bea's Knees Farm, LLC	Support	Written Testimony Only

Comments:

In our state's agricultural sector it is important that we take steps to support and promote sustainable farming practices. Those of us in the sector need the education, technical assistance, and financial incentives to implement the practices that contribute to healthy soils. We must do this so that our state's farmland remains fertile, productive, and sustainable for future generations. By establishing standards and goals for soil health, as well as incentives for small farmers, ranchers, and landowners to take carbon negative actions, this program will help ensure that our agricultural sector remains strong and resilient in the face of changing environmental conditions.

Please pass SB660 and invest in the future of our state's agricultural sector. Please help Hawai'i state move towards being able to feed itself.

SB-660-SD-2

Submitted on: 3/16/2023 12:32:27 PM

Testimony for AGR on 3/17/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Dr. Jana Bogs	Beyond Organic Consulting, Inc.	Support	Written Testimony Only

Comments:

As an agricultural professional who works with farmers to help them grow more and better quality foods in eco-friendly ways, I strongly support this bill. Thank you!



HAWAII CROP IMPROVEMENT ASSOCIATION

In Opposition to SB660 SD2
Relating to Agriculture

House Committee on Agriculture & Food Systems

Date: Friday, March 17, 2023

Time: 9:30 AM

Place: Conference Room 325

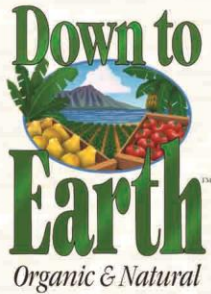
Aloha Chair Gates, Vice Chair Kahaloa, and Members of the Committee:

The Hawaii Crop Improvement Association (HCIA) appreciates the opportunity to provide testimony **in opposition to SB660 SD2**, which establishes the Healthy Soils program within the Department of Agriculture, appropriates funds, and requires an annual report to the Legislature.

While we support healthy soils, we believe this bill is not the best way to achieve that goal after the amendments inserted into the SD1. Phasing out the use of synthetic fertilizers takes away a safe and important tool for our local farmers to grow food. As the state seeks to increase its food production and sustainability goals, this measure runs counter to that.

Mahalo for the opportunity to testify and we ask that you please do not advance this bill.

The Hawaii Crop Improvement Association is a Hawaii-based non-profit organization that promotes modern agriculture to help farmers and communities succeed. Through education, collaboration, and advocacy, we work to ensure a safe and sustainable food supply, support responsible farming practices, and build a healthy economy.



SB660 SD2 RELATING TO AGRICULTURE
House Committee on Agriculture & Food Systems
March 17, 2023, 9:30am State Capitol

Aloha Rep. Cedric Gates, Chair, Rep. Kirsten Kahaloa, Vice Chair, and Committee Members.

Down to Earth Organic and Natural testifies in support of SB660 SD2.

Down to Earth Organic and Natural has six locations on Oahu and Maui. Since we opened in 1977, we have supported healthy lifestyles and preservation of the environment by selling local, fresh, organic and natural products, and by promoting a healthy, plant-based and vegetarian lifestyle.

We ~~are~~ strongly ~~in~~-support of SB3660 SD2, establishing within the Department of Agriculture a Healthy Soils program.

Down to Earth ~~is proud to work~~s closely with many local farmers, and especially those that are committed to using organic and regenerative methods. We are strongly in support of this measure which will provide incentives and assistance for local growers to improve their soil management and will create a statewide assessment of the health of our soils. These measures are crucial to the sustainability of our farmland to produce nourishing foods for thriving communities for many years to come.

Thank you for the opportunity to comment on this bill.

Alison Riggs
Public Policy & Government Relations Manager
Down to Earth

2525 S. King St., Suite 309
Honolulu, HI 96826

Phone (808) 824-3240
Fax (808) 951-8283
E-mail: alison.riggs@downtoearth.org

Corporate Office
P.O. Box 1166
Kailua, HI 96734
Phone: (808) 484-5890
Fax: (808) 484-5896
corporate@downtoearth.org

Oahu Locations

Honolulu
2525 South King Street
Honolulu, HI 96826
Phone: (808) 947-7678
Fax: (808) 943-8491
honolulu@downtoearth.org

Kailua
573 Kailua Road
Suite 101
Kailua, HI 96734
Phone: (808) 262-3838
Fax: (808) 263-3788
kailua@downtoearth.org

Pearlridge
98-211 Pali Momi Street
Suite 950
Aiea, Hawaii 96701
Phone: (808) 488-1375
Fax: (808) 488-4549
pearlridge@downtoearth.org

Kapolei
4460 Kapolei Parkway
Kapolei, Hawaii 96707
Phone: (808) 675-2300
Fax: (808) 675-2323
kapolei@downtoearth.org

Kakaako
500 Keawe St.
Honolulu, HI 96813
Phone: (808) 465-2512
Fax: (808) 465-2305
kakaako@downtoearth.org

Maui Location

Kahului
305 Dairy Road
Kahului, HI 96732
Phone: (808) 877-2661
Fax: (808) 877-7548
kahului@downtoearth.org

www.downtoearth.org

SB-660-SD-2

Submitted on: 3/17/2023 2:18:53 AM

Testimony for AGR on 3/17/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
James Crum	Tinyville Farm	Support	Written Testimony Only

Comments:

As a farmer on the Big Island of Hawaii, and a graduate of both Kohala Center's Beginning Farmer and Rancher Development Program and UH GoFarm's AgXcel program I know that healthy local food starts with healthy soil. Therefore the farmer's first duty is therefore to create and maintain healthy soil and this in turn means we care for the land in this wonderful place we are lucky enough to live. Please show your support of local agriculture and the health of our islands by supporting this bill.

SB-660-SD-2

Submitted on: 3/15/2023 11:40:33 AM

Testimony for AGR on 3/17/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Cards Pintor	Individual	Support	Written Testimony Only

Comments:

Aloha,

I support this bill.

Mahalo nui,

Cards Pintor

SB-660-SD-2

Submitted on: 3/15/2023 3:43:37 PM

Testimony for AGR on 3/17/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Nanea Lo	Individual	Support	Written Testimony Only

Comments:

Hello,

Please support SB660 SD2 to establish a healthy soils program. Soil is a vital and living ecosystem that provides critical functions supporting ecological, economical, and social well-being in Hawai'i. Healthy soils are the foundation of sustainable food production, climate readiness, and diverse ecosystems.

In recent decades, we have learned a great deal about the importance of microbial life, soil biodiversity, and the capacity for soil to capture carbon. Regenerative farming practices capture carbon to enrich soil health. This mitigates agricultural climate impacts while increasing soil productivity for farming.

Much of Hawaii's soils are severely depleted from over a century of industrial agricultural practices. If we are to meet Hawaii's food security goals, assessing and restoring soil health is critical to increasing local food production.

SB660 SD2 is a win-win for our farmers and our local environment. Please support this important measure.

Thank you for your consideration,

Nanea Lo, Mō'ili'ili

SB-660-SD-2

Submitted on: 3/15/2023 3:48:40 PM

Testimony for AGR on 3/17/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Dana Keawe	Individual	Support	Written Testimony Only

Comments:

Support

SB-660-SD-2

Submitted on: 3/15/2023 4:11:04 PM

Testimony for AGR on 3/17/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Bethan Pualani Baptista	Individual	Support	Written Testimony Only

Comments:

Please support SB660. We all need healthy soil for healthy food. As a citizen I earnestly encourage you to support our efforts. I know you all need the same basic foods as we do. As a representative of the people, I urge you to stand firmly in support of SB660 and further ask you to encourage others who have the courage and need for a healthy environment to do the same. With appreciation for your vote I thank you and those you will influence to do the same.

Mahalo Nui Loa, Bethan Pualani Baptista

SB-660-SD-2

Submitted on: 3/15/2023 4:23:54 PM

Testimony for AGR on 3/17/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Teresa Landreau	Individual	Support	Written Testimony Only

Comments:

Please support SB660 SD2 to establish a healthy soils program. Soil is a vital and living ecosystem that provides critical functions supporting ecological, economical, and social well-being in Hawai‘i. Healthy soils are the foundation of sustainable food production, climate readiness, and diverse ecosystems.

In recent decades, we have learned a great deal about the importance of microbial life, soil biodiversity, and the capacity for soil to capture carbon. Regenerative farming practices capture carbon to enrich soil health. This mitigates agricultural climate impacts while increasing soil productivity for farming.

Much of Hawaii’s soils are severely depleted from over a century of industrial agricultural practices. If we are to meet Hawaii’s food security goals, assessing and restoring soil health is critical to increasing local food production.

SB660 SD2 is a win-win for our farmers and our local environment. Please support this important measure.

Thank you for your consideration,

Teresa Landreau

95-129 Ikawelani Place

Mililani Town

SB-660-SD-2

Submitted on: 3/15/2023 4:30:26 PM

Testimony for AGR on 3/17/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Virginia Tincher	Individual	Support	Written Testimony Only

Comments:

Members of the Agriculture and Food Committee,

Mahalo for this opportunity to testify.

SB660 is a win-win. A win for farmers who, according to studies, will increase yields and soil resiliency. A win for the climate through greater and longer lasting absorption of carbon.

Farmers want healthier soil but it takes time, training and money and they have little of those. A Healthy Soils program in Hawaii along with Federal support from the USDA will help.

The investment in training and money support will more than pay for itself with more productive farms, locally grown food and reduced emissions.

Mahalo,

Virginia Tincher, Oahu

SB-660-SD-2

Submitted on: 3/15/2023 6:41:11 PM

Testimony for AGR on 3/17/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Kathy Shimata	Individual	Support	Written Testimony Only

Comments:

Much of Hawaii's soils are severely depleted from over a century of industrial agricultural practices. If we are to meet Hawaii's food security goals, assessing and restoring soil health is critical to increasing local food production.

SB660 SD2 is a win-win for our farmers and our local environment. Please support this important measure.

Mahalo,

Kathy Shimata

Honolulu 96822

SB-660-SD-2

Submitted on: 3/15/2023 7:27:06 PM

Testimony for AGR on 3/17/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Shay Chan Hodges	Individual	Support	Written Testimony Only

Comments:

Please support SB660 SD2 to establish a healthy soils program. Soil is a vital and living ecosystem that provides critical functions supporting ecological, economical, and social well-being in Hawai‘i. Healthy soils are the foundation of sustainable food production, climate readiness, and diverse ecosystems.

In recent decades, we have learned a great deal about the importance of microbial life, soil biodiversity, and the capacity for soil to capture carbon. Regenerative farming practices capture carbon to enrich soil health. This mitigates agricultural climate impacts while increasing soil productivity for farming.

Much of Hawaii’s soils are severely depleted from over a century of industrial agricultural practices. If we are to meet Hawaii’s food security goals, assessing and restoring soil health is critical to increasing local food production.

SB660 SD2 is a win-win for our farmers and our local environment. Please support this important measure.

Thank you for your consideration,

Shay Chan Hodges

Maui, HI 96708

SB-660-SD-2

Submitted on: 3/15/2023 7:31:28 PM

Testimony for AGR on 3/17/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Ezgi Green	Individual	Support	Written Testimony Only

Comments:

Please support SB660 SD2 to establish a healthy soils program. Soil is a vital living ecosystem that provides critical functions supporting ecological, economic, and social well-being in Hawai'i. Healthy soils are the foundation of sustainable food production, climate readiness, and diverse ecosystems.

In recent decades, we have learned a great deal about the importance of microbial life, soil biodiversity, and the capacity of soil to capture carbon. Regenerative farming practices capture carbon to enrich soil health. This mitigates agricultural climate impacts while increasing soil productivity for farming.

Much of Hawaii's soils are severely depleted from over a century of industrial and agricultural practices. Assessing and restoring soil health is critical to increasing local food production to meet Hawaii's food security goals.

SB660 SD2 is a win-win for our farmers and our local environment. Please support this vital measure.

Thank you for your consideration,

Ezgi Green, Kaimanu/Waialua

SB-660-SD-2

Submitted on: 3/15/2023 7:56:38 PM

Testimony for AGR on 3/17/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Mary Lu Kelley	Individual	Support	Written Testimony Only

Comments:

Aloha.

Please support SB660 SD2 to establish a healthy soils program. Soil is a vital and living ecosystem that provides critical functions supporting ecological, economical, and social well-being in Hawai'i. Healthy soils are the foundation of sustainable food production, climate readiness, and diverse ecosystems.

In recent decades, we have learned a great deal about the importance of microbial life, soil biodiversity, and the capacity for soil to capture carbon. Regenerative farming practices capture carbon to enrich soil health. This mitigates agricultural climate impacts while increasing soil productivity for farming.

Much of Hawaii's soils are severely depleted from over a century of industrial agricultural practices. If we are to meet Hawaii's food security goals, assessing and restoring soil health is critical to increasing local food production.

SB660 SD2 is a win-win for our farmers and our local environment. Please support this important measure.

Thank you for your consideration,

Mary Lu Kelley

Lawai, Kauai, HI

SB-660-SD-2

Submitted on: 3/15/2023 8:55:27 PM

Testimony for AGR on 3/17/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Dennis O'Shea	Individual	Support	Written Testimony Only

Comments:

Please support this bill. Healthy soil is essential to healthy food.

SB-660-SD-2

Submitted on: 3/16/2023 6:15:05 AM

Testimony for AGR on 3/17/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Caroline Azelski	Individual	Support	Written Testimony Only

Comments:

In support of SD2. Thank you.

SB-660-SD-2

Submitted on: 3/16/2023 6:57:07 AM

Testimony for AGR on 3/17/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
pamela burrell	Individual	Support	Written Testimony Only

Comments:

Aloha Senators,

Much of Hawaii's soils are severely depleted from over a century of industrial agricultural practices. If we are to meet Hawaii's food security goals, assessing and restoring soil health is critical to increasing local food production.

SB660 SD2 is a win-win for our farmers and our local environment. Please support this important measure.

Thankyou for your time and consideration,

pamela burrell, Kalihiwai, Kaua'i

SB-660-SD-2

Submitted on: 3/16/2023 7:43:30 AM

Testimony for AGR on 3/17/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Shannon Rudolph	Individual	Support	Written Testimony Only

Comments:

support

SB-660-SD-2

Submitted on: 3/16/2023 8:03:57 AM

Testimony for AGR on 3/17/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Lynn J Ishii	Individual	Support	Written Testimony Only

Comments:

Please support SB660 SD2 to establish a healthy soils program. Soil is a vital and living ecosystem that provides critical functions supporting ecological, economical, and social well-being in Hawai‘i. Healthy soils are the foundation of sustainable food production, climate readiness, and diverse ecosystems.

I realize the difficulty in shifting away from industrialized mono-crop plow farming. However, this type of farming method is proving to be unsustainable and requires increasing amounts of chemical inputs, herbicides, and insecticides– all of which are poisoning our communities, animal/microbial life, and our precious water.

In recent decades, we have learned a great deal about the importance of microbial life, soil biodiversity, and the capacity for soil to capture carbon. Regenerative farming practices capture carbon to enrich soil health. This mitigates agricultural climate impacts while increasing soil productivity for farming.

Much of Hawaii's soils are severely depleted from over a century of industrial agricultural practices. If we are to meet Hawaii's food security goals, assessing and restoring soil health is critical to increasing local food production.

SB660 SD2 is a win-win for our farmers and our local environment. Please support this important measure.

Thank you for your consideration,

Lynn Ishii, Wahiawā

SB-660-SD-2

Submitted on: 3/16/2023 10:11:17 AM

Testimony for AGR on 3/17/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Ken Stover	Individual	Support	Written Testimony Only

Comments:

Our state's agricultural sector is a vital component of our economy, and it is important that we take steps to support and promote sustainable farming practices. By providing farmers with education, technical assistance, and financial incentives to implement farm management practices that contribute to healthy soils, we can ensure that our state's farmland remains fertile, productive, and sustainable for future generations.

The Healthy Soils Program is intended to house multiple incentives, like those for cover crops and compost. This approach is similar to California's Healthy Soils Program which funds demonstration and implementation grants that support myriad conservation agriculture practices.

The Healthy Soils Program proposed in SB660 takes a comprehensive and holistic approach to soil health and sustainability. By establishing standards and goals for soil health, as well as incentives for small farmers, ranchers, and landowners to take carbon negative actions, this program will help ensure that our agricultural sector remains strong and resilient in the face of changing environmental conditions. We urge the legislature to pass SB660 and invest in the future of our state's agricultural sector by creating a Healthy Soils Program.

Ken & Karen Stover

SB-660-SD-2

Submitted on: 3/16/2023 10:15:13 AM

Testimony for AGR on 3/17/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Rexann Dubiel	Individual	Support	Written Testimony Only

Comments:

Soil is EVERYTHING!

PLEASE...PASS THIS BILL.

SB-660-SD-2

Submitted on: 3/16/2023 10:31:02 AM

Testimony for AGR on 3/17/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Michdelle Melendez	Individual	Support	Written Testimony Only

Comments:

I strongly support this bill.

SB-660-SD-2

Submitted on: 3/16/2023 10:35:15 AM

Testimony for AGR on 3/17/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Lois Crozer	Individual	Support	Written Testimony Only

Comments:

Healthy soil is everything. We need to be more sustainable because we live on an island far away from food sources. We have a lot of people to feed, and if anything happens where we can't import food, we are not going to do well.

SB-660-SD-2

Submitted on: 3/16/2023 10:36:26 AM

Testimony for AGR on 3/17/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Marilyn Mick	Individual	Support	Written Testimony Only

Comments:

Aloha,

The Healthy Soils Program is intended to house multiple incentives, like those for cover crops and compost. This approach is similar to California’s Healthy Soils Program which funds demonstration and implementation grants that support myriad conservation agriculture practices.

The Healthy Soils Program proposed in SB660 takes a comprehensive and holistic approach to soil health and sustainability. By establishing standards and goals for soil health, as well as incentives for small farmers, ranchers, and landowners to take carbon negative actions, this program will help ensure that our agricultural sector remains strong and resilient in the face of changing environmental conditions. We urge the legislature to pass SB660 and invest in the future of our state's agricultural sector by creating a Healthy Soils Program.

Mahalo, Marilyn Mick, Honolulu

SB-660-SD-2

Submitted on: 3/16/2023 10:45:36 AM

Testimony for AGR on 3/17/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Scott Crawford	Individual	Support	Written Testimony Only

Comments:

As someone who works for food security in East Maui through traditional Hawaiian agriculture, and through my work the Hana Farmers Market, I strongly support and urge you to pass this bill SB660.

Health soils are the basis for healthy food, healthy people and healthy community!

SB-660-SD-2

Submitted on: 3/16/2023 10:55:56 AM

Testimony for AGR on 3/17/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Robert Bence	Individual	Support	Remotely Via Zoom

Comments:

support

SB-660-SD-2

Submitted on: 3/16/2023 10:58:53 AM

Testimony for AGR on 3/17/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Mary	Individual	Support	Written Testimony Only

Comments:

Health Soils are imperative both for carbon sequestration and for growing healthful food for local consumption. Please vote in favor of this bill.

SB-660-SD-2

Submitted on: 3/16/2023 11:22:05 AM

Testimony for AGR on 3/17/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Rebekah Cryderman	Individual	Support	Written Testimony Only

Comments:

Our state's agricultural sector is a vital component of our economy, and it is important that we take steps to support and promote sustainable farming practices so they can carry into the future. By providing farmers with education, technical assistance, and financial incentives to implement farm management practices that contribute to healthy soils, we can ensure that our state's farmland remains fertile, productive, and sustainable for future generations. Healthy soil is the basis for healthy agriculture and therefore for a healthy community and economy. Please approve this measure for the good of Hawai'i's agricultural future.

SB-660-SD-2

Submitted on: 3/16/2023 11:26:38 AM

Testimony for AGR on 3/17/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Sunny Savage	Individual	Support	Written Testimony Only

Comments:

In strong support!

SB-660-SD-2

Submitted on: 3/16/2023 11:42:23 AM

Testimony for AGR on 3/17/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Carolyn Witcover	Individual	Support	Written Testimony Only

Comments:

Please support this important Bill. By providing farmers with education, technical assistance, and financial incentives to implement farm management practices that contribute to healthy soils, we can ensure that our state's farmland remains fertile, productive, and sustainable for future generations.

The Healthy Soils Program is intended to house multiple incentives, like those for cover crops and compost. This approach is similar to California's Healthy Soils Program which funds demonstration and implementation grants that support myriad conservation agriculture practices.

SB-660-SD-2

Submitted on: 3/16/2023 12:26:38 PM

Testimony for AGR on 3/17/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Karen Reid	Individual	Support	Written Testimony Only

Comments:

We urge the legislature to pass SB660 and invest in the future of our state's agricultural sector by creating a Healthy Soils Program.

SB-660-SD-2

Submitted on: 3/16/2023 1:03:33 PM

Testimony for AGR on 3/17/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Barbara Barry	Individual	Support	Written Testimony Only

Comments:

Aloha ,

I strongly support this Bill. Healthy food and grasslands start with healthy soil.
please pass this Bill asap.

Mahalo,

SB-660-SD-2

Submitted on: 3/16/2023 1:17:45 PM

Testimony for AGR on 3/17/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Thomas Brandt	Individual	Support	Written Testimony Only

Comments:

Strong support!

SB-660-SD-2

Submitted on: 3/16/2023 1:17:49 PM

Testimony for AGR on 3/17/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Shannon Lush	Individual	Support	Written Testimony Only

Comments:

This healthy soils program is necessary to help with sustaining and growing our healthy soils around Hawaii! We need to maintain healthy soils and teach others the benefits.

SB-660-SD-2

Submitted on: 3/16/2023 1:23:59 PM

Testimony for AGR on 3/17/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Raphiell Nolin	Individual	Support	Written Testimony Only

Comments:

I strongly support SB660. Healthy soils is the foundation of healthy food, which is of number one importance in good health!

SB-660-SD-2

Submitted on: 3/16/2023 1:35:00 PM

Testimony for AGR on 3/17/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Barbara Best	Individual	Support	Written Testimony Only

Comments:

Environment will benefit and accountability will help

SB-660-SD-2

Submitted on: 3/16/2023 1:42:47 PM

Testimony for AGR on 3/17/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
petra zoeller	Individual	Support	Written Testimony Only

Comments:

Aloha,

let's assist in creating healthy soils for a sustainable agriculture toward a more food secure Hawaii.

Mahalo,

Petra Zoeller

SB-660-SD-2

Submitted on: 3/16/2023 2:48:30 PM

Testimony for AGR on 3/17/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Sara Gilligan	Individual	Support	Written Testimony Only

Comments:

Our state's agricultural sector is a vital component of our economy, and it is important that we take steps to support and promote sustainable farming practices. By providing farmers with education, technical assistance, and financial incentives to implement farm management practices that contribute to healthy soils, we can ensure that our state's farmland remains fertile, productive, and sustainable for future generations.

The Healthy Soils Program is intended to house multiple incentives, like those for cover crops and compost. This approach is similar to California's Healthy Soils Program which funds demonstration and implementation grants that support myriad conservation agriculture practices.

The Healthy Soils Program proposed in SB660 takes a comprehensive and holistic approach to soil health and sustainability. By establishing standards and goals for soil health, as well as incentives for small farmers, ranchers, and landowners to take carbon negative actions, this program will help ensure that our agricultural sector remains strong and resilient in the face of changing environmental conditions. We urge the legislature to pass SB660 and invest in the future of our state's agricultural sector by creating a Healthy Soils Program.

SB-660-SD-2

Submitted on: 3/16/2023 4:58:49 PM

Testimony for AGR on 3/17/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Helmut Klauer	Individual	Support	Written Testimony Only

Comments:

Protecting and enhancing our soil will keep us healthy and make us less reliant on imported food!

SB-660-SD-2

Submitted on: 3/16/2023 6:54:43 PM

Testimony for AGR on 3/17/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Kevin Mulkern	Individual	Support	Written Testimony Only

Comments:

Pleas support healthy soils!

Kevin Mulkern

808 396 6595

SB-660-SD-2

Submitted on: 3/16/2023 7:47:16 PM

Testimony for AGR on 3/17/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Elaine Wender	Individual	Support	Written Testimony Only

Comments:

Strongly support.

SB-660-SD-2

Submitted on: 3/16/2023 8:00:11 PM

Testimony for AGR on 3/17/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Soo Sun Choe	Individual	Support	Written Testimony Only

Comments:

SB 660 is a critical piece of legislation for the future health and sustainability of our island soils and to support the work of farmers engaging in carbon negative agricultural practices.

SB-660-SD-2

Submitted on: 3/17/2023 12:32:25 AM

Testimony for AGR on 3/17/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Lauren Nelson	Individual	Support	Written Testimony Only

Comments:

Aloha e Chair Gates, Vice Chair Kahaloa and Members of the House Committee on Agriculture and Food Systems,

Please support SB660 SD2 to establish a healthy soils program. Soil is a vital and living ecosystem that provides critical functions supporting ecological, economical, and social well-being in Hawai'i. Healthy soils are the foundation of sustainable food production, climate readiness, and diverse ecosystems.

In recent decades, we have learned a great deal about the importance of microbial life, soil biodiversity, and the capacity for soil to capture carbon. Regenerative farming practices capture carbon to enrich soil health. This mitigates agricultural climate impacts while increasing soil productivity for farming.

Much of Hawai'i's soils are severely depleted from over a century of industrial agricultural practices. If we are to meet Hawai'i's food security goals, assessing and restoring soil health is critical to increasing local food production.

SB660 SD2 is a win-win for our farmers and our local environment. Please support this important measure.

Mahalo for your consideration,

Lauren Nelson

Makawao, Hawai'i

SB-660-SD-2

Submitted on: 3/17/2023 5:04:06 AM

Testimony for AGR on 3/17/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Nancy Romaine	Individual	Support	Written Testimony Only

Comments:

Aloha,

Please support SB660 SD2, as soil health is foundational to our achieving agricultural self-sufficiency.

Mahalo,

Nancy Romaine

SB-660-SD-2

Submitted on: 3/17/2023 6:14:21 AM

Testimony for AGR on 3/17/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Eden Peart	Individual	Support	Written Testimony Only

Comments:

Aloha

Please support this bill that will have long range positive effects.

Mahalo

SB-660-SD-2

Submitted on: 3/17/2023 8:03:26 AM

Testimony for AGR on 3/17/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Dennis F Lokmer	Individual	Support	Written Testimony Only

Comments:

I urge strong support for this bill. DFL