JOSH GREEN, M.D. GOVERNOR | KE KIA'ĀINA

SYLVIA LUKELIEUTENANT GOVERNOR | KA HOPE KIA ĀINA





STATE OF HAWAI'I | KA MOKU'ĀINA 'O HAWAI'I DEPARTMENT OF LAND AND NATURAL RESOURCES KA 'OIHANA KUMUWAIWAI 'ĀINA

P.O. BOX 621 HONOLULU, HAWAII 96809

Testimony of DAWN N. S. CHANG Chairperson

Before the Senate Committee on HIGHER EDUCATION

Thursday, March 13, 2025 3:05 PM State Capitol, Conference Room 229 and Via Videoconference

In consideration of HOUSE BILL 1337, HOUSE DRAFT 1 RELATING TO ENDEMIC PLANTS

House Bill 1337, House Draft 1, requires the University of Hawai'i to establish an endemic plant seed bank pilot program to preserve and promote the planting of plant species that are endemic to Hawai'i. The Department of Land and Natural Resources (Department) supports this bill.

Seed banks are critical for providing a safe place to hold large volumes of seeds stored in low-humidity environments until needed. The Department's Division of Forestry and Wildlife (DOFAW) supports investments in seed banks across the state to enable plant conservation and restoration and to create resilient landscapes with a coordinated strategy. Recently, much of the focus at DOFAW has been on ways to increase statewide nursery and seed banking capacity to meet future needs. The University of Hawai'i at Mānoa's Lyon Arboretum currently has an endemic seed bank. DOFAW supports expanding ongoing efforts at the University of Hawai'i to coordinate with others working in this arena.

Restoration of degraded ecosystems and rehabilitation of landscapes after wildfire in Hawai'i requires large amounts of locally adapted native plant seed. Restoration practitioners on all islands have confirmed that access to locally adapted plant materials is a major limiting factor for their projects. Ongoing research has shown that the seeds of most Hawaiian plants can be stored in seed banks for years until they are needed. Investments in locating source populations in remote areas, securing seed collections in seed banks, and marshaling the resources to plant the right seeds at the right time in the right place are urgently needed in many of Hawai'i's conservation institutions.

Mahalo for the opportunity to testify on this measure.

DAWN N.S. CHANG

CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE
MANAGEMENT

RYAN K.P. KANAKA'OLE FIRST DEPUTY

CIARA W.K. KAHAHANE DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
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HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

Testimony Presented Before the
Senate Committee on Higher Education
March 13, 2025 at 3:05 p.m.
By
Parwinder Grewal, Dean
College of Tropical Agriculture and Human Resilience
And
Michael Bruno, Provost
University of Hawai'i at Mānoa

HB 1337 HD1 - RELATED TO ENDEMIC PLANTS

Chair Kim, Vice Chair Kidani, and Members of the Committee:

The University of Hawai'i (UH) supports the intent of this community initiative and offers comments on HB 1337 HD1 relating to endemic plants which requires the University of Hawai'i at Mānoa College of Tropical Agriculture and Human Resilience (CTAHR) to establish an endemic plant seed bank pilot program to preserve and promote the planting of plant species that are endemic to Hawai'i.

We support the intent of this bill and respectfully offer the following comments. CTAHR currently has a small seed production program focused exclusively on agriculturally important crop varieties. CTAHR also has interest in preserving and promoting endemic plant species and has recently received a grant to produce mix plant species seeds of native plants to support reforestration efforts following wildfires. To establish the proposed endemic plant species seed bank, CTAHR has the land and expertise to produce the seed but would need lab, greenhouse, and storage facilities and staff positions. CTAHR recently learned that there are possibly 5 seed banks in the State that work with endemic and rare native plant collections. Because of this information, CTAHR respectfully suggests that the purpose of the bill be amended to a pilot study to bring the various seed bank partners together to develop a plan to build a large storage facility for the restoration process of endemic plants. Funds are needed for the Phase I planning and design of \$700,000 for the storage facility, and one (1.0 FTE) APT position for the seed production lab to help with the coordination of seed production, storage and emergency preparedness in landscape restoration for natural disasters. This facility would serve as a hub/central agency to produce and store large quantities of seed for landscape reforestation with endemic native plants.

Thank you for the opportunity to provide comments.

BIISC 23 E. Kawili St. Hilo, HI 96720 (808) 933-3340 www.biisc.org



March 11, 2025

Hearing: Senate Committee on Higher Education

RE: HB1337

Aloha Chair Kim, Vice Chair Kidani, and Members of the Committee,

The Big Island Invasive Species Committee would like to express strong support for HB1337, which requires the University of Hawaiʿi to establish an endemic plant seed bank pilot program to preserve and promote the planting of plant species that are endemic to Hawaiʿi. This initiative is a critical step toward conserving and restoring the unique native flora in Hawaiʿi, many of which are at risk due to habitat destruction, wildfires, climate change, and the spread of invasive species.

Seed banking is an essential conservation tool that allows us to store and preserve plant genetic material for future use. We can protect species from extinction and enhance efforts to restore degraded habitats by collecting and properly storing native seeds. A native seed bank is akin to an insurance policy ensuring restoration practices can endure, even after catastrophic events like the Lahaina wildfires. After a tragedy on that scale, it is crucial to sow native seeds where invasive grasses and plants once grew to stabilize the soil, reduce runoff into the oceans, and promote aquifer recharging. However, Hawai'i did not have a bank of seeds from Maui, and the invasive species took back control of the landscape.

Furthermore, seed banking can protect a species from extinction. Many endemic species, such as *Kanaloa kahoolawensis*, are extinct in the wild and only exist in cultivation thanks to conservation efforts.

Ecosystem loss and climate change will continue, making it harder to harvest wild seeds sustainably. Therefore, the time to begin seed banking is now. HB1337 will greatly help safeguard the rich botanical heritage in Hawai'i. Thank you for your time and dedication to preserving our natural resources.

Franny Kinslow Brewer Program Manager fbrewer@hawaii.edu (808) 933-3340

<u>HB-1337-HD-1</u> Submitted on: 3/11/2025 10:22:47 PM

Testimony for HRE on 3/13/2025 3:05:00 PM

Submitted By	Organization	Testifier Position	Testify
Ted Bohlen	Testifying for Hawaii Reef and Ocean Coalition	Support	Written Testimony Only

Comments:

SUPPORT endemic seed bank



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 13, 2025

HEARING BEFORE THE SENATE COMMITTEE ON HIGHER EDUCATION

TESTIMONY ON HB 1337, HD1 RELATING TO ENDEMIC PLANTS

Conference Room 229 & Videoconference 3:05 PM

Aloha Chair Kim, Vice-Chair Kidani, and Members of the Committee:

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

The Hawai'i Farm Bureau supports HB 1337, HD1, which requires the University of Hawai'i College of Tropical Agriculture and Human Resilience to establish an endemic plant seed bank pilot program to preserve and promote the planting of plant species that are endemic to Hawai'i.

Hawai'i's unique ecosystem is home to many endemic plant species that are found nowhere else in the world. These plants play a critical role in preserving biodiversity, preventing erosion, and maintaining the health of Hawai'i's environment. However, many endemic species are threatened by habitat loss, climate change, and invasive species, making conservation efforts increasingly urgent.

Establishing a seed bank program will help ensure that Hawaiʿi's endemic plants are preserved for future generations. By collecting, storing, and propagating seeds from native plant species, this program will create a valuable resource for conservationists, land managers, farmers, and researchers. Additionally, promoting the planting of endemic species can enhance reforestation efforts, support watershed restoration, and contribute to the long-term sustainability of Hawaiʿi's natural and agricultural landscapes.

Thank you for the opportunity to testify on this important matter.

<u>HB-1337-HD-1</u> Submitted on: 3/11/2025 7:39:55 AM

Testimony for HRE on 3/13/2025 3:05:00 PM

Submitted By	Organization	Testifier Position	Testify
Dylan P. Armstrong	Individual	Support	Written Testimony Only

Comments:

Testimony in support without elaboration, none being needed.

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Natalie Urminska Kaua'i





Aloha Chair Kim, Vice Chair Kidani, and Members of the Senate Higher Education Committee,

The Hawai'i Farmers Union is a 501(c)(5) agricultural advocacy nonprofit representing a network of over 2,500 family farmers and their supporters across the Hawaiian Islands. **HFU supports HB1337.**

Hawaii's endemic plants, found nowhere else on Earth, are an integral part of our environment, and preserving their seeds secures the genetic diversity vital for conservation efforts. By mandating the University of Hawaii to spearhead this pilot program, the bill addresses an important need to protect the rich biodiversity of our islands. In addition to their cultural significance, these plants may offer resilience against the effects of climate change, pests, and diseases, strengthening Hawaii's ecosystems and agricultural landscapes.

Endemic plants have co-evolved with Hawaii's distinct ecosystems, making them particularly well-suited to local growing conditions and resilient in the face of environmental changes. Establishing a seed bank ensures the preservation of these valuable species. By protecting and promoting endemic plant species, we are investing in the health of our environment and perpetuating the natural heritage that makes Hawaii truly unique. HB1337 is not just about preserving the past; it is about nurturing the land for future generations.

Mahalo for the opportunity to testify.

Hunter Heaivilin Advocacy Director Hawai'i Farmers Union