

HB-819-HD-2

Submitted on: 3/13/2023 7:33:20 PM

Testimony for TCA on 3/16/2023 3:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Malia Heimuli	Testifying for Limu Hui with Kuaaina Ulu Auamo (KUA)	Support	In Person

Comments:

Aloha mai kākou,

As a representative of the Limu Hui with Kua‘āina Ulu ‘Auamo (KUA), we support naming Limu Kala as the State Limu.

We hope this bill will spread awareness of the importance of limu to both our nearshore marine and island ecosystems here in Hawai‘i.

I ola limu kala!

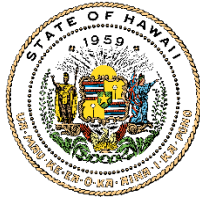
Me ka ha‘aha‘a,

Malia Heimuli

Limu Hui Coordinator, Kua‘āina Ulu ‘Auamo (KUA)

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

SYLVIA LUKE
LIEUTENANT 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
TRANSPORTATION AND CULTURE AND THE ARTS

Thursday, March 16, 2023
3:00 PM

State Capitol, Conference Room 224 & Videoconference

In consideration of
HOUSE BILL 819, HOUSE DRAFT 2
RELATING TO LIMU KALA

House Bill 819, House Draft 2 proposes to designate Limu Kala (*Sargassum echinocarpum*) as the official Hawai'i State Limu. **The Department of Land and Natural Resources (Department) fully supports this measure.**

This bill acknowledges and promotes the critical role that limu plays in our natural environment and in sustaining the people of Hawai'i. Limu Kala is an excellent choice for the state limu due to its numerous uses and significant cultural importance. Traditionally, the word "limu" included a broad range of organisms such as terrestrial moss and lichen, and even some marine zoanthids. However, for the purpose of this testimony, "limu" refers to native aquatic botanical species such as algae and seagrass.

The Department realizes the decline of desirable limu species, including Limu Kala, throughout the State. Limu is an "indicator species" (an organism whose presence, absence, or abundance reflects a specific environmental condition). The presence, absence or change in abundance of an indicator species can signal a change in the biological condition of an ecosystem, and may therefore be used as a proxy to diagnose the health of an entire ecosystem. The presence of native limu is an indicator of a healthy marine ecosystem. Many species of limu, including limu kala, need a brackish environment and therefore grow in abundance where there is mauka-makai water connectivity of kahawai (streams) or punawai (springs) to muliwai (river mouths or estuaries) to kai (ocean). Therefore, designating an official Hawai'i state limu, and limu kala in particular that grows where fresh and ocean water mix, honors the interdependence and connectivity of Hawai'i's environment.

DAWN N. S. CHANG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
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HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

Currently, the Department is supporting non-government organizations in the propagation of limu species for community driven restoration projects. Additionally, the Department has documented the proliferation of limu‘ē (non-native algae) and its detrimental impact on native benthic species such as limu and coral. In response, a decade ago the Department established an urchin hatchery. Urchins produced by the hatchery are released in areas with high limu‘ē concentrations. These urchins then feed on the limu‘ē, reducing their populations.

The Department recognizes that in Hawai‘i’s modern context there is an underappreciation of limu. House Bill 819, House Draft 2 is an excellent opportunity to increase awareness, understanding, and appreciation of limu in Hawai‘i, particularly Limu Kala.

Mahalo for the opportunity to provide testimony in support of this measure.



Testimony Before The
House Committee on Transportation and Culture and the Arts
IN SUPPORT OF HB 819 HD2
March 16, 2023, 3:00PM, Room 224

We are Malia Heimuli and Kevin Chang the Limu Hui Coordinator and Executive Director, respectively, of [Kua'āina Ulu 'Auamo \(or KUA\)](#). KUA works to empower grassroots rural and Native Hawaiian mālama 'āina groups to celebrate their places and pass on their traditions to better Hawai'i and achieve 'āina momona— an abundant, productive ecological system that supports community well-being.

KUA employs a community-driven approach that currently supports a statewide network of 36 mālama 'āina community groups collectively referred to as E Alu Pū (moving forward together), 40 fishpond projects and practitioners called the Hui Mālama Loko I'a, and a growing group of over 60 Limu practitioners and supporters called the Limu Hui.

KUA supports HB 819 HD2 as an incremental step on a pathway towards 'āina momona.

One of the founding kupuna of our first network E Alu Pū, Uncle Henry Chang Wo Jr., a recognized loea limu (limu expert) grew up in 'Ewa Beach and personally witnessed the decline of limu there. He worked to create a Limu Management Area (LMA) in 'Ewa, a place legally designated for traditional limu gathering. Uncle Henry taught us that one of the main causes of the loss of limu is the loss of groundwater that once flowed abundantly along the shoreline. As the flow of groundwater decreased, limu abundance decreased. One of Uncle Henry's famous sayings was "No limu, no fish". Unfortunately, Uncle Henry passed away in 2015. He left a legacy which includes the Limu Hui, the 'Ewa LMA and the struggle to bring limu back to 'Ewa the way it once was. KUA works to perpetuate his legacy. This resolution is part of that legacy we wish he were here to testify on and help continue.

KUA supports SB 1037 because recognition of the significant socio-cultural dimensions of Limu Kala helps to elevate the importance of the resources, people and culture of Hawai'i broadly. It also uplifts the work and passion of generations of kūpuna like Uncle Henry to perpetuate the deeper socio-cultural ties that bind us to these islands. We also feel this recognition will provide many opportunities to increase awareness and to educate Hawai'i's residents of the environmental and Hawaiian cultural significance of Limu Kala and all limu.

Lastly, this bill is significant to Hawai'i's leadership in the world. Limu Kala is significant to Native Hawaiian processes of reconciliation and healing. Global environmental governance has begun to disentangle the *hīhia* of colonial environmental history and reconciliation is a major theme on the pathway toward better caring for our planet together. In this regard Hawai'i is not just a leader for its own kupa'āina but for the world.

Mahalo for this opportunity to testify. Aloha 'Āina Momona, E Ola Limu!



Mālama Pūpūkea-Waimea
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Hale'iwa, HI 96712

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Makai Watch Coordinator*

Federal Nonprofit Organization
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info@pupukeawaimea.org

March 13, 2023

Re: **STRONG SUPPORT** for **HB819 SD1**: Relating to Limu Kala
TCA Hearing March 16, 2023, 3:00PM; Conference Room 224

**Aloha Chair Lee, Vice Chair Inouye, and the Committee on
Transportation and Culture and the Arts,**

Mālama Pūpūkea-Waimea (MPW) is the grassroots, community non-profit that actively works to care for, educate about, and protect our fragile, near-shore marine ecosystems of Pūpūkea and Waimea. Our mission is "working to replenish and sustain the natural and cultural resources of the Pūpūkea and Waimea ahupua'a for present and future generations through active community stewardship, education, and partnerships."

We are pleased to offer strong support of HB819 SD1. As part of the work we do, we have been monitoring the limu at Papakahāohina (a reef flat at Kapo'o/Sharks Cove) for the past seven years and have identified 32 native species of limu there so far, including Limu Kala, which is by far the most abundant. We regularly offer limu education for anyone, keiki to kupuna, and often host visits to the reef flat to learn more about this very important and special part of a healthy marine ecosystem.

In addition to being a significant source of vitamins, minerals, and fiber with many uses for traditional medicine, limu is a critically important component of a healthy, productive reef ecosystem. Limu is a primary producer and the base of the nearshore marine food chain, an important habitat for many marine creatures, and a key indicator of the health and resilience of the ahupua'a. Limu Kala, specifically, is special because has many uses for Native Hawaiian cultural ceremonies, is used in traditional fishing, and in the protection of ocean voyagers,

Naming Limu Kala as the State limu will help to bring awareness to the recapture, retention and sharing of limu cultural knowledge that will benefit the nearshore fishery and all people of Hawai'i for future generations.

Mahalo for hearing this bill and for the opportunity to provide testimony. **We strongly support HB819 SD1.**

Mahalo nui,

Jenny Yagodich

Jenny Yagodich
Director of Educational Programs &
Makai Watch Coordinator
Mālama Pūpūkea-Waimea

February 27, 2023



Re: **STRONG SUPPORT for HB819 HD2**: Relating to Limu Kala

Chair Lee, Vice Chair Inouye, and the Committee on Transportation and Culture and the Arts

We represent the Mālama Limu Club, a Kamehameha Schools Kapālama high school organization. The purpose of the Mālama Limu Club is to remove invasive limu from various fishponds and beaches, giving endemic and native Hawaiian limu the opportunity to thrive and maintain diversity in our ocean ecosystems.

Our entire club recognizes the environmental and cultural importance of seaweed. Limu is the foundation of all ocean ecosystems, as they provide a habitat and food source for various marine organisms. They also produce a large part of our world's oxygen and mitigate erosion and coral breaking. Culturally, limu was used in medicine, lei making, dying clothing, and is still found in a variety of Native Hawaiian dishes. Limu was also a cornerstone in the lives of Native Hawaiian women, as the process of collecting limu was entirely designated for women. Limu Kala, in particular, was used in ritual practices such as the ho'oponopono ceremony, where people would seek forgiveness as they ate or held the limu. It was also used for cleaning, in religious practices, after burials, and prior to fishing.

We strongly support HB819 HD2 which would name limu Kala as Hawai'i's official state limu. Due to the pollution and warming of our water along with the introduction of invasive seaweeds, which are much more resilient to these environmental changes, the endemic and native limu populations are rapidly decreasing. We believe that limu needs

to be recognized for its immense importance and that this bill will bring awareness to the great need for conserving our endemic and native marine ecosystems.

On behalf of the Mālama Limu Club Members, mahalo nui for this opportunity to provide testimony.

Mahalo,

Madison Murata

Mālama Limu Club President

Members: Hope Rosenbush, Brady Akau, Amara Martin, Shaina Wandasan, Amara Martin, Aidden Murray, Alyssa Faulkner, Ava Pasa, Brayden Van Kuren, Carleena Mattos, Carly Lasconia, Chloe Martin-Blevins, Clarice Hutchison, Cloey-Anne Yamasaki, Eli Nagaishi, Emily Loscalzo, Emma Attwood, Ethan Abraham, Gage Bassett, Hailey Ching, Harryzen Soares, Haylie Reiny, Hekili Kamalani, Jack Poepoe, Jadon Koa Haina Dumlao, Jenna Lingenbrink, Jordyn Lee, Kahiau Kaopuiki, Kaila Kim, Kailani McLain, Kaimana Eliana-Pantil, Kaimana Kau, Kaiya Hoopai, Kaohu Helenihi, Kapua Pupuhi, Kassidy Kepa, Kau‘i Sato, Kekai Wong, Kekoa Kenichi Agpalsa, Kekoapiilani Moses Kekina Dierks, Kili Rowe, Kilinoe Brown, Korie Lee, Kukamaehu Tamashiro, Lanamaliekai Haverly, Landon Choy, Lea Richardson, Leilani Jensen, Lucas Valleriani, Mahealani Plunkett, Makamaenamakanamaikalani Santiago, Makayla Lee, Malia Victor, Mālie Nee, Mattea Skeen, Maya Willing, Mehana Silva, Melissa Kaanoi, Mikala Akiona, Mima Field-Perkins, Moanahiwalani Walker, Nikki Chong, Ocean Bustamante, Pi‘i McKenzie, Rhyllie Skye Rabang, Roma Lerner, Sanae Oye, Shalem Asano, Shane Pinho, Shyla Aki, Stella Imada, Tiani Ing, Trevyn Nishimura, Nakoa Moses-Gomera, Nathaniel Ho

HB-819-HD-2

Submitted on: 3/15/2023 9:18:30 PM

Testimony for TCA on 3/16/2023 3:00:00 PM

LATE

Submitted By	Organization	Testifier Position	Testify
Presley Wann	Testifying for Hui Maka'ainana O Makana	Support	Written Testimony Only

Comments:

On behalf of the Hui Maka'ainana O Makana of Ha'ena, Kaua'i, please consider our support of this bill in recognizing this important culture and traditional ocean gift.

Mahalo Presley Wann (current President for the Hui Maka'ainana O Makana)

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Submitted on: 3/13/2023 8:27:40 PM

Testimony for TCA on 3/16/2023 3:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Amy Markel	Individual	Support	Written Testimony Only

Comments:

Limu kala is very culturally significant in Hawai'i. It would be a wonderful example for the state limu. It is used in medicine, ceremony, as well as being an important food source for herbivorous fish on the reef! It is commonly known by most local people, and is easily recognized on the nearby shoreline. Thank you for considering it!

HB-819-HD-2

Submitted on: 3/14/2023 6:19:56 AM

Testimony for TCA on 3/16/2023 3:00:00 PM

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

Comments:

In support of HD2. Thank you.

HB-819-HD-2

Submitted on: 3/14/2023 6:51:21 AM

Testimony for TCA on 3/16/2023 3:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Olan Leimomi Fisher	Individual	Support	Written Testimony Only

Comments:

Aloha kakou,

Kako'o nui au i ka Pila Hale 819 no ka wae 'ana o ka Limu Kala aloha nui i ka Limu Moku'aina o Hawai'i nei. I strongly support HB819 to name our precious Limu Kala as the State Limu. Limu in general is so important to the overall health & sustainability of our reef ecosystems. Limu Kala in particular is a special limu with vital benefits including as a habitat for marine life, nutrient-rich food source for i'a and kanaka alike, and culturally important to the practices of forgiveness and ho'oponopono. The great 'Iolani Luahine herself was known to use Limu Kala in ceremonies asking for peace and blessings to practice the sacred art of hula. All of Hawai'i and the world should know of the importance of our beautiful Limu Kala. Please support HB819!

Aloha limu, aloha no,

Olan Leimomi Fisher, Pupukeya, O'ahu

HB-819-HD-2

Submitted on: 3/15/2023 8:16:47 AM

Testimony for TCA on 3/16/2023 3:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Manuel Mejia	Individual	Support	Written Testimony Only

Comments:

Please support this bill. Limu Kala is important for Hawaii.

Aloha,
Manuel Mejia

HB-819-HD-2

Submitted on: 3/15/2023 10:07:18 AM

Testimony for TCA on 3/16/2023 3:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Roberts "Bob" Leinau	Individual	Support	Written Testimony Only

Comments:

Please support Limu Kala as our official limu. It is time. Mahalo.

HB-819-HD-2

Submitted on: 3/15/2023 12:04:53 PM

Testimony for TCA on 3/16/2023 3:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Pamela Lota Fujii	Individual	Support	Written Testimony Only

Comments:

Welina mai nei Senate Committee Members,

My name is Dennis H. Fujii and my wife is Pamela Lota Fujii. We have lived in the ahupuaa of Kuli'ou'ou for 40 years and are volunteers with the Ewa Limu Project, Limu Hui, Kua'āina Ulu 'Auamo (KUA), Waimanalo Limu Hui, Paepae O Heeia, Keiki O Ka Aina, Hui Malama O Ke Kai and the Maunalua Fishpond Heritage Center.

As volunteers with the Ewa Limu Project, Limu Hui, Kua'āina Ulu 'Auamo (KUA), Waimanalo Limu Hui, Paepae O Heeia, Keiki O Ka Aina, Hui Malama O Ke Kai and the Maunalua Fishpond Heritage Center we help restore our native limu, fishponds and nearshore habitats to bring abundance back to our islands and to ensure that traditional and cultural practices are sustained for future generations.

Our kumu was Uncle Henry Chang Wo Jr., a recognized loea limu (limu expert) grew up in 'Ewa Beach and personally witnessed the decline of limu there and was a founding member of the Ewa Limu Project, the Limu Hui and KUA network of E Alu Pū.

'Ewa Limu Project carries on the work of Uncle Henry Chang Wo, Jr. through limu outreach and educational "show-and-tell" events. As Uncle Henry Chang Wo once said, "Limu is so essential, it is the start of life, we need it."

We strongly support SB1037 "because recognition of the significant socio-cultural dimensions of Limu Kala helps to elevate the importance of the resources, people and culture of Hawai'i broadly. It also uplifts the work and passion of generations of kūpuna like Uncle Henry to perpetuate the deeper socio-cultural ties that bind us to these islands. We also feel this recognition will provide many opportunities to increase awareness and to educate Hawai'i's residents of the environmental and Hawaiian cultural significance of Limu Kala and all limu."

"Lastly, this bill is significant to Hawai'i's leadership in the world. Limu Kala is significant to Native Hawaiian processes of reconciliation and healing. Global environmental governance has begun to disentangle the hihia of colonial environmental history reconciliation is a major theme on the pathway toward better caring for our planet together. In this regard Hawai'i is not just a leader for its own kupa'āina but for the world. Mahalo for this opportunity to testify."

Aloha 'Āina Momona, E Ola Limu!

Mahalo nui loa,

Dennis & Pamela Fujii

LATE

HB-819-HD-2

Submitted on: 3/16/2023 7:53:27 AM

Testimony for TCA on 3/16/2023 3:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Tehani Louis-Perkins	Individual	Support	Written Testimony Only

Comments:

Limu play an integral role in the culture, religion, and lifestyle of kanaka oiwi. It is one of the pillars of the marine diet in Hawaii providing a significant amount of vitamins and other essential minerals such as iron to the diet. Limu is also a key indicator of the health of nearshore ecosystems, growing prolifically where there is a healthy mix of fresh water, salt water, and nutrients. Limu is fundamental as an indicator of healthy ecosystems, a food source for many species, and a connector between mauka and makai. Even more so it creates a habitat for many invertebrates, such as opae, and provides hiding places for juvenile fish. The loss of limu beds is directly tied to the decline for our nearshore fisheries. As Uncle Henry Wo Chang used to say, "no limu, no fish."

Modern pressures such as urban development, improper harvesting, and climate change have substantially affected the health and abundance of limu across Hawaii. However, thanks to mainly rural communities the knowledge and practice of limu is still perpetuated. With that being said, it is important for the State of Hawaii to take real steps to supporting and perpetuating limu and the practice of limu.

Designating Limu Kala (*S. echinocarpum*, *S. hawaiiensis*, *S. obtusifolium*, and *S. polyphyllum*) as the official limu of the state is integral to the perpetuation of limu loa (limu practitioners) and healthy ecosystems. Limu kala in particular is necessary for many cultural foods, medicine, and religious ceremonies. I am in full support of this bill and hope that this is only one of the many steps the legislature will take to protect such an important part of Hawaiian culture and Hawaii's future.

HB-819-HD-2

Submitted on: 3/16/2023 1:32:57 PM

Testimony for TCA on 3/16/2023 3:00:00 PM

LATE

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

Comments:

I agree