SB 2271

SHAN S. TSUTSUI Lt. Governor



SCOTT E. ENRIGHT Chairperson, Board of Agriculture

PHYLLIS SHIMABUKURO-GEISER Deputy to the Chairperson

State of Hawaii DEPARTMENT OF AGRICULTURE 1428 South King Street Honolulu, Hawaii 96814-2512 Phone: (808) 973-9600 FAX: (808) 973-9613

TESTIMONY OF SCOTT E. ENRIGHT CHAIRPERSON, BOARD OF AGRICULTURE

BEFORE THE SENATE COMMITTEE ON WATER, LAND, AND AGRICULTURE

February 3, 2016 2:45 P.M. CONFERENCE ROOM 224

SENATE BILL NO. 2271 RELATING TO ENVIRONMENTAL PROTECTION

Chairperson Gabbard and Members of the Committees:

Thank you for the opportunity to testify on Senate Bill 2271. This bill appropriates general funds to 1) research methods to prevent and treat rapid ohia death and 2) control and contain damage caused by rapid ohia death.

Rapid Ohia Death (ROD) is known to have infested at least 15,000 acres on the Big Island and continues to spread throughout that island and has not been found on other islands. It has left a devastating impact to the forests killing 50-90% of the trees in infested areas. The Department of Agriculture (HDOA) established a quarantine on August 25, 2015 to prevent its spread from the Big Island to the uninfested islands. This is under our authority which enables us to create an interim rule to govern the transport of flora and fauna into and within the State to protect agriculture and the environment.

ROD is a serious disease of Hawaii's ohia forests and the loss of these trees would have a devastating impact on our forest lands and natural resources. The purpose of this bill is to fund research for the treatment and prevention of ROD and control and contain damage caused by ROD. It is the department's view that it would be more advantageous to have these funds go to the Department of Land and Natural Resources in their Forestry and Wildlife Division which, unlike HDOA, have the mandate and authorities to carry out the purpose of this bill.

Thank you for the opportunity to present testimony.



DAVID Y. IGE GOVERNOR OF HAWAII





SUZANNE D. CASE CHAIRPERSON BOARD OF LAND AND NATURAL RESOURCES COMMISSION ON WATER RESOURCE MANAGEMENT

> KEKOA KALUHIWA FIRST DEPUTY

JEFFREY T. PEARSON, P.E. DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES BOATING AND OCEAN RECREATION BUREAU OF CONVEYANCES COMMISSION ON WATER RESOURCE MANAGEMENT CONSERVATION AND RESOURCES ENFORCEMENT ENGINEERING FORESTRY AND WILDLIFE HISTORIC PRESERVATION KAHOOLAWE ELAND RESERVE COMMISSION LAND STATE PARKS

STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES

POST OFFICE BOX 621 HONOLULU, HAWAII 96809

Testimony of SUZANNE D. CASE Chairperson

Before the Senate Committee on WATER, LAND, AND AGRICULTURE

Wednesday, February 3, 2016 2:45 PM State Capitol, Conference Room 224

In consideration of SENATE BILL 2271 RELATING TO ENVIRONMENTAL PROTECTION

Senate Bill 2271 proposes to require the Department of Agriculture (DOA) to submit a report to the Legislature on the status of Rapid Ohia Death and appropriates \$200,000 to DOA for research and control/containment. The Department of Land and Natural Resources (Department) supports this measure provided that this appropriation does not adversely impact appropriations for other priorities in the Executive Supplemental Budget request or any existing funding to the Department's programs.

The recent spread of Rapid Ohia Death (ROD) on Hawaii Island threatens the state's most important forest species and requires urgent action. Recent surveys conducted by the Department preliminarily found 34,000 acres of ohia forest affected by this disease, which is more than double the area mapped in 2014. The Department is working closely with DOA, USDA Forest Service and Agriculture Research Service, University of Hawaii College of Tropical Agriculture, and others to understand ROD and mitigate its spread where possible. Due to the lack of knowledge about this disease, many questions need to be answered before effectively managing the outbreak, as well as providing information or suggestions to the public.

This bill designates funding for 1) research for prevention and treatment; and 2) control and containment. We do not currently have treatments available to contain outbreaks in the forest, and funds are needed for researchers to develop such treatments. The Department supports funding research through DOA, but other activities might be more appropriately funded through different agencies. For example, control and containment activities, if research leads to effective techniques, would be more effectively handled by the Department and other land management agencies.

While the appropriation (\$200,000) in this bill is not sufficient to cover the entire scope of planned research and work, it would help sustain efforts already underway by state, federal, and private organizations. Priorities identified by the partner agencies include research, planning, survey/monitoring, and coordinated outreach.

Despite a lack of full understanding about this disease, all of the activities mentioned are vital to an effective response; therefore funding needs will be ongoing. The Department will continue to work closely with DOA and other partners to share knowledge and coordinate actions so resources are used efficiently.



The Senate Committee on Water, Land, and Agriculture February 3, 2016 2:45 p.m., Conference Room 224 State Capitol

Testimony in Support of SB 2271

Aloha Chair Gabbard, Vice Chair Nishihara, and Committee Members,

The Coordinating Group on Alien Pest Species (CGAPS) is in strong support of SB 2271, *Relating to Environmental Protection*.

As this Committee is aware, Rapid 'Ōhi'a Death is a new fungal disease that was recently detected on Hawai'i island and is killing 'ōhi'a at an alarming rate. 'Ōhi'a is Hawaii's most important and widespread forest tree and is central to watersheds, serves as habitat for many native species, and has tremendous cultural importance. Research shows that once the microscopic fungal disease enters 'ōhi'a trees, it can take a few weeks or even months where the tree shows no symptoms, but all at once, the tree dies. It is not yet known all of the ways that the fungal pathogen can be spread, although it can spread through infected soil (in the lab, 40% percent of seedlings succumbed within 6 months of infecting the soil with the disease). The fungal pathogen has also been found in wood from an 'ōhi'a tree that had died from the disease a year prior. The pathogen was still alive and capable of spreading with the movement of the wood. There is also some evidence that 'ōhi'a roots growing into each other, streams, and even feral cattle can carry and spread the pathogen from tree to tree.

The strain of this pathogen affecting 'ōhi'a is new to science--it has not been documented or studied anywhere else. Therefore, researchers are racing to learn as much as possible about its biology, all of the ways that the pathogen can spread, and to identify and test quarantine methods to detect and kill the pathogen in small amounts of soil (such as potted plants shipped from Big Island nurseries) and 'ōhi'a wood to protect neighbor islands from these known pathways for spread. However, at this rate of spread and with the tens of thousands of acres considered infected, there are virtually no options for landscape-scale protection of 'ōhi'a trees in natural areas on the Big Island. Faced with this sobering information, researchers are also looking at management actions that can and should be taken to mitigate impacts.

We should note that plant diseases such as these are extremely difficult to successfully address. For example, two well-documented accounts of widespread iconic U.S. tree species being wiped out by plant diseases include the disappearance of American chestnuts from an introduced fungal disease in the early 1900's (nearly 4 billion trees were killed and only a handful of trees remain in the wild, even today), and the 2003 discovery of an introduced beetle which is spreading a new fungal disease that is killing red bay/laurel in the south eastern U.S. The disease is on track to drive two species of red bay trees in the south eastern U.S. to

extinction, and also impact the avocado industry. These tragedies and their impacts are ongoing, and we in Hawai'i need to shift our emergency-response framework and mind-set to the idea that this disease is not going away, and that we must find ways to mitigate the impacts over the long term. Mahalo for your consideration.

Aloha, Christy Martin CGAPS



Testimony of the O'ahu Invasive Species Committee Supporting S.B. 2271 Relating to Environmental Protection Senate Committee on Water, Land, and Agriculture Wednesday, February 3, 2015, 2:45PM, Room 224

The O'ahu Invasive Species Committee supports S.B. 2271 which would provide funding to research questions surrounding the *Ceratocystis* pathogen that causes Rapid 'Ōhi'a Death. We are grateful to the Legislature for recognizing the seriousness of this situation and acting quickly to address it. OISC is currently assisting with outreach and early detection on O'ahu for this disease. There are so many questions around this disease and this bill would support research to answer them. We would ask however, that this funding be additive and not in place of regular invasive species funding so that if we are able to contain this disease, we will not have to play catch up with invasive species projects that we had to drop.

Karen Eoff Council Member Council District 8 - North Kona



Phone: (808) 323-4280 *Fax:* (808) 329-4786 *Email: karen.eoff@hawaiicounty.gov*

HAWAI'I COUNTY COUNCIL

County of Hawaiʻi West Hawaiʻi Civic Center, Bldg. A 74-5044 Ane Keohokalole Hwy. Kailua-Kona, Hawai'i 96740

January 29, 2016

Senate Committee on Water, Land & Agriculture Senator Mike Gabbard, Chair Senator Clarence K. Nishihara, Vice Chair 415 South Beretania Street State Capitol, Conference Room 224 Honolulu, Hawaii 96813 Email: WLAtestimony@capitol.hawaii.gov Email: sennishihara@capitol.hawaii.gov Email: sennishihara@capitol.hawaii.gov

Re: Testimony In Support of SB2271; Relating to Environmental Protection Hearing Date: February 3, 2016 at 2:45 p.m., Conference Room 224

Dear Committee on Water, Land and Agriculture:

On behalf of myself and constituents of Council District 8, North Kona, our support for the above referenced bill is expressed, with brief testimony provided as follows:

The Rapid 'Ōhi'a Death Disease is destroying our native forest and landscape on Hawai'i Island. The appropriation of funds to the Department of Agriculture for research and mitigation efforts relating to the rapid 'Ōhi'a death disease is a necessary step to combat this malady, and stop it from spreading.

I strongly urge enactment of this bill.

Sincerely,

Karnloff

KAREN EOFF, Vice Chair, Council District 8, North Kona



Kaua`i Watershed Alliance

Ben A. Dyre Limited Family Partnership, Department of Hawaiian Homelands, Department of Water County of Kaua'i, DLNR – Division of Forestry and Wildlife & Land Management Division, Grove Farm Company, Inc., Jurassic Kahili Ranch, Kamehameha Schools, Kaua'i Ranch LLC, Lihu'e Land Company, McBryde Sugar Company, Ltd., National Tropical Botanical Garden, Princeville Development, LLC

> Supporting S.B. 2271 Relating to Environmental Protection Senate Committee on Water, Land, and Agriculture Wednesday, February 3, 2015, 2:45PM, Room 224

The Kaua'i Watershed Alliance strongly supports *SB 2271* which is to make an appropriation for research and mitigation efforts to address rapid ohia death disease in the State.

The Kaua'i Watershed Alliance (KWA) has been actively managing portions of the mauka watershed on Kaua'i since 2003. It members which include DLNR (DOFAW and Land Management Div.) make up a diverse group of public and private entities who own land within the mountainous watershed and understand the importance of protecting and preserving the forests that capture the water - our most precious resource.

Rapid ohia death disease is currently a serious threat to thousands of acres of native forest on the island of Hawaii and may spread to other islands. The ohia provides structure to our forests that support other species both common and rare within native watershed areas.

Thank you for your support and the opportunity to provide supportive testimony.

Mahalo!

Watershed Alliance is to PROTECT, PRESERVE and MANAGE our valuable watershed resources for the benefit of our residents. communities and all future generations through the concerted efforts of its members."

"The Mission of the Kaua`i



West Maui Mountains Watershed Partnership P.O. Box 13240 Lahaina, Hawai'i 96761 Phone (808) 661-6600 Fax: (808) 661-6604

Watershed Partners

County of Maui

Dept. of Land & Natural Resources

General Finance Group. Inc.

Ka'anapali Land Company, LLC

Kahoma Land, LLC

Kamehameha Schools

Makila Land Co., LLC

Maui County Department of Water Supply

> Maui Land & Pineapple Company Inc

Wailuku Water Co. LLC

> The Nature Conservancy

West Maui Mountains Watershed Partnership

January 31st, 2016

Testimony Supporting S.B. 2271 Relating to Environmental Protection Senate Committee on Water, Land, and Agriculture Wednesday, February 3, 2015, 2:45PM, Room 224

Aloha Legislators,

The West Maui Mountains Watershed Partnership <u>Supports S.B.2271</u> which appropriates funds to the Department of Agriculture for research and mitigation efforts relating to **the rapid ohia death disease** and requires the Department to submit a report to the Legislature. Such funding should be in addition to other funding appropriated for watershed and invasive species protection support from the State.

The rate of spread on the Big Island is alarming and is estimated to have spread from 15,000 acres in 2014 to 34,000 acres in 2015. Ohia forests dominate approximately 865,000 acres in Hawaii and are a keystone species providing habitat for culturally important and unique species found nowhere else on earth. Furthermore, Ohia is the primary species comprising our watersheds and their loss would result in reduced capacity of forest lands to gather, filter and slowly release water into our streams and aquifers.

Ohia tree canopies are comprised of moss covered limbs and leaves that reach into the moist trade winds. The moisture rich air condenses on these surfaces and contribute as much as 30% more water through cloud drip above direct precipitation from rain alone. These trees also shade the ground from evaporation on clear days and uses less water than some of our worst invasive species to grow. Loss of ohia forests could also expose fragile forest floors to direct rains, leading elevated rates of erosion and greater rates of sediment in our streams and reefs.

It is vital that we understand the fungus that causes Rapid Ohia Death in the hope that we can contain its spread to other islands and reduce damage statewide. The potential cost of allowing this species to spread could be extremely detrimental to Hawaii's natural environment and sustainability.

Thoughtfully submitted with broad partner support and one abstention.



February 2, 2016

Supporting S.B. 2271 Relating to Environmental Protection Senate Committee on Water, Land, and Agriculture Wednesday, February 3, 2015, 2:45PM, Room 224

The Kaua'i Watershed Alliance strongly supports *SB 2271* which is to make an appropriation for research and mitigation efforts to address rapid ohia death disease in the State.

The Kaua'i Watershed Alliance (KWA) has been actively managing portions of the mauka watershed on Kaua'i since 2003. It members which include DLNR (DOFAW and Land Management Div.) make up a diverse group of public and private entities who own land within the mountainous watershed and understand the importance of protecting and preserving the forests that capture the water - our most precious resource.

Kauai's Forests, much like native forest the other islands, are dependent upon the Ohia as an anchor species that helps create a healthy ecosystem for the benefit many of Hawaii's endemic forest plants both common and rare!

Thank you for support and the opportunity to provide supportive testimony.

Mahalo

lan Kagimoto, PE

Manager



Testimony Submitted to the Senate Committee on Water, Land, and Agriculture Hearing: Wednesday, February 3, 2016 2:45 pm Conference Room 224

In Support of SB 2271 Relating to Environmental Protection

Chair Gabbard, Vice Chair Nishihara, and Members of the Committee.

Aloha. Conservation Council for Hawai'i supports SB 2271, which appropriates funds to the Department of Agriculture for research and mitigation efforts relating to the rapid ohia death disease in the State. Requires the Department to submit a report to the Legislature and makes an appropriation. However, we urge you to increase the appropriation of \$200,000 to an amount that is needed for research and protection of our watersheds.

'Ohi'a lehua is a dominant forest tree in our watersheds and habitat for rare and endangered species. Rapid 'ohi 'a death/wilt is a major threat to our native forests and watersheds, but it is not the only threat. Even if we are able to control or slow ROD, our native forests and watersheds will continue to decline as a result of additional threats, including introduced feral and game mammals (pigs, goats, sheep, and deer), invasive plants (such as strawberry guava, miconia, and others), plant pests, and diseases. Water and watersheds are important.

Our native forests are worth way more than \$200,000. Please do a better job of protecting our public lands and trust resources for future generations. Provide more funding for watershed protection and invasive species control. Stop nickel and diming important land conservation programs under the Department of Land and Natural Resources and Department of Agriculture.

Please support SB 2271 and appropriate more funding.

Mahalo nui loa for the opportunity to testify.

Mayrie Zizla

Marjorie Ziegler



The Nature Conservancy, Hawai'i Program 923 Nu'uanu Avenue Honolulu, HI 96817 Tel (808) 537-4508 Fax (808) 545-2019 nature.org/hawaii

Testimony of The Nature Conservancy of Hawai'i Supporting S.B. 2271 Relating to Environmental Protection Senate Committee on Water, Land, and Agriculture Wednesday, February 3, 2016, 2:45PM, Room 224

The Nature Conservancy of Hawai'i is a private non-profit conservation organization dedicated to the preservation of the lands and waters upon which life depends. The Conservancy has helped to protect nearly 200,000 acres of natural lands in Hawai'i. We manage 40,000 acres in 14 preserves and work in 19 coastal communities to help protect the near-shore reefs and waters of the main Hawaiian Islands. We forge partnerships with government, private parties and communities to protect Hawai'i's important watershed forests and coral reefs.

The Nature Conservancy supports S.B. 2271. We appreciate the crisis situation that exists with respect to Rapid 'Ōhi'a Death (ROD) and the acute circumstances on Hawai'i island with this disease and other pests of the environment, agriculture, and human health and well-being. We support a strong and coordinated response to ROD that is threatening the dominant native tree species in the Hawaiian forest—a tree that is central to the forests' ecological, cultural and watershed values statewide.

We also hope that providing the necessary and critical support for Rapid 'Ōhi'a Death will be additive and not prevent the Legislature, the Administration and partners from also devoting appropriate attention and funding to the full range of pest issues across the islands. We are concerned about unintended financial impacts of a piecemeal approach to invasive species funding. For example, in Fiscal Year 2007 the Legislature's provision of specific funding for coqui frog control was really a shifting of existing funds from other important invasive species programs, which then caused layoffs in the Island Invasive Species Committees and a hiatus in the Hawai'i Invasive Species Council's research grant program.

Therefore, we respectfully ask that the Committee and the Legislature also take a comprehensive approach of providing significant and consistent funding to address invasive species prevention, early detection, rapid response, control, research, and outreach priorities across the state. The Hawai'i Invasive Species Council—or the proposed Hawai'i Invasive Species Authority (<u>SB2799/HB2270</u>)—is the appropriate multi-agency venue for this broader effort. This approach necessarily results in prioritization based on a variety of issues including human health, safety and well-being, economic harm, and the threat to the health and function of the environment.

Thank you for the opportunity to testify on this bill.

BOARD OF TRUSTEES

Mark E. Agne Paul D. Alston Christopher J. Benjamin Anne S. Carter Richard A. Cooke III Thomas M. Gottlieb James J.C. Haynes III Mark L. Johnson Dr. Kenneth Y. Kaneshiro Eiichiro Kuwana Duncan MacNaughton Kathy M. Matsui Wayne K. Minami James C. Polk Jean E. Rolles Scott C. Rolles Crystal K. Rose Dustin E. Sellers Nathan E. Smith Peter K. Tomozawa James Wei

From:	mailinglist@capitol.hawaii.gov
To:	WLA Testimony
Cc:	lost in autumn@yahoo.com
Subject:	Submitted testimony for SB2271 on Feb 3, 2016 14:45PM
Date:	Monday, February 01, 2016 12:01:32 PM

Submitted on: 2/1/2016 Testimony for WLA on Feb 3, 2016 14:45PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Allison Baird	Individual	Support	No

Comments: Dear Senators Gabbard and Nishihara, I support the appropriation of \$200,000 to study Rapid Ohia Death Disease. This beautiful and majestic tree is a cornerstone of our native ecosystem. Additionally, it is critical to the survival of so many of our endangered species, from beloved native birds to fasinating insects. We must ensure the survivial of Ohia to ensure the survival of our forests. The alarming and rapid spread of this disease across Hawaii Island is very scary to me: we must understand and control this pathogen before the entire island -- or entire island chain -- is devastated. I urge you to act quickly to approve this bill so that we can preserve our irreplaceable natural heritage. Sincerely, Allison Baird Honolulu

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

February 2, 2016 Testimony in Support of SB2271 Relating to Environmental Protection Chair Mike Gabbard and Vice-Chair Clarence K. Nishihara Senate Committee on Water, Land, and Agriculture

Aloha e Senators Gabbard and Nishihara,

I support the appropriation of \$200,000 to research Rapid 'Ohi'a Death Disease or Ceratocystis Wilt, and to develop ways to stop and mitigate its spread.

'Ohi'a is the prime constituent of Hawai'i's native forests found in almost every ecological niche from sea level to 7,000 feet elevation. The loss of 'ohi'a trees would be a huge blow to the ability of our watersheds to absorb and retain water and would enable albezia, eucalyptus, strawberry guava, and other invasive species to take over – trees known to be harmful to Hawai'i's natural environment.

Many native animals depend on 'ohi'a -- endangered forest birds feed on the nectar of its blossoms, snails graze on algae and fungi on its leaves, and insect communities live in its foliage, making it a cornerstone of upland Hawaiian ecosystems.

'Ohi'a is sacred to several deities of Hawai'i: Ku, Pele, Hi'iakaikapoliopele, and Laka. The wood was used to make ki'i, temple carvings, altars, and other ceremonial structures. The plant is used in traditional herbal medicine and in veneration to the above referenced deities. It is frequently referenced in sacred Hawaiian narratives and veneration chants honoring these significant deities within the Hawaiian ethos.

Not only would the loss of 'ohi'a trees be detrimental to our island ecosystem but **would significantly impede Native Hawaiian religious practices** as well. I wholeheartedly support the appropriation of funding to mitigate and stop this deadly disease.

Na'u me ke aloha, na Amanda Candens

Amanda Candens

Graduate Assistant Department of Religion University of Hawai'i at Manoa <u>www.hawaii.edu/religion</u> February 2, 2016 Testimony in Support of SB2271 Relating to Environmental Protection

Chair Mike Gabbard and Vice-Chair Clarence K. Nishihara Senate Committee on Water, Land, and Agriculture

Dear Senators Gabbard and Nishihara,

I support the appropriation of \$200,000 to research Rapid Ohia Death Disease or Ceratocystis Wilt, and to develop ways to stop and mitigate its spread.

'Ohi'a is a foundational component of Hawaii's native forests, providing significant cultural and ecological resources. The loss of 'ohi'a trees would tremendously impair the ability of our watersheds to absorb and retain water, and would create opportunity for invasive species to colonize 'ohi'a's former footprint.

Many native species depend on 'ohi'a -- endangered forest birds feed on the nectar of its blossoms, snails graze on algae and fungi on its leaves, and insect communities live in its foliage, making it a cornerstone of upland Hawaiian ecosystems.

The loss of 'ohi'a trees would be detrimental to our island ecosystems and would also be a huge cultural loss to Hawaii. I wholeheartedly support the appropriation of funding to mitigate and stop this deadly disease.

Sincerely, Andrea Buckman

Andrea Buckman Program Manager Leeward Haleakala Watershed Restoration Partnership 3620 Baldwin Ave., Suite 202/203, Makawao HI 96768 www.lhwrp.org 808.573.8989 office 808.281.6836 cell

From:	mailinglist@capitol.hawaii.gov
To:	WLA Testimony
Cc:	anniemoriyasu@gmail.com
Subject:	*Submitted testimony for SB2271 on Feb 3, 2016 14:45PM*
Date:	Monday, February 01, 2016 7:37:30 PM

Submitted on: 2/1/2016 Testimony for WLA on Feb 3, 2016 14:45PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Annie Moriyasu	Individual	Support	No

Comments:

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

Dear Senators Gabbard and Nishihara,

I am Dr. Arthur Medeiros, formerly federal biologist on Maui for over three decades, first with the research division for Haleakala National Park, then the Pacific Island Ecosystem Research Center, U.S. Geological Survey. In 2015, I retired from Federal Service.

Though clearly inadequate as a governmental response to loss of its watersheds, I still fully support the appropriation of \$200,000 to research Rapid Ohia Death Disease or Ceratocystis Wilt, and to develop ways to stop and mitigate its spread.

Strict quarantine and directed research are desperately needed now to front load any solutions to loss or permanent degradation of all Hawaiian watersheds less we regret the time that we did not do more at what turned out to be a monumental turning for the economic, natural and cultural world of Hawai'i.

Respectfully, Dr. Art Medeiros

February 2, 2016 Testimony in Support of SB2271 Relating to Environmental Protection

Chair Mike Gabbard and Vice-Chair Clarence K. Nishihara Senate Committee on Water, Land, and Agriculture

Dear Senators Gabbard and Nishihara,

I support the appropriation of \$200,000 to research Rapid Ohia Death Disease or Ceratocystis Wilt, and to develop ways to stop and mitigate its spread.

'Ohi'a is the prime constituent of Hawaii's native forests found in almost every ecological niche from sea level to 7,000 feet elevation. The loss of 'ohi'a trees would be a huge blow to the ability of our watersheds to absorb and retain water and would enable albezia, eucalyptus, strawberry guava, and other invasive species to take over – trees known to be harmful to Hawaii's natural environment.

Many native animals depend on 'ohi'a -- endangered forest birds feed on the nectar of its blossoms, snails graze on algae and fungi on its leaves, and insect communities live in its foliage, making it a cornerstone of upland Hawaiian ecosystems.

'Ohi'a is sacred to several deities of Hawai'i: Ku, Pele, Hi'iaka, and Laka. The wood was used to make ki'i, temple carvings, altars, and other ceremonial structures. The plant is used in traditional herbal medicine and to make lei – can you imagine the Merrie Monarch Festival without lehua lei?

Not only would the loss of 'ohi'a trees be detrimental to our island ecosystem but would be a huge cultural loss to Hawaii. I wholeheartedly support the appropriation of funding to mitigate and stop this deadly disease.

Sincerely, Audrey Tamashiro-Kamii

From:	mailinglist@capitol.hawaii.gov
To:	WLA Testimony
Cc:	johnson.aulani@gmail.com
Subject:	Submitted testimony for SB2271 on Feb 3, 2016 14:45PM
Date:	Monday, February 01, 2016 12:02:42 PM

Submitted on: 2/1/2016 Testimony for WLA on Feb 3, 2016 14:45PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Aulani Johnson	Individual	Support	No

Comments: February 1, 2016 Testimony in Support of SB2271 Relating to Environmental Protection Chair Mike Gabbard and Vice-Chair Clarence K. Nishihara Senate Committee on Water, Land, and Agriculture Dear Senators Gabbard and Nishihara, Thank you for your time and energy reading this testimony! I support the appropriation of \$200,000 to research Rapid Ohia Death Disease or Ceratocystis Wilt, and to develop ways to stop and mitigate its spread. 'Ohi'a is the prime constituent of Hawaii's natives forests found in almost every ecological niche from sea level to 7,000 feet elevation. The loss of 'ohi'a trees would be a huge blow to the ability of our watersheds to absorb and retain water and would enable albezia, eucalyptus, strawberry guava, and other invasive species to take over - trees known to be harmful to Hawaii's natural environment. In Portland, OR, we have had the opportunity to perform Early Detection Rapid Response on many invasive species, including disease and blight, and I know first hand the cost of not dedicating resources to combat the destructive qualities of them. \$200,000 does not seem like a lot to ask for initial steps towards combating Ceratosystis wilt, especially when you consider the bevy of knowledge that is obtained with such an effort in protecting such an important species (Metrosideros polymorpha". 'Ohi'a is sacred to several ancient deities of Hawai'i: Ku, Pele, Hi'iaka, and Laka. The wood was used to make ki'i, temple carvings, altars, and other ceremonial structures. The plant is used in traditional herbal medicine and to make leis – can you imagine the Merrie Monarch Festival without lehua leis? Not only would the loss of 'ohi'a trees be detrimental to our island ecosystem but would be a huge cultural loss to Hawaii. I wholeheartedly support the appropriation of funding to mitigate and stop this deadly disease. Sincerely, Aulani Johnson Botanic Technician I Clty of Portland, OR 808-726-9939

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

From:	mailinglist@capitol.hawaii.gov
To:	WLA Testimony
Cc:	bryan@bryanberkowitz.com
Subject:	Submitted testimony for SB2271 on Feb 3, 2016 14:45PM
Date:	Tuesday, February 02, 2016 11:07:11 AM

Submitted on: 2/2/2016 Testimony for WLA on Feb 3, 2016 14:45PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Bryan Berkowitz	Individual	Support	No

Comments: We must save our native forests!

Please note that testimony submitted less than 24 hours prior to the hearing, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

From:	<u>C.M.</u>
To:	WLA Testimony
Subject:	Attn: Mike Gabbard, I Support SB2271
Date:	Monday, February 01, 2016 3:34:28 PM

February 1, 2016 Testimony in Support of SB2271 Relating to Environmental Protection

Chair Mike Gabbard and Vice-Chair Clarence K. Nishihara Senate Committee on Water, Land, and Agriculture

Dear Senators Gabbard and Nishihara,

I support the appropriation of \$200,000 to research Rapid Ohia Death Disease or Ceratocystis Wilt, and to develop ways to stop and mitigate its spread.

'Ohi'a is the prime constituent of Hawaii's natives forests found in almost every ecological niche from sea level to 7,000 feet elevation. The loss of 'ohi'a trees would be a huge blow to the ability of our watersheds to absorb and retain water and would enable albezia, eucalyptus, strawberry guava, and other invasive species to take over – trees known to be harmful to Hawaii's natural environment.

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Not only would the loss of 'ohi'a trees be detrimental to our island ecosystem but would be a huge cultural loss to Hawaii. I wholeheartedly support the appropriation of funding to mitigate and stop this deadly disease.

Sincerely,

C. Nakahara

From:	mailinglist@capitol.hawaii.gov
To:	WLA Testimony
Cc:	charles.bischoff@gmail.com
Subject:	Submitted testimony for SB2271 on Feb 3, 2016 14:45PM
Date:	Tuesday, February 02, 2016 5:29:07 AM

Submitted on: 2/2/2016 Testimony for WLA on Feb 3, 2016 14:45PM in Conference Room 224

Organization	Testifier Position	Present at Hearing
Individual	Support	No
	~	Organization Position

Comments: February 1, 2016 Testimony in Support of SB2271 Relating to Environmental Protection Chair Mike Gabbard and Vice-Chair Clarence K. Nishihara Senate Committee on Water, Land, and Agriculture Dear Senators Gabbard and Nishihara, I support the appropriation of \$200,000 to research Rapid Ohia Death Disease or Ceratocystis Wilt, and to develop ways to stop and mitigate its spread. 'Ohi'a is the prime constituent of Hawaii's native forests found in almost every ecological niche from sea level to 7,000 feet elevation. The loss of 'ohi'a trees would be a huge blow to the ability of our watersheds to absorb and retain water and would enable albezia, eucalyptus, strawberry guava, and other invasive species to take over – trees known to be harmful to Hawaii's natural environment. Many native animals depend on 'ohi'a -- endangered forest birds feed on the nectar of its blossoms, snails graze on algae and fungi on its leaves, and insect communities live in its foliage, making it a cornerstone of upland Hawaiian ecosystems.. 'Ohi'a is sacred to several deities of Hawai'i: Ku, Pele, Hi'iaka, and Laka. The wood was used to make ki'i, temple carvings, altars, and other ceremonial structures. The plant is used in traditional herbal medicine and to make leis – can you imagine the Merrie Monarch Festival without lehua leis? Not only would the loss of 'ohi'a trees be detrimental to our island ecosystem but would be a huge cultural loss to Hawaii. I wholeheartedly support the appropriation of funding to mitigate and stop this deadly disease. Sincerely, Charles Bischoff

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

From:	mailinglist@capitol.hawaii.gov
To:	WLA Testimony
Cc:	<u>makanaleij@gmail.com</u>
Subject:	Submitted testimony for SB2271 on Feb 3, 2016 14:45PM
Date:	Monday, February 01, 2016 9:23:49 AM

Submitted on: 2/1/2016 Testimony for WLA on Feb 3, 2016 14:45PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Chelsey Jay	Individual	Support	No

Comments: Dear Senators Gabbard and Nishihara, I support the appropriation of \$200,000 to research Rapid Ohia Death Disease or Ceratocystis Wilt, and to develop ways to stop and mitigate its spread. 'Ohi'a is the prime constituent of Hawaii's natives forests found in almost every ecological niche from sea level to 7,000 feet elevation. The loss of 'ohi'a trees would be a huge blow to the ability of our watersheds to absorb and retain water and would enable albezia, eucalyptus, strawberry guava, and other invasive species to take over – trees known to be harmful to Hawaii's natural environment. 'Ohi'a is sacred to several ancient deities of Hawai'i: Ku, Pele, Hi'iaka, and Laka. The wood was used to make ki'i, temple carvings, altars, and other ceremonial structures. The plant is used in traditional herbal medicine and to make leis – can you imagine the Merrie Monarch Festival with lehua leis? Not only would the loss of 'ohi'a trees be detrimental to our island ecosystem but would be a huge cultural loss to Hawaii. I wholeheartedly support the appropriation of funding to mitigate and stop this deadly disease. Sincerely, Chelsey

Please note that testimony submitted less than 24 hours prior to the hearing, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

February 1, 2016

Testimony in Support of SB2271

Relating to Environmental Protection

Chair Mike Gabbard and Vice-Chair Clarence K. Nishihara

Senate Committee on Water, Land, and Agriculture

Dear Senators Gabbard and Nishihara,

I support the appropriation of \$200,000 to research Rapid Ohia Death Disease or Ceratocystis Wilt, and to develop ways to stop and mitigate its spread.

'Ohi'a is the prime constituent of Hawaii's native forests found in almost every ecological niche from sea level to 7,000 feet elevation. The loss of 'ohi'a trees would be a huge blow to the ability of our watersheds to absorb and retain water and would enable albezia, eucalyptus, strawberry guava, and other invasive species to take over – trees known to be harmful to Hawaii's natural environment.

Many native animals depend on 'ohi'a -- endangered forest birds feed on the nectar of its blossoms, snails graze on algae and fungi on its leaves, and insect communities live in its foliage, making it a cornerstone of upland Hawaiian ecosystems..

'Ohi'a is sacred to several ancient deities of Hawai'i: Ku, Pele, Hi'iaka, and Laka. The wood was used to make ki'i, temple carvings, altars, and other ceremonial structures. The plant is used in traditional herbal medicine and to make leis – can you imagine the Merrie Monarch Festival without lehua leis?

Not only would the loss of 'ohi'a trees be detrimental to our island ecosystem but would be a huge cultural loss to Hawaii. I wholeheartedly support the appropriation of funding to mitigate and stop this deadly disease.

Sincerely,

Your name

Christine Johnson

Makaha, Hawaii

Testimony in Support of SB2271

Relating to Environmental Protection

Chair Mike Gabbard and Vice-Chair Clarence K. Nishihara

Senate Committee on Water, Land, and Agriculture

Dear Senators Gabbard and Nishihara,

My name is Clyde Tamaru, Ph.D., and am recently retired from the University of Hawaii at Manoa. I am providing testimony on behalf of myself and do not represent the University of Hawaii. However, while at UH I was an extension specialist Rank S5 with a doctorate from the University of Tokyo. I support the appropriation of \$200,000 to research Rapid Ohia Death Disease or Ceratocystis Wilt, and to develop ways to stop and mitigate its spread. The reasons for my support are as follows:

Our State is in trouble. Not only would the loss of 'ohi'a trees be detrimental to our island ecosystem but would be a huge cultural loss to Hawaii. For example:

- 'Ohi'a is the prime constituent of Hawaii's native forests found in almost every ecological niche from sea level to 7,000 feet elevation. The loss of 'ohi'a trees would be a huge blow to the ability of our watersheds to absorb and retain water and would enable albezia, eucalyptus, strawberry guava, and other invasive species to take over trees known to be harmful to Hawaii's natural environment.
- Many native animals depend on 'ohi'a -- endangered forest birds feed on the nectar of its blossoms, snails graze on algae and fungi on its leaves, and insect communities live in its foliage, making it a cornerstone of upland Hawaiian ecosystems..
- 'Ohi'a is sacred to several deities of Hawai'i: Ku, Pele, Hi'iaka, and Laka. The wood was used to make ki'i, temple carvings, altars, and other ceremonial structures. The plant is used in traditional herbal medicine and to make leis can you imagine the Merrie Monarch Festival without lehua leis?

I wholeheartedly support the appropriation of funding to mitigate and stop this deadly disease. If there are any questions please do not hesitate to contact me.

Sincerely,

Clyde S. Tamaru

Submitted on: 2/2/2016 Testimony for WLA on Feb 3, 2016 14:45PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Courtney Bruch	Individual	Support	No

Comments:

Please note that testimony submitted less than 24 hours prior to the hearing, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

Submitted on: 2/1/2016 Testimony for WLA on Feb 3, 2016 14:45PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Crystal Kia Paul	Individual	Support	No

Comments: Aloha Honorable Chair Gabbard and Vice Chair Nishihara, I humbly ask that you please pass this bill to fund the research of this disease of our beloved `ohia. `Ohia is a significantpart of our culture. We must do our best to help it survive. Mahalo, Crystal Kia-Paul

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

From:	Lewis, Dan
To:	WLA Testimony
Subject:	Support of appropriation to research Rapid Ohia Death Disease
Date:	Tuesday, February 02, 2016 6:05:11 PM

February 2, 2016

Testimony in Support of SB2271 Relating to Environmental Protection

Chair Mike Gabbard and Vice-Chair Clarence K. Nishihara Senate Committee on Water, Land, and Agriculture

Dear Senators Gabbard and Nishihara --

I'm a native of the Big Island, now living on the mainland. I work for one of the world's great cultural institutions, and am deeply committed to environmental matters. I strongly support the appropriation of \$200,000 to research Rapid Ohia Death Disease, also known as Ceratocystis Wilt, and to develop ways to stop and mitigate its spread.

'Ohi'a is the prime constituent of Hawaii's native forests found in almost every ecological niche from sea level to 7,000 feet elevation. The loss of 'ohi'a trees would be a huge blow to the ability of our watersheds to absorb and retain water and would enable albezia, eucalyptus, strawberry guava, and other invasive species to take over – trees known to be harmful to Hawaii's natural environment.

Many native animals depend on 'ohi'a -- endangered forest birds feed on the nectar of its blossoms, snails graze on algae and fungi on its leaves, and insect communities live in its foliage, making it a cornerstone of upland Hawaiian ecosystems.

'Ohi'a is sacred to several deities of Hawai'i: Ku, Pele, Hi'iaka, and Laka. The wood was used to make ki'i, temple carvings, altars, and other ceremonial structures. The plant is used in traditional herbal medicine and to make leis – can you imagine the Merrie Monarch Festival without lehua leis?

Not only would the loss of 'ohi'a trees be detrimental to our island ecosystem but would be a huge cultural loss to Hawaii. I wholeheartedly support the appropriation of funding to mitigate and stop this deadly disease.

Sincerely,

Daniel Lewis

Daniel Lewis, Ph.D. Dibner Senior Curator, History of Science & Technology The Huntington Library, Art Collections & Botanical Gardens 1151 Oxford Road San Marino, CA 91108 626-405-2206

Submitted on: 2/1/2016 Testimony for WLA on Feb 3, 2016 14:45PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Daniel Forman	Individual	Comments Only	No

Comments: I support funding to research how to stop rapid Ohia death.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

From:	mailinglist@capitol.hawaii.gov
To:	WLA Testimony
Cc:	dejinhi@hawaii.rr.com
Subject:	Submitted testimony for SB2271 on Feb 3, 2016 14:45PM
Date:	Monday, February 01, 2016 7:53:54 PM

Submitted on: 2/1/2016 Testimony for WLA on Feb 3, 2016 14:45PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
David E Johnson	Individual	Support	No

Comments: February 1, 2016 Testimony in Support of SB2271 Relating to Environmental Protection Chair Mike Gabbard and Vice-Chair Clarence K. Nishihara Senate Committee on Water, Land, and Agriculture Dear Senators Gabbard and Nishihara, I support the appropriation of \$200,000 to research Rapid Ohia Death Disease or Ceratocystis Wilt, and to develop ways to stop and mitigate its spread. 'Ohi'a is the prime constituent of Hawaii's native forests found in almost every ecological niche from sea level to 7,000 feet elevation. The loss of 'ohi'a trees would be a huge blow to the ability of our watersheds to absorb and retain water and would enable albezia, eucalyptus, strawberry guava, and other invasive species to take over – trees known to be harmful to Hawaii's natural environment. Many native animals depend on 'ohi'a -- endangered forest birds feed on the nectar of its blossoms, snails graze on algae and fungi on its leaves, and insect communities live in its foliage, making it a cornerstone of upland Hawaiian ecosystems.. 'Ohi'a is sacred to several deities of Hawai'i: Ku, Pele, Hi'iaka, and Laka. The wood was used to make ki'i, temple carvings, altars, and other ceremonial structures. The plant is used in traditional herbal medicine and to make leis – can you imagine the Merrie Monarch Festival without lehua leis? Not only would the loss of 'ohi'a trees be detrimental to our island ecosystem but would be a huge cultural loss to Hawaii. I wholeheartedly support the appropriation of funding to mitigate and stop this deadly disease. Sincerely, David E Johnson

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

February 1, 2016 Testimony in Support of SB2271 Relating to Environmental Protection

Chair Mike Gabbard and Vice-Chair Clarence K. Nishihara Senate Committee on Water, Land, and Agriculture

Dear Senators Gabbard and Nishihara,

I support the appropriation of \$200,000 to research Rapid Ohia Death Disease or Ceratocystis Wilt, and to develop ways to stop and mitigate its spread.

'Ohi'a is the prime constituent of Hawaii's native forests found in almost every ecological niche from sea level to 7,000 feet elevation. The loss of 'ohi'a trees would be a huge blow to the ability of our watersheds to absorb and retain water and would enable albezia, eucalyptus, strawberry guava, and other invasive species to take over – trees known to be harmful to Hawaii's natural environment.

Many native animals depend on 'ohi'a -- endangered forest birds feed on the nectar of its blossoms, snails graze on algae and fungi on its leaves, and insect communities live in its foliage, making it a cornerstone of upland Hawaiian ecosystems..

'Ohi'a is sacred to several deities of Hawai'i: Ku, Pele, Hi'iaka, and Laka. The wood was used to make ki'i, temple carvings, altars, and other ceremonial structures. The plant is used in traditional herbal medicine and to make leis – can you imagine the Merrie Monarch Festival without lehua leis?

Not only would the loss of 'ohi'a trees be detrimental to our island ecosystem but would be a huge cultural loss to Hawaii. I wholeheartedly support the appropriation of funding to mitigate and stop this deadly disease.

Sincerely, Denise Bailey HC2 Box 5623 Keaau, HI. 96749 Dear Senators Gabbard and Nishihara,

I support the appropriation of \$200,000 to research Rapid Ohia Death Disease or Ceratocystis Wilt, and to develop ways to stop and mitigate its spread.

'Ohi'a is the prime constituent of Hawaii's native forests found in almost every ecological niche from sea level to 7,000 feet elevation. The loss of 'ohi'a trees would be a huge blow to the ability of our watersheds to absorb and retain water and would enable albezia, eucalyptus, strawberry guava, and other invasive species to take over – trees known to be harmful to Hawaii's natural environment.

Many native animals depend on 'ohi'a -- endangered forest birds feed on the nectar of its blossoms, snails graze on algae and fungi on its leaves, and insect communities live in its foliage, making it a cornerstone of upland Hawaiian ecosystems..

'Ohi'a is sacred to several deities of Hawai'i: Ku, Pele, Hi'iaka, and Laka. The wood was used to make ki'i, temple carvings, altars, and other ceremonial structures. The plant is used in traditional herbal medicine and to make leis – can you imagine the Merrie Monarch Festival without lehua leis?

Not only would the loss of 'ohi'a trees be detrimental to our island ecosystem but would be a huge cultural loss to Hawaii. I wholeheartedly support the appropriation of funding to mitigate and stop this deadly disease.

Sincerely,

Edith Adkins

From:	<u>e kraftsow</u>
To:	WLA Testimony
Subject:	Attn: Mike Gabbard, I Support SB2271
Date:	Monday, February 01, 2016 11:03:34 PM

February 1, 2016 Testimony in Support of SB2271 Relating to Environmental Protection

Chair Mike Gabbard and Vice-Chair Clarence K. Nishihara Senate Committee on Water, Land, and Agriculture

Dear Senators Gabbard and Nishihara,

I support the appropriation of \$200,000 to research Rapid Ohia Death Disease or Ceratocystis Wilt, and to develop ways to stop and mitigate its spread.

'Ohi'a is the prime constituent of Hawaii's native forests found in almost every ecological niche from sea level to 7,000 feet elevation. The loss of 'ohi'a trees would be a huge blow to the ability of our watersheds to absorb and retain water and would enable albezia, eucalyptus, strawberry guava, and other invasive species to take over – trees known to be harmful to Hawaii's natural environment.

Many native animals depend on 'ohi'a -- endangered forest birds feed on the nectar of its blossoms, snails graze on algae and fungi on its leaves, and insect communities live in its foliage, making it a cornerstone of upland Hawaiian ecosystems..

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Not only would the loss of 'ohi'a trees be detrimental to our island ecosystem but would be a huge cultural loss to Hawaii. I wholeheartedly support the appropriation of funding to mitigate and stop this deadly disease.

Sincerely, Ellen Kraftsow February 1, 2016

Subject: Testimony in Support of SB2271 Relating to Environmental Protection Attention: Chair Mike Gabbard and Vice-Chair Clarence K. Nishihara Senate Committee on Water, Land, and Agriculture

Dear Senators Gabbard and Nishihara,

I support the appropriation of \$200,000 to research Rapid Ohia Death Disease or Ceratocystis Wilt, and to develop ways to stop and mitigate its spread.

'Ohi'a is the prime constituent of Hawaii's native forests found in almost every ecological niche from sea level to 7,000 feet elevation. The loss of 'ohi'a trees would be a huge blow to the ability of our watersheds to absorb and retain water and would enable albezia, eucalyptus, strawberry guava, and other invasive species to take over – trees known to be harmful to Hawaii's natural environment.

Many native animals depend on 'ohi'a -- endangered forest birds feed on the nectar of its blossoms, snails graze on algae and fungi on its leaves, and insect communities live in its foliage, making it a cornerstone of upland Hawaiian ecosystems.

'Ohi'a is sacred to several ancient deities of Hawai'i: Ku, Pele, Hi'iaka, and Laka. The wood was used to make ki'i, temple carvings, altars, and other ceremonial structures. The plant is used in traditional herbal medicine and to make leis – can you imagine the Merrie Monarch Festival without lehua leis?

Not only would the loss of 'ohi'a trees be detrimental to our island ecosystem but would be a huge cultural loss to Hawaii. I wholeheartedly support the appropriation of funding to mitigate and stop this deadly disease.

Sincerely,

/s/ Florencia L. Fines
From:	mailinglist@capitol.hawaii.gov
To:	WLA Testimony
Cc:	kekodenning@yahoo.com
Subject:	Submitted testimony for SB2271 on Feb 3, 2016 14:45PM
Date:	Monday, February 01, 2016 8:41:58 PM

Submitted on: 2/1/2016 Testimony for WLA on Feb 3, 2016 14:45PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Genevieve Denning	Individual	Support	No

Comments: February 1, 2016 Testimony in Support of SB2271 Relating to Environmental Protection Chair Mike Gabbard and Vice-Chair Clarence K. Nishihara Senate Committee on Water, Land, and Agriculture Dear Senators Gabbard and Nishihara, I support the appropriation of \$200,000 to research Rapid Ohia Death Disease or Ceratocystis Wilt, and to develop ways to stop and mitigate its spread. 'Ohi'a is the prime constituent of Hawaii's native forests found in almost every ecological niche from sea level to 7,000 feet elevation. The loss of 'ohi'a trees would be a huge blow to the ability of our watersheds to absorb and retain water and would enable albezia, eucalyptus, strawberry guava, and other invasive species to take over – trees known to be harmful to Hawaii's natural environment. Many native animals depend on 'ohi'a -- endangered forest birds feed on the nectar of its blossoms, snails graze on algae and fungi on its leaves, and insect communities live in its foliage, making it a cornerstone of upland Hawaiian ecosystems.. 'Ohi'a is sacred to several deities of Hawai'i: Ku, Pele, Hi'iaka, and Laka. The wood was used to make ki'i, temple carvings, altars, and other ceremonial structures. The plant is used in traditional herbal medicine and to make leis – can you imagine the Merrie Monarch Festival without lehua leis? Not only would the loss of 'ohi'a trees be detrimental to our island ecosystem but would be a huge cultural loss to Hawaii. I wholeheartedly support the appropriation of funding to mitigate and stop this deadly disease. Sincerely, Genevieve K.Denning

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Chair Mike Gabbard and Vice-Chair Clarence K. Nishihara Senate Committee on Water, Land, and Agriculture

Dear Senators Gabbard and Nishihara,

I support the appropriation of \$200,000 to support research of Rapid Ohia Death Disease or Ceratocystis Wilt, and to develop ways to stop and mitigate its spread.

'Ohi'a is the prime constituent of Hawaii's native forests found in almost every ecological niche from sea level to 7,000 feet elevation. The loss of 'ohi'a trees would be a huge blow to the ability of our watersheds to absorb and retain water and would enable albezia, eucalyptus, strawberry guava, and other invasive species to take over – trees known to be harmful to Hawaii's natural environment.

Many native animals depend on 'ohi'a -- endangered forest birds feed on the nectar of its blossoms, snails graze on algae and fungi on its leaves, and insect communities live in its foliage, making it a cornerstone of upland Hawaiian ecosystems..

'Ohi'a is sacred to several ancient deities of Hawai'i: Ku, Pele, Hi'iaka, and Laka. The wood was used to make ki'i, temple carvings, altars, and other ceremonial structures. The plant is used in traditional herbal medicine and to make lei – can you imagine the Merrie Monarch Festival without lehua lei?

Not only would the loss of 'ohi'a trees be detrimental to our island ecosystem but it would be a huge cultural loss to all of Hawai'i Neii and its people. I wholeheartedly support the appropriation of funding to mitigate and stop this deadly threat to our beloved 'ohi'a.

Sincerely,

Heraldo M. Farrington

Heraldo Farrington Huaka'i Consulting PO Box 952 Volcano, HI 96785 Cell: 808.756.6978

"Helping good people do great work, safely."

LinkedIn Public Profile: http://www.linkedin.com/pub/heraldo-farrington/32/776/b42 February 1, 2016

Testimony in Support of SB2271 Relating to Environmental Protection

Chair Mike Gabbard and Vice-Chair Clarence K. Nishihara Senate Committee on Water, Land, and Agriculture

Dear Senators Gabbard and Nishihara,

I support the appropriation of \$200,000 to research Rapid Ohia Death Disease or Ceratocystis Wilt, and to develop ways to stop and mitigate its spread.

'Ohi'a is the prime constituent of Hawaii's native forests found in almost every ecological niche from sea level to 7,000 feet elevation. The loss of 'ohi'a trees would be a huge blow to the ability of our watersheds to absorb and retain water and would enable albezia, eucalyptus, strawberry guava, and other invasive species to take over – trees known to be harmful to Hawaii's natural environment.

Many native animals depend on 'ohi'a -- endangered forest birds feed on the nectar of its blossoms, snails graze on algae and fungi on its leaves, and insect communities live in its foliage, making it a cornerstone of upland Hawaiian ecosystems..

'Ohi'a is sacred to several deities of Hawai'i: Ku, Pele, Hi'iaka, and Laka. The wood was used to make ki'i, temple carvings, altars, and other ceremonial structures. The plant is used in traditional herbal medicine and to make leis – can you imagine the Merrie Monarch Festival without lehua leis?

Not only would the loss of 'ohi'a trees be detrimental to our island ecosystem but would be a huge cultural loss to Hawaii. I wholeheartedly support the appropriation of funding to mitigate and stop this deadly disease.

Sincerely,

Holle Chernis

Noho Nani Mai

Historic & Hula Inspired Arts 510-898-8020 Facebook My Blog

E pili mau na pomaika'i ia 'oe.

Ben Dyre Family Limited Partnership

Supporting S.B. 2271 Relating to Environmental Protection Senate Committee on Water, Land, and Agriculture Wednesday, February 3, 2016, 2:45PM, Room 224

To Whom It May Concern:

The Kaua'i Watershed Alliance strongly supports *SB 2271* which is to make an appropriation for research and mitigation efforts to address rapid ohia death disease in the State.

The Kaua'i Watershed Alliance (KWA) has been actively managing portions of the mauka watershed on Kaua'i since 2003. It members which include DLNR (DOFAW and Land Management Div.) make up a diverse group of public and private entities who own land within the mountainous watershed and understand the importance of protecting and preserving the forests that capture the water - our most precious resource.

The Ben Dyre Family Limited Partnership has been a part of the Kauai Watershed Association (KWA) since its formation in 2003. As a landowner on Kauai, it is an honor to be a part of such an upstanding group, which has helped to protect and conserve our most vital assets- water, and our unique native plants and animal species. Please help continue this work through dedicated funding!

Kauai's Forests, much like native forest the other islands, are dependent upon the Ohia as an anchor species that helps create a healthy ecosystem for the benefit many of Hawaii's endemic forest plants both common and rare!

Thanks so much for the opportunity to voice our support for this bill.

Sincerely,

Holly Dyre General Partner Ben Dyre Family Limited Partnership

From:	Irene Newhouse
То:	WLA Testimony
Subject:	Attn: Mike Gabbard - support SB2271
Date:	Monday, February 01, 2016 12:08:38 PM

I support appropriating funds to study rapid ohia death. If this becomes a serious problem, as it looks as if it will, unless something's done, it will have devastating effect on the remaining native forests of this state, and on the unique birds that depend on them. It will be like Dutch elm disease in the US northeast, which I'm old enough to remember, or chestnut blight, which I am not. The landscape's been irreversibly changed by these disasters.

Irene Newhouse 129 Walua Place Kihei HI 96752

Written Testimony Presented Before the Senate Committee on Water, Land, and Agriculture

Wednesday, February 3, 2016; 2:45 pm

By

J. Kenneth Grace

SB 2271 RELATING TO ENVIRONMENTAL PROTECTION

Chair Gabbard, Vice Chair Nishihara, and members of the Senate Committee on Water, Land, and Agriculture, thank you for this opportunity to testify <u>in support</u> of SB 2271, which appropriates funds to the Department of Agriculture for research and mitigation efforts relating to the rapid ohia death disease in the State.

My name is J. Kenneth Grace. I am a resident of Kaneohe, and employed as Associate Dean for Research in the College of Tropical Agriculture and Human Resources (CTAHR), University of Hawai'i at Mānoa. I am providing personal testimony on SB 2137.

Rapid ohia death, caused by a fungal pathogen first identified in 2014, has spread extremely rapidly on the Big Island, from 15,000 acres of ohia forest infected by the disease in 2014, to 34,000 in 2016. Ohia makes up half the acreage, and half the woody biomass, of all the forests in Hawai'i. Loss of ohia across the state will severally impact our endangered forest birds that depend on the trees for nesting sites, and will intensify invasion of the forest by invasive plant species such as strawberry guava that use more water than ohia, with negative impacts on the watershed. From a cultural standpoint, it is difficult to imagine Hawai'i without ohia and the lehua flowers. Further, forests of dead trees will greatly damage tourism, particularly on the Big Island, and greatly increase fire hazards.

The nursery industry in Hawaii has also been impacted by rapid ohia death, since it has been necessary to impose a quarantine on soil movement from the Big Island to prevent possible spread of the disease.

Researchers from state and federal agencies and the College of Tropical Agriculture and Human Resources (CTAHR) are working to address the spread and management of this severe plant disease, but their efforts are limited by resources and by the absence of prior information on this devastating and very rapidly spreading forest disease. SB 2271 would appropriate the funds necessary to increase these research and management efforts before the disease devastates Big Island forests, and spreads across the state.

I appreciate the opportunity to testify in strong support of SB 2271.

From:	mailinglist@capitol.hawaii.gov
To:	WLA Testimony
Cc:	james.b.friday@gmail.com
Subject:	Submitted testimony for SB2271 on Feb 3, 2016 14:45PM
Date:	Saturday, January 30, 2016 12:13:08 AM

Submitted on: 1/30/2016 Testimony for WLA on Feb 3, 2016 14:45PM in Conference Room 224

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

Comments: I am writing to testify in favor of Senate Bill 2271 appropriating \$200,000 to develop ways to control Rapid Ohia Death. I am the extension specialist in forestry with the University of Hawaii Cooperative Extension Service, although this testimony is my personal opinion and not the University's. I have been working on Rapid Ohia Death since 2013 and have seen the devastation it is causing to the Big Island's forests. For someone who loves the native forest, such as myself, it is heartbreaking to see thousands of acres of dead trees spreading across the landscape. Since we identified the pathogen in 2014, we have assembled team of pathologists, entomologists, ecologists, and foresters to understand the disease, how it moves, and how we can manage it to protect our remaining forests on Hawaii Island and stop the movement of the fungus to other island. An appropriation of \$200,000 would go long way to helping sustain these efforts and be much appreciated. Mahalo for your care for our forests and our islands.

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Dear Senators Gabbard and Nishihara,

I support the appropriation of \$200,000 to research Rapid Ohia Death Disease or Ceratocystis Wilt, and to develop ways to stop and mitigate its spread.

'Ohi'a is the prime constituent of Hawaii's natives forests found in almost every ecological niche from sea level to 7,000 feet elevation. The loss of 'ohi'a trees would be a huge blow to the ability of our watersheds to absorb and retain water and would enable albezia, eucalyptus, strawberry guava, and other invasive species to take over – trees known to be harmful to Hawaii's natural environment.

Many native animals depend on 'ohi'a -- endangered forest birds feed on the nectar of its blossoms, snails graze on algae and fungi on its leaves, and insect communities live in its foliage, making it a cornerstone of upland Hawaiian ecosystems..

'Ohi'a is sacred to several ancient deities of Hawai'i: Ku, Pele, Hi'iaka, and Laka. The wood was used to make ki'i, temple carvings, altars, and other ceremonial structures. The plant is used in traditional herbal medicine and to make leis – can you imagine the Merrie Monarch Festival without lehua leis?

Not only would the loss of 'ohi'a trees be detrimental to our island ecosystem but would be a huge cultural loss to Hawaii. I wholeheartedly support the appropriation of funding to mitigate and stop this deadly disease.

Jeanne and Michael Duberstein, 34 Iliwai Loop, Kihei, HI 96753

Chair Mike Gabbard and Vice-Chair Clarence K. Nishihara Senate Committee on Water, Land, and Agriculture

Dear Senators Gabbard and Nishihara,

I support the appropriation of \$200,000 to research Rapid Ohia Death Disease or Ceratocystis Wilt, and to develop ways to stop and mitigate its spread.

The possibilities of this disease are terrifying: hundreds of thousands of acres of dead Ohia trees. Ohia is one of the iconic trees of Hawai'i; being one of the first to colonize lava flows and remaining as a dominant or co-dominant tree in the oldest of Hawaiian forests.

The death of slow-growing Ohia means the degradation of habitat for many other Hawaiian plants and animals, and additional opportunities for invasive species.

We cannot work to stop the spread of the disease without science-based strategies to fight the disease. Please appropriate these funds so we can do our best to help Hawai'i's forests. It may already be too late, but if we don't try, it is a disgrace.

Sincerely,

Jeff Stallman

From:	mailinglist@capitol.hawaii.gov
To:	WLA Testimony
Cc:	jokimoto@stanfordalumni.org
Subject:	Submitted testimony for SB2271 on Feb 3, 2016 14:45PM
Date:	Tuesday, February 02, 2016 12:40:04 PM

Submitted on: 2/2/2016 Testimony for WLA on Feb 3, 2016 14:45PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Jolyn Rosa	Individual	Support	No

Comments: Dear Senators Gabbard and Nishihara, I am writing to SUPPORT the appropriation of \$200,000 to research Rapid Ohia Death Disease (Ceratocystis Wilt), and to develop ways to stop and mitigate its spread. Particularly at this time of global climate change, we must protect Hawai'i's delicate ecosystem. 'Ohi'a is the prime constituent of Hawaii's native forests. The loss of 'ohi'a trees would devastate our watersheds to absorb and retain water and would enable such invasive species as albezia and eucalyptus to take over. I wholeheartedly support the appropriation of funding to mitigate and stop this deadly disease. Sincerely and with thanks, Jolyn Rosa

Please note that testimony submitted less than 24 hours prior to the hearing, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

Submitted on: 1/31/2016 Testimony for WLA on Feb 3, 2016 14:45PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Kally	Individual	Support	No

Comments: Please allocate this money for the Ohi'as, our watershed, native birds etc etc, erosion, climate, everything. Devastation follows deforestation. I cannot think of anything more important right now. Hawaii depends upon these forests. The Ohias are the lifeblood of my coffee farm. The OHIA Forest even provides Beauveria inoculum. Please allocate!

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From:	mailinglist@capitol.hawaii.gov
To:	WLA Testimony
Cc:	Kamu.akeo@gmail.com
Subject:	Submitted testimony for SB2271 on Feb 3, 2016 14:45PM
Date:	Monday, February 01, 2016 5:43:02 PM

Submitted on: 2/1/2016 Testimony for WLA on Feb 3, 2016 14:45PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Kamuela Akeo	Individual	Comments Only	No

Comments: Dear Senators Gabbard and Nishihara, I support the appropriation of \$200,000 to research Rapid Ohia Death Disease or Ceratocystis Wilt, and to develop ways to stop and mitigate its spread. 'Ohi'a is the prime constituent of Hawaii's native forests found in almost every ecological niche from sea level to 7,000 feet elevation. The loss of 'ohi'a trees would be a huge blow to the ability of our watersheds to absorb and retain water and would enable albezia, eucalyptus, strawberry guava, and other invasive species to take over – trees known to be harmful to Hawaii's natural environment. Many native animals depend on 'ohi'a -- endangered forest birds feed on the nectar of its blossoms, snails graze on algae and fungi on its leaves, and insect communities live in its foliage, making it a cornerstone of upland Hawaiian ecosystems.. 'Ohi'a is sacred to several ancient deities of Hawai'i: Ku, Pele, Hi'iaka, and Laka. The wood was used to make ki'i, temple carvings, altars, and other ceremonial structures. The plant is used in traditional herbal medicine and to make leis – can you imagine the Merrie Monarch Festival without lehua leis? Not only would the loss of 'ohi'a trees be detrimental to our island ecosystem but would be a huge cultural loss to Hawaii. I wholeheartedly support the appropriation of funding to mitigate and stop this deadly disease. With Aloha, Kamuela Akeo

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Chair Mike Gabbard and Vice-Chair Clarence K. Nishihara Senate Committee on Water, Land, and Agriculture

Dear Senators Gabbard and Nishihara,

I support the appropriation of \$200,000 to research Rapid Ohia Death Disease or Ceratocystis Wilt, and to develop ways to stop and mitigate its spread.

'Ohi'a is the prime constituent of Hawaii's natives forests found in almost every ecological niche from sea level to 7,000 feet elevation. The loss of 'ohi'a trees would be a huge blow to the ability of our watersheds to absorb and retain water and would enable albezia, eucalyptus, strawberry guava, and other invasive species to take over – trees known to be harmful to Hawaii's natural environment.

'Ohi'a is sacred to several ancient deities of Hawai?i: Ku, Pele, Hi'iaka, and Laka. The wood was used to make ki'i, temple carvings, altars, and other ceremonial structures. The plant is used in traditional herbal medicine and to make leis – can you imagine the Merrie Monarch Festival without lehua leis?

Not only would the loss of 'ohi'a trees be detrimental to our island ecosystem but would be a huge cultural loss to Hawaii. I wholeheartedly support the appropriation of funding to mitigate and stop this deadly disease.

Sincerely, Keith Y. Higaki Chair Mike Gabbard and Vice-Chair Clarence K. Nishihara Senate Committee on Water, Land, and Agriculture

Dear Senators Gabbard and Nishihara,

I support the appropriation of \$200,000 to research Rapid Ohia Death Disease or Ceratocystis Wilt, and to develop ways to stop and mitigate its spread.

'Ohi'a is the prime constituent of Hawaii's native forests found in almost every ecological niche from sea level to 7,000 feet elevation. The loss of 'ohi'a trees would be a huge blow to the ability of our watersheds to absorb and retain water and would enable albezia, eucalyptus, strawberry guava, and other invasive species to take over – trees known to be harmful to Hawaii's natural environment.

Many native animals depend on 'ohi'a -- endangered forest birds feed on the nectar of its blossoms, snails graze on algae and fungi on its leaves, and insect communities live in its foliage, making it a cornerstone of upland Hawaiian ecosystems..

'Ohi'a is sacred to several deities of Hawai'i: Ku, Pele, Hi'iaka, and Laka. The wood was used to make ki'i, temple carvings, altars, and other ceremonial structures. The plant is used in traditional herbal medicine and to make leis – can you imagine the Merrie Monarch Festival without lehua leis?

Not only would the loss of 'ohi'a trees be detrimental to our island ecosystem but would be a huge cultural loss to Hawaii. I wholeheartedly support the appropriation of funding to mitigate and stop this deadly disease.

Sincerely, Kilohana Roberts

Submitted on: 2/1/2016 Testimony for WLA on Feb 3, 2016 14:45PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Kimberly crawford	Individual	Support	No

Comments: I Support SB2271. we need to save our native forest and watershed.

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Chair Mike Gabbard and Vice-Chair Clarence K. Nishihara Senate Committee on Water, Land, and Agriculture

Dear Senators Gabbard and Nishihara,

I support the appropriation of \$200,000 to research Rapid Ohia Death Disease or Ceratocystis Wilt, and to develop ways to stop and mitigate its spread.

The loss of 'ohi'a trees would be a huge blow to the ability of our watersheds to absorb and retain water and would not only be be very damaging to our upland ecosystems, but another blow to the native culture, as well.

I support the appropriation of funding to mitigate and stop this deadly disease.

Sincerely, Laura Civitello

From:	mailinglist@capitol.hawaii.gov
To:	WLA Testimony
Cc:	LaurieHo1@hawaiiantel.net
Subject:	Submitted testimony for SB2217 on Feb 3, 2016 14:45PM
Date:	Monday, February 01, 2016 2:50:22 PM

Submitted on: 2/1/2016 Testimony for WLA on Feb 3, 2016 14:45PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Laurie Ho	Individual	Support	No

Comments: Aloha and thank you for the opportunity to submit written support to SB2217. We are beneficiaries of the East Kauai Water User's Cooperative (EKWUC) and grow breadfruit trees. We need this grassroots community-based organization to help us maintain our irrigation systems which were abandoned by Lihue Sugar Plantation. It is imperative that the State of Hawaii protect and preserve these elaborate water systems in perpetuity. WE ask that you support the EKWUC ~ what better way to do this? For farmers by farmers! Mahalo.

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From:	mailinglist@capitol.hawaii.gov
To:	WLA Testimony
Cc:	leemarie a@yahoo.com
Subject:	Submitted testimony for SB2271 on Feb 3, 2016 14:45PM
Date:	Monday, February 01, 2016 8:51:20 PM

Submitted on: 2/1/2016 Testimony for WLA on Feb 3, 2016 14:45PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
LeeMarie DePonte	Individual	Support	No

Comments: I support the appropriation of \$200,000 to research Rapid Ohia Death Disease or Ceratocystis Wilt, and to develop ways to stop and mitigate its spread. 'Ohi'a is the prime constituent of Hawaii's native forests found in almost every ecological niche from sea level to 7,000 feet elevation. The loss of 'ohi'a trees would be a huge blow to the ability of our watersheds to absorb and retain water and would enable albezia, eucalyptus, strawberry guava, and other invasive species to take over – trees known to be harmful to Hawaii's natural environment. Many native animals depend on 'ohi'a -- endangered forest birds feed on the nectar of its blossoms, snails graze on algae and fungi on its leaves, and insect communities live in its foliage, making it a cornerstone of upland Hawaiian ecosystems.. 'Ohi'a is sacred to several deities of Hawai'i: Ku, Pele, Hi'iaka, and Laka. The wood was used to make ki'i, temple carvings, altars, and other ceremonial structures. The plant is used in traditional herbal medicine and to make leis – can you imagine the Merrie Monarch Festival without lehua leis? Not only would the loss of 'ohi'a trees be detrimental to our island ecosystem but would be a huge cultural loss to Hawaii. I wholeheartedly support the appropriation of funding to mitigate and stop this deadly disease.

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Submitted on: 2/2/2016 Testimony for WLA on Feb 3, 2016 14:45PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Abby Barrios	Individual	Support	No

Comments:

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Chair Mike Gabbard and Vice-Chair Clarence K. Nishihara Senate Committee on Water, Land, and Agriculture

Dear Senators Gabbard and Nishihara,

I support the appropriation of \$200,000 to research Rapid Ohia Death Disease or Ceratocystis Wilt, and to develop ways to stop and mitigate its spread.

'Ohi'a is the prime constituent of Hawaii's native forests found in almost every ecological niche from sea level to 7,000 feet elevation. The loss of 'ohi'a trees would be a huge blow to the ability of our watersheds to absorb and retain water and would enable albezia, eucalyptus, strawberry guava, and other invasive species to take over – trees known to be harmful to Hawaii's natural environment.

Many native animals depend on 'ohi'a -- endangered forest birds feed on the nectar of its blossoms, snails graze on algae and fungi on its leaves, and insect communities live in its foliage, making it a cornerstone of upland Hawaiian ecosystems..

'Ohi'a is sacred to several deities of Hawai'i: Ku, Pele, Hi'iaka, and Laka. The wood was used to make ki'i, temple carvings, altars, and other ceremonial structures. The plant is used in traditional herbal medicine and to make leis – can you imagine the Merrie Monarch Festival without lehua leis?

Not only would the loss of 'ohi'a trees be detrimental to our island ecosystem but would be a huge cultural loss to Hawaii. I wholeheartedly support the appropriation of funding to mitigate and stop this deadly disease.

Sincerely, Your name

From:	Marlene MCClure
To:	WLA Testimony
Subject:	Attn: Mike Gabbard, I Support SB2271
Date:	Tuesday, February 02, 2016 1:50:52 PM

Chair Mike Gabbard and Vice-Chair Clarence K. Nishihara Senate Committee on Water, Land, and Agriculture

Dear Senators Gabbard and Nishihara,

I support the appropriation of \$200,000 to research Rapid Ohia Death Disease or Ceratocystis Wilt, and to develop ways to stop and mitigate its spread.

'Ohi'a is the prime constituent of Hawaii's native forests found in almost every ecological niche from sea level to 7,000 feet elevation. The loss of 'ohi'a trees would be a huge blow to the ability of our watersheds to absorb and retain water and would enable albezia, eucalyptus, strawberry guava, and other invasive species to take over – trees known to be harmful to Hawaii's natural environment.

Many native animals depend on 'ohi'a -- endangered forest birds feed on the nectar of its blossoms, snails graze on algae and fungi on its leaves, and insect communities live in its foliage, making it a cornerstone of upland Hawaiian ecosystems..

'Ohi'a is sacred to several deities of Hawai'i: Ku, Pele, Hi'iaka, and Laka. The wood was used to make ki'i, temple carvings, altars, and other ceremonial structures. The plant is used in traditional herbal medicine and to make leis – can you imagine the Merrie Monarch Festival without lehua leis?

Not only would the loss of 'ohi'a trees be detrimental to our island ecosystem but would be a huge cultural loss to Hawaii. I wholeheartedly support the appropriation of funding to mitigate and stop this deadly disease.

Sincerely, Marlene and Cameron McClure

Chair Mike Gabbard and Vice-Chair Clarence K. Nishihara Senate Committee on Water, Land, and Agriculture

Dear Senators Gabbard and Nishihara,

I support the appropriation of \$200,000 to research Rapid Ohia Death Disease or Ceratocystis Wilt, and to develop ways to stop and mitigate its spread.

'Ohi'a is the prime constituent of Hawaii's natives forests found in almost every ecological niche from sea level to 7,000 feet elevation. The loss of 'ohi'a trees would be a huge blow to the ability of our watersheds to absorb and retain water and would enable albezia, eucalyptus, strawberry guava, and other invasive species to take over – trees known to be harmful to Hawaii's natural environment.

'Ohi'a is sacred to several ancient deities of Hawai'i: Ku, Pele, Hi'iaka, and Laka. The wood was used to make ki'i, temple carvings, altars, and other ceremonial structures. The plant is used in traditional herbal medicine and to make leis – can you imagine the Merrie Monarch Festival without lehua leis?

Not only would the loss of 'ohi'a trees be detrimental to our island ecosystem but would be a huge cultural loss to Hawaii. I wholeheartedly support the appropriation of funding to mitigate and stop this deadly disease.

Sincerely, Marybeth Fentriss

Sent from my iPad



Chair Mike Gabbard and Vice-Chair Clarence K. Nishihara Senate Committee on Water, Land, and Agriculture

D ear Senators Gabbard and Nishihara,

Please appropriate \$200,000 to research ways to stop and mitigate

the spread of Rapid Ohia Death Disease. As a former national park ranger and Hawai'i conservationist of two decades, this is one of the most critical ecological battles of our time.

The loss of 'oh' a trees, the prime constituent of Hawaii's native forests--from sea level to 7,000 ft.--would be a huge blow to our watersheds. Our watersheds absorb and retain water. Many native animals depend on 'ohi'a, from endangered forest birds to snails and insect communities. The species comprises the cornerstone of upland Hawaiian cosystems. Its loss would mean replacement by invasive trees and the eventual wholesale destruction of the native upland forest.

In addition, it is culturally sacred. The wood was used to make ki'i, temple carvings, altars, and other ceremonial structures. Can you imagine the Merrie Monarch Festival without lehua leis?

The loss of 'ohi'a trees be not only detrimental to our island ecosystems but would be a huge cultural loss to Hawa'i. I wholeheartedly support the appropriation of funding to mitigate and stop this deadly disease.

Sincerely, Melissa Chimera





Melissa Michelle Chimera P.O. Box 1502 Makawao, Hawai'i 96768 USA www.melissachimera.com con n e c t

From:	mailinglist@capitol.hawaii.gov
To:	WLA Testimony
Cc:	nfroman@hotmail.com
Subject:	Submitted testimony for SB2271 on Feb 3, 2016 14:45PM
Date:	Monday, February 01, 2016 6:31:57 PM

Submitted on: 2/1/2016 Testimony for WLA on Feb 3, 2016 14:45PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Napua Froman	Individual	Comments Only	No

Comments: Dear Senators Gabbard and Nishihara, I support the appropriation of \$200,000 to research Rapid Ohia Death Disease or Ceratocystis Wilt, and to develop ways to stop and mitigate its spread. 'Ohi'a is the prime constituent of Hawaii's native forests found in almost every ecological niche from sea level to 7,000 feet elevation. The loss of 'ohi'a trees would be a huge blow to the ability of our watersheds to absorb and retain water and would enable albezia, eucalyptus, strawberry guava, and other invasive species to take over – trees known to be harmful to Hawaii's natural environment. Many native animals depend on 'ohi'a -- endangered forest birds feed on the nectar of its blossoms, snails graze on algae and fungi on its leaves, and insect communities live in its foliage, making it a cornerstone of upland Hawaiian ecosystems.. 'Ohi'a is sacred to several ancient deities of Hawai'i: Ku, Pele, Hi'iaka, and Laka. The wood was used to make ki'i, temple carvings, altars, and other ceremonial structures. The plant is used in traditional herbal medicine and to make leis – can you imagine the Merrie Monarch Festival without lehua leis? Not only would the loss of 'ohi'a trees be detrimental to our island ecosystem but would be a huge cultural loss to Hawaii. I wholeheartedly support the appropriation of funding to mitigate and stop this deadly disease. Sincerely, Napua Froman

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February 1, 2016

Testimony in Support of SB2271 Relating to Environmental Protection

Chair Mike Gabbard and Vice-Chair Clarence K. Nishihara Senate Committee on Water, Land, and Agriculture

Dear Senators Gabbard and Nishihara,

I support the appropriation of \$200,000 to research Rapid Ohia Death Disease or Ceratocystis Wilt, and to develop ways to stop and mitigate its spread.

For the past 20 years I have been hiking throughout the Hawaiian Islands to photograph the native flora and fauna which I blog about at my website – HawaiianForest.Com. 'Ōhi'a trees are one of my favorite things to photograph. In 2013 I was appointed to the Natural Area Reserves System Commission.

'Ōhi'a is the prime constituent of Hawaii's natives forests found in almost every ecological niche from sea level to 7,000 feet elevation. The loss of 'ōhi'a trees would be a huge blow to the ability of our watersheds to absorb and retain water and would enable albezia, eucalyptus, strawberry guava, and other invasive species to take over – trees known to be harmful to Hawaii's natural environment.

'Ōhi'a is sacred to several ancient deities of Hawai'i: Ku, Pele, Hi'iaka, and Laka. The wood was used to make ki'i, temple carvings, altars, and other ceremonial structures. The plant is used in traditional herbal medicine and to make leis – can you imagine the Merrie Monarch Festival with lehua leis?

Not only would the loss of 'ōhi'a trees be detrimental to our island ecosystem but would be a huge cultural loss to Hawaii. I wholeheartedly support the appropriation of funding to mitigate and stop this deadly disease.

Sincerely,

Vattor gran Nathan Yuen

Chair Mike Gabbard and Vice-Chair Clarence K. Nishihara Senate Committee on Water, Land, and Agriculture

Dear Senators Gabbard and Nishihara,

I support the appropriation of \$200,000 to research Rapid Ohia Death Disease or Ceratocystis Wilt, and to develop ways to stop and mitigate its spread.

However, I also request that there be immediate action taken to protect our remaining 'Ohi'a population from extinction. Two very simple actions can be taken immediately.

1) Post signs (as was once done on the Big Island years ago, when there was a threat to the banana business with the bunchy top virus) that alert people that transporting any 'Ohi'a lumber, logs, by-products, flowers, or dirt that could be harboring any infectious virus is illegal and subject to a fine. Make it a very hefty fine for anyone, anyone, caught transporting across our island.

2) Post police within those boundaries to pull over any person hauling logs, etc., and have them immediately confiscated, destroyed, and the person slapped with hefty fine for the illegal transportation.

This is not something that is going to go away on its own. It must be stopped immediately before irreparable harm is done to our forests. The native forests of the Big Island not only give shelter to our native species, they also provide us with our watershed. To allow the trees to die is to put our water source in jeopardy.

Failure to take action to protect our natural resources I believe will lead to lawsuits in the future. It is our State's responsibility to act on this immediately.

'Ohi'a is the prime constituent of Hawaii's native forests found in almost every ecological niche from sea level to 7,000 feet elevation. The loss of 'ohi'a trees would be a huge blow to the ability of our watersheds to absorb and retain water and would enable albezia, eucalyptus, strawberry guava, and other invasive species to take over – trees known to be harmful to Hawaii's natural environment.

Many native animals depend on 'ohi'a -- endangered forest birds feed on the nectar of its blossoms, snails graze on algae and fungi on its leaves, and insect communities live in its foliage, making it a cornerstone of upland Hawaiian ecosystems..

'Ohi'a is sacred to several deities of Hawai'i: Ku, Pele, Hi'iaka, and Laka. The wood was used to make ki'i, temple carvings, altars, and other ceremonial structures. The plant is used in traditional herbal medicine and to make leis – can you imagine the Merrie Monarch Festival without lehua leis?

Not only would the loss of 'ohi'a trees be detrimental to our island ecosystem but would be a huge cultural loss to Hawaii. I wholeheartedly support the appropriation of funding to mitigate and stop this deadly disease.

Sincerely, Patricia Missler Chair Mike Gabbard and Vice-Chair Clarence K. Nishihara Senate Committee on Water, Land, and Agriculture

Dear Senators Gabbard and Nishihara,

I support the appropriation of \$200,000 to research Rapid Ohia Death Disease or Ceratocystis Wilt, and to develop ways to stop and mitigate its spread.

'Ohi'a is the prime constituent of Hawaii's native forests found in almost every ecological niche from sea level to 7,000 feet elevation. The loss of 'ohi'a trees would be a huge blow to the ability of our watersheds to absorb and retain water and would enable albezia, eucalyptus, strawberry guava, and other invasive species to take over – trees known to be harmful to Hawaii's natural environment.

Many native animals depend on 'ohi'a -- endangered forest birds feed on the nectar of its blossoms, snails graze on algae and fungi on its leaves, and insect communities live in its foliage, making it a cornerstone of upland Hawaiian ecosystems.

'Ohi'a is sacred to several deities of Hawai'i: Ku, Pele, Hi'iaka, and Laka. The wood was used to make ki'i, temple carvings, altars, and other ceremonial structures. The plant is used in traditional herbal medicine and to make leis – can you imagine the Merrie Monarch Festival without lehua leis?

Not only would the loss of 'ohi'a trees be detrimental to our island ecosystem but would be a huge cultural loss to Hawaii. I wholeheartedly support the appropriation of funding to mitigate and stop this deadly disease.

Sincerely,

Patti Montgomery Kula, Maui

From:	mailinglist@capitol.hawaii.gov
To:	WLA Testimony
Cc:	alohashellservice@hawaii.rr.com
Subject:	Submitted testimony for SB2271 on Feb 3, 2016 14:45PM
Date:	Tuesday, February 02, 2016 10:11:26 AM

Submitted on: 2/2/2016 Testimony for WLA on Feb 3, 2016 14:45PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Paul Hanada	Individual	Support	No

Comments: Aloha, Please support this bill. Mahalo

Please note that testimony submitted less than 24 hours prior to the hearing, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

From:	mailinglist@capitol.hawaii.gov
To:	WLA Testimony
Cc:	brian@hfbf.org
Subject:	*Submitted testimony for SB2271 on Feb 3, 2016 14:45PM*
Date:	Tuesday, February 02, 2016 3:19:35 PM

Submitted on: 2/2/2016 Testimony for WLA on Feb 3, 2016 14:45PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Randy Cabral	Hawaii Farm Bureau	Support	Yes

Comments:

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From:	mailinglist@capitol.hawaii.gov
To:	WLA Testimony
Cc:	ray@mycybershaman.com
Subject:	Submitted testimony for SB2271 on Feb 3, 2016 14:45PM
Date:	Monday, February 01, 2016 9:03:31 PM

Submitted on: 2/1/2016 Testimony for WLA on Feb 3, 2016 14:45PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Raymond Mata	Individual	Support	No

Comments: Mahalo for this opportunity to submit testimony for SB2271. I've been a resident on the islands for over 15 years now. Our family started on Hawaii Island and spent three years living in Kaloko at 4200ft on the Kona slopes of Hualalai, surrounded by old groves of healthy Ohia trees. I have witnessed first hand what Ohia does for our forests. Covering over 1 million acres across the state, Ohia is a powerful ally in protecting and preserving our island ecosystems by back-boning our watersheds and by supporting other native plant and animal life both directly and indirectly. I can not imagine a Hawaii without Ohia, it would be devastating to the health and beauty that so many have grown up knowing. More recently my family relocated to Kauai and joined a hula halau where we learned of the cultural importance of this tree and its long standing role in the preservation of life and culture. I believe acceptance of this bill will begin the long and prosperous road to protecting and preserving one of life's greatest allies. \$200,000 is a humble beginning for such an important task. I ask that you consider the health and vitality of our shared island home and use your power to help protect Ohia from death. Endless rewards await! A'ohe hana nui ke alu i'a - no task is too great when done together by all.

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From:	mailinglist@capitol.hawaii.gov
To:	WLA Testimony
Cc:	rebeccapike@mac.com
Subject:	Submitted testimony for SB2271 on Feb 3, 2016 14:45PM
Date:	Monday, February 01, 2016 10:04:41 PM

Submitted on: 2/1/2016 Testimony for WLA on Feb 3, 2016 14:45PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Rebecca Pike	Individual	Support	No

Comments: Dear Senators Gabbard and Nishihara, It is impossible that you are not yet aware of the disaster that is Rapid Ohia Death Disease. And impossible that anyone could stand by and not fight it. I support the appropriation of \$200,000 to research Rapid Ohia Death Disease or Ceratocystis Wilt, and to develop ways to stop and mitigate its spread. 'Ohi'a is the prime constituent of Hawaii's native forests found in almost every ecological niche from sea level to 7,000 feet elevation. The loss of 'ohi'a trees would be a huge blow to the ability of our watersheds to absorb and retain water and would enable albezia, eucalyptus, strawberry guava, and other invasive species to take over - trees known to be harmful to Hawaii's natural environment. Many native animals depend on 'ohi'a -- endangered forest birds feed on the nectar of its blossoms, snails graze on algae and fungi on its leaves, and insect communities live in its foliage, making it a cornerstone of upland Hawaiian ecosystems.. 'Ohi'a is sacred to several deities of Hawai'i: Ku, Pele, Hi'iaka, and Laka. The wood was used to make ki'i, temple carvings, altars, and other ceremonial structures. The plant is used in traditional herbal medicine and to make leis - can you imagine the Merrie Monarch Festival without lehua leis? Not only would the loss of 'ohi'a trees be detrimental to our island ecosystem but would be a huge cultural loss to Hawaii. I wholeheartedly support the appropriation of funding to mitigate and stop this deadly disease. Sincerely, Rebecca Pike

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Chair Mike Gabbard and Vice-Chair Clarence K. Nishihara Senate Committee on Water, Land, and Agriculture

Dear Senators Gabbard and Nishihara,

I support the appropriation of \$200,000 to research Rapid Ohia Death Disease or Ceratocystis Wilt, and to develop ways to stop and mitigate its spread.

'Ohi'a is the prime constituent of Hawaii's native forests found in almost every ecological niche from sea level to 7,000 feet elevation. The loss of 'ohi'a trees would be a huge blow to the ability of our watersheds to absorb and retain water and would enable albezia, eucalyptus, strawberry guava, and other invasive species to take over – trees known to be harmful to Hawaii's natural environment.

Many native animals depend on 'ohi'a -- endangered forest birds feed on the nectar of its blossoms, snails graze on algae and fungi on its leaves, and insect communities live in its foliage, making it a cornerstone of upland Hawaiian ecosystems..

'Ohi'a is sacred to several deities of Hawai'i: Ku, Pele, Hi'iaka, and Laka. The wood was used to make ki'i, temple carvings, altars, and other ceremonial structures. The plant is used in traditional herbal medicine and to make leis – can you imagine the Merrie Monarch Festival without lehua leis?

Not only would the loss of 'ohi'a trees be detrimental to our island ecosystem but would be a huge cultural loss to Hawaii. I wholeheartedly support the appropriation of funding to mitigate and stop this deadly disease.

Sincerely,

Rebecca Riggins rg@ryanriggins.com

Submitted on: 2/2/2016 Testimony for WLA on Feb 3, 2016 14:45PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Roddy Akau	Individual	Support	No

Comments: As state-recognized Kahu of Moanalua Valley, and as a practicing Kahuna Laau Lapaau, I recognize both the cultural and environmental importance of our ohia forests. I would therefore like to submit my support for state funds and efforts to combat rapid ohia death, and to prevent the spread to other islands. Mahalo, Roddy Kawehi Kamawaelualani Akau

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February 2, 2016 Testimony in Support of SB2271 Relating to Environmental Protection Chair Mike Gabbard and Vice-Chair Clarence K. Nishihara Senate Committee on Water, Land, and Agriculture

Dear Senators Gabbard and Nishihara,

Thank you for taking the time to read my comments on SB2271.

My name is Sara Tekula, and I am a 40 year old, college educated, working mother. My husband and I have planted native trees in all 50 states (through our project called "Plant a Wish"), and thousands of native trees on our home island of Maui, and we are both active land stewardship/native habitat restoration practitioners living in Makawao.

I am writing to SUPPORT SB2271.

I support the appropriation of \$200,000 to research Rapid Ohia Death Disease or Ceratocystis Wilt, and to develop ways to stop and mitigate its spread.

'Ōhi'a is the prime constituent of Hawaii's native forests found in almost every ecological niche from sea level to 7,000 feet elevation. The loss of 'ōhi'a trees would be a huge blow to the ability of our watersheds to absorb and retain water and would enable albezia, eucalyptus, strawberry guava, and other invasive species to take over – trees known to be harmful to Hawaii's natural environment.

Many native animals depend on 'ōhi'a -- endangered forest birds feed on the nectar of its blossoms, snails graze on algae and fungi on its leaves, and insect communities live in its foliage, making it a cornerstone of upland Hawaiian ecosystems.

'Ōhi'a is sacred to several deities of Hawai'i: Ku, Pele, Hi'iaka, and Laka. The wood was used to make ki'i, temple carvings, altars, and other ceremonial structures. The plant is used in traditional herbal medicine and to make leis – can you imagine the Merrie Monarch Festival without lehua leis?

Not only would the loss of 'ōhi'a trees be detrimental to our island ecosystem but would be a huge cultural loss to Hawaii. I wholeheartedly support the appropriation of funding to mitigate and stop this deadly disease.

Mahalo piha, Sara

Chair Mike Gabbard and Vice-Chair Clarence K. Nishihara Senate Committee on Water, Land, and Agriculture

Dear Senators Gabbard and Nishihara,

I support the appropriation of \$200,000 to research Rapid Ohia Death Disease or Ceratocystis Wilt, and to develop ways to stop and mitigate its spread.

'Ohi'a is the prime constituent of Hawaii's native forests found in almost every ecological niche from sea level to 7,000 feet elevation. The loss of 'ohi'a trees would be a huge blow to the ability of our watersheds to absorb and retain water and would enable albezia, eucalyptus, strawberry guava, and other invasive species to take over – trees known to be harmful to Hawaii's natural environment.

Many native animals depend on 'ohi'a -- endangered forest birds feed on the nectar of its blossoms, snails graze on algae and fungi on its leaves, and insect communities live in its foliage, making it a cornerstone of upland Hawaiian ecosystems..

'Ohi'a is sacred to several deities of Hawai'i: Ku, Pele, Hi'iaka, and Laka. The wood was used to make ki'i, temple carvings, altars, and other ceremonial structures. The plant is used in traditional herbal medicine and to make leis – can you imagine the Merrie Monarch Festival without lehua leis?

Not only would the loss of 'ohi'a trees be detrimental to our island ecosystem but would be a huge cultural loss to Hawaii. I wholeheartedly support the appropriation of funding to mitigate and stop this deadly disease.

Sincerely, Scott Laniakea Splean Kihei, Maui
Submitted on: 2/2/2016 Testimony for WLA on Feb 3, 2016 14:45PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
sean king	Individual	Comments Only	No

Comments: please help save Hawaii by saving the Ohia's from devlopment cutting them dowm from the Albezia trees choking out the them out and the rapid ohia death fungus ...if big islands ohia forests die all of Hawaii will change forever and not for the good

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From:	Shannon Wianecki
To:	WLA Testimony
Subject:	Attn: Mike Gabbard, support SB2271 to save "ohia
Date:	Tuesday, February 02, 2016 10:42:59 AM

Aloha Senators Gabbard and Nishihara,

Please release \$200,000 to research and stop the spread of Rapid Ohia Death. And if that amount is not enough, find more funds.

'Ohi'a is one of the first plants to colonize bare lava flows. A beautiful and strong pioneer, it begins the marvelous process of forest-building. Beneath its shade, native Hawaiian understory plants take root and thrive. Honeycreepers feed on the nectar of its iconic flowers. It grows from sea level to 7,000 feet elevation--a critical component of nearly every indigenous forest type.

Of the many numerous native Hawaiian proverbs refer to 'ohi'a, I offer you this one: *Ke uwe nei ka 'ohi'a o Kealakona*. The 'ohi'a wood of Kealakona weeps [for you].

Mahihelelima, a powerful Maui warriori, taunted the invading army from Hawai'i Island with this declaration. His fortress at Ka'uiki was fortified with 'ohi'a logs from Kealakona. Later the proverb came to mean, "We are prepared to defend ourselves and we are sorry for you if you try and fight us."

Let us announce to the world and to our communities that we are prepared to defend this majestic, essential tree. We will sacrifice convenience and comfort to save it.

With regard, Shannon Wianecki

--Shannon Wianecki (808) 205-7273 <u>www.shannonwianecki.com</u> @swianecki February 1, 2016 Testimony in Support of SB2271 Relating to Environmental Protection

Chair Mike Gabbard and Vice-Chair Clarence K. Nishihara Senate Committee on Water, Land, and Agriculture

Dear Senators Gabbard and Nishihara,

I support the appropriation of \$200,000 to research Rapid Ohia Death Disease or Ceratocystis Wilt, and to develop ways to stop and mitigate its spread.

'Ohi'a is the prime constituent of Hawaii's native forests found in almost every ecological niche from sea level to 7,000 feet elevation. The loss of 'ohi'a trees would be a huge blow to the ability of our watersheds to absorb and retain water and would enable albezia, eucalyptus, strawberry guava, and other invasive species to take over – trees known to be harmful to Hawaii's natural environment.

Many native animals depend on 'ohi'a -- endangered forest birds feed on the nectar of its blossoms, snails graze on algae and fungi on its leaves, and insect communities live in its foliage, making it a cornerstone of upland Hawaiian ecosystems..

'Ohi'a is sacred to several ancient deities of Hawai'i: Ku, Pele, Hi'iaka, and Laka. The wood was used to make ki'i, temple carvings, altars, and other ceremonial structures. The plant is used in traditional herbal medicine and to make leis – can you imagine the Merrie Monarch Festival without lehua leis?

Not only would the loss of 'ohi'a trees be detrimental to our island ecosystem but would be a huge cultural loss to Hawaii. I wholeheartedly support the appropriation of funding to mitigate and stop this deadly disease.

Namaste,

Sherwin Alop BSN, RN, CCRN





From:	mailinglist@capitol.hawaii.gov
To:	WLA Testimony
Cc:	shonvanzandt@gmail.com
Subject:	*Submitted testimony for SB2271 on Feb 3, 2016 14:45PM*
Date:	Tuesday, February 02, 2016 11:33:36 AM

Submitted on: 2/2/2016 Testimony for WLA on Feb 3, 2016 14:45PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Shon Van Zandt	Individual	Support	No

Comments:

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From:	mailinglist@capitol.hawaii.gov
To:	WLA Testimony
Cc:	skrobello@gmail.com
Subject:	Submitted testimony for SB2271 on Feb 3, 2016 14:45PM
Date:	Monday, February 01, 2016 10:04:30 AM

Submitted on: 2/1/2016 Testimony for WLA on Feb 3, 2016 14:45PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Steven K. Robello	Individual	Support	No

Comments: February 1, 2016 Testimony in Support of SB2271 Relating to Environmental Protection Chair Mike Gabbard and Vice-Chair Clarence K. Nishihara Senate Committee on Water, Land, and Agriculture Dear Senators Gabbard and Nishihara, I support the appropriation of \$200,000 to research Rapid Ohia Death Disease or Ceratocystis Wilt, and to develop ways to stop and mitigate its spread. Ohi'a is the prime constituent of Hawaii's natives forests found in almost every ecological niche from sea level to 7,000 feet elevation. The loss of 'ohi'a trees would be a huge blow to the ability of our watersheds to absorb and retain water and would enable albezia, eucalyptus, strawberry guava, and other invasive species to take over – trees known to be harmful to Hawaii's natural environment. 'Ohi'a is sacred to several ancient deities of Hawai'i: Ku, Pele, Hi'iaka, and Laka. The wood was used to make ki'i, temple carvings, altars, and other ceremonial structures. The plant is used in traditional herbal medicine and to make leis – can you imagine the Merrie Monarch Festival with lehua leis? Not only would the loss of 'ohi'a trees be detrimental to our island ecosystem but would be a huge cultural loss to Hawaii. I wholeheartedly support the appropriation of funding to mitigate and stop this deadly disease. Sincerely, Steven Robello

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From:	mailinglist@capitol.hawaii.gov
To:	WLA Testimony
Cc:	susanonmaui@gmail.com
Subject:	Submitted testimony for SB2271 on Feb 3, 2016 14:45PM
Date:	Tuesday, February 02, 2016 10:29:12 AM

Submitted on: 2/2/2016 Testimony for WLA on Feb 3, 2016 14:45PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
susan kean	Individual	Support	No

Comments: I support the appropriation of \$200,000 to research Rapid Ohia Death Disease or Ceratocystis Wilt, and to develop ways to stop and mitigate its spread. 'Ohi'a is the prime constituent of Hawaii's native forests found in almost every ecological niche from sea level to 7,000 feet elevation. The loss of 'ohi'a trees would be a huge blow to the ability of our watersheds to absorb and retain water and would enable albezia, eucalyptus, strawberry guava, and other invasive species to take over – trees known to be harmful to Hawaii's natural environment. Many native animals depend on 'ohi'a -- endangered forest birds feed on the nectar of its blossoms, snails graze on algae and fungi on its leaves, and insect communities live in its foliage, making it a cornerstone of upland Hawaiian ecosystems.. 'Ohi'a is sacred to several deities of Hawai'i: Ku, Pele, Hi'iaka, and Laka. The wood was used to make ki'i, temple carvings, altars, and other ceremonial structures. The plant is used in traditional herbal medicine and to make leis – can you imagine the Merrie Monarch Festival without lehua leis? Not only would the loss of 'ohi'a trees be detrimental to our island ecosystem but would be a huge cultural loss to Hawaii. I wholeheartedly support the appropriation of funding to mitigate and stop this deadly disease. Sincereley, Susan Kean

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Submitted on: 2/2/2016 Testimony for WLA on Feb 3, 2016 14:45PM in Conference Room 224

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

Comments: Dear Senators Gabbard and Nishihara, I support the appropriation of \$200,000 to research Rapid Ohia Death Disease or Ceratocystis Wilt, and to develop ways to stop and mitigate its spread. 'Ohi'a is the prime constituent of Hawaii's native forests found in almost every ecological niche from sea level to 7,000 feet elevation. The loss of 'ohi'a trees would be a huge blow to the ability of our watersheds to absorb and retain water and would enable albezia, eucalyptus, strawberry guava, and other invasive species to take over – trees known to be harmful to Hawaii's natural environment. Many native animals depend on 'ohi'a -- endangered forest birds feed on the nectar of its blossoms, snails graze on algae and fungi on its leaves, and insect communities live in its foliage, making it a cornerstone of upland Hawaiian ecosystems.. 'Ohi'a is sacred to several deities of Hawai'i: Ku, Pele, Hi'iaka, and Laka. The wood was used to make ki'i, temple carvings, altars, and other ceremonial structures. The plant is used in traditional herbal medicine and to make leis – can you imagine the Merrie Monarch Festival without lehua leis? Not only would the loss of 'ohi'a trees be detrimental to our island ecosystem but would be a huge cultural loss to Hawaii. I wholeheartedly support the appropriation of funding to mitigate and stop this deadly disease. Mahalo nui.

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Submitted on: 2/2/2016 Testimony for WLA on Feb 3, 2016 14:45PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Teri L Skillman	Individual	Support	No

Comments: February 1, 2016 Testimony in Support of SB2271 Relating to Environmental Protection Chair Mike Gabbard and Vice-Chair Clarence K. Nishihara Senate Committee on Water, Land, and Agriculture Dear Senators Gabbard and Nishihara, I support the appropriation of \$200,000 to research Rapid Ohia Death Disease or Ceratocystis Wilt, and to develop ways to stop and mitigate its spread. 'Ohi'a is the prime constituent of Hawaii's native forests found in almost every ecological niche from sea level to 7,000 feet elevation. The loss of 'ohi'a trees would be a huge blow to the ability of our watersheds to absorb and retain water and would enable albezia, eucalyptus, strawberry guava, and other invasive species to take over – trees known to be harmful to Hawaii's natural environment. Many native animals depend on 'ohi'a -- endangered forest birds feed on the nectar of its blossoms, snails graze on algae and fungi on its leaves, and insect communities live in its foliage, making it a cornerstone of upland Hawaiian ecosystems. 'Ohi'a is sacred to several deities of Hawai'i: Ku, Pele, Hi'iaka, and Laka. The wood was used to make ki'i, temple carvings, altars, and other ceremonial structures. The plant is used in traditional herbal medicine and to make leis – can you imagine the Merrie Monarch Festival without lehua leis? Not only would the loss of 'ohi'a trees be detrimental to our island ecosystem but would be a huge cultural loss to Hawaii. I wholeheartedly support the appropriation of funding to mitigate and stop this deadly disease. My doctoral dissertation was on the Merrie Monarch Festival so I write in full support of the Bill to stop rapid death of 'ohi'a trees. The 'ohi'a trees are essential to the hula tradition and an important part of the mo'olelo repertoire. Sincerely, Dr. Teri L. Skillman

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Submitted on: 2/2/2016 Testimony for WLA on Feb 3, 2016 14:45PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Teri Heede	Individual	Support	No

Comments: I support the appropriation of \$200,000 to research Rapid Ohia Death Disease or Ceratocystis Wilt, and to develop ways to stop and mitigate its spread.

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Aloha Mike -

I support SB2271 regarding funding for ROD mitigation.

Mahalo,

Tim Bowden

Submitted on: 2/2/2016 Testimony for WLA on Feb 3, 2016 14:45PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Toni Auld Yardley	Individual	Comments Only	No

Comments: I highly recommend you seek cultural consultation from the KANAKAOLE FOUNDATION.

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From:	Me Me
To:	WLA Testimony
Subject:	Attn: Mike Gabbard, I Support SB2271
Date:	Monday, February 01, 2016 7:30:06 PM

Dear Senators Gabbard and Nishihara,

I support the appropriation of \$200,000 to research Rapid Ohia Death Disease or Ceratocystis Wilt, and to develop ways to stop and mitigate its spread. 'Ohi'a is the prime constituent of Hawaii's native forests found in almost every ecological niche from sea level to 7,000 feet elevation. The loss of 'ohi'a trees would be a huge blow to the ability of our watersheds to absorb and retain water and would enable albezia, eucalyptus, strawberry guava, and other invasive species to take over – trees known to be harmful to Hawaii's natural environment.

Many native animals depend on 'ohi'a -- endangered forest birds feed on the nectar of its blossoms, snails graze on algae and fungi on its leaves, and insect communities live in its foliage, making it a cornerstone of upland Hawaiian ecosystems..

Not only would the loss of 'ohi'a trees be detrimental to our island ecosystem but would be a huge cultural loss to Hawaii. I wholeheartedly support the appropriation of funding to mitigate and stop this deadly disease. Sincerely,

Vanassa Melendez

Submitted on: 2/2/2016 Testimony for WLA on Feb 3, 2016 14:45PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Wade Holmes	Individual	Comments Only	No

Comments: February 1, 2016 Testimony in Support of SB2271 Relating to Environmental Protection Chair Mike Gabbard and Vice-Chair Clarence K. Nishihara Senate Committee on Water, Land, and Agriculture Dear Senators Gabbard and Nishihara, I support the appropriation of \$200,000 to research Rapid Ohia Death Disease or Ceratocystis Wilt, and to develop ways to stop and mitigate its spread. 'Ohi'a is the prime constituent of Hawaii's native forests found in almost every ecological niche from sea level to 7,000 feet elevation. The loss of 'ohi'a trees would be a huge blow to the ability of our watersheds to absorb and retain water and would enable albezia, eucalyptus, strawberry guava, and other invasive species to take over – trees known to be harmful to Hawaii's natural environment. Many native animals depend on 'ohi'a -- endangered forest birds feed on the nectar of its blossoms, snails graze on algae and fungi on its leaves, and insect communities live in its foliage, making it a cornerstone of upland Hawaiian ecosystems. 'Ohi'a is sacred to several deities of Hawai'i: Ku, Pele, Hi'iaka, and Laka. The wood was used to make ki'i, temple carvings, altars, and other ceremonial structures. The plant is used in traditional herbal medicine and to make leis – can you imagine the Merrie Monarch Festival without lehua leis? Not only would the loss of 'ohi'a trees be detrimental to our island ecosystem but would be a huge cultural loss to Hawaii. I wholeheartedly support the appropriation of funding to mitigate and stop this deadly disease. Sincerely, Wade Holmes Ethnobotanist, UH-Manoa Graduate

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From:	mailinglist@capitol.hawaii.gov
To:	WLA Testimony
Cc:	<u>ymakaha@gmail.com</u>
Subject:	Submitted testimony for SB2271 on Feb 3, 2016 14:45PM
Date:	Monday, February 01, 2016 10:08:03 AM

Submitted on: 2/1/2016 Testimony for WLA on Feb 3, 2016 14:45PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Yoshio Akaha	Individual	Support	No

Comments: February 1, 2016 Testimony in Support of SB2271 Relating to Environmental Protection Chair Mike Gabbard and Vice-Chair Clarence K. Nishihara Senate Committee on Water, Land, and Agriculture Dear Senators Gabbard and Nishihara, I support the appropriation of \$200,000 to research Rapid Ohia Death Disease or Ceratocystis Wilt, and to develop ways to stop and mitigate its spread. Ohi'a is the prime constituent of Hawaii's natives forests found in almost every ecological niche from sea level to 7,000 feet elevation. The loss of 'ohi'a trees would be a huge blow to the ability of our watersheds to absorb and retain water and would enable albezia, eucalyptus, strawberry guava, and other invasive species to take over – trees known to be harmful to Hawaii's natural environment. 'Ohi'a is sacred to several ancient deities of Hawai'i: Ku, Pele, Hi'iaka, and Laka. The wood was used to make ki'i, temple carvings, altars, and other ceremonial structures. The plant is used in traditional herbal medicine and to make leis – can you imagine the Merrie Monarch Festival with lehua leis? Not only would the loss of 'ohi'a trees be detrimental to our island ecosystem but would be a huge cultural loss to Hawaii. I wholeheartedly support the appropriation of funding to mitigate and stop this deadly disease. Sincerely, Yoshi Akaha

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