

# HCR 47

Measure  
Title:

REQUESTING THE HAWAII DEPARTMENT OF AGRICULTURE AND  
UNITED STATES DEPARTMENT OF AGRICULTURE TO TAKE  
ADMINISTRATIVE ACTIONS TO PROTECT OHIA AND OTHER  
MYRTACEAE FAMILY PLANTS FROM THE DESTRUCTIVE RUST FUNGUS,  
PUCCINIA PSIDII.

Report Title:

Rust Fungus; Not Authorized Pending Pest Risk Analysis Petition

NEIL ABERCROMBIE  
GOVERNOR OF HAWAII



STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES

POST OFFICE BOX 621  
HONOLULU, HAWAII 96809

Testimony of  
WILLIAM J. AILA, JR.  
Chairperson

Before the Senate Committees on  
ENERGY & ENVIRONMENT  
and  
AGRICULTURE

Tuesday, April 15, 2014  
10AM  
State Capitol, Conference Room 225

In consideration of  
HOUSE CONCURRENT RESOLUTION 47  
REQUESTING THE HAWAII DEPARTMENT OF AGRICULTURE AND UNITED  
STATES DEPARTMENT OF AGRICULTURE TO TAKE ADMINISTRATIVE  
ACTIONS TO PROTECT ŌHIA AND OTHER *MYRTACEAE* FAMILY PLANTS FROM  
THE DESTRUCTIVE RUST FUNGUS, *PUCCINIA PSIDII*.

House Concurrent Resolution 47 describes the threat posed by the nonnative fungus *Puccinia psidii* to native 'ōhi'a and the ecosystems it supports. This measure requests the Hawai'i Department of Agriculture adopt administrative rules restricting the import of plants in the Myrtaceae family to minimize the risk of introduction of the associated *P. psidii* fungus. The measure also requests that the United States Department of Agriculture acts upon an existing request from the Department of Land and Natural Resources (Department) to classify imports of Myrtaceae species as Not Authorized Pending Pest Risk Analysis. **The Department strongly supports this measure.**

Native 'ōhi'a is a dominant tree species in our mauka forests and is critical to supporting our watershed structure and function. The Department's *Rain Follows the Forest* initiative recognizes the importance of these ecosystems to sustaining Hawai'i's biodiversity and our source of fresh water. The Department also administers the interagency Hawai'i Invasive Species Council (HISC), which in 2011 adopted HISC Resolution 11-4, "Regarding 'Ōhi'a Rust", which supports the establishment of administrative rules restricting imports of plants in the myrtle family to minimize the risk of introduction of *P. psidii*.

The Department appreciates the opportunity to provide these comments.

WILLIAM J. AILA, JR.  
CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCE MANAGEMENT

JESSEK SOUKI  
FIRST DEPUTY

WILLIAM M. TAM  
DEPUTY DIRECTOR - WATER

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



### HCR47

REQUESTING THE HAWAII DEPARTMENT OF AGRICULTURE TO TAKE ADMINISTRATIVE ACTIONS TO PROTECT OHIA AND OTHER MYRTACEAE FAMILY PLANTS FROM THE DESTRUCTIVE RUST FUNGUS, PUCCINIA PSIDII.

Senate Committee on Energy and Environment

Senate Committee on Agriculture

April 15, 2014

10:00 a.m.

Room 225

The Office of Hawaiian Affairs (OHA) **SUPPORTS** HCR47, which would urge proactive administrative measures to protect Hawai'i's iconic and culturally, ecologically and environmentally significant 'ōhi'a from potentially catastrophic pest introductions.

Found nowhere else in the world, 'ōhi'a or *Metrosideros polymorpha* is a key component of Hawai'i's culture, ecology and environment. Native Hawaiians recognize 'ōhi'a as the first sign of life to emerge after a lava flow, and have developed a range of medicinal, spiritual, practical and other uses for all parts of the plant. Many aspects of our islands' ecosystems also depend upon the unique characteristics of 'ōhi'a, and a number of endemic and often endangered species have evolved to form close relationships with what is still one of the most common trees in Hawai'i. Moreover, the restoration of our once abundant 'ōhi'a forests is now recognized as critical to watershed protection and aquifer recharge, a growing concern given the anticipated impacts of an increasing population base, decreasing rainfall trends and climate change.

As noted in this resolution, the recent introduction and extraordinarily rapid distribution of a relatively benign strain of the rust fungus *Puccinia* demonstrated the vulnerability of 'ōhi'a and related plants to potentially catastrophic destruction, should a more malignant strain be introduced. Given the high potential for such an introduction, and the apparent futility of reactive, post-introduction control measures, timely and proactive rulemaking as urged by these resolutions may be a necessary investment to protect one of our most iconic and significant plant species.

Accordingly, OHA urges the Committees to **PASS** HCR47. Mahalo for the opportunity to testify on this important issue.

NEIL ABERCROMBIE  
Governor



SCOTT E. ENRIGHT  
Chairperson, Board of Agriculture

KEN H. KAKESAKO  
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 HOUSE COMMITTEES ON ENERGY AND ENVIRONMENT AND  
AGRICULTURE  
TUESDAY, APRIL 15, 2014  
10:00 A.M.  
Conference Room 225

HCR NO. 47 REQUESTING THE HAWAII DEPARTMENT OF AGRICULTURE AND  
UNITED STATES DEPARTMENT OF AGRICULTURE TO TAKE ADMINISTRATIVE  
ACTIONS TO PROTECT OHIA AND OTHER MYRTACEAE FAMILY PLANTS FROM  
THE DESTRUCTIVE RUST FUNGUS, PUCCINIA PSIDI

Chairpersons Gabbard and Nishihara and Members of the Committees:

Thank you for the opportunity to testify on House Concurrent Resolution No. 47. This resolution requests the Hawaii Department of Agriculture (HDOA) to adopt permanent rules restricting importation of plants in the Myrtaceae family. The Department supports the intent of this resolution.

HDOA is already in the process of creating new permanent importation rules for plants in the Myrtaceae family, and HDOA is dedicated to adopting these rules in a timely manner, following all procedures in our administrative rules and the Hawaii Revised Statutes.

Thank you, again, for the opportunity to testify on this measure.



Testimony of The Nature Conservancy of Hawai'i  
Supporting HCR 47 Requesting the Hawai'i Department of Agriculture and  
The U.S. Department of Agriculture to Take Administrative Actions to Protect  
'Ōhi'a and Other Myrtaceae Family Plants from the Destructive Rust Fungus *Puccinia Psidii*  
Senate Committee on Energy and Environment  
Senate Committee on Agriculture  
Tuesday, April 15, 2014, 10:00AM, Room 225

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*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 in these islands depends. The Conservancy has helped to protect nearly 200,000 acres of natural lands in Hawai'i. Today, we actively manage more than 35,000 acres in 11 nature preserves on Maui, Hawai'i, Moloka'i, Lāna'i, and Kaua'i. We also work closely with government agencies, private parties and communities on cooperative land and marine management projects.*

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The Nature Conservancy supports HCR 47.

We are grateful for and supportive of the administrative rules currently being drafted by the Hawai'i Department of Agriculture to restrict *Myrtaceae* family plant imports to Hawai'i to prevent introduction of additional strains of *Puccinia psidii*, or 'ōhi'a rust. We also urge the U.S. Department of Agriculture to favorably review and approve the Hawai'i Department of Land and Natural Resource's petition seeking federal restrictions on foreign imports of *Myrtaceae* family plants to Hawai'i.

One strain of *Puccinia psidii* was discovered attacking horticultural plants and *Myrtaceous* native plants on O'ahu in 2005. Within a few months, it had spread to all the main Hawaiian Islands. This rust attacks a wide range of plants. Of greatest concern in Hawai'i is the native 'ōhi'a tree, which makes up 75% of the native forests on the islands. Loss of the 'ōhi'a would destroy habitat for the islands' beleaguered native wildlife and expose steep-sided watersheds to severe erosion. The strain of the rust now in Hawai'i does not cause significant damage to 'ōhi'a, but experts fear introduction of other, more virulent strains.

Invasive weeds, insects, diseases, and other pests are one of the greatest threats to Hawaii's economy, agriculture, natural environment, and the health and lifestyle of its people. With favorable conditions and limited competition, non-native species arrive in the Hawaiian islands to find an easy environment in which to thrive. Evidence from Hawai'i and around the world shows that preventing new pest establishment is exponentially more economical than eradicating a pest or, even worse, controlling it indefinitely once it becomes established.

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

April 14, 2014

HEARING BEFORE THE  
SENATE COMMITTEE ON ENERGY AND ENVIRONMENT  
SENATE COMMITTEE ON AGRICULTURE

**TESTIMONY ON HCR47**

REQUESTING THE HAWAII DEPARTMENT OF AGRICULTURE AND UNITED STATES  
DEPARTMENT OF AGRICULTURE TO TAKE ADMINISTRATIVE ACTIONS TO PROTECT OHIA AND  
OTHER MYRTACEAE FAMILY PLANTS FROM THE DESTRUCTIVE RUST FUNGUS, PUCCINIA  
PSIDII

Room 225  
10:00 AM

Aloha Chair Gabbard, Chair Nishihara, Vice Chair Ruderman, Vice Chair Kouchi, and Members of the Committees:

I am Christopher Manfredi, President of the Hawaii Farm Bureau (HFB). Organized since 1948, the HFB is comprised of 1,832 farm family members statewide, and serves as Hawaii's voice of agriculture to protect, advocate and advance the social, economic and educational interest of our diverse agricultural community.

**HFB stands in strong support of HCR 47** requesting the HDOA to expeditiously adopt a permanent rule restricting the importation of plants in the Myrtaceae family.

The Ohia plant is recognized as a cultural and ecologically important plant species in Hawaii. It is under significant threat by *Puccinia psidii* and its devastation can be seen in ghostly stands of rose apple on the road to Hana. The Ohia is an important plant in our watersheds and devastation to these stands will strain our already insufficient water systems.

Over the last few years, the Hawaii Agricultural Foundation in cooperation with CGAPS and Hau'oli Mau Loa Foundation provided Eucalyptus seedlings to farmers across the state. Harvests of the plantings have begun. The capacity to meet local florists needs have been established. Brides will have bouquets of their dreams even with a prohibition in place.

This program provides an excellent example of the partnership between agriculture and the environmental community. Local production of agricultural crops whose imports could cause significant harm to the environment will provide an excellent mechanism to address consumer desires while protecting the environment. It also provides a working example of the comprehensive nature of the Hawaii Biosecurity Plan as crafted by the Legislature.

HFB respectfully requests your **strong support** of this measure as a natural progression in the control of this devastating invasive species. We also request that the Legislature use this as an example of the need for a comprehensive plan when making decisions on bills regarding invasive species. Thank you.

**HCR47**

Submitted on: 4/13/2014

Testimony for ENE/AGL on Apr 15, 2014 10:00AM in Conference Room 225

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
John R. Gordines	Hawaii Floriculture & Nursery Ass.	Support	No

Comments: Thank you the privilege of testifying in support of HCR 47. I am presently the Regulatory Chairman for the Hawaii Floriculture and Nursery Association the statewide organization of 300 growers, exporters, nurseries and stakeholders for floriculture and nursery in Hawaii. The "Import Replacement" program has been moving forward for the past two years, farmers, florists are currently on board with product here in Hawaii to substitute Myrtaceae importation. We strongly encourage the HDOA and the USDA to implement this ban ASAP. Mahalo, Johnny Gordines Director and Regulatory Chair HFNA



COORDINATING GROUP ON  
ALIEN PEST SPECIES

The Senate  
Committee on Energy and Environment  
Tuesday, April 15, 2014  
10:00 a.m., Conference Room 225  
State Capitol

### **Testimony in Support of HCR 47**

Aloha Chair Gabbard, Vice Chair Ruderman, and Members of the Committee,

The Coordinating Group on Alien Pest Species (CGAPS) supports HCR 47, which urges the federal and state departments of agriculture to adopt rules to protect 'ōhi'a, and myrtle family plants, from introductions of *Puccinia psidii*, a rust fungus native to South and Central America.

In 2005, a new rust fungus was discovered spreading on plants in the myrtle family, including rose apple and 'ōhi'a. Surveys found that the rust fungus, *Puccinia psidii*, had already spread to each of the main islands. We watched for several tense months as the rust proved extremely virulent on a rose apple, infesting new growth and eventually defoliating and killing trees, but not proving nearly as severe on 'ōhi'a. We felt like we dodged a bullet because the same could have happened to 'ōhi'a, our dominant native forest tree which occupies more than 1 million acres.

Since then, we learned that *Puccinia psidii* is a global threat to myrtle family plants, and that it spreads hidden in imported myrtle family plants and foliage that are its hosts. In 2007, HDOA passed an interim rule restricting the importation of myrtle family plants. During this time, HDOA inspection of imported flower bouquets found the rust on cut myrtle foliage.

Although the rule expired in 2008, more evidence was collected that overwhelmingly demonstrates that there is a clear and high risk to all myrtle family plants in Hawai'i from additional introductions of *Puccinia psidii*. Genetic studies show that there are multiple strains of this rust fungus, and each strain is associated with different myrtle family plants. Research also showed that when 'ōhi'a were sent to Brazil, all strains were able to sicken 'ōhi'a, some very severely. Further, there is evidence that shows that additional introductions of the strain already present in Hawai'i can bring genetic variation that changes how the rust behaves and what it impacts.

A restriction on the importation of myrtle family plants would allow agencies to set in place safe importation requirements for industries such as biofuels, which import eucalyptus (another myrtle family plant), and even nursery industry imports. For flower vendors who import, there are fewer options, although I suspect that the vast majority of people couldn't identify the foliage in a flower bouquet, much less care if it were myrtle or some other greenery. In fact, one big box store has continued to ship bouquets to Hawai'i without myrtle family foliage in them since the interim rule in 2007, with no apparent impact in sales. For cut eucalyptus, HDOA and partners used a private grant to grow and distribute for free, thousands of ornamental eucalyptus plants statewide to nurseries and flower growers to replace any potential loss in this area.

Your support of HCR 47 will help us send the message that 'ōhi'a must be protected, that there is ample evidence that documents the risk. Mahalo for your consideration.

Aloha,  
Christy Martin, CGAPS