LINDA LINGLE Governor



SANDRA LEE KUNIMOTO Chairperson, Board of Agriculture

> DUANE K. OKAMOTO Deputy to the Chairperson

State of Hawaii DEPARTMENT OF AGRICULTURE 1428 South King Street Honolulu, Hawaii 96814-2512

TESTIMONY OF SANDRA LEE KUNIMOTO CHAIRPERSON, BOARD OF AGRICULTURE

BEFORE THE HOUSE COMMITTEES ON AGRICULTURE AND ENERGY & ENVIRONMENTAL PROTECTION

FEBRUARY 6, 2008 8:30 A.M.

HOUSE BILL NO. 2501 RELATING TO BIOSECURITY

Chairpersons Tsuji and Morita and Members of the Committees:

Thank you for the opportunity to provide testimony on House Bill No. 2501.

The purpose of this bill is to establish and fund the department of agriculture's biosecurity program. The department supports this bill provided it does not adversely impact priorities as indicated in our executive biennium budget.

The department of agriculture has formulated and has begun to implement a new biosecurity program for the state consisting of preclearance programs, port-of-entry inspections, post-entry control and eradication programs, and initiatives to spur the growth of agriculture in Hawaii to reduce the state's dependency on imported agricultural products.

Several major projects key to the implementation of the biosecurity program are underway at this time. Specifically, we have initiated the planning and installation of joint-use inspection facilities at the airports and harbors to mitigate environmental concerns for the improvements to the transportation infrastructure at ports statewide; and are currently developing coordinated federal-state programs targeting risk assessments, diagnostics, detection, control and suppression, and emergency management programs. CIP proposals have been submitted and are under review in the department. Consultants are involved in scoping the project and identifying the needs of state and federal agencies, the airlines, freight carriers and growers in Hawaii.

A separate but related initiative is under way to identify the inspection infrastructure needed at Honolulu Harbor of the inspection of sea containers arriving in Hawaii containing high pest risk cargo.

In addition to the above, the department has committed to expand efforts to control invasive species in Hawaii through biological control, the introduction of beneficial insects and pathogens for the control of pest species. The department has an excellent track record in this area.

LINDA LINGLE GOVERNOR OF HAWAII





LAURA H. THIELEN CHAIRPERSON BOARD OF LAND AND NATURAL RESOURCES COMMISSION ON WATER RESOURCE MANAGEMENT

> RUSSELL Y. TSUJI FIRST DEPUTY

KEN C. KAWAHARA DEPUTY DIRECTOR - WATER

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

STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES

POST OFFICE BOX 621 HONOLULU, HAWAII 96809

TESTIMONY OF THE CHAIRPERSON OF THE BOARD OF LAND AND NATURAL RESOURCES

on House Bill 2501 – RELATING TO BIOSECURITY

BEFORE THE HOUSE COMMITTEE ON AGRICULTURE

February 6, 2008

House Bill 2501 consolidates existing quarantine authorities and stated goals for the Department of Agriculture (DOA) by recognizing the biosecurity program, provides authorities to require cargo manifests of cargo and provides funding. The Department of Land and Natural Resources (Department) supports the intent of this measure, but has concerns as it would adversely impact priorities in the Executive Supplemental Budget request

Preventing new invasive species from establishing in Hawaii provides the greatest long term protection for Hawaii and the Department supports stronger import quarantine measures. Fortunately, the Hawaii's islands provide a natural barrier and advantage that helps slow the interisland movement of invasive species. The increase in interisland transportation without adequate inspection and quarantine has resulted in the spread of invasive species across the state once they become established on a single island. Some of the most recent and costly examples of this are the introduction of several coqui frogs each year to the islands of Maui, Molokai, Oahu and Kauai and the spread of stinging nettle caterpillar from the Big Island to Maui and Oahu.

In Hawaii, over 432,000 - 20' equivalent containers are imported annually according to 2005 numbers recorded by the Department of Transportation. A similar number of containers are transported interisland each year. Allowing DOA to review detailed descriptions of the contents of the containers and prioritize them for inspection will allow the highest risk goods to be inspected for invasive species as the current DOA capacity allows while allowing the rest to move on to their destinations. Requiring detailed manifests will improve the State's response to future risk posed by new commodities such as the increased importation of building materials that may harbor invasive plants, insects or even larger animals such as snakes. Including inspection and quarantine treatment in the State's transportation network and providing DOA with the resources and authority to improve interisland and import quarantine for Hawaii, protects the State's agricultural sector, tourism economy and environment.

DOA has developed and implemented key initiatives in their Biosecurity Strategy designed to reduce the import and spread of invasive species such as coqui and nettle caterpillar. The recent increase in permanent inspector positions and the establishment of the user fee under Act 9,

Session Laws of Hawaii 2007, has been an important incremental step in the process of supporting a modernized and functional quarantine system to protect Hawaii from invasive species that threaten agriculture, the economy, our environment and way of life.

The development of sustained, scalable funding for Hawaii's quarantine system was one of the priorities recognized by the 2002 Legislative Reference Bureau Report "Filling the Gaps in the Fight Against Invasive Species". In a poll carried out in Feb 2007 by Qmark, a division of Star Segal, done on behalf of the Coordinating Group on Alien Pest Species (CGAPS), nearly 75% of those polled supported a service fee to protect Hawaii from invasive species.

Establishment of adequate interisland quarantine inspections and improvements in inspections of imports will require additional resources and authorities as identified in this measure. The Department supports the intent of this measure, however has concerns with the budgetary implications this bill will have on the Executive Supplemental Budget request, and defers to DOA on the specific mechanisms for developing these tools.

BRENNON T. MORIOKA INTERIM DIRECTOR

Deputy Directors MICHAEL D. FORMBY FRANCIS PAUL KEENO BRIAN H. SEKIGUCHI

IN REPLY REFER TO:

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION 869 PUNCHBOWL STREET HONOLULU, HAWAII 96813-5097

February 6, 2008

TESTIMONY OF THE DEPARTMENT OF TRANSPORTATION

HOUSE BILL NO. 2501

COMMITTEE ON AGRICULTURE

The Department of Transportation supports this bill.

House Bill No. 2501 would, in part, add new language to Chapter 150A, HRS, to establish a biosecurity program and require cargo carriers to prepare and submit manifests of cargo shipped into the State or between islands, to the Department of Agriculture.

We believe the establishment of a biosecurity program will provide the State with an important tool to control the spread of invasive species. As an operator of airport and harbor facilities in the State, the Department stands ready to work with the Department of Agriculture in its implementation of actions to achieve the objectives of this bill.

HAWAII FARM BUREAU FEDERATION 2343 ROSE STREET HONOLULU, HI 96819

FEBRUARY 6, 2008

HEARING BEFORE THE HOUSE COMMITTEE ON AGRICULTURE & HOUSE COMMITTEE ON ENERGY AND ENVIRONMENTAL PROTECTION

TESTIMONY ON HB 2501 RELATING TO BIOSECURITY

Chair Tsuji and Morita and Members of the Committee:

My name is Alan Takemoto, Executive Director, of the Hawaii Farm Bureau Federation, which is the largest non-profit general agriculture organization representing approximately 1,600 farm and ranch family members statewide.

The Hawaii Farm Bureau Federation supports HB 2501, which establishes statutory provisions and appropriates funds for the DOA's biosecurity program.

Invasive species have become one of the most devastating problems impacting Hawaii's agricultural industry. Invasive species have negatively impacted both Hawaii's environment and economy. The demise of the native wili wili tress, the recent infestation of imported Christmas trees, coqui frog, and others pests and diseases chronically devastate our agricultural crops. DOA's biosecurity program is a comprehensive plan to address our food security and invasive species control in Hawaii.

Thank you for allowing us to testify on this measure.





Maui County Farm Bureau

An Affiliate of the American Farm Bureau Federation and Hawaii Farm Bureau Federation Serving Maui's Farmers and Ranchers

TESTIMONY

HB 2501 RELATING TO BIOSECURITY

HEARING BEFORE THE HOUSE COMMITTEE ON AGRICULTURE

Chair Tsuji and Committee Members:

My name is Warren Watanabe, Executive Director of the Maui County Farm Bureau, a non-profit general agriculture organization and an affiliate of the Hawaii Farm Bureau Federation.

HFBF **strongly requests your SUPPORT** of HB 2501 to support implementation of the Hawaii Department of Agriculture's Biosecurity Program. Programs such as pre-entry measures which include agreements with other States and countries take time to develop. Funding to begin the process immediately is critical so mechanisms can be in place in the foreseeable future to stop invasives from leaving their places of origin and to stop them if they accidentally escape local inspection procedures.

The viability of our farmers and ranchers is at stake. Invasive species control is of great concern to our farmers and ranchers. Crops have been lost, control costs increased and health of our livestock industry threatened by various invasive species. Therefore, this subject matter is one of our primary concerns. We are therefore in agreement that Invasive Species Control is important.

As we look to address invasive species, our farmers and ranchers are facing a near crisis situation in the area of transportation. Improvements in Harbor infrastructure will be critical for expansion of Hawaii's agriculture. Recent experiences with the Hawaii Superferry and now the Kahului Harbor 2030 Draft EIS gives strong testament to the delay tactics that will used by some to slow down the improvement process. This measure is needed to ensure that concern of invasive species does not used to slow down the much needed harbor improvement plans.

MCFB respectfully requests passage of this measure. The viability of our farmers and ranchers is at stake.

P.O. Box 148 Kula, HI 96790 ph: 808 2819718 email:mauicountyfb@hotmail.com



Hawaii Agriculture Research Center

99-193 Aiea Heights Drive, Suite 300 Aiea, Hawaii 96701 Ph: 808-487-5561/Fax: 808-486-5020

TESTIMONY BEFORE THE HOUSE COMMITTEE ON AGRICULTURE AND ENERGY AND ENVIRONMENT PROTECTION

HOUSE BILL 2501

RELATING TO BIOSECURITY

February 6, 2008

Chairs Tsuji and Morita and Members of the Committee:

My name is Stephanie Whalen. I am President and Research Director of the Hawaii Agriculture Research Center (HARC). I am testifying today on behalf of the center, our research and support staff, and our members and clients.

HARC strongly supports of House Bill 2501 Relating to Biosecurity

This proposal if passed will facilitate inspections to have descriptions on the manifests of cargo shipped into the State and between the islands and availability of these manifests to the department prior to shipping. This will improve the efficiency of inspections and reduce the chances of noxious materials entering the state and moving between islands.

Thank you for the opportunity to testify in support of this measure.

Hawaii Crop Improvement Association

Sarah Styan, President P.O. Box 609 Waimea, Hawaii 96796 Phone: 808- 338-8300 ext 113

Testimony by: Sarah Styan HB 2501, Biosecurity House AGR Committee Wednesday, Feb. 6, 2007 Room 325: 8:30 am

Position: Support

Chair Tsuji and Members of the House AGR Committee:

My name is Sarah Styan. I am a Kauai resident, President of HCIA and research scientist of Pioneer Hi-Bred International, Waimea Research Station. The HCIA represents seed production and research facilities operating in Hawaii for nearly 40 years. The HCIA is comprised of five member companies that farm an estimated 8,000 acres on four islands, valued at \$97.6 million in operating budget (2006/2007 HASS). We are proud members of Hawaii's diversified agriculture and life sciences industries.

As testified in previous years, HCIA believes that financing the prevention of importation of invasive species is more prudent than later financing of eradication or containment programs. Examples of such latter efforts include the battle against the coqui frogs, miconia, gorse weed, fireweed and others.

Policy and funding support for the Department of Agriculture's proposed Biosecurity program is critical, not only to the agricultural industry, but to Hawaii's environment. The proposed program seeks to establish pre-entry inspection programs and quarantine as needed of exporters from other states and countries, and safe handling and storage of food and agricultural cargo. This is a welcomed and necessary program to protect Hawaii's farmers and environment. Hawaii's exporters have been subject to such stringent pre-entry inspection programs for many years.

Please support this measure. Thank you for the opportunity to present testimony.

Growing the Future of Worldwide Agriculture in Hawaii



Conservation Council for Hawai'i

Testimony Submitted to the House Committee on Agriculture and House Committee on Energy & Environmental Protection

> Hearing: Wednesday, February 6, 2008 8:30 am Room 325

Support for HB 2501 Relating to Biosecurity

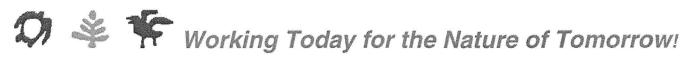
Aloha. The Conservation Council for Hawai'i supports HB 2501, which establishes statutory provisions and appropriates funds for the Department of Agriculture's biosecurity program.

We also recommend that, as part of the Hawai'i Department of Agriculture's post-entry measures within the biosecurity program, permanent adequate funding be established for the Invasive Species Committee's for Kaua'i, O'ahu, Moloka'i, Maui, and Hawai'i. The Invasive Species Committees are doing a good job with limited resources. They are working with private landowners in a cooperative manner to control invasive species <u>already here</u>. Please identify the appropriate vehicle to establish permanent adequate funding for the Invasive Species Committees.

Mahalo nui loa for the opportunity to testify.

Sincerely,

Marjorie Ziegler



Telephone/Fax 808.593.0255 • email: info@conservehi.org • web: www@conservehi.org P.O. Box 2923 • Honolulu, HI 96802 • Office: 250 Ward Ave., Suite 212 • Honolulu, HI 96814

Hawai'i Affiliate of the National Wildlife Federation

President: Julie Leialoha * Vice-President: Nelson Ho * Secretary/Treasurer: Kim Ramos * Directors: Fred Kraus, Ph.D. * Douglas Lamerson, George Robertson * Claire Shimabukuro * Helene Takemoto * Mashuri Waite * Executive Director: Marjorie Ziegler



COORDINATING GROUP ON ALIEN PEST SPECIES

The House of Representatives Committee on Agriculture Committee on Energy & Environmental Protection 8:30 a.m., Conference Room 325 State Capitol

Testimony in Support of HB 2501

Aloha Chairs Tsuji and Morita, Vice Chairs Brower and Carroll, and Members of the Committees, The Coordinating Group on Alien Pest Species (CGAPS) **supports HB 2501**, *Relating to Biosecurity*.

The Hawai'i Department of Agriculture's (HDOA) comprehensive biosecurity program goes a long way to address some of the State's most pressing invasive species issues, primarily by bolstering our ability to prevent or intercept new invasive species that could enter the State.

CGAPS asks for your support of HB 2501. Mahalo.

CGAPS--Coordinating Group on Alien Pest Species Ph: (808) 722-0995



Sierra Club Hawai'i Chapter PO Box 2577, Honolulu, HI 96803 808.537.9019 hawaii.chapter@sierraclub.org

HOUSE COMMITTEE ON AGRICULTURE HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION February 6th, 2008, 8:30 A.M.

(Testimony is 4 pages long)

TESTIMONY IN SUPPORT OF HB 2516 AND HB 2501

Chairs Tsuji and Morita and members of the committees:

The Sierra Club, Hawai'i Chapter, with 5500 dues paying members statewide, supports both HB 2516 and HB 2501, providing funding for invasives inspection facilities and for the Department of Agriculture's biosecurity program.

We believe that the adequate funding for the control and prevention of invasive species has been lacking for too long. As a result, Hawaii's residents, businesses, and agricultural operations are footing the bill. Estimates by one state biologist show that alien pests cost residents and the agriculture industry upwards of \$400 million annually.

Hawai'i is losing the war on alien species. Some alien species, such as miconia, threaten to destroy watersheds and native ecosystems, jeopardizing freshwater supplies and pushing species to extinction. Other alien species, such as the coqui frog and dengue and its carriers, threaten our health, tourist industry, and our quality of life. Of particular concern is the introduction of the brown tree snake—a snake that nearly wiped out the native bird population on Guam.

Invasive pests from the Asia and the US mainland wreck havoc on native ecosystems. The cost—both economic and environmental—of introduced species in Hawai`i is astronomical. Tourism, agriculture, native species, and citizens' way of life are threatened with each new introduction. Sufficient funding to reduce introductions is clearly warranted; this is one are where an once of prevention is worth many pounds of cure.

The following pages contain articles highlighting the magnitude of Hawaii's invasive species problem. The first, from the February 7th, 2001 *Honolulu Advertiser*, describes the failure of the current mitigation methods efforts at the Kahului airport. The second, from the December 15th, 2005 Honolulu Advertiser, explains the dire situation with a recently introduced pest, the erythrina gall wasp, and the native wiliwili tree. Both make the case for expanded invasive species funding.

Thank you for the opportunity to testify.



Airport inspectors find plenty of trouble

By Timothy Hurley Advertiser Maui Bureau February 7, 2001

KAHULUI, Maui — A trial period of beefed-up agricultural inspections under way at Kahului Airport has turned up hundreds of insects and diseases, many not known to occur in Hawai'i.

State agriculture officials said yesterday that inspectors have returned contaminated shipments to the Mainland and have destroyed others as part of an effort to see exactly what's needed to intercept alien species at an airport that is soon expected to be accepting international flights.

At the same time, they said, the project may shed some light on weaknesses that may exist at inspection points at other ports of entry across the state.

Agriculture officials described their pest risk assessment study last night at a meeting sponsored by the Maui Invasive Species Committee and the Maui Farm Bureau.

The effort, they said, is being financed by \$300,000 in Federal Aviation Administration money and features more inspectors and dog teams, a doubling of the staff at Kahului Airport. The project was launched in late September and will continue during intermittent three- and four-week periods for a year.

Lyle Wong, Plant Industry Division administrator, said workers are conducting a 100 percent inspection of all incoming domestic flights and air cargo containers of agricultural products such as fresh fruits and vegetables and also are looking at aircraft cabin cargo and wheel wells.

Specifically, inspectors are looking for plant materials, insects, animals and other organisms that could wreak havoc on Maui's environment and crops.

Entomologist Neil Reimer said that Kahului Airport inspectors intercepted 90 plant diseases and 844 insects, mites, snails and other pests from Sept. 25 to Dec. 15. That compares to typical results of 1,200 interceptions a year islandwide.

Of the 844 pests, nearly 200 of them are not known to occur in Hawai'i, Reimer said, and about 200 more were too immature to be identified. The rest already are established in the Islands.

Lloyd Loope, U.S. Geological Survey scientist stationed at Haleakala National Park, said the numbers indicate the inspection system is "a leaky sieve."

"We're finding out just how leaky it is," Loope said.

The best solution for Hawai'i seems to be to push for pre-inspections before goods leave the Mainland, he said.

"Otherwise, Hawai'i will continue to accumulate a host of pests that impact all aspects of life and business in Hawai'i," Loope said.

When state officials announced plans to expand Kahului Airport 10 years ago, some critics questioned the wisdom of accommodating international flights and even more Mainland flights without a more serious quarantine effort to prevent invasive alien pests.

The critics complained that the existing inspection system was inadequate and getting less effective over time because of budget cuts.

More than two years ago, state and federal authorities signed an agreement on preventing introduction of alien species at Kahului Airport. A team of representatives from state and federal agencies, the airline industry and the Maui tourism industry was formed to look at the issue, and an Alien Species Action Plan was formulated.

Reimer said preliminary data show plants present a higher risk of bringing in pests, while passengers and baggage are a lower risk.

Fred Kraus, the state's alien species coordinator, said increased port-of-entry inspections statewide would help filter out many pests, including an increasing number of snakes.

Scientists have said more than 15 new pest species become established in Hawai'i each year.

Sierra Club

Honolulu Advertiser Thursday, December 15, 2005

Scientists step up battle to save wiliwili

By Jan TenBruggencate

Hawai'i researchers and plant experts are working in laboratories, gardens, native forests and soon even in Africa toward a common goal of saving the embattled Hawaiian wiliwili tree, which is being threatened across the state by a mysterious bug called the erythrina gall wasp.

The almost microscopic wasps appeared in Hawai'i only this year and have invaded all the main islands. They are soon expected to be everywhere wiliwili is found in the wild landscape.

"They're so tiny and they're spread on winds, so it just seems they're going to reach every population," said Honolulu botanist Maya LeGrande, who specializes in wiliwili. She said wiliwili is the only native dryland tree species that is still widespread.

The urban landscape is suffering, too. Native wiliwili and its relatives, sometimes known as coral trees, are popular landscaping plants that belong to the genus erythrina. Many of trees in parks and along streets in Honolulu and across the state are now bare, their branch tips overtaken by misshapen lumps, or galls, that are unformed leaves, swollen in reaction to eggs injected by the female wasps.

Scientists, foresters, landscapers and natural-resources managers launched a statewide multi-agency response soon after the bug was first noticed on O'ahu in April. But the wasp has spread so rapidly and its impacts are so severe that saving the wiliwili in the Hawaiian dry forest is in doubt.

Some botanists say a biological control — a disease or another insect that attacks the wasp — is the wiliwili's best hope, but state entomologists say it could be years before such a remedy could be approved for release, even if one is found soon.

The next best hope is that something already in the Hawaiian environment will identify the wasp as prey and begin attacking it.

But scientists wonder if there's time, and they are leading a complex series of efforts to bring living plant material into storage, to protect plants still in the wild and to find the magic biological bullet as soon as possible.

Alvin Yoshinaga, who runs the Center for Conservation Research and Training at the University of Hawai'i's Lyon Arboretum, is taking delivery of tens of thousands of seeds from hundreds of populations of wiliwili around the state as part of an effort to preserve the genetic diversity of the wild plants.

"We're refrigerating or freezing them. We're splitting the collections into three different locations," said Lauren Weisenberger, who oversees the arboretum's seed conservation lab. Wiliwili seeds germinate at a high rate and should survive for several years in cold storage, she said.

Scientists at the National Tropical Botanical Garden's new tissue culture laboratory in Lawa'i Valley on Kaua'i are trying a different tack. They are growing rare relatives of wiliwili in a sterile lab, then clipping off bits of leaf and placing them on agar in test tubes and petri dishes. If they can develop

techniques to grow erythrina from sterile plant tissue in the lab, they can keep species alive indefinitely in bug-proof rooms.

"If we can do this, we can keep it safe until the gall wasp is controlled in the wild," said Ellen Coulombe, administrative assistant in the garden's conservation department.

The National Tropical Botanical Garden and the Waimea Valley Audubon Center on O'ahu together have the world's largest collection of wiliwili and other erythrina. Each garden has more than 80 species, and both are working hard to protect their collections.

Waimea botanist David Orr said his gardeners drenched their plants with an insecticide called imidacloprid, which enters the plant's tissues and may protect it against the wasps.

"I'm really amazed at our results. Our plants are doing pretty well," he said.

State foresters with the Department of Land and Natural Resources are experimentally treating wild trees at Kekaha, Kaua'i, and Wai'anae, O'ahu, with applications of imidacloprid. Similar treatments at the National Tropical Botanical Garden, however, have not been that successful.

It is clear that some wiliwili cousins, notably some thick-leaved species from Africa, appear to be naturally resistant.

On Dec. 24, state Department of Agriculture entomologist Mohsen Ramadan will fly to Tanzania in Africa, where there are known to be relatives of the erythrina gall wasp. His goal is to find other insects that naturally attack the gall wasp and might be effective in controlling the pest in Hawai'i. Other insect experts are looking in Kenya and elsewhere in Africa.

"The rainy season will be starting there and plants will be beginning to flush. That will be a good time to be looking for the wasps," said Neil Reimer, plant pest control branch manager at the Department of Agriculture.

"I am confident that there are parasites in Africa and that we can get them."

But that's just the first step. Reimer said it could take several years to completely test any parasites to be sure they don't threaten native Hawaiian insects.

University of Hawai'i entomologist Russell Messing said scientists still don't clearly understand the interaction between the gall wasp and the wiliwili plant.

"The thing that's tricky about the project is you can have entire communities of things living within a gall. There's a lot of biology that needs to be done," Messing said.