

DAVID Y. IGE
Governor

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 HOUSE COMMITTEE ON FINANCE

March 4, 2015

1:30 P.M.

CONFERENCE ROOM 308

HOUSE BILL NO. 507 HD 1
RELATING TO AGRICULTURE

Chairperson Luke and Members of the Committee:

Thank you for the opportunity to present testimony on House Bill 507 HD 1. This bill appropriates funds to the Department to research and develop methods for the prevention and treatment of macadamia felted coccid. The Department supports this measure provided it does not adversely impact the priorities of the Administration's budget.

The Department would first like to thank the Legislature for its passage of Act 100, Session Laws of Hawaii 2014, that provided funding to the Department to work in conjunction with the University of Hawaii to do research on the prevention and treatment of macadamia felted coccid. The Department is working to contract with the University of Hawaii for this work. The macadamia nut industry is a vital part of the agricultural economy here in Hawaii. With an estimated farm value of over \$35 million, macadamia nuts are one of the top five agricultural commodities for the State of Hawaii.

The macadamia felted coccid is an insipid pest that can cause severe damage to macadamia nut trees and hurt our macadamia nut industry. It is vital to develop new methods to prevent the spread of this pest and limit the damage that it will have on the macadamia nut industry.

Thank you for the opportunity to present testimony.





UNIVERSITY OF HAWAII SYSTEM

Legislative Testimony

Written Testimony Presented Before the
House Committee on Finance
Wednesday, March 4, 2015 at 1:30 pm

By

Robert Bley-Vroman, Chancellor

And

Maria Gallo, Dean

And

J. Kenneth Grace, Associate Dean

College of Tropical Agriculture and Human Resources

University of Hawai'i at Mānoa

HB 507 HD1 – RELATING TO AGRICULTURE

Chair Luke, Vice Chair Nishimoto, and members of the House Committee on Finance, we respectfully submit testimony in support of HB 507 HD1, which appropriates funds to the department of agriculture to collaborate with the University of Hawai'i to research and develop methods for the prevention and treatment of macadamia felted coccid.

Hawai'i is the third largest producer of macadamia nuts in the world, with approximately 15,000 acres harvested on the Island of Hawai'i and a \$38.2 million farm-gate value (NASS 2012). Macadamia felted coccid is a severe pest of macadamia. This scale insect was found in south Kona in February 2005, and is now distributed throughout the Island of Hawai'i. Development of new control methods and appropriate management recommendations are essential for Hawai'i's producers to stop this invasive pest. Horticultural and harvest methods used in Hawai'i and the large size of trees in our well-established orchards contribute to great difficulties in achieving effective control.

In FY 2014, the legislature appropriated funds to initiate collaboration by the Department of Agriculture and CTAHR to address this serious invasive pest problem, augmented by funds committed by industry. With this support, CTAHR has begun the extensive field sampling required to develop a management decision plan, is testing the impact of canopy management, is developing methods to identify key predators of the coccid and to augment their populations, and is testing new control options.

This is not a simple problem, and a multi-year effort is required. HB 507 HD1 requests appropriation of the funds necessary to continue this research effort to the department of agriculture, in order to identify and import effective biological control agents, find ways to increase the populations of natural enemies of this insect pest, develop better insecticide application technologies, and ultimately develop an effective macadamia felted coccid management plan for Hawai'i macadamia orchards.

From: mailinglist@capitol.hawaii.gov
Sent: Monday, March 02, 2015 4:47 PM
To: FINTestimony
Cc: swhalen@harc-hspa.com
Subject: *Submitted testimony for HB507 on Mar 4, 2015 13:30PM*

HB507

Submitted on: 3/2/2015

Testimony for FIN on Mar 4, 2015 13:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Stephanie A Whalen	HARC	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.

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March 2, 2015

Representative Sylvia J. Luke, Chair
Representative Scott Y. Nishimoto, Vice-Chair
House Committee on Finance

Testimony in Support of HB 507, HD1, Relating to Agriculture (Appropriates Funds to the Department of Agriculture, in Cooperation with UH CTAHR, to Research and Develop Methods for the Prevention and Treatment of Macadamia Felted Coccid).

Wednesday, March 4, 2015, 1:30 p.m., in Conference Room 308

The Land Use Research Foundation of Hawaii (LURF) is a private, non-profit research and trade association whose members include major Hawaii landowners, developers and a utility company. LURF's mission is to advocate for reasonable, rational and equitable land use planning, legislation and regulations that encourage well-planned economic growth and development, while safeguarding Hawaii's significant natural and cultural resources, and public health and safety.

LURF appreciates the opportunity to express its **support of HB 507, HD1.**

HB 507, HD1. This bill proposes to appropriate funds out of the general revenues of the State of Hawaii as may be necessary for fiscal year 2015-2016 and the same sum or so much thereof as may be necessary for fiscal year 2016-2017 for the DOA, in cooperation with the University of Hawaii's College of Tropical Agriculture and Human Resources, to research and develop methods for the prevention and treatment of macadamia felted coccid. The purpose of this measure is to provide funds for research to develop new methods of preventing and treating macadamia felted coccid infestations.

LURF's Position. Invasive species such as insects, disease-bearing organisms, snakes, weeds, and other pests pose the greatest threat to Hawaii's economy, tourism, agriculture, the natural environment, native species and to the health and lifestyle of Hawaii's people. Invasive species already cause millions of dollars in crop losses, the extinction of native species, the destruction of native wet, moist and dry land forests, and the spread of disease, but many more harmful pests, such as the macadamia felted coccid, now threaten to invade all of the Hawaiian Islands and wreak further damage, including damage to Hawaii's macadamia nut crop, which is among the State's top five grossing agricultural commodities.

Despite initial efforts to control the spread of the macadamia felted coccid, infestations have now spread from south Kona to as far north as Honokaa on the Big Island, and new methods must be developed to control the incursions. Appropriated funds for research to develop new methods of preventing and treating macadamia felted coccid infestations are immediately

necessary to mitigate the threats and impacts of uncontrolled spread and devastation of the State's macadamia nut industry.

For the above reasons, LURF **supports HB 507, HD1** and respectfully urges your favorable consideration.

Thank you for the opportunity to present testimony regarding this matter.



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

March 4, 2015

HEARING BEFORE THE
HOUSE COMMITTEE ON FINANCE

TESTIMONY ON HB 507 HD 1
RELATING TO AGRICULTURE

Room 308
1:30 PM

Aloha Chair Luke, Vice Chair Nishimoto and Members of the Committee:

I am Christopher Manfredi, President of the Hawaii Farm Bureau Federation (HFB). Organized since 1948, the HFBF is comprised of 1,932 farm family members statewide, and serves as Hawaii's voice of agriculture to protect, advocate and advance the social, economic and educational interests of our diverse agricultural community.

HFB strongly supports HB 507 HD 1, which appropriates funds to the Hawaii Department of Agriculture, in cooperation with the University of Hawaii College of Tropical Agriculture and Human Resources, to research and develop methods for the prevention and treatment of macadamia felted coccid.

Hawai'i is the 3rd largest producer of macadamia nuts in the world (570 farms, operating on 17,000 acres), after Australia and South Africa. Production in 2013-2014 totaled 41 million pounds; **the net farm value was \$35.7 million.**

The macadamia felted coccid (MFC) threatens the entire macadamia nut industry in Hawaii by causing severe tree dieback and then death. Even mature trees can be killed by this small insect. If not controlled, we believe the MFC will spread and could devastate Hawaii's macadamia nut industry. We have seen what the coffee berry borer has done to the local coffee industry and we know that we can't afford to wait. We need to fund research to find economical solutions to this problem. This bill would supply the needed funding to help develop new ways to prevent and treat MFC infestations.

Hundreds of jobs are tied to macadamia farming in Hawai'i; it is a vital source of employment in Ka'u, which has among the highest unemployment rate in the state. Over 50% of Hawai'i's macadamia tree acres are located in the Ka'u district, the area hardest hit by the MFC.

Please support HB 507. Thank you.

From: mailinglist@capitol.hawaii.gov
Sent: Monday, March 02, 2015 12:19 AM
To: FINTestimony
Cc: legechair@gmail.com
Subject: *Submitted testimony for HB507 on Mar 4, 2015 13:30PM*

HB507

Submitted on: 3/2/2015

Testimony for FIN on Mar 4, 2015 13:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Simon Russell	Hawaii Farmers Union United	Support	No

Comments:

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Chamber of Commerce HAWAII

The Voice of Business

**Testimony to the House Committee on Finance
Wednesday, March 4, 2015 at 1:30 P.M.
Conference Room 308, State Capitol**

RE: HOUSE BILL 507 HD1 RELATING TO AGRICULTURE

Chair Luke, Vice Chair Nishimoto, and Members of the Committee:

The Chamber of Commerce Hawaii ("The Chamber") **supports** HB 507 HD1, which appropriates funds to the Department of Agriculture, in cooperation with UH CTAHR, to research and develop methods for the prevention and treatment of macadamia felted coccid.

The Chamber is the largest business organization in Hawaii, representing about 1,000 businesses. Approximately 80% of our members are small businesses with less than 20 employees. As the "Voice of Business" in Hawaii, the organization works on behalf of members and the entire business community to improve the state's economic climate and to foster positive action on issues of common concern.

Hawaii is the 3rd largest producer of macadamia nuts, after Australia and South Africa. In 2013-2014, a total of 41 million pounds was produced, with a net farm value of \$35.7 million. The macadamia farms in Hawaii provide hundreds of jobs that must be protected.

The macadamia felted coccid (MFC) is the cause of death for many macadamia nut trees and a threat to Hawaii's macadamia nut industry and the economy. It is crucial to support research to identify preventative measures and develop a solution to this problem before it becomes more severe.

Thank you for the opportunity to testify.

Hawaii Macadamia Nut Association
P.O. Box 541
Papaikou, Hawaii 96781

Written testimony for House Committee on Finance

HEARING: March 4, 2015, 1:30 P.M.

To: Chair Luke and Vice Chair Nishimoto

From: John C. Cross, President, Hawaii Macadamia Nut Association

RE: HB 507, Regarding the Macadamia Felted Coccid.

Dear Chair Luke and Vice Chair Nishimoto and Committee Members, My name is John C. Cross I am the current President of the Hawaii Macadamia Nut Association and represent the interests of the Board and membership of the Association. The HMNA represents over 100 grower and processor members. All of the major growers and every processor in the State are active in our organization. Our members cultivate some 18,000 acres of trees in the State and harvest over 50 million pounds of nuts per year. The farm gate value for the crop exceeds \$35 million each year. Our processor members produce over 15 million pounds of Kernal having a wholesale value of over \$135 million. Macadamia kernel is further valued by coating in Chocolates, flavored with salt or unique spices, part of an Energy bar, or made into Oil or Butters. The Hawaiian Macadamia Nut (products) is almost synonymous with Hawaii, Kona Coffee, and Aloha. Visitors to the islands return home with boxes of macadamia nut products and the memories of Hawaii.

Regarding the Macadamia Felted Coccid, we have seen and unfortunately have experienced the especially devastating effects of this pest island wide but especially so in the Ka'u region. This pest is one of most virulent, aggressive, and damaging alien pests I have witnessed in the 20 years since leaving the sugarcane plantations.

THE HMNA STRONGLY SUPPORTS THIS BILL. The support this bill would provide to our industry is critical. We need to give our Department of Agriculture and College of Tropical Agriculture the tools it needs to research this pest and provide methods of control and treatment for infested orchards. There are thousands of jobs at stake Statewide.

There is so much that we do not know about this pest and the research dollars this bill will authorize will be a big boost to finding the weaknesses this pest has, the natural predators that may exist, to find what chemicals or growth regulators may work, what cultural practices we may need to employ to lessen the population, etc. We need research and on the ground effective help as soon as possible.

Thank you for listening to my testimony. I am available to answer questions in person, by phone, or e-mail. John@olsontrust.com, 808-987-4229

HB507 HD1, Relating to Agriculture:

Chair, Vice-Chair, and members of the House Committee on Finance, I thank you for this opportunity to provide my personal testimony in support of HB507, Relating to Agriculture. I strongly support this bill provided that its passage does not replace or adversely impact priorities as indicated in the University's Board of Regents Approved Executive Biennium Budget.

Macadamia felted coccid is the most serious pest of macadamia nuts cultivated in Hawaii. This insect has a dramatic impact on yields if left unchecked. When this pest was initially detected in 2005, immediate efforts were made to suppress the pest in the South Kona, to where it was restricted at that time. The environment at the South Kona growing areas is significantly different from many other areas where macadamia nuts are grown, and effective pest control measures could relatively easily be implemented. Effective suppression protocols were developed and implemented with very good results. In some areas to which this pest spread to subsequently, we were successful in eradicating early infestations in very young trees.

While biological control options and insecticide treatments are effective under certain circumstances, there are many situations where the impacts of both are reduced. Research is required to address improvement of biological and chemical control of this pest under all growing conditions; the exact origin of the pest (as the potential source of new biological control agents); interactions with macadamia felted coccids with pathogens of macadamia nut trees; and natural resistance to macadamia felted coccid in macadamia varieties. This pest is spreading extensively in macadamia growing areas of Hawaii, and immediate action is essential. Macadamia felted coccid has been recorded from almost all macadamia nut-growing areas on Hawaii island now, and if left unchecked will result in severe economic impacts on growers. Potentially, the entire 15,000 acres of macadamia nut grown in Hawaii could be impacted. Economic losses are incurred through direct damage to the trees, reducing yields; and through management costs. Yield loss can be 100% on severely infested trees. Pesticide applications are costly and often logistically complex in many of the areas where macadamia nuts are produced, and reducing reliance on pesticides by developing effective integrated pest management procedures is a priority. Pesticide application costs exceed \$300 per acre, and severe infestations of this pest can require multiple applications to exert effective pest suppression.

This requires developing optimized integrated pest management protocols that include the use of biological control agents and other pest suppression techniques, such as insecticides. While biological control may be highly effective in some situations, it may be variable in others, and alternative management options may be required. Ensuring that the management alternatives are applied in a mutually compatible manner is important, and requires research attention. Dissemination of information on management procedures to growers is equally important.

My name is Mark G Wright. I am a professor of entomology and an entomology extension specialist at UH Manoa. I have conducted extensive research on the management of macadamia felted coccid. However, today, I am providing personal testimony.
March 2, 2015.

HOUSE COMMITTEE ON FINANCE
MARCH 02, 2015
HB 507 HD1

Aloha Chair Luke, Vice Chair Nishimoto and Members of the Committees,

My name is Randy Mochizuki and I am the Crop Control Superintendent at the Royal Hawaiian Orchard in Pahala, HI. I strongly support this bill to fund a way to protect macadamia nut farmers from a devastating invasive pest.

The coccids were first found in our orchard in 2009 damaging a few trees. It has since spread throughout our 3,300 acres. They have destroyed or damaged a substantial number of trees and continues to do so. I don't believe the Hawaiian macadamia industry has ever seen such a devastating pest.

Due to the size of our trees; oil sprays which can control the pest in orchards with smaller trees, are ineffective because of inadequate coverage. We have experimented with several different sprayers and numerous chemicals. All have proven inadequate to control the coccids in our orchard.

Other orchards in Kau and along the Hamakua coast are also being damaged by the coccids and have been unable to find effective means of control.

It also has the potential of destroying other macadamia orchards in the state affecting 1,500 acres and 570 farms and a 35-38 million dollar industry.

Our company's Pahala division has spent well over \$100,000 on this pest since 2009. In 2014, RHO and another Kau company contracted the University of Hawaii to do research on management and control of the felted coccid. That work is ongoing; but much more is need to not only find an immediate control, but long term control measures.

Please help us by supporting this bill.

Thank you for your consideration of my comments.



From: mailinglist@capitol.hawaii.gov
Sent: Tuesday, March 03, 2015 10:33 PM
To: FINTestimony
Cc: amybrinker@mac.com
Subject: *Submitted testimony for HB507 on Mar 4, 2015 13:30PM*

HB507

Submitted on: 3/3/2015

Testimony for FIN on Mar 4, 2015 13:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Amy Brinker	Individual	Support	No

Comments:

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