

**SENATE COMMITTEE ON AGRICULTURE
and
SENATE COMMITTEE ON ENERGY AND ENVIRONMENT**

**March 19, 2015
3:00 pm
Room 415
Relating to Agriculture
HB507 HD-1**

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

I am Randy Cabral and I have been farming in Hawaii for over 40 years. I am the Senior Vice President of Operations for Royal Hawaiian Orchards LP. We farm 6,000 acres of macadamia on Hawai'i Island. Of these, 3,000 are in the District of Ka'u. We employ 250 full time and seasonal workers. **We strongly support this bill.**

I am testifying today to request funding to prevent a dire situation from becoming even worse. 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 crop year totaled 41 million pounds; the net farm value was \$35.7 million.

The problem ---the Macadamia Felted Coccid

Already, three of our largest growers, along with many smaller growers, have found a devastating pest, the macadamia felted coccid (MFC) in their orchards. These farms produce over 80% of the state's macadamia kernels.

The strangely named pest is a small Australian insect that covers and feeds on leaves, nuts, branches, and trunks of the macadamia tree. It even thrives in drought conditions, such as those in Ka'u, and can spread easily by wind.

The 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 to other regions on Hawai'i Island and other islands, and devastate the 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.

What do we know and what's been done?

Currently, very little is known about the life cycle or vulnerabilities of the pest. In its native Australia, macadamia nut growers use considerable pesticides to control the MFC, but in Hawaii, because we typically don't use insecticides, we don't have the equipment and resources to apply these types of pesticides to large, mature trees. Some pesticides seem to work but require adequate rainfall or adequate irrigation, neither of which is available.

The MFC has no significant natural predators in Hawaii as compared to Australia.

Why fund research to control the pest?

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.

We know there are many other demands for funding and there is a limited budget. Other pests such as the coffee berry borer have gotten more media attention and funding. But we want you to know that without intervention, we have little chance of successfully continuing macadamia farming.

The HDOA and UH CTAHR can help us by studying the MFC and figuring out sustainable and economical solutions. Growers themselves have contributed \$95,000 to UH CTAHR to conduct MFC research, but more funding is needed.

Thank you for allowing me this opportunity to explain our predicament to you. I would be happy to answer any questions you might have. Please contact me if

you're interested in seeing in person the devastation this pest has already caused in Ka'u (see photo examples on following pages).

MFC Damage in Ka'u Orchard





Tree infested with MFC



MFC on trunk of infested tree



Extensive MFC damage within an orchard block