



UNIVERSITY OF HAWAII SYSTEM

Legislative Testimony

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Senate Committee on Agriculture and Environment
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By
Nicholas Comerford, Dean
College of Tropical Agriculture and Human Resources
And
Michael Bruno, PhD
Provost
University of Hawai'i at Mānoa

HB 1861 HD1 – RELATING TO COFFEE BERRY BORER

Chair Gabbard, Vice Chair Ruderman, and members of the Senate Committee on Agriculture and Environment:

Thank you for this opportunity to testify in support of HB 1861 HD1 relating to the coffee berry borer (CBB).

Our testimony is the same as previously submitted in strong support for this bill.

According to the 2018 State Agriculture overview published by the U.S. Department of Agriculture, Hawai'i produced 5.4 million pounds (green weight) of coffee grown on 7,100 harvested acres, with an average yield of 1.92 tons/acre, at a unit price of \$19.40/lb., for a value of \$50.16 million. These data show the high value of this crop to Hawai'i agriculture since that value is based on using just 0.65% of farm acres operated.

The CBB is found in most coffee growing countries of the world and was discovered in Kona, Hawai'i in 2010. It has the potential to be a devastating disease for this industry. It is established on Hawai'i Island, and can be found now on O'ahu and Maui. At the moment it is the most important pest for coffee, with the hopes that early detection and rapid response by the Hawai'i Department of Agriculture (HDOA) will continue to keep the other major disease of coffee out of Hawai'i.

The CBB is endemic to Central Africa. It belongs to a subfamily of beetles that houses some of the most important pests world-wide. Female beetles bore into the berry and lay eggs inside the seed and the brood then feasts on the coffee seed. Because this happens inside the berry and seed, it can be difficult to control.

An integrated pest management program (IPM) developed Best Management Practices to control the CBB. Collaborative research has shown that sanitation along with biocontrol can be effective. Cooperative Extension Agents estimate that about 80% of

coffee farmers are familiar with the IPM program. Cooperative Extension Agents with the College of Tropical Agriculture and Human Resources, University of Hawai'i at Mānoa, further estimate that the IPM program has directly saved approximately \$11 million in farm gate value, and directly saved another \$11 million in efforts to control the spread of the CBB. Realizing the direct and indirect effects highlights the value that this IPM program has for the coffee industry and the state of Hawai'i.

The IPM program uses an insecticide (pesticide), known as a mycoinsecticide, to control the borer. A fungus, *Beauveria bassiana*, is a biological control material and is bought commercially. HDOA was empowered in the past to develop and manage a CBB pesticide subsidy plan, allowing as much as \$600/acre for the grower. The basic approach of this bill is to maintain parts of that program into the future, until 2025.

The IPM program has been shown to be not only effective in control, but maybe more important, effective in controlling the spread of the beetle to other parts of Hawai'i.

There is concern that without a full functioning subsidy program, efforts to apply IPM would be reduced; thereby reducing the on-farm and regional effectiveness of the strategy. A survey of coffee growers indicated that nearly 38% of growers would reduce the rate of the pesticide if the program was detrimentally affected. It is reasonable to assume that this would negatively affect the control and spread of the CBB.

Given the estimated \$22 million/year effectiveness of the IPM program that includes a biological insecticide, we support HB 1861 HD1 and thank the committee for the opportunity to submit testimony in its behalf.