



COORDINATING GROUP ON
ALIEN PEST SPECIES

April 20, 2023

Board of Agriculture
9 a.m., April 25, 2025
Plant Quarantine Branch
1849 Auiki Street
Honolulu, Hawaii 96819

Testimony in Support of Agenda Items IV. C, 1

Aloha Chairperson Hurd, and Members of the Board of Agriculture,

The Coordinating Group on Alien Pest Species (CGAPS) is in support of the U.S. Department of Agriculture – Agricultural Research Service (USDA ARS) and the University of Hawaii’s request for a permit to import and possess lab-reared strains of the parasitoid wasp (*Phymastichus coffea*) for release (under permit conditions) to control the coffee berry borer (*Hypothenemus hampei*), and the establishment of permit conditions for the importation and field release.

If not caught early, invasive pests, weeds, and plant pathogens can become widespread and too costly—if not impossible—to control using chemical or mechanical tools. In island systems, some widespread invasive species are particularly damaging, and biological control is the only available, cost-effective, low-risk, and nature-based option that can reduce negative impacts at-scale, and in perpetuity. Biological control has come a long way over the past fifty years since environmental protection and testing regulations were put in place, and the application of modern techniques to pinpoint a pest’s co-evolved, host-specific natural enemy has minimized the risk of unanticipated events. For anyone interested in a meta-analysis of biocontrol and risk, in 2020 the Secretariat of the Convention on Biological Diversity published Technical Report 91 that pulled together the risk and performance of historic vs. current biological control practices.

This Board knows the damage that coffee berry borer (CBB) causes to the product, the industry, and the farmers, and that existing integrated pest management methods are not enough. CBB populations spill over from wild plants or unmanaged fields and into even the most meticulously kept plantations. Reuniting CBB with its host-specific predator would be an important tool that can be applied, without adding additional burdens on farmers.

For these reasons, we support this petition. Thank you for the opportunity to provide these comments.

Aloha,

Christy Martin, CGAPS



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April 25, 2023

Hawaii Department of Agriculture
Board of Agriculture
Plant Quarantine Branch
1849 Auiki Street
Honolulu, Hawaii 96819-310

RE: Testimony in Support of Agenda Item C.:

*(1) Allow the Importation and Possession of Lab-Reared Strains of the Parasitoid Wasp, *Phymastichus coffea* (Hymenoptera: Eulophidae), an Insect on the List of Restricted Animals (Part A), by Permit, for Field Release to Control the Coffee Berry Borer, *Hypothenemus hampei*, by the U.S. Department of Agriculture - Agricultural Research Service (USDA ARS) and University of Hawaii at Manoa (UHM); and*

*(2) Establish Permit Conditions for the Importation and Field Release of Lab-Reared Strains of the Parasitoid Wasp, *Phymastichus coffea* (Hymenoptera: Eulophidae), an Insect on the List of Restricted Animals (Part A), to Control the Coffee Berry Borer, *Hypothenemus hampei*, by the USDA ARS and UHM.*

The Advisory Committee and Plants and Animals has approved the application.

The benefits are well-documented in the Environmental Assessment.

This application represents a biocontrol method that has the potential to reduce the use of pesticides and assist Hawaii's coffee growers combat the devastating effects of Coffee Berry Borer; at a time when they are under pressure from rising pesticide and fertilizer costs.

Phymastichus coffea is successfully being used in several other coffee producing countries and will help Hawaii's producers who often find themselves at a competitive disadvantage with our counterparts across the globe.

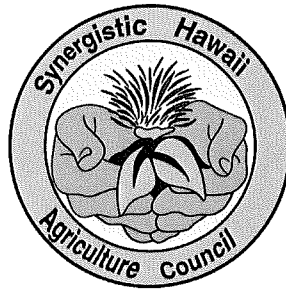
The risks, based on extensive research, appear minimal. From the EA: "*P. coffea* is not expected to attack any native Hawaiian species or disrupt native ecosystems given its high host specificity and short life span. Therefore, undesired environmental impacts are not anticipated."

Assuming this information is reliable and verifiable, **we ask that this application be approved.**

The Hawaii Coffee Association's (HCA) mission is to represent all sectors of the Hawaiian coffee industry, including growers, millers, wholesalers, roasters and retailers located throughout the State of Hawaii. The HCA's primary objective is to increase awareness and consumption of Hawaiian coffees. A major component of HCA's work is the continuing education of members and consumers. According to the USDA's National Agriculture Statistics Service, (NASS), the Hawaiian Coffee industry is conservatively ranked among Hawaii's highest-value crops.

Thank you for your thoughtful consideration,

Chris Manfredi
Executive Director



Board of Agriculture
Department of Agriculture
1849 Auiki Street
Honolulu Hawaii 96819-3100

**Re: April 25th Board of Agriculture Meeting Item IV.C.1
Testimony in Support of *Phymastichus coffea* Request 1 and 2**

Aloha Chair, and Board Members

SHAC is a non-profit trade organization representing agribusinesses in the coffee, floriculture, papaya, and macadamia crops. We assist our producers with responding to pests and diseases in order to increase production at the farmgate. **We stand in strong support of the PQ Branch's request on *Phymastichus coffea*.**

Hawaii coffee farmers face unprecedented pest and disease pressure, made worse by rising chemical costs and labor shortages for field sanitation. In the 2022-2023 harvest, growers reported Coffee Berry Borer (CBB) damage at 30% or more; levels not seen since the early years of CBB's introduction. Dr. PingSun Leung at UH CTAHR has documented that these levels can cost farmers over \$25 million in sales per year. Keeping infestations at 5% or less is key to maintaining the Hawaii quality and price, as well grower solvency. It's clear we need additional pest management options.

Biocontrol is an effective way to limit chemical usage on farms and control pests in feral lands. *Phymastichus coffea* is well-researched, and has had multiple introductions in coffee regions globally. It has consistently been shown to reduce coffee pest populations without impacting local insects. **We ask you approve the request to allow importation and establish reasonable permit conditions for field release.**

Mahalo nui loa!

Suzanne Shriner
Administrator



April 25, 2023

Board of Agriculture
Department of Agriculture
1849 Auiki Street
Honolulu Hawaii 96819-3100

RE: Support of *Phymastichus coffea* Request 1 and 2

Aloha Chair and Board Members,

Kona Coffee Farmers Association represents coffee farmers that have been blighted by Coffee Berry Borer (CBB). In the 2022/23 coffee crop year, CBB caused damage to over 30% of the harvest. In addition, farmers used costly labor inputs to apply agents to remediate the negative impacts of CBB. **Without reservation we support the PQ Branch's request on *Phymastichus coffea*.**

Biocontrol is looked on with skepticism especially when the debacle of the introduced mongoose to control rats is examined. However parasitoid wasps have been successfully used by home gardeners and agriculturalists all over the world and are likely the most important biocontrol method available. *Phymastichus coffea*, a parasitoid wasp, has been imported into most Latin American countries to mitigate damage with considerable success and no negative outcomes (Infante et al 2013; <http://dx.doi.org/10.1016/j.biocontrol.201309.019>). In an article by F. Yousuf et al. 2021 (<https://doi.org/10.1007/s10340-021-01353-8>) it was reported that *Phymastichus coffea* did not parasitize any native Hawaiian insects and had a very small chance of negative outcomes concluding it would be safe for release in Hawaii. Our farmers are very conscious of the environment and this strategy seems to be a very effective method to control CBB with no ecological harmful effects, which is very encouraging when you consider the positive impact on coffee. The data shows coffee farmers would spend less on control while achieving greater bean weights and improved quality.

This application represents a passive biocontrol method that has been proven elsewhere to minimize use of control agents, reduce coffee bean damage while improving coffee bean weight and quality at a time when coffee farmers are struggling with rising pesticide, fertilizer price and coffee leaf rust.

Mahalo nui loa!

Mark Petersen, President