**Minutes of the Advisory Committee on Plants and Animals**

**May 20, 2019 Meeting**

Hawaii Department of Agriculture

1. CALL TO ORDER

 The meeting of the Advisory Committee on Plants and Animals (Committee) was called to order by Advisory Committee Chairperson Dr. Kevin Hoffman on Monday,

May 20, 2019 at 1:36 P.M. at the Plant Quarantine Branch (PQB) Conference Room,

1849 Auiki Street, Honolulu, Hawaii 96819.

Members Present:

Dr. Kevin M. Hoffman, Committee Chairperson, Hawaii Department of Agriculture (HDOA)

Kenneth Matsui, Petland/Pets Pacifica

Dr. Maria Haws, Director, Pacific Aquaculture & Coastal Research Center, University of Hawaii at Hilo

Dr. Ryan Okano, Division of Aquatic Resources, Department of Land & Natural Resources (DLNR), Ex Officio Member Designated Representative

Scott Glenn, Director, Office of Environmental Quality Control, Ex Officio Member

Members Absent:

Kenneth Redman, Retired Director of the Honolulu Zoo

Dr. Benton Pang, Invasive Species Team Manager, U.S. Fish & Wildlife Service

Dr. Bruce Anderson, Director, Department of Health

Others Present:

Jennifer Waihee-Polk, Deputy Attorney General

Jonathan Ho, Acting Manager, PQB, HDOA

Trenton Yasui, Acting Inspection & Compliance Chief, PQB, HDOA

Techie Lancaster, Acting Invertebrate & Aquatic Biota Specialist, PQB, HDOA

David Lingenfelser, Acting Land & Vertebrate Specialist, PQB, HDOA

Karen Hiroshige, Secretary, PQB, HDOA

1. INTRODUCTION AND COMMENTS

Chairperson Hoffman and the Committee members introduced themselves.

1. APPROVAL OF MINUTES FROM THE APRIL 17, 2019 MEETING

Chairperson Hoffman asked the Committee to review the minutes for the

April 17, 2019 meeting before entertaining a motion to approve them. Committee member Maria Haws requested the minutes be corrected on page 11, 2nd paragraph, to state, “that the industry is currently cultivating hybrids that are potentially invasive,” not “are invasive.” Chairperson Hoffman requested the minutes be corrected.

With no further questions or comments, Committee member Dr. Maria Haws made a motion to approve the minutes of the April 17, 2019 meeting with Dr. Haw’s correction. The motion to approve was seconded by Advisory Committee member Ken Matsui. Chairperson Hoffman called for a vote.

Vote: APPROVED 4/0 ABSTAINED: 1/0

Motion fails.

1. COMMENTS FROM GENERAL PUBLIC ON AGENDA ITEMS (ORAL OR

WRITTEN)

Chairperson Hoffman asked if there were any comments from the general public on any of the agenda items. There were no comments from the general public.

1. REQUESTS TO BE REVIEWED BY THE ADVISORY COMMITTEE

Invertebrate and Aquatic Biota:

 Request to: (1) Allow the Importation of the Copepod, *Apocyclops panamensis*, an Unlisted Crustacean, by Special Permit, for Scientific Research, by Kampachi Farms, LLC.; and (2) Establish Permit Conditions for the Importation of the Copepod, *Apocyclops panamensis*, an Unlisted Crustacean, by Special Permit, for Scientific Research, by Kampachi Farms, LLC.

Acting Invertebrate and Aquatic Biota Specialist Techie Lancaster provided a synopsis of the request, and made it known that the applicant is available by phone if there are any questions.

 The applicant Dr. Dale Sarver participated in this meeting via telephone.

Committee member Kenneth Matsui stated that if diseases were introduced with the requested copepods, it would present a risk to the opae ula in ponds near to Dr. Sarver’s facility, due to the many lava tubes and underground water lenses throughout the NELHA property. He said that discharging effluent water directly into a sump that leads to this environment is risky and asked if the sump has a fine-meshed filtration system. Dr. Sarver stated that there is no filtration system and that the discharge goes into the injection well and trickles down through the substrate. Mr. Matsui said that he is understands the need to use copepods as a feed for Dr. Sarver’s animals and that he is not against it; however, he is somewhat skeptical that their sumps are totally isolated from the surrounding environment.

Committee Chairperson Hoffman asked if there were concerns about disease discharge into the environment through NELHA’s injection wells and sumps in the past. Acting Inspection and Compliance Chief Trenton Yasui stated that there have been some concerns expressed in the past, which is why the PQB incorporated condition no. 9 as a standard permit condition, whereby the PQB Chief can require a treatment if necessary, for the discharge water. He said that the disease testing requirement in the permit conditions also may further address any disease concerns.

Committee member Haws stated that the copepod will be imported from Reed Mariculture, which is a company that supplies algae and other aquaculture products to companies in the U.S. and around the world. She said that their facility is highly bio-secure, and she feels that Advisory Subcommittee member Dr. Lei Yamasaki addressed White Spot Syndrome, which is the most serious concern for this organism.

Committee member Matsui agreed that Reed Mariculture has a very good reputation. Mr. Matsui reiterated his request that Committee members receive these submittals earlier so that there is sufficient time for review and to make an informed recommendation to the Board of Agriculture.

Committee member Scott Glenn said that the topic of native copepod species was raised in the Advisory Subcommittee review, and he asked if the applicant could speak to why the potential of native species aren’t being investigated. Dr. Sarver said that researchers have been using various native species in Hawaii for a long time. He said that the reason why they chose to use *A. panamensis* in their research is because native species require live algae and, therefore, a whole section of the hatchery must be dedicated to raise live algae to sustain them, which is difficult to do and cost prohibitive. He said that *A. panamensis* does just fine on powdered algae that can be purchased from Reed Mariculture. Committee member Glenn asked Dr. Sarver if tests have been done to determine if native copepods would eat the powdered algae. Dr. Sarver said that tests have been done and it has never worked.

Committee member Haws added that people would love to culture as many native species as possible rather than to import new species; however, it is extremely difficult to do and may require a lifetime of work to get done. She stated that the culture of cows, horses, and pigs has been ongoing for tens of thousands of years, and we still have not perfected it. She added that this is the reason why people often opt for things that have already been developed, because no one in the commercial industry has the time and/or resources to develop the culture of a native species, and no one funds this type of research. Dr. Haws stated that Kampachi Farms is actually trying to develop the propagation of native fish species, and it requires the development of support systems with introduced copepods.

Dr. Sarver stated that if there were other options, they would use them, and that this new copepod species became available and is currently being used and developed in many places in the United States.

Advisory Committee member Dr. Ryan Okano echoed Advisory Subcommittee member Justin Goggin’s comments that he is hesitant to recommend approval for the importation of a non-native species, and that he recommends the cultivating of native copepods for research. He said that *A. panamensis* can survive in various salinities, reproduces quickly, and if it were to be released into the environment and it flourished, there would be no way to control it. Dr. Okano recognized that past studies have shown that it is a relatively weak organism and would not compete well in the environment.

Hearing no further comments or questions, Committee Chairperson Hoffman called for a motion. Committee member Haws made a motion to recommend approval of the request to: (1) allow the importation of the Copepod, *Apocyclops panamensis*, an unlisted crustacean, by special permit, for scientific research, by Kampachi Farms, LLC.; and (2) establish permit conditions for the importation of the copepod, *Apocyclops panamensis*, an unlisted crustacean, by special permit, for scientific research, by Kampachi Farms, LLC. Committee member Matsui seconded the motion.

All five Committee members voted in favor of recommending approval of this request to the Hawaii Board of Agriculture.

Vote: APPROVED 5/0

Motion passes.

1. ADJOURNMENT

Having no further business, Committee member Maria Haws moved to adjourn the meeting. The motion was seconded by Committee member Matsui and unanimously approved. The meeting was adjourned at 2:14 P.M.

Vote: APPROVED 5/0

Respectfully Submitted,

Karen Hiroshige

Advisory Committee Secretary