



STATE OF HAWAII
DEPARTMENT OF HEALTH
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**Testimony COMMENTING on HB 297
RELATING TO MOSQUITO VECTOR CONTROL**

REPRESENTATIVE JOHN M. MIZUNO, CHAIR
HOUSE COMMITTEE ON HEALTH

REPRESENTATIVE RICHARD P. CREAGAN, CHAIR
HOUSE COMMITTEE ON AGRICULTURE

Hearing Date: February 6, 2019

Room Number: 312

1 **Fiscal Implications:** None

2 **Department Testimony:** The Department understands the importance of HB 267 which directs
3 the Department of Agriculture (DOA) to review the *Aedes aegypti* mosquito with *Wolbachia*
4 bacteria for placement on the appropriate animal import list.

5 The Department defers to DOA with respect to the placement of the *Aedes aegypti* on the
6 appropriate animal import list but will collaborate on the report to the Legislature with our
7 findings and recommendations regarding the import and release of the mosquito and bacteria into
8 the environment.

9 The Department is aware of ongoing research with various strains of mosquitoes and bacteria
10 which may provide innovative ways of controlling mosquitos in the environment. We look
11 forward to future practical applications in the vector control program.

12 **Offered Amendments:** Section 2 should be removed as the Department has no authority to
13 determine the placement of an animal to the appropriate import list, pursuant to section 150A-
14 6.2, Hawaii Revised Statutes.

15 Thank you for the opportunity to testify on this measure.

DAVID Y. IGE
Governor

JOSH GREEN
Lt. Governor



PHYLLIS SHIMABUKURO-GEISER
Acting Chairperson
Board of Agriculture

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DEPARTMENT OF AGRICULTURE
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TESTIMONY OF THE DEPARTMENT OF AGRICULTURE
BEFORE THE HOUSE COMMITTEES ON HEALTH AND AGRICULTURE

FEBRUARY 6, 2019
8:40 A.M.
CONFERENCE ROOM 312

HOUSE BILL NO. 297
RELATING TO MOSQUITO VECTOR CONTROL

Chairpersons Mizuno and Creagan and Members of the Committees:

Thank you for the opportunity to testify on House Bill No. 297 that directs the Hawaii Department of Agriculture to review the *Aedes aegypti* mosquito with *Wolbachia* bacteria for placement on one of the non-domestic animal lists maintained by the Department. The Department supports the intent of this bill, however has concerns regarding the implementation.

The Department is familiar with the research into cytoplasmic incompatibility in mosquito species, including *A. aegypti*, with differing strains of *Wolbachia* bacteria. However, the importation of *A. aegypti* with *Wolbachia* bacteria and then releasing them into the wild could have unintended consequences. By introducing new *A. aegypti* genes into the environment, there is an increased likelihood that a new subspecies of *A. aegypti* could become distributed throughout the State and potentially become more invasive than the currently established one. Also, because research has shown that *Wolbachia* bacteria are not regularly found in *A. aegypti*, they may not be efficient carriers of *Wolbachia* bacteria, therefore introduction and release may not be a viable technique for control or eradication and could further jeopardize public health and the environment, especially without any research conducted in the State.



Additionally, the Hawaii Revises Statutes Chapter 150A-6.2 already has a provision that allows certain entities, such as the University of Hawaii, to potentially import an unlisted organism, such as *A. aegypti*, on a case-by-case basis for the purpose of conducting scientific research in a manner that *A. aegypti* will not be detrimental to agriculture, the environment, or humans, provided the importer can meet permit requirements as determined by the Board of Agriculture

As an alternative, the use of the Vinegar Fly, *Drosophila melanogaster*, has been shown to be an alternative host to carry *Wolbachia* bacteria. *D. melanogaster* is already on the Department's List of Conditionally Approved Animals and represents a drastically reduced risk to public health and the environment than *A. aegypti*. Being on the List of Conditionally Approved Animals also makes *D. melanogaster* currently eligible for importation.

Thank you for the opportunity to submit our testimony.

DAVID Y. IGE
GOVERNOR OF
HAWAII



**STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES**

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**Testimony of
SUZANNE D. CASE
Chairperson**

**Before the House Committees on
HEALTH
and
AGRICULTURE**

**Wednesday, February 6, 2019
8:40 AM
State Capitol, Conference Room 312**

**In consideration of
HOUSE BILL 297
RELATING TO MOSQUITO VECTOR CONTROL**

House Bill 297 proposes to direct the Department of Agriculture (DOA) to review the *Aedes aegypti* mosquito with *Wolbachia* bacteria for placement on an appropriate animal import list and requires the DOA and Department of Health (DOH) to report on the feasibility of using *Aedes aegypti* with *Wolbachia* bacteria in an innovative vector control program within the State. **The Department of Land and Natural Resources (Department) supports this measure and offers the comments.**

Mosquitoes are non-native to Hawaii and vector diseases, which threaten public health as well as native wildlife. The Department supports the overall concept of using *Aedes aegypti* with *Wolbachia* bacteria for landscape-scale mosquito control in Hawaii. Such technology is already being applied elsewhere in the US and internationally to suppress populations of mosquitoes that vector diseases. The Department also supports the review of *Aedes aegypti* and *Wolbachia* for placement on an animal import list but defers to DOA and DOH with regards to the proper approach to reviewing and listing species for import into the State.

The Department notes that SECTION 2 should likely refer to a review by DOA rather than DOH, as DOA has the statutory authority regarding animal import lists pursuant to Section 150A-6.2, Hawaii Revised Statutes. The Department further notes that while SECTION 1 states that no mosquitoes in Hawaii have naturally-occurring *Wolbachia* bacteria, many insects, including other mosquitoes, with *Wolbachia* do presently exist in Hawaii. The bacteria is not present in *Aedes aegypti* in Hawaii.

Thank you for the opportunity to comment on this measure.

SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

ROBERT K. MASUDA
FIRST DEPUTY

M. KALEO MANUEL
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

HB-297

Submitted on: 2/5/2019 8:28:46 AM

Testimony for HLT on 2/6/2019 8:40:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Melodie Aduja	O`ahu County Committee on Legislative Priorities of the Democratic Party of Hawai`i	Support	No

Comments: