
HOUSE RESOLUTION

URGING THE DEPARTMENT OF AGRICULTURE, DEPARTMENT OF HEALTH, AND DEPARTMENT OF LAND AND NATURAL RESOURCES TO DEVELOP AND IMPLEMENT A MOSQUITO CONTROL PROGRAM THAT USES *WOLBACHIA* BACTERIA TO REDUCE BOTH THE RATE OF TRANSMISSION OF MOSQUITO-BORNE DISEASES AND MOSQUITO POPULATION LEVELS THROUGHOUT THE STATE.

1 WHEREAS, the control of mosquito populations throughout the
2 State is urgently necessary to protect the health and well-being
3 of the State's residents and animals; and
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5 WHEREAS, mosquito-borne diseases, including the Zika virus,
6 West Nile virus, Chikungunya virus, dengue, and avian malaria,
7 are spread through the bite of an infected mosquito; and
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9 WHEREAS, more species of native birds have gone extinct in
10 Hawaii than anywhere else in the world, with ten unique bird
11 species disappearing from Hawaii since the 1980s; and
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13 WHEREAS, virtually every individual native bird living
14 below 4,000 feet, or 1,200 meters, in elevation has been
15 eliminated by avian malaria; and
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17 WHEREAS, between 2013 and November 2, 2020, the Department
18 of Health confirmed twenty-six cases of the Zika virus, thirty-
19 six cases of the Chikungunya virus, and three hundred sixty
20 cases of dengue in the State; and
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22 WHEREAS, according to a Department of Agriculture report
23 submitted to the Legislature on December 26, 2019, as required
24 by Act 106, Session Laws of Hawaii 2019, mosquitoes in Hawaii
25 also pose a potential threat to Hawaii's native wildlife,
26 especially native birds; and
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1 WHEREAS, Hawaii's mountaintop forests serve as a refuge for
2 native birds escaping from mosquitoes that carry avian malaria;
3 and
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5 WHEREAS, however, climate change has raised temperatures in
6 Hawaii's mountaintop forests, resulting in mosquitoes moving
7 toward the mountains' respective summits and threatening the
8 only disease-free refuge for native birds; and
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10 WHEREAS, various federal and state agencies, including the
11 United States Fish and Wildlife Service, National Parks Service,
12 Department of Agriculture, Department of Land and Natural
13 Resources, and Department of Health, have made significant
14 efforts to suppress mosquito populations; and
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16 WHEREAS, these efforts include the development of
17 *Wolbachia*-infected mosquito lineages, application of chemical
18 adulticides and larvicides, reduction of mosquito habitats, and
19 distribution of materials to educate the public about mosquito
20 control and bite prevention; and
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22 WHEREAS, *Wolbachia* is a naturally occurring bacteria that
23 is present in approximately fifty percent of all insects; and
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25 WHEREAS, introducing the *Wolbachia* bacteria, which is safe
26 to humans and the environment, into mosquito populations
27 throughout the State would help to prevent the transmission of
28 mosquito-borne diseases in humans and wildlife; and
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30 WHEREAS, according to the World Mosquito Project, once a
31 mosquito becomes infected with the *Wolbachia* bacteria, the
32 bacteria actively competes with certain mosquito-borne diseases,
33 making it more difficult for the certain mosquito-borne diseases
34 to reproduce inside the infected mosquito, and thus reduces the
35 likelihood of the mosquito spreading any disease to humans; and
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37 WHEREAS, because male mosquitoes infected with certain
38 *Wolbachia* bacteria are unable to produce offspring with wild
39 female mosquitoes that are either not infected with any
40 *Wolbachia* bacteria or are infected with a different *Wolbachia*
41 bacteria than the male mosquito, *Wolbachia* bacteria may also be
42 used to suppress mosquito populations; now, therefore,

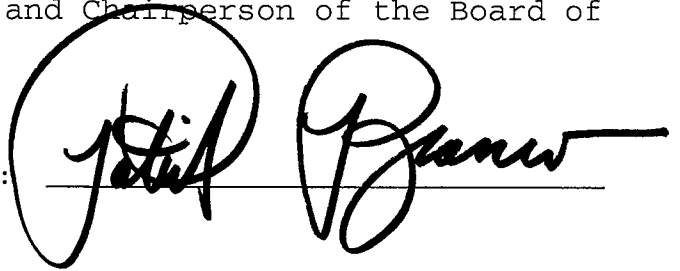


H.R. NO. 95

1 BE IT RESOLVED by the House of Representatives of the
2 Thirty-first Legislature of the State of Hawaii, Regular Session
3 of 2021, that the Department of Agriculture, Department of
4 Health, and Department of Land and Natural Resources are urged
5 to develop and implement a mosquito control program that uses
6 *Wolbachia* bacteria to reduce both the rate of transmission of
7 mosquito-borne diseases and mosquito population levels
8 throughout the State; and
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10 BE IT FURTHER RESOLVED that certified copies of this
11 Resolution be transmitted to the Chairperson of the Board of
12 Agriculture, Director of Health, and Chairperson of the Board of
13 Land and Natural Resources.
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OFFERED BY: _____



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