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## HOUSE CONCURRENT 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,



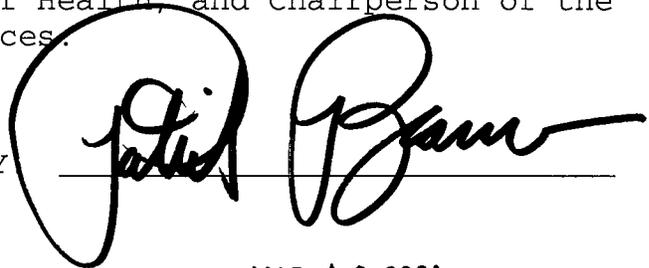
# H.C.R. NO. 119

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, the Senate concurring, that the Department of  
4 Agriculture, Department of Health, and Department of Land and  
5 Natural Resources are urged to develop and implement a mosquito  
6 control program that uses *Wolbachia* bacteria to reduce both the  
7 rate of transmission of mosquito-borne diseases and mosquito  
8 population levels throughout the State; and

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10 BE IT FURTHER RESOLVED that certified copies of this  
11 Concurrent Resolution be transmitted to the Chairperson of the  
12 Board of Agriculture, Director of Health, and Chairperson of the  
13 Board of Land and Natural Resources.

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OFFERED BY \_\_\_\_\_



MAR 12 2021

