

DAVID Y. IGE
Governor

JOSH GREEN
Lt. Governor



PHYLLIS SHIMABUKURO-GEISER
Chairperson, Board of Agriculture

MORRIS M. ATTA
Deputy to the Chairperson

State of Hawaii
DEPARTMENT OF AGRICULTURE
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December 30, 2021

The Honorable Ronald D. Kouchi,
President and Members of the Senate
Thirty-first State Legislature
State Capitol, Room 409
Honolulu, Hawaii 96813

The Honorable Scott K. Saiki, Speaker
and Members of the House of
Representatives
Thirty-first State Legislature
State Capitol, Room 431
Honolulu, Hawaii 96813

Dear President Kouchi, Speaker Saiki, and Members of the Legislature:

For your information and consideration, I am transmitting a copy of the Department's findings and recommendations regarding efforts to mitigate and control the two-lined spittlebug and the recovery of pasture lands, as required by Act 137, SLH 2021. In accordance with Section 93-16, Hawaii Revised Statutes, I am also informing you that the report may be viewed electronically at <https://hdoa.hawaii.gov/meetings-reports/legislative-reports/>.

Sincerely,

Phyllis Shimabukuro-Geiser
Chairperson, Board of Agriculture

Enclosures



**REPORT TO THE THIRTY-FIRST LEGISLATURE
2022 REGULAR SESSION
STATE OF HAWAII**

**IN RESPONSE TO ACT 137, SESSION LAWS OF HAWAII 2021
REQUIRING THE DEPARTMENT OF AGRICULTURE TO REPORT THE EXPENDITURE OF FUNDS
AND PROGRESS OF ACTIVITIES RELATING TO TWO-LINED SPITTLEBUG AND THE RECOVERY OF
PASTURE LANDS**



Prepared by:

**THE STATE OF HAWAII
DEPARTMENT OF AGRICULTURE**

DECEMBER 2021

Report to Legislature

Background

In the Thirty-First State Legislature, Regular Session of 2021, Act 137 was passed which allocated \$350,000 from Coronavirus State Fiscal Recover Funds (CSFRF) to mitigate and control the two-lined spittlebug, including reducing the two-lined spittlebug population by using insecticides, integrating weed management measures in affected rangelands, and reseeding pastures damaged by infestations.

Executive Summary

This report covers through to December 31, 2021

The two-lined spittlebug (TLSB) has emerged as one of the most invasive and impactful species of rangeland systems. Found only on the island of Hawaii at the present time, TLSB is devastating rangeland grass areas previously dominated by kikuyu grass. In 2016 when TLSB was first reported, approximately 2,000 acres of rangeland was affected. It now is affecting 176,000 acres. Kikuyu has proven to be extremely susceptible to TLSB attack and heavy infestations will lead to the death of this important rangeland grass or replacement of kikuyu with noxious weeds that are ill-suited for forage and harmful to the cattle in addition to posing immediate threats to the watershed areas adjacent to high elevation rangelands. The loss of production in affected areas is estimated to be about \$133/acre. It is forecasted that severely impacted pasture will cost \$500/acre for up to 10 years to recover. Associated impacts to loss of the rangelands and subsequent replacement with weeds will induce reduction in grass cover with attendant increase in soil erosion and subsequent impacts to water quality in the form of runoff.

The Department is working on a direct contract to the Research Corporation of the University of Hawaii (RCUH). This contract will use Coronavirus State Fiscal Recover Funds (CSFRF) to support rancher activities to control TLSB in areas devastated by this insect. Funding will be used to reimburse ranchers for their control efforts through an application and granting process. Funds would be available for the purchase of approved pesticides to kill TLSB especially in areas under incipient attack, herbicides to kill grasses impacted by TLSB, and/or seeds and fertilizer/mulch systems to replace affected rangelands with resistant stock, and labor for the application of these efforts. In all cases, the program will promote techniques and products that have been proven effective through research conducted by the University of Hawaii for management of TLSB. The program will be administered by the Plant Industry Division of the Hawaii Department of Agriculture. This direct contract has not been executed. A total of \$350,000 was allocated to the Department on October 18, 2021. Qualified applicants will be asked to participate in a series of survey questions pre- and post- receipt and expenditure of funds. These surveys will be used by HDOA and University of Hawaii Cooperative Extension specialists to assess impacts of TLSB, begin economic impact studies on TLSB, and assist researchers and extension personnel to assess, evaluate and drive integrated pest management programs for TLSB.

The Department recommends the following:

- Continue to support research activities by the University of Hawaii. The department has allocated \$673,989 in funds from the Pest Inspection, Quarantine, and Eradication Fund to the University of Hawaii. Support needs to continue to develop integrated management options of TLSB infestations and subsequent recovery of rangelands. In meetings with the Department, researchers at the University have identified an annual need in excess of \$1 million to support our ranching industries.
- Continue and expand support of the project’s objectives to manage and slow the spread of the TLSB infestations. Provide sufficient funding to assist affected landowners in control and management response of the TLSB.
- Support continuous release of effective biological control agents to control noxious weeds, such as Hamakua pamakani (*Ageratina ripar*), which are replacing kikuyu in rangeland areas impacted by TLSB. The absence of adequate biocontrol agents has caused severe impacts of noxious weeds in TSLB areas not experienced in more than 30 years.

Allocation as of October 18, 2021:	\$ 350,000.00
Will be transferred in entirety to RCUH	
Receipts:	\$ 0.00
FY2021 expenditures:	\$ 0.00
Remaining balance:	\$ 0.00