

Hawai'i Invasive Species Council Resources Working Group August 10, 2021, 9:00 a.m

Hawaii Invasive Species Council,

The Hawaii Cattlemen's Council strongly supports the proposal for funding submitted by Dr. Mark Thorne and Dr. Mark Wright for the Detection and Management for the Control of *Prosapia bicincta* (Twolined Spittlebug) in Hawaii.

While there are many pressing issues that have arisen from the effects of COVID-19, agriculture should continue to be a priority topic. We are aware that there are many pressing issues that need funding, but this invasive species directly affects food production. Hawaii Island is responsible for 80% of the state's cattle production, so a further outbreak of this invasive species will be devastating not only to cattle ranchers, but to our endeavor for food security. This invasive species issue affects all of Hawaii, not just the cattle ranchers.

**Background:** Twolined Spittlebug infestations in Hawaii have been shown to dramatically reduce the forage quantity and quality of pastures by killing key forage species outright, or by decreasing the nutritional value, palatability, and productivity of key forages. This promotes the establishment and proliferation of invasive weeds with no economic or other value, while significantly reducing the quality of foraging grasses. Reseeding areas denuded by the Twolined Spittlebug will protect from runoff and provide forage for cattle. The Hawaii Cattlemen's Council has been holding consistent meetings to keep up to date on this issue and work towards finding solutions. This group includes CTAHR researchers, HDOA, HISC, BIISC, affected ranchers, and ranchers who are at threat. The meeting of stakeholders has allowed us to ensure that the voices of ranchers, government agencies, and researchers are aligned. Together, we have been able to increase awareness in the public by sharing information on a new website, <a href="https://www.tlsbhawaii.com">www.tlsbhawaii.com</a> and through educational videos.

**Economic Impact:** Ranchers anticipating the devastating effects of the Twolined Spittlebug reaching their pastures know that they will need to reduce their herds to ensure enough forage is available. They know that many of their pastures will become ungrazeable if the pest spreads to them. On one affected ranch, at lease 70% of the available pasture acres is impacted by the Twolined Spittlebug. The pest has killed off Kikuyu and Pangola, high quality forage, leaving undesirable forage and weeds. With huge swaths of land now ungrazeable, the ranch has had to reduce their herd, creating a situation in which the operation is now losing money. With further research into effective methods and funding to implement those methods in high impact areas, we can suppress the spread of the invasive species.

Importance to Conservation: Healthy grazing lands are integral to watershed health and function in Hawaii. The Twolined Spittlebug severely disturbs the Hawaiian grazing land plant community by killing the grass. This loss of living ground cover leaves the land vulnerable to soil loss which contributes to sediment-laden runoff into our near shore coastal waters, affecting coral reef health. Healthy coral reefs











provide important services such as shoreline protection, marine ecosystem habitats that support important food chains that also help support our communities. Invasive weeds move in on these degraded lands, changing the entire character of the landscape hindering not only agriculture, but also other land management efforts, and recreational uses such as forest and wildlife conservation projects, hiking and hunting, not to mention the change to the aesthetic value of the land. For this reason, while the ranchers are on the frontlines of this issue, the Twolined Spittlebug is an invasive species that the entire state should be concerned about.

The Need for Continued Research: As stated earlier, the TLSB committee brings together stakeholders for this issue and ensures we are aligned. We supported the 2021 legislations to provide ranchers with funding (Act 137), as ranchers need relief and assistance to purchase seed and herbicides to reseed pasture and prevent erosion and noxious weeds. However, the continued research is still needed, as Dr. Thorne and Dr. Wright's research team is still determining the best TLSB-resistant forage types to use, and play a key role in determining the spread of the invasive species. This information is key to a comprehensive plan to contain the Twolined Spittlebug and give ranchers and other landowners the best chance of maintaining their land. The more that this research uncovers in pesticide trials, reseeding methods, and TLSB-resistant forages, the better chance our ranchers have at efficiently and effectively adapting to ensure their operations survive the threat of the Twolined Spittlebug.

Thank you for the opportunity to support this proposal. While ranchers face many challenges, the Twolined Spittlebug has the potential to devastate the industry, an industry that has been working to increase food security for Hawaii. We appreciate your consideration to fund this project.

Nicole Galase Managing Director







