

Aloha and Happy New Year from the Hawai'i Ant Lab



The Hawai'i Ant Lab (HAL) is a project of the University of Hawai'i, Pacific Cooperative Studies Unit. This January we begin our tenth year of operations. We now have two locations, Hilo and Honolulu, within the Hawai'i Department of Agriculture. HAL Staff would like to thank you for your support over the past years. Our mission statement is to:

- *Protect Hawai'i from new intentional and unintentional introductions of pest ants*
- *Prevent the inter-island and intra-island spread of existing invasive ant species*
- *Provide sound, practical treatment methods for homeowners, natural resource managers, and industry*
- *Eradicate new incursions whenever possible*

HAL conducts semi-annual port-of-entry surveys (airports and harbors) on Hawai'i Island to monitor for Little Fire Ant (LFA) and any new invasive ant species, such as: Red Imported Fire Ant, Crazy Tawny Ant, and Harvester Ant. If and when LFA are detected at these sites, the areas are treated to prevent potential inter-island spread. As an additional precaution, airports on neighbor islands (outside of Hawai'i Island) are surveyed as part of the Mamalu Poepoe Project.

Early detection is critical in the fight against invasive species. HAL conducted a site visit and training on Lanai with Palama Lanai staff that are responsible for quarantine and monitoring of incoming plant shipments for the Four Season Resorts and island residents.

Within Hawai'i Island, preventing the spread of LFA is an immense task since LFA infested areas span the east side of the island, are becoming more frequent on the west side of the island, and are now present in each district of the island. Education and extension work is fundamental to help residents and industries understand how easily this tramp species can be spread through fruit, potted plants, landscaping material, cinder, and basically any item that has been in an infested area. We have been fortunate to work with an enthusiastic Holualoa resident, Carolyn Dillon, who formed the LFA HUI (Hawai'i Unites Against Invasives). This grass roots effort facilitates educational events, such as organizing training for resort landscape managers and staff where HAL demonstrates Best Management Practices for prevention and management of LFA.



Hawai'i Ant Lab Extension Specialist, Heather Forester (right), conducting a site visit and training with Palama Lanai staff to promote early detection of Little Fire Ant and other invasive ant species.

Additional strategies to provide sound treatment advice for those on Hawai'i Island include the following examples:

- USDA Farm Bill grant designed to train pesticide suppliers
- Trainings for licensed pest control operators
- Consultation with three National Parks on Hawai'i Island, one of which is managing an LFA infestation
- Working with the County of Hawai'i Department of Environmental Management to offer Best Management Practices for pest free mulch, a known vector for LFA. A survey of the mulch at the two processing facilities, Hilo and Puuanahulu, is conducted monthly. Hilo has seen a drastic reduction in detections, and Puuanahulu has yet to have a positive sample collected.

Calls and walk-ins are handled on a daily basis to correctly identify ant samples, so the individuals are given treatment advice specific to his or her priorities. Ant samples are also received by mail and responded to. Each month HAL provides a free Ant Management Clinic to residents. Constituents can book a place at these clinics by visiting our website or calling our office. During the workshop, we cover invasive ants in Hawai'i, LFA biology, pesticide safety, and treatment methods; including mixing up a blank batch of the HAL Gel Bait used to treat trees.



HAL Research Specialist Michelle Montgomery and Research Associate Kioshi Adachi (pictured) conduct training for Pest Control Operators, coordinated by Carolyn Dillon, LFA HUI.

In the past year, the Hawai'i Ant Lab staff are responsible for eradication efforts on Kauai, Oahu, and Maui, and have been working closely with the Hawai'i Department of Agriculture and the Invasive Species Committees in each county. The LFA population in Kahiliwai, Kauai is currently below detectable levels with the last detection occurring in January 2017. Continued area-wide monitoring is recommended until there have been zero LFA positive detections for a minimum of 3 years. Even after this time, annual surveys should be conducted when resources permit. On Oahu, early detection efforts continue via nursery surveys. Treatments are conducted as the need arises. Monitoring and treatments continue in Waimanalo where an occasional positive sample is detected. On Maui, the battle continues with several existing infestations being treated at a six week interval. HAL has been teaming up with MISC to combat these unique infestations in resort areas, farms, and dense jungle with waterways. There have also been a couple new infestations that have popped up in 2017 which HAL and MISC are collaborating on.

On behalf of the HAL staff, I would like to thank you for your continued support and we look forward to working with you in 2018. Please let us know of any collaboration opportunities that may arise.

Sincerely,

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