

**Title:** Control of Little Fire Ants in Hawaii

**Organization:** Hawai'i Ant Lab

**Award:** \$72,782.59



**Introduction:** The Hawai'i Ant Lab (HAL) is located within the Hawai'i Department of Agriculture in Hilo. Its charter is to protect Hawai'i from new intentional and unintentional introductions of invasive ants, to prevent the inter-island and intra-island spread of existing invasive ant species, and to provide sound, practical treatment methods for homeowners and industry. Currently staffed by Dr Cas Vanderwoude, Michelle Montgomery and Brent Sheehan, the team handles a startling array of projects and activities related to research, extension and training. Total HAL funding for 2011-12 fiscal year was approximately \$283,000, with approximately 25% provided by HISC.

---

### ***Achievements in FY12***

#### **Eradication of outlying LFA infestations:**

##### **1. Maui**

HAL conducted four post-eradication surveys of the infested site on Maui. The treatment area remains free of LFA. A single incipient LFA colony was discovered about 50 ft beyond the control boundary in February 2012. This has now been treated on two occasions. Treatment and follow-up monitoring will continue through '12-13 fiscal year.

##### **2. Kailua-Kona**

All known infested sites in Kailua-Kona were visited three times during the reporting period. So far there are 6 infested sites, four have no LFA and two are under active suppression. Recently, two additional sites have been discovered.

##### **3. Kauai**

During the reporting period, substantial progress has been made towards eradication of LFA from Kauai. First, access issues have been overcome. Additionally, an experimental use permit covering the use of off-label bait formulations have been applied for and approved. State registration and a section 2(ee) registrant recommendation have been approved for Tango® a key chemical needed for this project. All stakeholders, including residents have met and agreed on a proposed course of treatment and monitoring activities which will commence in September 2012.



*HAL staffer Michelle Montgomery showing onlookers Little Fire Ants in the field*

#### **Improving LFA management capacity:**

##### **1. Requests for assistance**

Over 300 public enquiries were recorded during the 2011-12 year (Figure 1). Record-keeping was not complete for this period and the actual number of public enquiries was much higher. Most enquiries were from the districts south of Hilo (48%) and in keeping with trends of past years, a substantially greater number of calls are being received from the Hilo urban area (45%). The remainder of calls were recorded from the Hamakua coast.

##### **2. [www.littlefireants.com](http://www.littlefireants.com)**

Visitation at the dedicated fire ant website continues to increase to a total of 3866 visits during the 2011-12 year. Of these, 60% of visits were from Hawai'i – Big Island 51%, Oahu 41%, Maui 6% and Kauai

2%. The entire website was re-coded as the original format no longer fitted the increasing complexity of the pages. This may have to be repeated during the 2012-13 year as the website grows.

### **3. Efficacy of control products**

Field testing the palatability of baits available for sale in Hawai'i revealed substantial differences (Figure 2). One result of some concern was the discovery that the only two products available for use in food crops were entirely unattractive and therefore have little or no efficacy. Fortunately, HAL was successful in obtaining state registration of a new product (Tango®) that will act as a suitable replacement.

#### **Training for HISC Communication staff:**

A two day training session on invasive ants was prepared and delivered to HISC communication staff on 14-15 November in Hilo. Training was well received and provided staff with a greater understanding of the issues involved. The main training presentation is available for download here:

<https://dl.dropbox.com/u/17898942/ant%20communication%20workshop.pdf>

---

#### **Additional Information**

The 2011-2012 year has been a formative year for the Hawai'i Ant Lab. The addition two new staff to the team has greatly increased the Lab's capacity for research, outreach and extension. This is vitally important as Little Fire Ants continue to spread at rapid rates, making new inroads into the Hilo urban area and agricultural industries. In previous years, Little Fire Ants were mostly confined to the acreage districts south of Hilo, Now in the urban area where house lots are much smaller, the number of affected residents could increase at much faster rates.

---

#### **Contact Information**

Hawai'i Ant Lab,  
Pacific Cooperative Studies Unit, University of Hawai'i  
Hawai'i Department of Agriculture  
16 E. Lanikaula St Hilo. HI 96720  
Ph: 808 315 5656  
email: [info@littlefireants.com](mailto:info@littlefireants.com)

Want more information?  
go to [www.littlefireants.com](http://www.littlefireants.com)



*Depiction of a senior HAL staffer about to treat for Little Fire Ants. © Brooke Mahnken, Maui Invasive Species Committee*

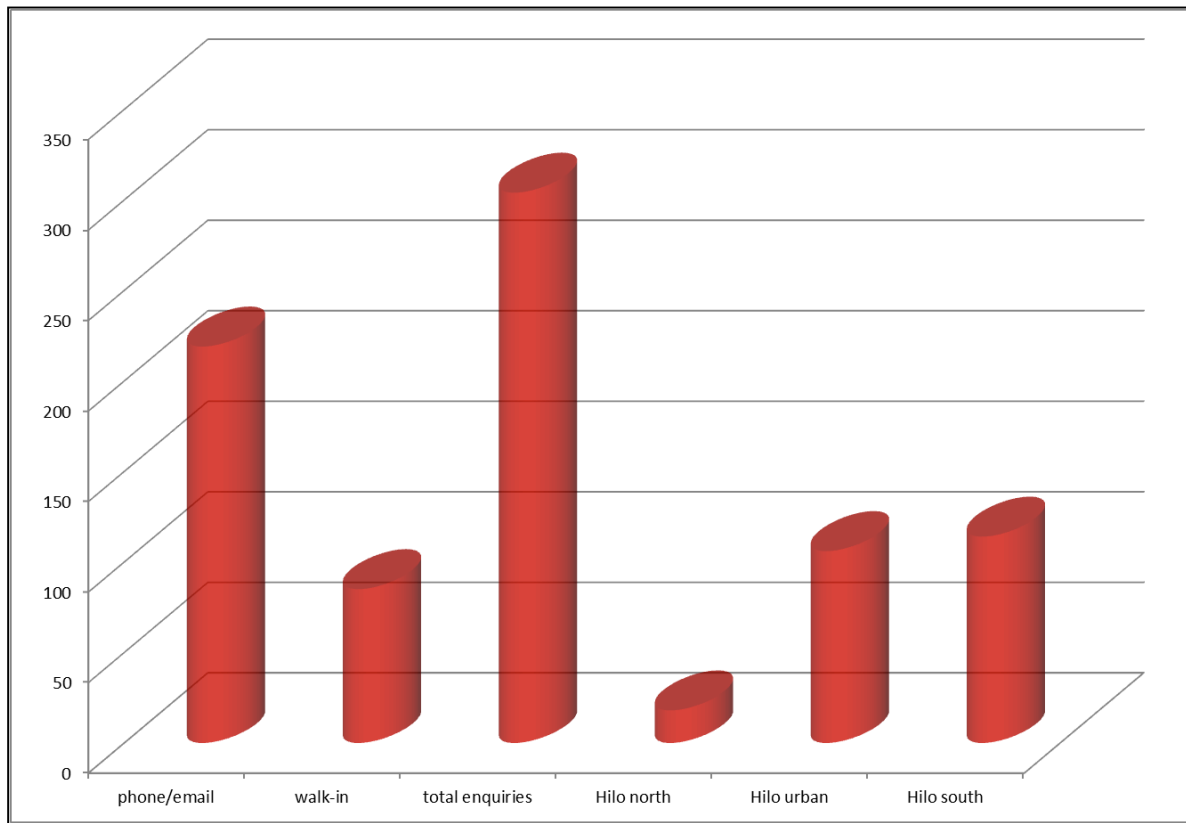


Figure 1. Public enquiries for 2011-2012 year listed by type and location.

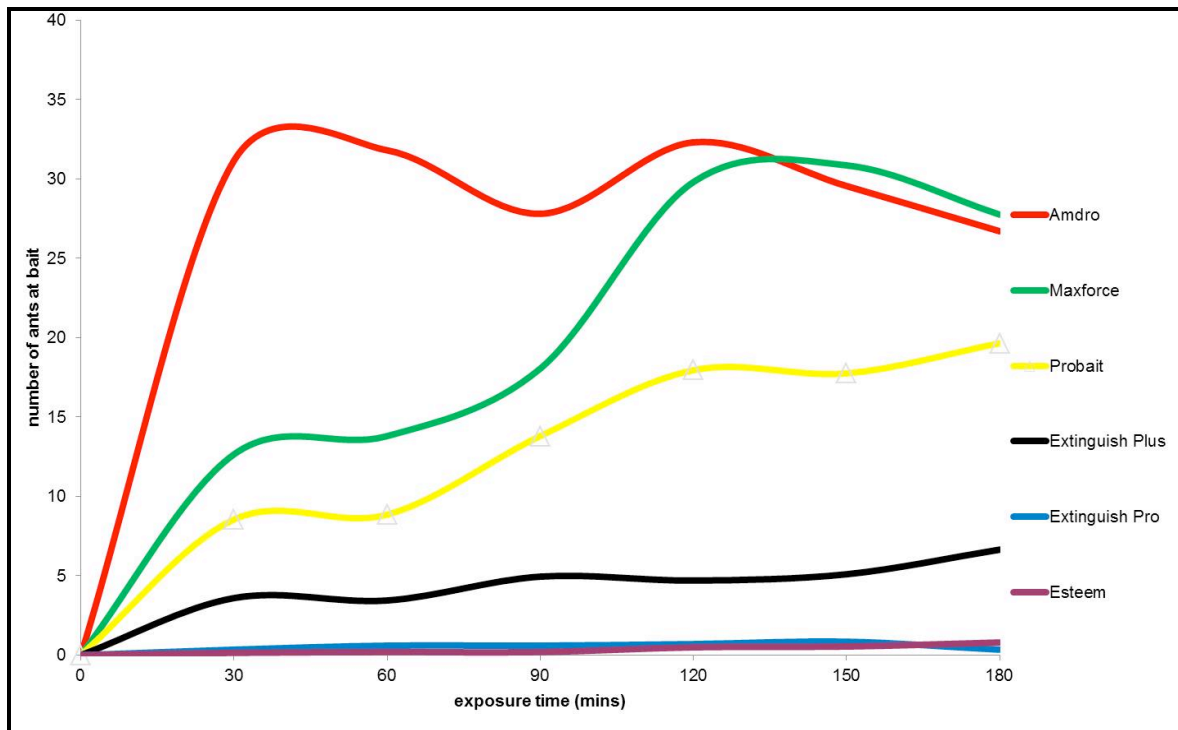


Figure 2. Attractiveness of commercial ant baits over three hours exposure time.