BEST MANAGEMENT PRACTICES FOR LITTLE FIRE ANTS

LFA (Wasmannia auropunctata)



Little fire ants (LFA) were accidentally introduced to Hawaii on a shipment of potted palms from Florida in the 1990's. LFA are listed as one the world's top 100 invasive species. Follow these best management practices in order to prevent the spread of little fire ants.

1. HARM TO ENVIRONMENT

- LFA are aggressive against other invertebrates, driving out all other insects.
- Heavy infestations of LFA can render areas unusable.

2. HARM TO ECONOMY

- LFA promote plant pests like aphids and mealybugs, which secrete honeydew that ants eat.
- LFA are predicted to cost \$1 billion for agriculture and \$76 million for nurseries in the next 10 years.
- Incidents involving LFA may lead to losses in tourism and tourism-related businesses.

3. HARM TO HEALTH & WAY OF LIFE

- LFA deliver a painful sting leaving welts that can last for weeks.
- LFA stings to the eyes may blind pets and other animals.

PREVENTATIVE MEASURES:

LFA colonize in heavy vegetation, debris areas (weed mat, stock pile areas, fill, mulch etc.), or where moisture accumulates. Maintaining tidy work and storage areas maximize the effectiveness of chemical treatments. We also recommend incorporating Talstar/Upstar nursery granules into potting media.

REGULARLY SURVEY FOR LFA

- Always test new plants and plant materials for LFA using the peanut butter-chopstick method.
- Monitor quarterly: survey shadehouses, landscape, and nursery property with PB/chopstick method.
- Maintain a quarantine zone to place plants incoming and outgoing plants and materials. Be proactive and catch ant infestations early!

SET UP A QUARANTINE ZONE

- Select a flat, clear area for quarantines.
- Apply Talstar/Upstar or appropriate bifenthrin product and allow to dry.
- Place any incoming/outgoing materials in this quarantine area and survey with chopsticks/PB to make sure items are free of LFA. Force feed with granular if positive for LFA.
- Reapply treatment according to the label.

MINIMIZE SUITABLE HABITAT

- Keep perimeter around structures neat and clear of vegetation, materials, and debris.
- Replace and discard old, mossy weed mats.
- Clean, sterilize and neatly store pots on shelving instead of on the ground.
- Dispose of rubbish and materials that will not be used again.

For more information:

E-mail: biisc@hawaii.edu Call: (808) 933-3340 Visit: www.biisc.org





BEST MANAGEMENT PRACTICES FOR LITTLE FIRE ANTS

TREATING WITH BAITS

We recommend treating with a bait (gel or granular) every 4-6 weeks until ants no longer appear in surveys. Always follow label instructions and wear proper PPE.

For edible crops and areas with lots of foliage, use Tango. Tango is an insect growth regulator (IGR), and serves as an effective "birth control" for the ants. This will reduce egg production and prevent eggs from developing. Expect to see a population decline after 3-4 months.

Granular baits are laced with a toxicant and result in a quick reduction of worker ants. Apply granules on the ground and in plants. It is vital to retreat multiple times to fully eliminate the colony. Make sure to apply granular baits on a dry, sunny day.

Gel baits: suitable for edible crops/lots of foliage

Product	Active Ingredient		Approved for use on edible crops
Tango	S-methoprene	2724-420	Yes

Granular baits: suitable for low vegetation, open areas, storage sheds, and around structures. These products must be applied in dry weather.

Product	Active Ingredient	EPA Reg. No.	Approved for use on edible crops
Siesta	Metaflumizone	7969-232	Some, read label
Amdro Pro	Hydramethylnon	241-322	Some, read label
Probait	Hydramethylnon	73342-1- 2724	No

TREATING AROUND STRUCTURES

It is important to minimize LFA habitat around all structures. Make sure that the perimeter around structures is neat and clear of vegetation, materials and debris. Vegetation (landscaping and planting benches) should never touch a structure as this creates a highway for LFA infestations.

Chemical barriers: use around structures for border treatments and to create quarantine areas.

Product	Active Ingredient	EPA Reg. No.
Bifen I/T	Bifenthrin	53883-118
Talstar Pro	Bifenthrin	279-3206

Chemical barriers (residual insecticides) may be used to prevent LFA from entering structures from surrounding infested areas. Maintaining clear perimeters will make it easier to apply effective barrier treatments. Always follow label instructions and restrictions.

REFERENCES:

Aoki, K. L., Hara, A. H., Niino-DuPonte, R. Y., Cabral, S.K., & Zarders, J.A. (2013). Best Management Practices for Little Fire Ants. University of Hawai'i at Manoa, CTAHR, Komohana Research and Extension Center, Hilo, HI.

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For more information:

Contact: Molly Murphy, mollym3@hawaii.edu Call: (808) 933-3340 | Visit: www.biisc.org



