

LFA FACT SHEET 7

(VERSION 2: JULY 2017)



FIRE ANTS AND MULCH

Using mulch in your garden or orchard is a great way to enrich the soil and prevent weed growth. The County of Hawai'i offers mulch at no cost from both its east Hawai'i and west Hawai'i green waste facilities (see http://www.hawaiizerowaste.org). This mulch is made from garden clippings and cuttings, logs and unpainted pallets from other residents and businesses in the area. Unfortunately, many homes and orchards are now infested with Little Fire Ants (LFA) and it is inevitable that some of the garden waste used to make the mulch will contain Little Fire Ants and other pests and pathogens. This fact sheet provides advice on how to ensure you do not accidentally bring Little Fire Ants to your garden or orchard when using mulch.

Want more information?

go to www.littlefireants.com

Or contact
Hawai`i Ant Lab,
Pacific Cooperative Studies Unit, University of Hawai`i
16 E. Lanikaula St.
Hilo, HI 96720

Ph: 808 315 5656

email: info@littlefireants.com

BACKGROUND

Waste management in Hawai'i is an expensive exercise and as residents, we all pay for this service. The County of Hawai'i has committed to a "path to zero waste" which will reduce costs and the need for more landfill sites. One part of that policy is to reuse organic garden or green waste (clippings, cuttings, logs and unpainted pallets) by mulching this material and giving it at no cost to residents for use on gardens and orchards. This keeps around 40,000 tons of green waste out of our landfills each year!



Hilo green waste mulching machine in action

Using mulch on garden beds and around trees has many advantages. It reduces water use, enriches the soil, promotes a healthy microenvironment for beneficial soil organisms that help make nutrients available to plants and suppresses weed growth. Best of all, its free!

An unfortunate side-effect of mulching green material and re-distributing it is the possibility that plant pests and pathogens might be present in the mulch, thereby spreading these problems to other locations. In Hawai'i, LFA are a special concern.

We know that some LFA can survive the mulching process, so the county has added further steps to reduce risk including continuously treating the area the mulch is staged in as well as keeping the mulch on site allowing it to heat (up to over 130 degrees) in order to kill any pests that remain in the mulch after chipping. The Hawai'i Ant Lab surveys the Hilo and Waikoloa green waste facilities monthly, and reports any positive findings to the facilitators. Current monthly survey maps are available on our website.



Hilo Green Waste facility map from June 2017. Red circles show positive LFA samples. The areas surrounding the piles are infested and are a constant concern. The county does its best to treat the immediate area the piles are located in to prevent spread to the mulch itself.



Waikoloa Green Waste facility map from June 2017. No LFA have been found here.

There is no such thing as a 100% LFA free guarantee, but these facilities are doing their best to reduce the risk involved making the probability of LFA in the mulch at either facility very low. That being said it's still a good idea to quarantine any new material being brought to your property.

So, what can you do to make sure no LFA travel with the mulch to your home?

STEP 1: QUARANTINE

Before having any mulch delivered to your home, prepare a quarantine area where it can be stored for a few weeks. Make sure your quarantine area is well away from overhanging vegetation; garden beds etc so that if there are LFA in the mulch, the little critters can not sneak out and infest your garden. As an extra precaution, spray a barrier pesticide around the outside of this area. (Read Fact Sheet 2 for a list of suitable barrier sprays). This should be like a donut with the mulch inside the donut and a band of 4-6 feet of pesticide around the outside. Some people might spray the entire area under the pile for good measure but this is not necessary. Now you have a safe place to store the material while you check for LFA.

STEP 2: SURVEY

Once the mulch has been delivered, cover it with a clear or black plastic sheet if at all possible. This will help heat up the material and may kill some of the LFA. This step is not mandatory but it will help. The next step

is to survey around the edge of the pile for LFA. There is an excellent video demonstration as well as *LFA Fact Sheet 3* – (*Checking your property for LFA*) on the Hawai'i Ant Lab website at www.littlefireants.com.

Hawai'i Ant Lab researchers recommend you survey every couple of weeks for a month or two, to make certain there are no LFA in the pile.



Baited chopstick next to the mulch pile

You will need some chopsticks (popsicle sticks or disposable coffee stirrers will do too), some quart sized ziplock bags, and creamy peanut butter. Smear about half the length of the sticks with a VERY THIN layer of peanut butter, and place them around the pile every 3-6 feet. LFA do not like to be in the open so loosely cover the sticks with an old leaf or piece of cardboard.



Little Fire Ants feeding at baited chopsticks.

Leave the sticks in place for around an hour, and then carefully lift up the covers. If there are LFA foraging nearby, they will have discovered the sticks and will be feeding on the peanut butter.

LFA are very small and orange or red in color. If you see ants that look like LFA, carefully lift the sticks and place them into a ziplock bag.

You can put all "suspect" sticks into the same bag. Pop the bag in the freezer overnight and bring them into the Hawai'i Ant Lab laboratory at 16 East Lanikaula Street in Hilo for identification. You can also mail them in but remember, the postage will be higher than a standard letter.

After the surveys are completed and you do not find any ants, it is ok to move the mulch to your garden beds, orchard or where ever you intend to use it.

STEP 3: TREAT

Hopefully you will not find any LFA in your mulch, but it is possible that you find some. In that case, it is fairly easy to treat the pile using a granular ant bait. *LFA Fact Sheet 2* – (managing LFA around your home) will give you instructions on how to do this and which products work best. Hawai'i Ant Lab researchers recommend you apply the bait over and around the pile at least 4 times at 4-6 week intervals.

After you have completed all the treatments, it is a good idea to survey the pile once again just to be sure all LFA are controlled. After the surveys are completed and you do not find any ants, it is ok to move the mulch to your garden beds, orchard or where ever you intend to use it.

WHERE TO GO FOR MORE INFORMATION

Hawai'i Ant Lab, Pacific Cooperative Studies Unit, University of Hawaii

16 East Lanikaula St Hilo HI 96720

Phone 808-315-5656

Email <u>info@littlefireants.com</u>
Website <u>www.littlefireants.com</u>

County of Hawai'i

Department of Environmental Management, Solid Waste Division 345 Kekūanāo'a Street, Suite 41 Hilo. HI 96720

Email recycle3@co.hawaii.hi.us

Website http://www.hawaiizerowaste.org

Zero Waste America

http://www.zerowasteamerica.org/