



LFA FACT SHEET 7

(VERSION 1: AUGUST 2014)



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 organics 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 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

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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 re-use 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!

Using mulch on garden beds and around trees has many advantages. It reduces water use, enriches the soil, promotes a healthy micro-environment 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, Little Fire Ants are a special concern. No-one wants to accidentally bring these critters to their home! Many households in Hilo and surrounding districts have LFA, so when these households take their garden waste to the one of the County’s green waste facilities, it is inevitable that some LFA will be attached to the clippings and cuttings.

Now, the mulching process is fairly brutal – all the garden waste is fed into a high-powered grinder where it is torn into tiny little chunks. Huge logs can be reduced to match sticks in seconds! Most arthropods (insects, spiders etc) will also be ground up

and not survive. But, it is possible that some will survive and make their home in the newly formed mulch. We do not know how likely this is, and will be doing some research to try to answer this question.



Hilo green waste mulching machine in action

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 over-hanging 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 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 smooth 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, 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, orange or salmon 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 deep freeze overnight and bring them into the Hawai'i Ant Lab laboratory at 16 East Lanikaula St 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. *HAL 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

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