

Recommended Treatment Calendar for IGR-then-Toxicant Approach

QTR: 1	MONTH 1				MONTH 2				MONTH 3			
	WK 1	WK 2	WK 3	WK 4	WK 1	WK 2	WK 3	WK 4	WK 1	WK 2	WK 3	WK 4
	IGR											
Toxicant												
Survey	*											

QTR: 2	MONTH 4				MONTH 5				MONTH 6			
	WK 1	WK 2	WK 3	WK 4	WK 1	WK 2	WK 3	WK 4	WK 1	WK 2	WK 3	WK 4
	IGR											
Toxicant												
Survey												

QTR: 3	MONTH 7				MONTH 8				MONTH 9			
	WK 1	WK 2	WK 3	WK 4	WK 1	WK 2	WK 3	WK 4	WK 1	WK 2	WK 3	WK 4
	IGR											
Toxicant												
Survey	*								*			

QTR: 4	MONTH 10				MONTH 11				MONTH 12			
	WK 1	WK 2	WK 3	WK 4	WK 1	WK 2	WK 3	WK 4	WK 1	WK 2	WK 3	WK 4
	IGR											
Toxicant												
Survey					*							

*Survey before applying baits

Do NOT bait if it is raining or may soon rain, or if the ground is soaking. It is best to treat within 4-6 weeks, so we recommend planning for a treatment at 5 weeks (leaving an extra potential week for “rain rescheduling” if necessary). Adjust calendar if treatment is delayed past 6 weeks.

When using **toxicants**, remember that they are more restricted than the **IGR** (Tango). Only certain toxicants can be applied to food crops (eg. Altrevin can be used on some citrus and nut trees, and Amdro Pro can be used in most tropical fruit trees only in a bait station). Always be sure to apply other baits outside of the “drip zone” of the tree, and avoid toxicant contact with vegetables and garden plants.

Alternate Methods of Treatment

The calendar above is best for most general situations in Hawaii, **but is not the only effective approach!** If you have no fruit trees in your yard, you do have the option to go straight to toxicant baits (no IGR). Just follow a similar routine as the one shown in quarter 3 & 4 in the above chart – remember, the key is treatments 4-6 weeks apart, for a year! Some toxicant bait can only be applied so many times a year so make sure to read the label thoroughly and rotate when needed.

This document is provided as a general guide and is NOT intended as a substitute for information provided on product labels. Pesticides usage is regulated by federal and state authorities and should be used only as directed by the manufacturer. Before using any of the products listed here, be sure that you read and understand directions for use. Take all recommended precautions and wear proper clothing as indicated on each product label.



Recommended Homeowner Control Products for Little Fire Ant in Hawai'i
Based on information provided by the Hawaii Ant Lab (HAL) and the University of Manoa College of Tropical Agriculture and Human Resources (CTAHR)

Surveying

Survey your property before you begin treating to confirm presence of ants and determine where the most infected spots are. To survey:

- Smear a small amount of creamy peanut butter on a chopstick. Place in shady areas, including crooks of trees (particularly fruit trees), potted plants, and debris piles. Leave for 30 min-1 hour.
- Place sticks with ants in a Ziploc bag and store it in the freezer overnight (to kill ants).
- If you are unsure if you have LFA, ant samples can be taken to the Hawaii Ant Lab, the HDOA office in Kealahou, or BIISC for positive identification.

After treatment: Continue to survey throughout the year to monitor. Once you are consistently finding no LFA during the survey, switch from baiting to applying barrier treatments*. Once you are at "zero detection," continue to survey quarterly to make sure that LFA do not become reestablished.

Treatments:

1. Insect Growth Regulators (IGR)

IGRs serve as a kind of "birth control" for the ants. When fed to the queen, an IGR will reduce egg production and prevent eggs and larvae from developing, thus weakening the colony. IGRs are not poison and will not kill adult workers (the ones that sting) – because you want them to take it back and feed it to the queen and larvae! Workers have a lifespan of **about 3-4 months**, and you will begin to see population decline after that point. Don't be discouraged when you still see ants even for a while after treating. This is an effective *long-term* treatment – keep going!

- Active ingredient in IGRs: **methoprene (Tango is the only brand labeled for use in Hawaii/bait)**.

2. Toxicants

Use of a toxicant-laced bait will result in a quick reduction in workers, but it is unlikely to destroy the colony with only a single treatment. It is vital to retreat multiple times with the toxicant bait to fully eliminate the colony. Toxicants can come in a powder form which can be mixed with the protein gel bait (good for heavy vegetation) or in granule form that is ready-to-use (good for lots of lawn area).

- Active ingredients to look for in toxicants: **hydamethylnon (ex: Amdro)**, **indoxacarb (ex: ProVaunt)**, or **metaflumizone (ex: Siesta)**. *Other brands can work – check the active ingredients!*

3. Barrier Treatments *(not listed on calendar)

Barrier treatments can be used when you have infestations occurring on neighboring properties or stretches of land where control is not taking place. If you have LFA on your property but not in your house, you may also want to spray around the base of your house and all entryways to prevent ants from "moving in" while you are implementing control outside. *Do not apply a barrier treatment and bait at the same time.* The barrier may prevent the workers from reaching the bait or keep them from returning to the colony. Keep treatments a week apart.

Barriers come in the form of a spray or a granular. Many granular ant toxicants and granular barrier treatments look the same. To distinguish them, remember that *barrier treatments* will usually include instructions on *wetting* the granules, while *toxicants* need to remain *dry*.

- Active ingredients to look for in barrier treatments: **bifenthrin (ex: Talstar, Upstar, Ortho Home Defense)** or **cyfluthrin (ex: Tempo)**.

(January 2016) Research into effective treatments for LFA is ongoing. The information provided may be updated as new research and products are available. Please check with BIISC (www.biisc.org) or the Hawaii Ant Lab (www.Littlefireants.com) for latest information. Visit either of these webpages for more detailed information.