

## Little Fire Ant Products Available for Homeowner Use

A.H. Hara, S.K. Cabral, R.Y. Niino-DuPonte, and J.M. Miyashiro University of Hawai'i at Mānoa, CTAHR, Komohana Research & Extension Center, Hilo, HI

rocery, garden, and hardware retail stores in Hawaii were surveyed in 2012 for ant bait insecticides available to control the little fire ants (LFA), *Wasmannia auropunctata*. Products were purchased and tested against LFA. Little fire ants can nest or colonize near the soil surface, plant debris and above ground (in trees, shrubs, structures, undisturbed sites). Ant food bait mixed with a slow-acting insecticide is the most effective way to kill and eliminate an ant colony by allowing the worker ants to carry the insecticide to the queen(s). These products were subjected to field trials to determine attractancy to little fire ant workers, and thereby, transfer of the bait insecticide back to their nests for eventual colony elimination.

**Outdoor treatments:** Outdoor products for LFA control are formulated as a broadcast granular bait. Granulated corn grit coated with soybean oil serves as the bait and a slow-acting insecticide is added to the corn grit matrix. Granular baits are spread uniformly on the ground using granular spreader applicators or aerial equipment. Tango is a concentrated liquid that must be formulated with a bait matrix and may be applied as a gel. LFA were not attracted to oil-corn grit with spinosad (Conserve) or methoprene (Extinguish Professional) possibly due to repellency of the toxicant itself or to high concentrations of the toxicant (Table 1).

Read and follow all label directions before applying baits. Apply product as directed, then survey 2-3 weeks after each treatment using peanut butter to detect any remaining little fire ants (see "Detecting the Little Fire Ant" section in IP-24 publication **Stop the Little Fire Ant**). Repeat treatments and peanut butter surveying until ants are no longer detected.

**Table 1**: Outdoor broadcast bait attractancy to little fire ants.

1, 4, 6, 8, 9, 10, 12, 14 1, 3, 4, 6, 7, 8, 9, 11 1, 2, 3, 4, 5 1, 5, 6, 7, 1, 3, 4, 5, 6, 7	499-370 100-1481 73342-2 73342-1 73342-6
1, 3, 4, 6, 7, 8, 9, 11 1, 2, 3, 4, 5 1, 5, 6, 7,	100-1481 73342-2 73342-1
1, 2, 3, 4, 5 1, 5, 6, 7,	73342-2 73342-1
1, 5, 6, 7,	73342-1
1, 3, 4, 5, 6, 7	73342-6
3, 7, 8, 9, 11, 13	1021-1728-59639
3, <b>15</b>	59639-114
1, 3, 5, 6, 13, 16	2724-496
1, 3, 8, 9, 10, 11, 16	432-1255
1, 3, 4, 5, 6, 7,	73342-1-2724
1, 3, 4, 5, 6, 7, 8, 9, 11	7969-232
	1, 3, 5, 6, 13, 16 1, 3, 8, 9, 10, 11, 16 1, 3, 4, 5, 6, 7,

Liquid concentrate to be mixed and diluted with a bait matrix (see <a href="www.littlefireants.com/Tango%20package.pdf">www.littlefireants.com/Tango%20package.pdf</a>)
Tango methoprene 3, **15**, 16 2724-420

**Table 1**: (continued) Outdoor broadcast granular bait attractancy to little fire ants.

Trade name	Active ingredient	Site/Crop (see footnote)	EPA Reg. No.		
Not attractive to little fire ants					
Green Light Fire Ant	spinosad		62719-304-869		
Control with Conserve					
Extinguish Professional	methoprene		2724-475		

**Non-bait outdoor treatments:** Apply these products (Table 2) as a foliar spray, potted media drench, or ground application to kill foraging worker ants. Ground applications have residual effectiveness and act as barriers along boundaries to keep ants from re-infesting ant-free areas.

Table 2. Outdoor liquid ant insecticides

Trade name	Active ingredient	Site/Crop (see footnote)	EPA Reg. No.
Bug B Gon (spray,drench) bifenthrin cypermethrin		1, 2, 3, 8, 11	239-2685

**Indoor treatments:** Most of these homeowner products (Table 3) are self-contained baits that can be used in homes, under sinks, near plumbing, and under cabinets, and do not contaminate food products. Read and follow all label directions before setting out these baits. Most recommend replacing bait stations every 3 months.

**Table 3:** Indoor bait attractancy to little fire ants.

Trade name	Active ingredient	Site/Crop (see footnote)	EPA Reg. No.			
Attractive to little fire ants						
Extinguish Plus	hydramethylnon, in the same of	1, 3, 5, 6, 13, <b>16</b>	2724-496			
Hot Shot MaxAttrax Ant Bait 2	indoxacarb	16	9688-214-8845			
Maxforce Complete	hydramethylnon	1, 3, 8, 9, 10, 11, <b>16</b>	432-1255			
Raid Ant Bait III	avermectin B	16	4822-529			
Raid Double Control Ant Baits II	avermectin B	<b>16</b> , 17	4822-472			
Tango	methoprene	3, 15, <b>16</b>	2724-420			
(A liquid concentrate to be mixed and diluted with a bait matrix (see <a href="www.littlefireants.com/Tango%20package.pdf">www.littlefireants.com/Tango%20package.pdf</a> )						
Not attractive to little fire ants (paste/liquid)						
Amdro Kills Ants Stake	hydramethlynon		1663-33-73342			
Combat Source Kill Ant	fipronil		64240-30			
Grant's Kills Ants Ant Control	hydramethylnon		1663-33			
PIC Liquid Ant Bait Killer	sodium tetraborate pental	hydrate	3095-47			
Raid Ant Gel Precision Placement	thiamethoxam		100-1261-4822			
TomCat Ant Killer Gel Bait	indoxacarb		12455-118-3240			

Site/Crop: 1= lawn, landscape areas, 2= ornamental gardens, forested areas, 3= non-cropland areas, 4= recreational areas and parks, 5= on ground surrounding poultry houses or corrals and other animal holding areas, 6= golf courses, 7= commercial grounds, 8= around buildings, 9= residential areas, 10= non-food/non-feed areas, 11= managed turf areas (non-crop) ornamental nurseries, arboretums, public gardens, sod farms, 12= food storage areas, 13= field grown ornamental nursery and non-bearing nursery stock, 14=non-occupied patient areas of hospitals and nursing homes, 15= vineyards, fruit/nut bearing trees, other edible crops, 16= indoors, 17= potted plants.

Reference: Hara. A.H. 2004 (rev 2010). Stop the Little Fire Ant. Alien Pest Alert. Cooperative Extension Service, College of Tropical Agriculture and Human Resources, University of Hawai'i at Mānoa, Publication IP-24. (download at <a href="http://www.ctahr.hawaii.edu/site/Info.aspx">http://www.ctahr.hawaii.edu/site/Info.aspx</a>)

March 2014

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