

Fire Ants in Home Lawns: Have fire ants taken over your yard? Are you ready to take it back? This is not as difficult, or as costly, as many people think. Today's homeowners have access to two very effective tools for fire ant control: granular fire ant baits and individual mound treatments. Understanding how these tools work, when to apply them, how to apply them properly, and then putting this knowledge into action is the key to successful fire ant control.

Granular Fire Ant Baits: Timely use of granular fire ant baits should be the foundation of your fire ant control effort. When used properly baits are inexpensive, easy to apply, safe to pets and people, and they work! That's a lot of positives. The only real negative for granular fire ant baits is that they are slow-acting. Apply baits to your yard this Saturday and go out and kick that big mound by the driveway next Saturday and it will still be teeming with ants. Depending on the active ingredient, it takes from two weeks to two months to see the full benefit of a fire ant bait treatment. Baits are designed to be slow-acting. They would not work nearly as well if they killed so quickly that the foraging workers died before they could carry the granules back to the mound. Following are two key points to keep in mind for successfully using baits.

- > Baits are best used preventively. Use the holidays: Easter, Independence Day, and Labor Day to remind you it is time to apply fire ant bait. Go ahead and treat even if you don't see any mounds. From spring through fall newly-mated fire ant queens are constantly reinvading our landscapes and starting new colonies. This means there are almost certainly some young colonies that are too small to be seen above the grass. Baits will eliminate most of these before they grow large enough to be noticed. If you don't want to have big fire ant mounds in your yard you have to treat before you have big fire ant mounds in your yard!
- > Baits are best used by broadcasting them over the entire lawn—not by piling them on top of the mound. But don't waste money; baits are inexpensive only if you use the proper rate, and it is easy to over-apply fire ant baits. Application rates for most fire ant baits are very low, only a pound to 1.5 lbs per acre (1.5 lbs per acre is just a little over ½ ounce per 1000 sq ft.). Don't try to use your fertilizer spreader for this; use a hand-held spreader designed to apply fire ant baits. You can get these at the same places that sell fire ant baits. Don't worry if you have some gaps between your application swaths. The foraging workers will still find the granules and carry them back to the mound

Results to expect: Use fire ant baits properly and you will get around 80 to 90% control. This means you will see a lot fewer fire ant mounds in your yard than you will if you don't use baits. You may still have two or three mounds that you need to treat with one of the individual mound treatments, but that's a lot better than having twenty or thirty mounds to treat individually.

Baits for Control of Fire Ants in Home Lawns *

Brand Name (insecticide) (% ai)	Rate/acre **	
Amdro Fire Ant Bait (hydramethylnon) (0.73%)	1 to 1.5 lb	
Dupont Advion Fire Ant Bait (indoxacarb) 0.045%	1.5 lb	
Spectracide, Fire Ant Killer (indoxacarb) (0.016%)	22 lb	
Ferti-lome Come & Get It (spinosad) (0.015%	2.5 to 5 lb	
Distance Fire Ant Bait (pyriproxyfen) (0.5%)	1 to 1.5 lb	
Extinguish Professional Fire Ant Bait (methoprene) (0.5%)	1 to 1.5 lb	
Extinguish Plus Fire Ant Bait (hydramethylnon) (0.365%) +	2 lb	
(methoprene) (0.25%)		
Ascend Fire Ant Bait (abamectin) (0.011%)	1 lb	

^{*}Avoid applying baits immediately before or after irrigation or rainfall.

Baits may require 4 to 8 weeks to provide maximum results.

Individual Mound Treatments: Can't wait a couple of weeks or longer for that big mound by the driveway to die out from a bait treatment? This is what individual mound treatments are for. There are two different types. Dry mound treatments are convenient and easy to use, but take a little time to work. Liquid mound treatments take more time to mix and apply, but provide almost immediate control.

Dry Mound Treatments: Dry mound treatments are dusts or powders you apply by simply sprinkling the specified amount over the top of the mound. Keep a can handy to quickly and conveniently treat any mounds you notice while working in the yard.

Dry mound treatments that contain the active ingredient acephate (Ortho Fire Ant Killer) work fast and are very effective. In one study we got 100% control by three days after treatment. The problem with acephate is that it smells bad, and this bad odor can persist for weeks after a mound has been treated. Many people prefer not to use acephate because of its odor. Dry mound treatments containing active ingredients such as deltamethrin or cyfluthrin do not have this odor problem, but they take longer to work.

Liquid Mound Drenches: Liquid mound drenches are liquid insecticides that are diluted in water according to label directions and then poured over the mound. When applied properly, mound drenches quickly eliminate fire ant mounds. The key to success with mound drenches is to use enough liquid to thoroughly soak the mound and contact all of the ants inside. Small to medium-sized mounds take about one gallon of drench, but it takes a couple of gallons of liquid to thoroughly drench a large mound. Start by applying about ½ of the drench to an eight to twelve inch band around the outside of the mound and then drench the mound with the remaining liquid.

Results to Expect: When properly applied, liquid mound drenches containing pyrethroid insecticides, such as permethrin, will kill mounds within 24 hours or less. Dry mound treatments containing acephate will kill most mounds within three days, but dry mound treatments containing deltamethrin or cyfluthrin can take up to two weeks. The table below shows results from a trial with some of the more common fire ant mound treatments. We treated eight mounds per treatment and evaluated control at 3, 7 and 14 days after treatment.

^{**} There are 43,560 square feet in one acre. (100 ft x 100 ft is a little under $\frac{1}{4}$ acre; 50 ft x 50 ft is less than $\frac{1}{16}$ acre) (1.5 lb per acre is only 0.55 oz per 1000 sq. ft.)

Efficacy of Fire Ant Mound Treatments: Choctaw, MS, 2009

			Percent Control		
Product	Active	Treatment	(at _ days after treatment)		
Brand Name	Ingredient	Method	3 DAT	7 DAT	14 DAT
Ortho Fire Ant Killer	acephate	Dry	100%	100%	100%
Terro Fire Ant Killer	deltamethrin	Dry	0%	13%	13% *
Sevin Concentrate Bug	carbaryl	Drench	89%*	89%	100%
Killer					
Hi Yield Garden, Pet, &	permethrin	Drench	100%	100%	100%
Livestock Insect Control					
Ferti-lome, Bore,	spinosad	Drench	0%	63%	89%
Bagworm, Tent					
Caterpillar & Leafminer					
Spray					
Untreated			0%	0%	13%

^{*} Although the deltamethrin treatment only shows 13% mortality by 14 DAT, all mounds were essentially dead (All deltamethrin treated mounds had fewer than 75 ants per mound, but our pre-determined criteria for declaring a mound dead was fewer than 25 ants per mound).

See Extension Publication 2429, Control Fire Ants in Your Yard, for more complete information on fire ant control in home lawns. You can get this publication from your local county extension office, or you can also find this publication on-line by going to: www.msucares.com, clicking on "Publications," and searching for the title.

Fire Ant Control in Commercial Food Crops: Some of the treatments labeled for use in home lawns are not approved for use around edible crops or crops that will be grazed or eaten by livestock. See Publication 2494, Control Fire Ants in Commercial Fruits, Nuts, and Vegetables or Publication 2493 Control Fire Ants in Pastures, Hayfields, and Barnyards for information on fire ant control in these commercial situations.

Fire Ant Control in Home Vegetable Gardens: For information on controlling fire ants in homegrown vegetables go to: www.msucares.com > Insects-Plant Diseases > Insects > Fire Ants > Fire Ants in Home Vegetable Gardens.

Organic Fire Ant Control: For information on organic fire ant control in home lawns or vegetable gardens go to: www.msucares.com Insects-Plant Diseases > Insects > Fire Ants > Organic Fire Ant Control.

This fire ant web site site also contains information on fire ant biology and other information about fire ants and their control.

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This information is for educational and preliminary planning purposes only. Brand names mentioned in this publication are used as examples only. No endorsement of these products is intended. Other appropriately labeled products containing similar active ingredients should provide similar levels of control. Always read and follow the insecticide label.