Respect Our Environment!

- Never use gasoline or other petroleum products to control fire ants! Although gasoline kills fire ants, it is highly flammable and dangerous to you and the environment.
- Don't leave insecticide granules on streets or sidewalks after application Sweep up any excess product so that it won't wash into storm sewers.
- When using and disposing of pesticides, follow the directions on the label. Never pour pesticide leftovers down the drain, as they are not easily removed by standard wastewater treatment. Pesticides can easily contaminate streams and endanger fish and other life. Try to use all the pesticide in a container before discarding it.

Michael Merchant, Extension Urban Entomologist, and Bastiaan M. Drees, Extension Entomologist, The Texas A&M University System

> Produced by Agricultural Communications The Texas A&M University System

Extension publications can be found on the Web at: http://AgriLifeBookstore.org

> Visit Texas AgriLife Extension at: http://AgriLifeExtension.tamu.edu

Educational programs of Texas AgriLife Extension Service are open to all people without regard to race, color, sex, disability, religion, age or national origin.

Issued in furtherance of Cooperative Extension Work in Agriculture and Home Economics, Acts of Congress of May 8, 1914, as amended, and June 30, 1914, in cooperation with the United States Department of Agriculture. Chester P. Fehlis, Deputy Director, Texas Cooperative Extension, The Texas A&M University System. 30M, Revision AgriLIFE EXTENSION Texas A&M System

> Do-it-yourself Fire Ant Control for Homes and Neighborhoods





Texas Imported Fire Ant Research & Management Plan ood news! With persistence, patience and the right plan, fire ants *can be controlled*. The Two-Step Method gives excellent control of red imported fire ants, especially in larger lawns and where applied to entire neighborhoods.

When applied properly this method poses little risk to people or pets. And the necessary ingredients can be found at most nursery supply or garden centers.

Let them eat bait!

The first step in the Two-Step Method is to broadcast one of the many excellent fire ant baits over your entire lawn. When collected by foraging ants, fire ant bait particles are carried to all colonies in the yard and shared with queens and other fire ants in their underground nests.

Baits consist of a food combined with a slow-acting insecticide. Baits make efficient use of very small amounts of pesticides because they are delivered into the colony by the ants themselves.

Baits *can* be applied directly to a fire ant mound, but they usually work best when scattered lightly over the entire yard or area to be treated. This controls visible as well as hidden fire ant nests.

Two types of spreaders can be used to broadcast baits. The type you use depends on the kind of bait chosen. Baits designed to be applied at rates of 1 to $1\frac{1}{2}$ pounds per acre can be put out using a handheld seed spreader. Set the spreader to the smallest setting. One pass over the area to be treated is generally sufficient, as the amounts to be applied are very low.

Some products are specially formulated to be put out at higher rates using a standard, push-type fertilizer spreader. Read the label for the product you choose to determine the best type of spreader to use.

Baits do not kill fire ants overnight, so be patient. Products containing indoxacarb, hydramethylnon and spinosad work the fastest. They will control fire ants within 2 to 4 weeks.

Baits that contain an insect growth regulator (such as fenoxycarb, pyriproxifen or methoprene) usually require 2 to 6 months for control, but they generally



Use a hand-held seed spreader to apply fire ant bait.

do not need to be reapplied more than once every 1 or 2 years if you treat more than 1 or 2 acres.

Apply baits at the right time. Baits work only when applied while the fire ants are actively searching for food. When applied during this time, the ants will take the baits to their underground nests within a few hours.

Getting the Most from Baits

- Use fresh baits, preferably from an unopened container. Once opened, baits should be used within a month or two. Unopened containers have about a 2-year shelf life.
- Test baits for freshness before using them. Sprinkle a small amount next to an active mound. If the bait is fresh, it will be picked up by fire ants within 30 minutes.
- Don't water the lawn after applying baits, and don't apply baits when rain is expected within 8 hours.
- Not sure if ants are actively foraging? Place a small amount of fresh bait, hot dog slice or potato chips next to a mound. If the ants begin removing the food within 1 hour, it's OK to begin the Two-Step.
- During hot weather, apply baits only in the evening. When daytime soil temperatures exceed 90 °F, any baits applied during the day quickly lose their effectiveness. During the summer, fire ants forage mostly at night to avoid the heat.

So when are ants actively searching for food? Fire ants forage when soil surface temperatures are between 70 and 90 °F. For most of Texas, the best time to bait is between May and September. In the winter, when soil temperatures are cooler, fire ants may build mounds but they forage little.

Treat problem mounds The second step is to directly treat any ant colony that needs immediate control. Applying an insecticide or other treatment directly to a fire ant mound is the fastest way to get rid of most fire ant colonies.

Because broadcast bait treatments provide slower control of most of the fire ants in your yard, limit Step 2 treatments to mounds located next to the house foundation, in high-traffic areas or in other sensitive spots where you want fast control.

Treating individual mounds takes more time than does broadcasting baits; however it may be all you need if your yard has only a few mounds. Step 2 treatment options include:

• **Granular products,** which contain an insecticide that releases into the soil when water is applied. Sprinkle the recommended amount of insecticide on top and around the mound. Most products should then be watered into the mound with at least 1 to 2 gallons of water. A sprinkling can is best for gently washing chemicals into the nest without washing the granules off the mound. Do not use a hose for this purpose.



Most granular (non-bait) products contain an insecticide that releases into the soil when drenched with water.

- *Liquid concentrates*, which are mixed with water and applied to a mound. As with granules, always use 1 to 2 gallons of water per mound to get enough solution deep into the nest where the queen lives.
- **Insecticide dusts**, which are designed to be sprinkled lightly over the entire mound. Avoid disturbing the mound during the application, as this can disturb and disperse the ants. It's best to keep children and pets away from treated mounds until the dust is gone.



Dry dusts are convenient and easy to apply.

- **Baits**, which can be used as direct-mound treatments, although they are generally slow to work. When applying directly to a mound, use one of the fast-acting baits. This type of treatment is especially good for colonies next to sidewalks or curbs, where the nests often extend under the concrete.
- *Naturally derived insecticides,* which are available in a number of different formulations and using different natural ingredients. As with other treatments, be sure to apply enough water when using liquids or granules.
- **Shoveling**, which can be used to move fire ants from gardens, compost piles or other sensitive sites. Wear rubber gloves and liberally dust the gloves, shovel and bucket with talcum powder to keep the ants from scattering and to reduce the risk of stings. Once captured, the colonies can be dispatched by carefully dousing them with soapy water. Do not attempt this method if you are allergic to fire ant stings.

Throw a fire ant block party

Consider the Two-Step Method a good excuse to throw a neighborhood block party. By joining with neighbors, you can reduce costs, improve control and have fun at the same time.

It takes longer for fire ants to re-infest when larger areas and multiple yards are treated with the Two-Step Method. That means fewer applications and less time spent controlling ants.

Hiring a professional pest control company to treat your neighborhood can ensure that your treatments are applied properly and on time. Some pest control companies offer lower individual vard treatment prices for neighborhood treatment programs.

For more information

The Two-Step Method may not be the best treatment approach if you have few fire ants or a small yard or need a higher level of control, such as for people who are highly allergic to fire ant stings. For alternative approaches, visit Texas Cooperative Extension's fire ant website at *http://fireants*. tamu.edu.

Acknowledgments

The authors thank S. B. Vinson, Wizzie Brown, Paul Nester, Molly Keck and Kim Engler for reviewing this and earlier versions of this manuscript.

The information herein is for educational purposes only. Reference to commercial products or trade names is made with the understanding that no discrimination is intended and no endorsement by Texas AgriLife Extension Service is implied.

Common insecticides for fire ant control	ant control.		
		Baits	
Trade names	Active ingredient	Speed of control	Notes
Amdro *, Amdro * Yard Treatment	hydramethylnon medium	E	
Once & Done! 🐂 Advion 🔹	Indoxacarb	medium to fast	
Distance	p yr i proxyfen	slow	
Come & Get It!, Conserve	spinosad	slow to medium	
Extinguish *	m ethoprene	slow	
Extinguish Plus	m ethoprene + hydramethylnon	m edium	
Logic *, Award *	Fe no xy carb	slow	
		Mound Treatments**	
Formulation type	Common active ingredients**		Notes
Dusts	Acephate, carbaryl de Itam ethrin, cyuthrin, permethrin	cy uthrin, permethrin	
Granules	Bifenthrin, carbaryl, cy uthrin, deltamethrin, lamba-cyhalothrin, permethrin	methrin, lamba-cyhalothrin, permethrin	
Liquids	Binfenthrin, carbaryl, cyuthrin, lamba-cyhalothrin, permethrin	ha-cyhalothrin, permethrin	
Botanicals (naturally derived) d	d-limonene, pyrethrum (pyrethrins), rotenone		
Baits	Spinosad, indoxacarb, hydramethylnon	ylnon	
*Additional products may be available under	ler different trade names.		
**The trade names for these products are t	**The trade names for these products are too numerous to list. To compare products, check the active ingredients list on the fr	k the active ingredients list on the fr	ont of the pesticide label.
Note: If using measuring cups or spoons to	Note: If using measuring cups or spoons to distribute pesicide over a mound, use those utensils only for pesticides. Do not us	ensils only for pesticides. Do not us	e them with food.