

# The Texas Two-step Method

## Do-it-yourself Fire Ant Control for Homes & Neighborhoods



Texas Imported Fire Ant  
Research & Management Plan

**G**ood news! Red imported fire ants can be controlled with persistence, patience and the right plan. The Texas Two-step Method gives excellent control of fire ants, particularly in larger lawns and neighborhoods where their mounds are numerous (more than five per  $\frac{1}{4}$ -acre yard). Two-step pesticides can be found in nurseries, garden centers, and hardware or pesticide speciality stores. When properly applied, this method causes little risk to people, pets or the environment. Other treatment programs may be more suitable in certain situations (see B-6043, "Managing Imported Fire Ants in Urban Areas," Texas Cooperative Extension).

### **1** Let Them Eat Bait

The first step is to broadcast a fire ant bait—a product containing a food plus an insecticide—over the whole yard, usually in the fall and spring. When collected by worker ants, bait particles are carried to the colony and shared with the queen and other ants. Less pesticide is needed with baits because this kind of delivery is so efficient.

Baits work best when scattered lightly over the whole yard. Hand-held seed spreaders are ideal for applying fire ant baits. The EarthWay® Ev-N-Spred and Scotts® HandyGreen® spreaders are typical units. Set the spreader on the smallest opening and make one pass over the area to be treated. This should apply the recommended rate (1 to  $1\frac{1}{2}$  pounds per acre for most products). Push-type fertilizer spreaders put out most baits too quickly.

Be patient. Baits work slowly. Products containing hydramethylnon or spinosad work the fastest, controlling ants within 2 to 4 weeks. Insect growth regulator baits (like fenoxycarb, pyriproxifen and methoprene) usually require 2 to 6 months. The advantage of growth regulators is that they need to be reapplied less often when treating areas larger than an acre.

Apply baits at the right time. Baits are effective only when fire ants are actively searching for food. Ants remove baits from the soil surface within a few hours if baits are applied during peak foraging times. Fire ants forage when the soil sur-



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

face temperature is between 70 and 90 degrees F, May to September in most of Texas. Fall applications work well to reduce fire ant numbers the following spring. During winter, fire ants forage little and rarely pick up baits.

### Getting the most from baits

- Apply baits when ants are foraging. To see if ants are active, place a small amount of bait or suitable food (hot dog or potato chip) next to a mound. If ants begin removing the food within 30 minutes, it's a good time to treat.
- In summer, apply baits in the evening. Ants forage during the cool of evening and will quickly discover and carry off baits. Baits applied during the day, in extreme heat, quickly lose their effectiveness. Ants do not forage during the day in hot weather.
- Use only fresh bait, preferably from an unopened container. Once opened, baits should be used quickly. Opened containers may last only a few weeks. Unopened containers stay fresh for up to 2 years.
- Test baits for freshness before using. Sprinkle a small amount next to an active mound. If the bait is fresh, ants will begin removing it within 30 minutes.
- Apply baits when no rain is expected for at least 8 hours. This reduces the risk of their being washed away.

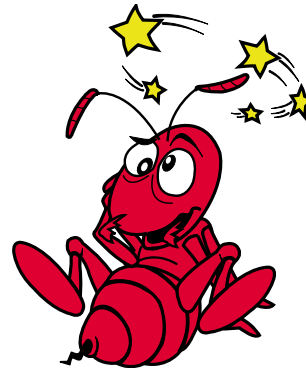
### Common insecticides for fire ant control

Trade Name*	Pesticide	Speed of Control
<b>Baits</b>		
Amdro®, Combat®, ProBait™, Siege® Pro	hydramethylnon	moderate-slow
Ascend®, Varsity®	abamectin	moderate-slow
Chipco® FireStar™	fipronil	moderate-slow
Distance®, Spectracide® Fire Ant Bait	pyriproxyfen	slow
Ortho® Fire Ant Killer, Fertlome® Come & Get It Fire Ant Killer, Justice®	spinosad	moderate-slow
Extinguish™	methoprene	slow
<b>Mound Treatments**</b>		
Bayer® Advanced Garden™ or Advanced Turf™ Lawn & Garden Multi-Insect Killer	cyfluthrin	fast
Safer® Fire Ant Killer	d-limonene	fast
DeltaDust®, Bengal UltraDust® or Terro® Fire Ant Killer	deltamethrin	fast
Garden Tech® Sevin®	carbaryl	moderate
Organic Solutions™ Multipurpose Fireant Killer, Diatec™ III, Results™	pyrethrins	immediate
Orthene®, Surrender® Fire Ant Killer	acephate	moderate
Real-Kill® Fire Ant Killer Granules, Spectracide® Bug Stop	permethrin	fast
Bonide Rotenone	rotenone	slow

\*Additional products may be available under different trade names. Be sure to read the label list of active ingredients to find the product that suits your needs.

\*\*Baits containing hydramethylnon, spinosad and abamectin also can be used as moderate- to slow-acting mound treatments.

\*\*\*If using measuring cups or spoons to distribute pesticide over a mound, use those utensils only for pesticides. Do not use them with food.



## Treat the Mounds

The second step is to treat problem ant colonies—those needing immediate attention—using a mound treatment. Mound treatment is the fastest way to get rid of individual colonies. It's not necessary to treat all fire ant colonies with mound treatments after applying a bait. Limit *Step Two* treatments to mounds located next to house foundations, in high-traffic areas or other trouble spots.

### Options

- *Granular products* contain an insecticide that releases into the soil, usually when drenched with water. Sprinkle the recommended amount of product around and on top of the mound. When directed on the label, sprinkle 1 to 2 gallons of water over the granules with a watering can. Sprinkle gently to avoid disturbing the colony and washing the granules off the mound.



Most granular products contain an insecticide that releases into the soil when drenched with water.

- *Liquid drenches* are pesticides mixed with water first and then applied directly to the mound. As with granules, 1 to 2 gallons of water is needed per nest. Always wear chemical resistant, unlined gloves to protect your skin when handling liquid concentrates, and follow label safety directions.

- *Acephate* (Orthene®) is an effective dry dust treatment that does not require added water. Sprinkle lightly and evenly over the entire mound. Avoid disturbing the colony during application. This can cause the ants to vacate a mound. It's best to keep pets away from treated mounds until the dust is gone. Dust can be easily dispersed with water after the colony is killed.



Dry dusts are convenient and easy to apply.

- *Baits* are slower than most other mound treatments, but faster-acting products can be used for treating colonies next to sidewalks and curbs. Nests in such sites often extend under the concrete, making them difficult to treat with other methods.
- Several “*organic*” products will control fire ants. Examples include spinosad (bait), citrus oil (d-limonene), pyrethrins, rotenone or pine oil (turpentine). Liquid formulations should be mixed with water and poured on the mound. Some organic products may cost more and act more slowly than conventional pesticides.
- *Boiling water* (about 3 gallons per mound) can eliminate some fire ant colonies. However, this method can be hazardous to the person carrying the hot water. Boiling water poured on grass or over plant roots also can be lethal to the plants.
- *Shoveling* can be used to move fire ants from gardens, compost piles and other sensitive sites. Wear rubber gloves and liberally dust your gloves and a shovel with talcum powder. Talcum powder creates a slippery surface that ants cannot climb. Captured colonies can be dispatched by carefully dousing with soapy water.

For a two-step program that uses only natural products, broadcast spinosad bait and then treat mounds with d-limonene or products containing unsynergized pyrethrins.

On small properties where a high degree of control is needed, consider using the “Ant Elimination” method (described in B-6043) using a granular fipronil product such as Over ‘N Out.®

## Have a Fire Ant Block Party!

Consider the Two-step Method as a reason for a block party. By joining with neighbors, you may reduce your costs, improve control and have fun at the same time! There is less chance for re-infestation if adjoining yards are treated. That means fewer treatments.

If you and your neighbors prefer not to apply pesticides yourselves, or want to ensure that treatments are applied uniformly and on time, consider a professional pest control company. Some companies even may offer discounts to households in neighborhood treatment programs.

For more information on how to organize your own neighborhood block party, visit the fire ant Website at <http://fireant.tamu.edu> or check with your county Extension office. Other insect information is available on the Web at <http://insects.tamu.edu> and <http://agcomwww.tamu.edu>.



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## Respect Our Environment!

- **Never use gasoline or other petroleum products for fire ant control!** Although gasoline kills fire ants, it is extremely flammable and dangerous—both to you and to the environment.
- **Don't leave insecticide granules on streets or sidewalks** after application, as these will wash into storm sewers.
- **Follow label directions** when disposing of extra pesticides and containers. Never pour leftovers down the drain. This can contaminate streams and endanger aquatic life. It is best to use all insecticide in a container before discarding it.

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