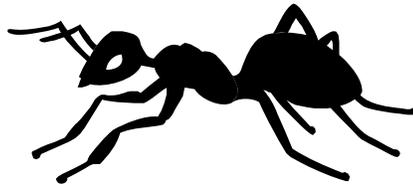


## Bug-Wise



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**Control Fire Ants In Your Yard:** Fire ants are the most common insect pest of home lawns. They occur in practically every lawn in the state! Even if you manage to achieve a totally fire ant free yard, it probably won't stay that way long because newly swarmed fire ant queens will quickly re-colonize it. And, new fire ant colonies thrive especially well in areas that are free of other, competing colonies. Fire ant control is a never-ending battle in the South, but there are steps you can take to keep your lawn and landscape relatively fire ant free.

The easiest, cheapest, most effective thing you can do to control fire ants is to use baits. When used properly, baits alone will give about 80% control. If you want even better control, you will have to supplement your baiting program with some additional tricks, like spot treating any mounds that survive the bait treatments. Don't use baits for these spot treatments, contact insecticides will work faster.

**Baits:** The key to success with baits is to apply them as broadcast treatments, instead of just treating individual mounds. In addition to those big mounds you can easily see, or trip over, there are a lot of little colonies that are just getting started. If you only eliminate the big mounds, the small colonies will thrive, because they have less foraging competition, and quickly grow into more large mounds. Broadcast bait treatments target all colonies in an area, regardless of size.

Early spring is one of the best times to apply fire ant baits, because fire ants are actively foraging for food at this time. If you are only going to treat one time per year, do it in the spring. But, you can improve control by treating again in mid-summer and a third time in the fall, especially if you live in an area where fire ants are abundant.

Don't wait until you see more big mounds to make the next bait treatment. If you don't like to have big fire ant mounds in your yard, you have to treat before you have big fire ant mounds in your yard. Use the holidays: Easter, Independence Day, and Labor Day to help remember when it is time to put out fire ant bait. Try to pick a time when it is not likely to rain for a couple of days. This gives the ants time to collect the bait and carry it back to the mound, before it is washed away. You also need to avoid watering for a couple of days after applying bait.

For small areas, such as home lawns, broadcast fire ant baits are most commonly applied using a small, hand-powered spreader. When using such spreaders be sure to note the settings recommended by the manufacturer for the specific spreader and ant bait being used. Don't try to use your fertilizer spreader; it will put out way too much! Most fire ant baits are applied at rates of 1 to 2.5 lbs per acre. That's not very much material, and it's easy to over-apply fire ant baits if you don't read and follow the label and directions. Baits are a cheap way to control fire ants, if you use the proper rate, but they can be very expensive if over applied.

Maintaining uniform coverage is less important when applying fire ant baits than when applying fertilizers, herbicides or other lawn insecticides. The foraging fire ant workers will compensate for any narrow untreated areas that may occur between swaths of bait. It is not necessary to apply fire ant baits in a criss-cross pattern, as is normally done with seed, fertilizers, herbicides, or granular insecticides.

Apply baits when the ground is dry and when ground temperatures are between 70 and 90° F with no forecast of rain. Remember that fire ant baits are supposed to be slow acting. Baits are picked up by foraging ants, carried back to the colony, and passed among the ants in the colony, eventually reaching and killing the queen. This slow activity is necessary to allow time for the insecticide to be spread throughout the colony. Depending on which bait you use, it can take two to six weeks to obtain maximum control. Baits work great, but you have to be patient!

Where they are properly applied two to three times per year, baits can provide 80 to 90% control of fire ants. In relatively small areas, you can improve control by spot treating any individual mounds that escape the bait treatments. It's best to wait several days after applying baits before you treat individual mounds with contact insecticide treatments. This allows time for foraging worker ants to carry the baits into the colonies and improves the odds of killing the queen.

You can use baits to treat individual mounds, but they won't work as fast as other types of mound treatments. If you do use baits for individual mounds, don't put the bait directly on top of the mound. The ants won't find it up there on the roof! Instead, spread the specified amount of bait to the area around the mound so that foraging workers can find it readily.

**Mound Treatments:** Individual mound treatments, containing contact insecticides, provide much quicker control than bait treatments, and are an effective way to quickly eliminate mounds that are especially troublesome. There are two basic methods of treating individual fire ant mounds, liquid drenches and dry mound treatments.

The liquid drenches provide the quickest control, but they are time consuming to mix and apply. The dry mound treatments are easy and convenient to use, but may take several days to provide control. **Don't disturb mounds before treating.** If you do, the colony may take the queen or queens to safety, either by moving them deep into the mound or by moving them laterally to establish satellite mounds.

When using liquid drenches, it is important to apply enough liquid to thoroughly soak the mound. Depending on the size of the mound, this ranges from one to two gallons of mixed drench. When applying liquid drenches, begin by applying about ¼ of the total volume to a 10 to 12 inch band around the outside of the mound. This is to prevent the escape of the queen through lateral foraging tunnels and to improve control of workers. Then apply the rest of the drench directly to the mound. Failure to use enough water to thoroughly soak the mound is the primary reason for unsuccessful mound drenching efforts.

Although they don't work as fast, dry mound treatments are quicker and easier to use than liquid drenches. Many homeowners like to keep a container of one of the dry mound treatments handy to spot treat any active mounds that they notice when mowing or doing other lawn chores. Again, don't disturb the mound before treating. Just sprinkle the dust over and around the mound according to label directions. Dry mound treatments containing acephate are quite

effective, but acephate does have a strong, persistent odor. Treatments containing cyfluthrin or deltamethrin are somewhat slower acting, and a bit less effective overall, but they don't have the odor of acephate.

**Broadcast Insecticide Treatments:** Broadcast insecticide treatments are contact insecticides that are applied over the entire lawn area. They are generally more time consuming and costly to use than baits, and are more commonly used in highly managed areas, such as athletic fields and golf courses, than in home lawns. Broadcast insecticide treatments may be formulated as liquids, which are mixed according to label directions and sprayed over the turf area, or as granular treatments, which are spread over the turf area using an appropriate spreader.

Some broadcast insecticide treatments, such as fipronil, provide long-term control of fire ants when applied according to label directions. For maximum control of fire ants in especially sensitive areas, consider a three-fold attack. Apply bait treatments to the entire lawn as previously discussed. Use a long-lasting broadcast insecticide treatment on those areas of the lawn you use most, areas where you have a near zero-tolerance for fire ants. Then use individual mound treatments to spot treat any mounds that survive the other two treatments.

It is important not to confuse granular contact insecticides with insecticide baits. Most fire ant baits are formulated as granules that are impregnated with oil, or some other food substance, which the ants will actively collect and carry back to the colony. Baits are attractive to the ants; they want to eat them. Granular insecticides are simply granules that are impregnated with insecticide. They are not attractive to ants, and the ants won't eat them. Instead, the insecticide in the granules moves into the soil and controls foraging ants and newly settled queens by contact activity. Obtaining uniform coverage is more important when applying broadcast insecticide granules than when applying granular baits.

Many of the insecticides used as broadcast treatments for fire ants also control other lawn pests, such as chinch bugs, white grubs, or mole crickets. If you have multiple pest problems, this can be useful to know. Before buying a broadcast insecticide, read the label carefully to be sure that the insecticide you chose controls the particular group of pests you are trying to control. See Extension Publication 2331, Control Insect Pests In and Around the Home Lawn for additional information.

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### Bait Treatments for Control of Fire Ants \*

Brand Name (insecticide) (% ai)	Rate/mound **	Rate/acre ***
Amdro Bait (hydromethylon) (0.73%)	2 to 5 tablespoons	1 to 1.5 lb
Award (fenoxycarb) (1.0%)		
Hi-Yield Fire Ant Bait (fenoxycarb) (1.0%)	1 to 3 tablespoons	1 to 1.5 lb
Come & Get It Bait (spinosad) (0.015%)	4 to 6 tablespoons	2.5 to 5 lb
Once & Done! (indoxacarb) (0.016%)	4 tablespoons	22 lb
Distance (pyriproxyfen) (0.5%)	1 to 4 tablespoons	1 to 1.5 lb
Extinguish (methoprene) (0.5%)	3 to 5 tablespoons	1 to 1.5 lb
Ascend (abamectin) (0.011%)	5 to 7 tablespoons	1 lb

\*Avoid applying baits immediately before or after irrigation or rainfall.

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

\*\* Baits should be applied in an area around the mound, not on top of the mound.

\*\*\* There are 43,560 square feet in one acre. 1 lb per acre = 0.36 oz./1000 sq ft.

### Liquid Mound Drench Treatments for Control of Fire Ants \*

Insecticide	Brand Name	Rate
Acephate (75% SP)	Orthene 75 TTO (75%)	2 teaspoons/gal
Carbaryl (22.5% concentrate)	Sevin Concentrate Bug Killer	¾ fl oz/gal
Permethrin (2.5% concentrate)	Bonide Eight Insect Control	2/3 fl oz/gal
Permethrin (38% concentrate)	Hi Yield 38 Plus	1.6 fl oz/gal

\* Depending on the size of the mound, it takes 1 to 2 gallons of water-insecticide mix to drench a fire ant mound effectively. Drench the mound and an area approximately 10 to 12 inches around the perimeter of the mound. **Do not disturb mounds before drenching.**

### Dry Mound Treatments for Control of Fire Ants in Home Lawns \*

Insecticide	Brand Name	Amount/mound
acephate	Orthene 75 TTO (75%)	1 - 2 teaspoons
cyfluthrin	Bayer Fire Ant Killer (1.0%)	1 teaspoon
deltamethrin	Bengal Ultra Dust Fire Ant Killer (0.05%) Terro Fire Ant Killer (0.05%)	1 tablespoon

\* Sprinkle dry product on and around mound as directed on label.

**Do not disturb the mound before or after treatment.**

### Broadcast Treatments for Control of Fire Ants \*

Insecticide	Brand Name	Rate/1000 sq ft
<b>Treatments Applied as Sprays</b>		
carbaryl (22.5% concentrate)	Sevin Concentrate Bug Killer	3 to 6 fl oz
cyfluthrin (0.75% concentrate)	PowerForce Multi-Insect Killer	6 fl oz
lambda cyhalothrin (0.5% concentrate)	Triazicide Soil & Turf Insect Killer Concentrate	2 fl oz
permethrin (38% concentrate)	Hi-Yield 38 Plus Turf, Termite & Ornamental Insect Concentrate	0.8 fl oz
<b>Treatments Applied as Granules</b>		
bifenthrin (0.2% granules)	Ortho Fire Ant Killer Granules	2.3 lbs
fipronil (0.0103% granules) **	Gardentech Over'n Out!	2 lbs
lambda cyhalothrin (0.04% granules)	Triazicide Soil & Turf Insect Killer Granules	2 lbs
permethrin (0.5% granules)	Kill A Bug II Lawn Granules	2 to 3 lbs

\* Most broadcast treatments will provide control for approximately 4 to 8 weeks.

\*\* \* The label of the fipronil treatment (Over'n Out) indicates that a single spring application will provide season-long fire ant control.