

Gardening Basics

Fire Ant Control



"Red Imported Fire Ant (*Solenopsis invicta*)" by stevenw12339 is licensed under CC BY-NC 2.0.

Imported and native fire ants are often more visible in the landscape after it rains. The first step is accurately determining that you're dealing with imported fire ants. Then, follow the "Two Steps to Control Fire Ants" method (below) to manage the fire ants in your landscape.

Imported Red Fire Ant Identification

There are hundreds of species of ants in North Texas, and most are not harmful. Indeed, most ants are beneficial insects preying on other insects and effectively aerating more soil than earthworms. Accurately identifying the species of ant will ensure the control measures taken are effective. There are five fire ant species in Texas, four are less aggressive natives and the fifth species is the imported red fire ant.

Imported red fire ants (*Solenopsis invicta*) have several characteristics:

1. They are aggressive and run up any object placed into their nest and try to bite and sting it.
2. They have a narrow "waist" between the thorax and abdomen with a petiole and a postpetiole.
3. Their antennae are jointed like an elbow.
4. Other physical characteristics unique to the imported red fire ant are more challenging to see without a microscope. They include a "median clypeal tooth, a striated mesepimeron, the antennal scape nearly reaches the vertex, the postpetiole is constricted at the back half, and the petiolar process is small or absent." (See the illustration in the "Key to Common Pest Ants and Fire Ant Species" linked in **Resources** below.)

Fire Ant Swarms

Fire ants will swarm after it rains, particularly following a dry period. Swarming is how fire ants reproduce and expand their range. You may see winged male and female ants exiting the mound. They mate in the air while flying. The male ant then dies, the female ant falls to the ground, burrows into the ground, and lays eggs to start a new colony. Swarming fire ants can be confused with termites. Along with the physical characteristics listed above, the fire ant's front wings are longer than the back wings.

Swarming fire ants are attracted to reflective, shiny surfaces. You may spot them in swimming pools, ponds, or water features. Float a tennis ball or two in the water for the ants to climb onto (they're not good swimmers). Collect the tennis balls and drop them into a plastic bag, tie off or seal, then discard.



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Two Steps to Control Fire Ants

Eradication or total elimination of fire ants is not possible or practical. However, following these steps recommended by Texas A&M AgriLife Extension and many other state extension services will effectively control fire ants in the landscape.

Step 1 - Apply Fire Ant Bait

Applying a fire ant bait product twice annually is the most effective and cost-efficient method of control. The ants do the work for you, gathering the bait and taking it back to the colony, which is ingested by the ant larvae, worker ants, and queen, effectively killing the entire colony. Fire ants forage up to 300 feet from their mounds, so broadcasting bait is effective and doesn't require knowing where the mounds are.

Fire ant baits are typically in granular form. Their low toxicity and low application rate make them one of the safest control methods for homeowners to use. They are best used as a broadcast, using a hand-held spreader set with a narrow opening to distribute 1 to 1.5 lbs. per acre. Be aware that drop spreaders typically cannot be set with a narrow enough opening to broadcast the small amount needed.

Tips for Using Fire Ant Bait Effectively

1. Apply fire ant bait twice annually, once in spring (May/early June) and again in fall (late September/October).
2. Baits work best when fire ants are actively foraging for food. To find out if they're foraging, drop a few greasy potato chips several places in the landscape. After 20 to 30 minutes, check the potato chips for fire ants. If they're on the chips, they're foraging, and it's a good time to broadcast fire ant bait.
3. Use fresh bait; purchase just enough to treat one season. Fire ant bait uses soybean oil as an attractant. Soybean oil can become rancid quickly and will no longer be attractive to the ants.
4. Apply the bait when the weather is dry, at least 4 hours before any expected rain. Wait to apply until the morning dew has dried. **Do not water in the pesticide and be sure to turn off irrigation.**
5. Broadcast the bait around the perimeter of the home, in the garden, and compost pile.

Step 2 - Spot Treat Individual Mounds

Spot-treat individual mounds (resembling piles of coffee grounds) or colonies in high-traffic areas, which may be more visible after rain. Many labeled products for non-bait fire ant control are available in dust, liquid concentrates or drenches, or granular forms. These treatments will usually kill the colony in 1 to 2 days.

A Few Final Words

Following these steps, with the appropriately labeled products and at the right time, really work. Always carefully read the product label for application instructions, safety precautions, and proper disposal.

Home DIY remedies such as sprinkling grits over the mound do not work, and some DIY methods can be dangerous (e.g., gasoline or other petroleum products).

Sources and Resources:

"Hints and Tips for an Effective Fire Ant Management Program in Home Landscapes Using Broadcast Baits." Vicky Bertagnolli, Clemson Cooperative Extension Home & Garden Information Center, 2020:

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