



The ABC's of Fire Ants and Their Management

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Ants are one of the most numerous groups of insects found on earth. Ants have adapted to live very well with humans and have become pests in their homes, gardens, yards, and other areas. In Texas, one of the most serious pests is the red imported fire ant.

Life Cycle

Red imported fire ants live in large colonies and build dome-shaped mounds that may contain more than 200,000 ants! They like to build mounds in open, sunny areas like yards, pastures, and gardens. During very hot or dry weather, fire ants will dig deeply into the soil to find cooler temperatures and water. It will seem like they just “disappeared.” However, soon after rain or thorough watering, their mounds will “magically” reappear because the ants are trying to escape from the water that flooded their mound. It may seem like there are more ants, but it is more likely that the ants already present are just building a new mound.

Fire ants reproduce by mating flights. On warm, sunny mornings after a rain shower, winged males and females fly up into the air from the mound and mate many feet above the ground. The newly-mated queens drop back to the ground, cut off their wings, and find a nice quiet place to dig a hole and start their own colonies. Sometimes many queens come together to form a colony, and sometimes only one queen starts a colony. Male ants die after mating.

Fire ants are very aggressive and will protect their mounds from any threat. When their mound is disturbed, they rush out of it in large numbers and will sting anything within their reach. This aggressive attitude is why so many people get stung -- usually more than once. A few hours to a day after a fire ant stings, a red blister that contains fluid will form. If these blisters are scratched open, they can get infected and cause more serious problems.

Fire ant workers are attracted to oily or greasy foods. They take these foods back to the colony and pass them to the other ants in the nest. Fire ants also will eat other insects, oily seeds, and sometimes during dry weather will dig into potatoes that are in the ground. Dog and cat food are among some of the favorite foods of fire ants around the home.

Management

There are many ways to manage fire ant problems. You can manage fire ants by pouring very hot water on the mound, using insecticide mound drenches, spreading insecticide granules approved for fire ants on the mound and watering them in, or using bait-formulated insecticides.

Be advised, however, some “home remedies” don’t work as well. Spreading grits or sugar on a fire ant mound will only make them move to another spot rather than kill them. Laying orange or grapefruit peels on a fire ant mound will do the same thing. It might make them move to another spot, but it probably won’t kill them.

Hot water treatment. Pouring 2 to 3 gallons of very hot or boiling water on the mound will kill mounds about 60 percent of the time. This method should only be used after rain has fallen and fresh mounds have been built. Otherwise, the ants will be too deep and probably just move to another location. Remember one thing about this method: very hot or boiling water will kill the grass or surrounding vegetation that it is poured upon. Other natural or “organic” methods include mound drench products that contain d-limonene (citrus oil extract), pyrethrins plus diatomaceous earth, (silicon dioxide), pine oil or

rotenone.

Individual mound drenches. Using individual mound treatments can have good and bad results. Individual mound treatments are used to treat one mound at a time, therefore concentrating insecticides in one place. In the case of mound drenches, follow the label directions to assure the proper amount of insecticide is applied. When using granular insecticides on individual mounds, be sure to water the granules into the mound after applying as directed. Failure to water in the granules does a poor job of killing the ants, and more importantly, may contaminate runoff water after a rain because the granules will be washed away and end up in sensitive areas like creeks, streams, and drinking water. Individual mound treatments, when administered according to label directions, will suppress fire ants for 3 to 6 weeks depending on environmental conditions and ingredients. Wet conditions will shorten the effective period of the treatment, and dry conditions may lengthen it.

Bait-formulated insecticides. Another method of managing fire ants comes as bait-formulated insecticides. These baits come in the form of defatted corn grit coated with soybean oil to attract the ants. The active ingredient is dissolved in the soybean oil. Generally, these baits are collected by foraging worker ants and are taken back to the colony where they are distributed. The bait is fed to the queen, and she dies or is prevented from producing viable eggs. In general, baits are slower acting, but provide 80 percent to 90 percent suppression for 12 to 18 months. Be sure to use fresh baits because ants are not attracted to spoiled bait. One advantage of using baits is their low application rate and extremely low amount of active ingredient. The amount of active ingredient in some baits applied per acre equals the weight of a nickel down to less than a dime! The benefits to the environment are much greater, and baits provide the same suppression as individual ant mound treatments.

Choosing which method to use when managing fire ant problems depends upon personal preferences and beliefs, the type of problem, and the affected area. If there are very few mounds, maybe an individual mound treatment is best. This protects populations of native ants and allows them to compete with fire ants on more even terms. If the problem is more widespread and involves more than 20 or 25 mounds per acre, or about 5 mounds per average 1/4 acre or less yard, then maybe a bait formulation broadcast over the area is a better option. This will slow the re-infestation by fire ants and allow native ants to repopulate as well. Use a crank-type seeder set on the lowest setting to broadcast the bait.

Just a note about native ants. In areas where there are relatively few fire ants, native ants slow the establishment of fire ants by attacking very small colonies or new queens that are trying to establish new colonies. Therefore, it is important to preserve these ants as a part of the management scheme. Most native lawn ants are not pests in houses or in general.

Fire ants stir deep emotions in all of us. They attack us, our children, our pets, our homes, and other things we hold dear. The trick to managing them is to find a strategy that fits the situation and your own comfort zone and stick with it. Even better, get your neighbors involved and attack the fire ants as a group or a neighborhood. The potential for success is greater and the results may last longer.

For more information regarding fire ant management, see Extension publications B-6043, Managing Red Imported Fire Ants in Urban Areas; B-6076, Managing Red Imported Fire Ants in Agriculture; B-6099, Broadcast Baits for Fire Ant Control; or L-5070 The Texas Two-Step Method Do-It-Yourself Fire Ant Control for Homes and Neighborhoods. Also visit our web site at <http://fireant.tamu.edu>.

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