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Managing Fire Ants In Your Yard

Red Imported Fire Ant

INTRODUCTION

Fire ants were accidentally imported into Mobile, AL about 1930. Since then, they have spread rapidly into most of the southeastern states and a few western states primarily through commerce. They are now in most of NC except some of the northern tier counties. You should accept that you will never get rid of them, but you can manage them. This note will help the homeowner take control of his home lawn. Professional lawn care businesses are also an option and they have a few additional products available that are not sold in stores. Fire ants produce mounds that may continue to enlarge as the population grows. Young colonies may not have mounds. Mounds are located in sunny areas and often next to sidewalks, driveways or other heat absorbing masses.

MANAGEMENT

The best seasons to treat fire ants are late spring and early fall (late Sept-early Oct) before the temperatures become too cool. However, if you have an active mound in an inconvenient location, you can mound drench on any warm day. The most effective management program will combine a two-step process combining direct mound treatment *and* baits. If you have too many mounds, baiting may be your best solution if you can be patient. It is better to use a bait first and follow up with mound treatment a few days later if you can't wait for a slower bait. You can test for activity with a potato chip. DO NOT use both mound drench and bait at the same time. You will waste your bait. You may also mound drench and follow with bait 5-7 days later if there is still activity or a satellite mound has sprung up. Some products are made for application across the entire lawn. An effective management program also requires monitoring several times per year. Fire ant control measures will not be successful if you think you can make one application of something and they will be gone forever.

Bait Treatment

Baiting may be done near specific mounds, or broadcast across a large area. Baits generally, should not be applied directly onto the mound. Ants do not forage on top of the mound. Fire ant entrances are located around the outside edges of a mound. Not all baits that can be used at a mound may also be used as a broadcast. Read the label. Baits are actually food and depend upon that food being attractive for the ants to take it in. Some baits are direct poisons and some are insect growth regulators which, instead, cause the colony to die out more gradually. Baits are slower acting than direct mound poisons so do not expect results overnight. Baits rely on foragers to collect the food and bring it back to the rest of the colony to eat. In mid-morning before baiting, drop one or two potato chips near a mound. If ants are consuming the potato chips at 20 minutes, it is a good time to apply bait.

Bait Product Name	Active Ingredient	Formulation
Amdro Fire Ant Bait	hydramethylnon	bait
Amdro FireStrike baits	hydramethylnon + methoprene	bait
Come 'n Get It Fire Ant Killer by Fertilome	spinosad	bait
Ortho ecosense brand	spinosad	bait

Direct Contact Treatment (nonbait insecticides) -

Directly treating a mound is the fastest method for killing a specific mound. Even so, it is hard to kill <u>every</u> ant and more importantly the queen(s), with certainty. Mounds can be treated directly with insecticide. The insecticide could be powder or granules that are applied atop the mound and then watered into the soil, or they may be dry or liquid insecticides that are mixed with water and then drenched onto the mound. Read the directions carefully for the product you are using. If it is too cold or too hot, ants may not be near the top of the mound. Mid-morning is a good time when temperatures are not too hot nor too cool and mound ants are near the surface. Somewhere near 70 degrees F would be good.

Mound Treatment Product Name	Active Ingredient	Formulation
Amdro Quick Kill Fire Ant Mound Drench	z-cypermethrin	hose end spray
Basic Solutions Fire Ant Killer by Ortho	deltamethrin	granules
Bayer Advanced Powerforce Multi-insect Killer	cyfluthrin	granules
Bonide Stinger Fire Ant Killer	bifenthrin	granules
Eliminator Fire Ant Killer Plus!	permethrin	granules
Hi-Yield Imported Fire Ant Control Granules	deltamethrin	granules
Ortho Fire Ant Killer Mound Treatment	bifenthrin	granules
Over 'n Out Fire Ant Killer Granules (broadcast)	bifenthrin	granules
Orange Guard	d-limonene	liquid concentrate
Spectracide Fire Ant Killer Granules Mound Destroyer	L-cyhalothrin	granules

NON-CHEMICAL CONTROL OF FIRE ANTS

There are some non-chemical methods available that can be used against fire ants; however, they may be limited in their effectiveness (or may be ineffective).

Hot Water and Mechanical Disruption

Hot water (i.e., 90° F) and mechanical disruption have been used in many instances. Results of some preliminary evaluations at <u>Texas A&M University</u> have shown that these treatments will kill large numbers of ants; however, satellite mounds formed by surviving ants subsequently appear. Thus, these methods can have a useful, but temporary impact on fire ant colonies in areas situations where pesticides of any type are considered unacceptable. Other non-chemical mechanical devices that disrupt colonies do not have scientifically-based test data to support their effectiveness.

One potential downside to using hot water is that it can damage/kill vegetation in the general vicinity.

Grits

A long-standing folklore method of controlling fire ants (and other ants) has been to pour grits over the mound. The assumption in some cases has been that the ingested grit particles absorb water and cause the ants to "explode". However, fire ants (and ants in general) feed primarily on liquified foods and their digestive tracts filter out these solid particles. Studies have shown that foraging fire ants collect the grits, but there is no reduction in the number of ants in the colony.

Any recommendations for the use of chemicals are included solely as a convenience to the reader and do not imply that insecticides are necessarily the sole or most appropriate method of control. Any mention of brand names or listing of commercial products or services in the publication does not imply endorsements by North Carolina Cooperative Extension nor discrimination against similar products or services. All recommendations for pesticide use were legal at the time of publication, but the status of pesticide registrations and use patterns are subject to change by actions of state and federal regulatory agencies. Individuals who use chemicals are responsible for using these products according to the regulations in their state and to the guidelines on the product label. Before applying any chemical, always obtain current information about its use and read the product label carefully. For assistance, contact the Cooperative Extension Center in your county.