



PEST MANAGEMENT AND INSECT IDENTIFICATION SERIES

Fire Ants / Wingless Wasps

The red imported fire ant, a Louisiana resident since the early 1950s, can be a painful pest or a useful, beneficial friend. Depending on your situation, you may want to manage these ants or simply let them go about their helpful way.

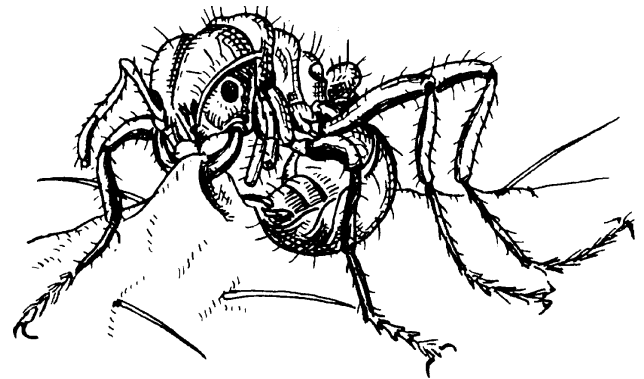
The first question most people ask when told fire ants are helpful or beneficial is, how? To the homeowner who lives near a wooded area, they help to keep tick numbers low. To those with pets or numerous squirrels, they can help reduce flea numbers. To the farmer, they control pests such as boll weevils in cotton, sugarcane borers in sugarcane and tip moths in Christmas trees.

But, to the homeowner with small children or pets, they are a problem. To a producer, their rock-hard mounds can break machinery or the ants can be a problem on young animals and wildlife. Like any plant or insect, they are good or bad – depending on where and under what circumstances they are found.

Eradication vs. Management

In Louisiana, eradicating the fire ant is as unlikely as eradicating the mosquito or the cockroach. The environmental conditions and density of the fire ants make it impossible. But, with patience and correct application of pesticides, you can manage fire ants. Do not treat until soil temperature is 55 degrees or above, so that ants are actively foraging.

In the spring, summer and early fall, just about every time it rains, virgin queens and kings swarm out of mounds and fly off to begin new colonies. This is what makes them so hard to control. These



initial colonies may be very small and go unnoticed until a medium to large mound develops.

The second reason they are hard to control is that you may treat your yard, but your neighbors don't treat theirs. Thus your yard may be easily reinfested. Third, many people don't apply the pesticides correctly, and this causes the colony simply to move rather than to die.

Several types of insecticides are available for management: granules, wettable powders, emulsifiable concentrates, soluble powders and baits (Insecticide IGR). Baits can be either on a corncob grit impregnated with an insecticide or an insect growth regulator (IGR). Both are used in conjunction with an attractant such as soybean oil. They are picked up, brought to the mound and fed to the larvae. This is where the similarities end. The insecticides kill the colony and allow for reinfestations slowly. The



IGR sterilizes the system from the larvae to the reproductives {queen(s)}. This causes the colony to decline slowly, but, at the same time, allows it to be an active predator in the system, by feeding on a wide variety of insects including the new queens that try to start new colonies in the area.

Baits are the only insecticide that can be broadcast throughout the yard. All other insecticides are strictly mound treatments. Baits act more slowly because they are picked up, brought back and eventually fed to the queen. This gradually kills or sterilizes her and then the colony. It may be several weeks to months before control is noted. Most baits give 60% to 70% control. They are best used 10 to 14 days after a mound treatment. Baits lose their effectiveness if they get wet or are exposed to ultraviolet light (naturally occurring in sunlight) for long periods. Apply baits after midday.

The other insecticides, except granules, are mixed with water. One to two gallons of the insecticide mixture are drenched into each mound because, for each inch of mound above the ground, there may be 1 ½ inches below the ground. If you apply only a pint or quart of mixture, it will not penetrate deeply enough into the mound to control the queen. The ants will simply move the mound, and the queen or queens will continue to reproduce.

The soluble powder may be mixed in water or applied directly to the surface of the mound. The humidity and afternoon showers are enough to



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dissolve it and move it downward through the soil, killing the queen and other ants in the mound. The granular materials should be washed into mound with at least one gallon of water.

All are effective. The method and techniques of applying insecticides are usually the reasons for not getting effective control. When applied correctly, the insecticides (except the IGR baits) will give control within 24 to 48 hours after application. The best treatment method is the two-step approach. This involves the application of either an insecticide or bait directly to the mound. Ten to 14 days later, a broadcast application of an insect growth regulator bait is applied. This combination has proved to be very effective. Two such applications (one in the spring and one in the fall) will manage the red imported fire ant very effectively.

The best management technique for the red imported fire ant is treatment of large areas. Instead of individual yards, whole subdivisions should be treated. This creates a larger area of management and extends the intervals between reinfestation.

For a list of the recommended insecticides, contact your local county agent. Insecticides are not listed in this publication because of frequent changes in insecticides and rates.

