

Fire Ant Season is Here Again

History

Red imported fire ants are thought to have invaded the U.S. at the Port of Mobile, Alabama, in the 1930s. Since that time, they have spread to infest more than 260 million acres, from North Carolina to Texas, with isolated infestations in California and New Mexico. The red imported fire ant was first officially reported in Oklahoma in the mid-1980s, but was probably present in the state before that time. As of late 1999, the red imported fire ant had been found in 25 Oklahoma counties including Pontotoc. Many infestations are thought to be the result of ants being transported in sod or nursery stock

The Mound

One clue to which ant you're dealing with is the nature of the mound. Red imported fire ants build soil mounds that can reach two or more feet in diameter and a foot or more in height and are often mistaken for a gopher mound. The mounds **do not** have a central entrance/exit hole; rather, the ants enter and leave via underground tunnels that radiate out from the mound. When a mound is disturbed, hundreds or thousands of worker ants rush out to defend the colony. Fire ant workers range in size from about 1/8 to 1/2 inch in length. Mature mounds may contain 250,000 or more workers. Identification of worker ants is a difficult task, even for experts.

Damage

Fire ants cause damage in several ways. Their activity causes shorts and damage to insulation in electrical equipment. Their tunneling activity can remove soil from under roadways and sidewalks, causing cracking and collapse of pavement. Their large mounds can damage mowing and harvesting equipment.

The primary concern of most people living in fire ant infested areas is the likelihood of stings. A small percentage of people can experience anaphylactic shock as a result of stings. During hot, dry periods of the year, fire ants may enter homes and businesses in search of moisture and food, increasing the chance of stings.

Controlling Red Imported Fire Ants

The Two-Step Method

Step One - Baits

Fire ant baits consist of insecticides on processed corn grits coated with soybean oil. While baits can be applied as an individual mound treatment, they are best used as a broadcast treatment. Broadcast treatments are less expensive (in terms of product costs and time) and control colonies even when mounds are not visible. For best results, use fresh bait, preferably from an unopened container or one that has been tightly sealed and stored for no more than two years. Apply when the ground and grass are dry and no rain is expected for the next 24 hours. Apply when worker ants are actively searching for food. This can be determined by leaving a small piece of food (chips or meat) near an active mound. If ants are seen removing the food within 10 to 30 minutes, it's a good time to begin application. Ants are less active during cold and hot periods (when soil temperature

is less than 70° F or greater than 95° F). In the summer, apply bait in late afternoon or evening, when ants are most active.

Baits can be applied with hand-held seed spreaders. Set the spreader on the smallest opening and make one or two passes over the lawn at a normal walking speed to apply the recommended rate (1 to 1 1/2 pounds per acre, or approximately 4 ounces per 10,000 feet).

Step Two - Individual Mound Treatments

There are a variety of chemical and non-chemical methods for treating individual fire ant mounds. After baiting, treat “problem mounds” (mounds near sidewalks, porches, and other sensitive areas) with the mound treatment of your choice.

Chemical Treatments: Some products, such as those containing 75 percent acephate (Orthene® Fire Ant Killer), are formulated as dusts. Ants walking through the treated soil get dust on their bodies and transport the insecticide into the mound. Within a few days the entire colony should be killed. To use a dust, distribute the recommended amount evenly around the mound. Do not inhale the dust or get it on your skin.

Liquid concentrates are diluted with water and then applied to the mound. These liquid mound drenches kill the ants underground, but must be applied in sufficient volume to penetrate the entire nest (one to two gallons of diluted mixture poured over the top of each mound). Mound drenches generally eliminate mounds within a few hours. When handling liquid concentrates, avoid getting the product on your skin by always wearing unlined rubber gloves. Mix the insecticide in a container such as a sprinkler can. Write “Poison” on the container, and do not use it for any other purpose. Mound drenches should contact the greatest possible number of ants in the colony. The ants are nearest the surface of mounds on sunny mornings following cool nights, so time applications appropriately. During hot, dry weather, the ants stay farther underground, decreasing your chance of contacting them with insecticides.

Granular insecticides are released when water is poured over the granules on treated mounds. To treat a single mound, sprinkle the recommended amount of granules with a measuring cup on top of and around the mound. Then, gently sprinkle one to two gallons of water over the treated mound to avoid disturbing the colony or washing the granules off the mound.

Remember, if you apply less than the recommended amount of water with either liquid concentrates or granular insecticides you can expect poor results. Unless the product completely penetrates the mound, ants will move to a different site via underground foraging tunnels to avoid the poison.

Some products come in aerosol containers to which an injection rod is attached. The rod is inserted into the mound and the insecticide injected according to the label instructions for a quick kill of problem mounds. Contact the Extension Office for a list of chemicals that you can use to treat fire ants.

General tips

Pay special attention to application instructions on the label of the product(s) you use to insure the best return for your money and time. It pays to monitor for fire ant activity before applying baits, since the success of baiting programs is directly related to the ability of ants to rapidly collect materials and return them to the colony.

Fire ants are probably here to stay. Movement in horticultural and agricultural goods and natural movement during mating flights will continue to spread fire ants to new areas in Oklahoma where sufficient moisture and warm temperatures are present. Current research efforts are targeted toward introducing natural enemies and diseases of fire ants to reduce overall infestation levels. Management of fire ants in the short term can be accomplished with a little care and persistence by following the tips presented herein.

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