



## Solution Sheet

# Fire Ant – Lawn

## The Problem

The red imported fire ant (*Solenopsis invicta*) was introduced into the United States around 1940. It is presently found in 14 states across the southern U.S., north to Virginia, south to Florida and west to portions of California. The biggest problems associated with these ants is their aggressive nature and stinging when their mounds or food sources are disturbed. Symptoms of the sting include burning and itching, followed by the development of a pustule that may take a week or more to heal. Scratching these pustules can lead to secondary bacterial infections and can leave permanent scars. As with all insect stings, certain persons are hypersensitive to fire ant venom and may suffer chest pains, nausea or lapse into a coma from one sting.

## What To Look For

The red imported fire ant builds mounds in almost any type of soil, but prefers open sunny areas found on lawns. The size of the mound depends upon the soil characteristics and the frequency with which the mound is disturbed. The above-ground portion of the mound is usually conical and can reach 10-12 inches in height. The tops of mounds are less well developed in very sandy soils, or where the land is frequently disturbed.

Established colonies produce new queens and winged males during warm spring and summer months. Mated queens establish a new colony by digging a small hole in the soil and closing up the entrance. Inside the chamber, the queen lays eggs several times over the next week. The emerging larvae are fed by the queen until they pupate and tiny workers emerge. These workers break open the nesting chamber and begin foraging for insect food and start to enlarge the nest. The queen, now fed by workers, will continue to lay eggs. A colony established in June could contain 15,000 individuals one year later. A mature colony (3 years old) may contain 100,000 to 500,000 workers and several hundred winged forms.

## The Solution

In general, nonchemical methods are ineffective against fire ants. Digging up or tilling mounds usually results in dispersal of ants or movement of nests. The most effective control programs incorporate the use of bait products and/or broadcast applications of insecticides. Spraying insecticide on foraging ants will not control a colony and spraying a nest may cause the colony to disperse which could make control even more difficult. Envu offers two outstanding products for the control of red imported fire ants. These products are based on the active ingredient fipronil.

Topchoice® insecticide is a non-bait insecticide that provides single-application control of fire ants for up to a full year. It is formulated specifically for broadcast application with commercially available spreaders. Topchoice provides control of existing colonies, as well as prevents new infestations.

The second product available for fire ant control is Maxforce® FC Fire Ant Bait, which provides effective control of fire ants with a Simply Irresistible™ formula and the exclusive Maxforce Domino Effect®. Baits in general should be put out when ants are seen walking on the ground (temperatures from 70-90°F are best). You can check if fire ants are active by putting out a piece of greasy food (i.e. a potato chip) and checking it 30 minutes later. In hotter weather, baits are best applied in the evening. The ants will then forage overnight on the bait. Baits lose their effectiveness quickly with extreme heat, water, and sunlight. Do not apply Maxforce FC Fire Ant Bait immediately before or after irrigation or rain.

Solution	Rate (per acre)	Active Notes
Topchoice®	87 lbs.	Approximate length of control is 1 year. For best results, water or irrigate treated turf after application.
Maxforce® FC Fire Ant Bait	1.5 - 5 lbs.	<p><b>Broadcast Applications</b></p> <ul style="list-style-type: none"> <li>• Make broadcast applications of this product to turfgrass to control existing active imported fire ant populations</li> <li>• Do not reapply for 3-6 weeks</li> <li>• Do not exceed 4 applications per year</li> </ul> <p><b>Mound Applications</b></p> <ul style="list-style-type: none"> <li>• Shake the granules uniformly around the mound, but do not disturb the mound</li> <li>• Broadcast the granules in a circle about 4 or 5 feet in diameter with the mound being the center of the circle</li> <li>• Do not reapply for 3-6 weeks; do not exceed 4 applications per year</li> </ul>



Active fire ant mound in warm-season turf. (Envu)



Fire ant adults tending to eggs. (Envu)