

LOUISIANA HOME LAWN SERIES

A guide to maintaining a healthy Louisiana lawn



Red imported fire ant

Description

The red imported fire ant, *Solenopsis invicta* Buren (Hymenoptera: Formicidae), is a common turfgrass insect pest in Louisiana. Fire ants do not injure turfgrass, but they do build unsightly mounds on the turfgrass surface. They are considered a nuisance to homeowners because they can inflict a painful sting to humans and pets when disturbed. A single colony can exceed 100,000 ants.



Figure 1. Ant mound

Identification

Adult fire ants' bodies are reddish brown with a black posterior. They range from one-eighth to one-third of an inch in length depending on their roles, which include: minor workers, major workers, winged males, winged females and wingless queens. Beginning in the spring, winged males and females leave their mounds to mate. A fertilized female becomes a queen as she sheds her wings and burrows into the ground. She lays a brood of eggs and cares for them until they mature into worker ants. Worker ants vary in size and assume responsibility for the colony by building the mound and gathering food. However, the mound may not appear above ground for several months. The queen continues laying eggs, and the mound number grows. About nine months later, winged males and females are produced and leave the mound to restart the cycle. A queen may lay up to 200 eggs per day and may live more than five years.



Figure 2. Worker fire ant



Figure 3. Ant swarm



Figure 4. Mound tunnels

Indicators of Insect Presence

Look for winged males and females flying in the spring and summer usually following a rainfall.

Look for elevated mounds of soil on the surface of the turfgrass.

- Mounds begin underground and may not appear above ground for several months.
- Mounds appear more quickly following a rainfall.

When soil is disturbed, ants become aggressive and tend to swarm.

- Be cautious of their painful sting. Some people are severely allergic to their sting.

January	February	March	April	May	June	July	August	September	October	November	December



Injury common



Injury occasional



Injury rare

Cultural Control Practices

One way to reduce insect injury and accelerate turfgrass recovery is to maintain a healthy lawn through proper fertilization and irrigation and regular mowing. Never apply more than 1 pound of nitrogen per 1,000 square feet per application, and always follow soil test recommendations for proper fertility. Irrigate as needed while taking rainfall into account. Mow regularly, but never remove more than one-third of the leaf blade height at one mowing. Thatch can develop over time and may need to be reduced through vertical mowing. Compaction can form more quickly on finer texture soils and in areas where there is high traffic. Dethatching or aeration need to be performed in late spring to summer when the turfgrass is actively growing. Properly maintaining a lawn through these cultural practices promotes dense and vigorous turfgrass and can increase tolerance to insect injury.

Chemical Control Practices

In addition to cultural practices, insecticide applications may be required to achieve effective insect control. When using any insecticide, you must follow the manufacturer's labeled directions concerning all application parameters.

For more information regarding insecticides for turfgrass insect pests please reference the Louisiana Insect Pest Management Guide at the LSU AgCenter website, www.lsuagcenter.com.

Insecticide Active Ingredients
acephate
avermectin
bifenthrin
clothianidin + bifenthrin
deltamethrin
fenoxycarb
hydramethylnon
imidacloprid + bifenthrin
indoxacarb
lambda-cyhalothrin
metaflumizone
methoprene + hydromethylnon
pyriproxyfen
spinosad
spinosad A + D

To submit insect samples for identification send to:

Dr. Dennis Ring
404 Life Sciences, Department of Entomology
Baton Rouge, LA 70803

Need more information? Visit www.lsuagcenter.com to contact your local LSU AgCenter Extension Parish Office.

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Figure 1. LSU AgCenter, Michael A. Seymour, <http://www.lsuagcenter.com/portals/communications/publications/agmag/archive/2010/fall/balancing-benefits-and-damage-from-fire-ants-in-pastures>

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