

Pest Profile



Photo credit: April Nobile, California Academy of Sciences
(Specimen: CASET0005804; from www.antweb.org)

Common Name: Red Imported Fire Ant (RIFA)

Scientific Name: *Solenopsis invicta*

Order and Family: Order Hymenoptera; Family Formicidae

Size and Appearance:

	Length (mm)	Appearance
Egg		
Larva/Nymph		White
Adult	Workers: 3.0 – 7.0 mm Queens: up to 9 mm	All fire ants are characterized by several body features, including a relatively boxy-shaped head; 10-segmented antennae with the last segments enlarged as a club; the lack of spines on the back; a two-part waist; a prominent stinger; and the cuticle is typically free of texture or sculpture. RIFA workers are polymorphic with the largest referred to as majors. They are reddish brown with a darker gaster (last segments of the abdomen).

		Male and female reproductive ants have wings with females resembling the workers. Colonies may have a single queen or many queens (up to 20,000)
Pupa (if applicable)		White

Type of feeder (Chewing, sucking, etc.): Chewing

Host plant/s: Generally, *Solenopsis* fire ants are omnivorous and generalists predators, eating a variety of animals and plants.

Description of Damage (larvae and adults):

The RIFA is a significant agricultural pest on both plants and animals. RIFA feed on citrus trees during cold weather, riddling the bark, and otherwise eating stems and fruits. They also protect other insects that damage these trees. RIFA pack soil into the wounds they create in feeding, which subjects the trees to infection.

The RIFA also eat soybeans, corn, okra, sorghum, wheat, rabbiteye blueberry, and potatoes, often feeding underground on roots and seeds so the damage may go unnoticed. The RIFA also protect and tend mealybugs and aphids which attack these plants.

In agricultural fields, RIFA nest mounds cause damage to harvesting equipment and the presence of the mounds requires the equipment to be set higher, greatly reducing what can be harvested.

The RIFA is a significant nuisance pest and forager on both domesticated animals and wildlife. Stings and bites of the RIFA torment animals reducing their health. The RIFA will attack cattle and a number of other animals, including rodents, squirrels, deer, turtles, reptiles, alligators, birds, and insects. They are known to feed on young as well as eggs of larger species. Some fish have problems when they eat fire ants that are washed into the waterways. RIFA eat many kinds of insects including all life stages. They are known to enter honey bee hives and take the larvae from their cells. In some cases, the RIFA may indirectly effect other animals who avoid nesting or foraging in areas where these ants are present. Thus, the RIFA is a major problem for domesticated animals and in disrupting ecosystems.

RIFA also has significant impacts on property including human structures. Their nests may damage concrete and asphalt structures, including roadways. RIFA chew through nearly everything including the silicone sealant used on roads, telephone and electrical cables, irrigation and water lines, and sprinkler tubing. The RIFA may infest electrical boxes, causing short circuits. Their nest mounds are also a problem, especially in golf courses.

The RIFA has a significant stinger and can give painful stings, resulting in pustules which often resolve in a few days. The venom may cause allergic reactions.

The RIFA is an invasive and tramp species, native to South America. The RIFA now has a world-wide distribution. In the USA, the RIFA is found mostly in the south with reports from Alabama, Arizona,

California, Florida, Georgia, Louisiana, Mississippi, Missouri, New Mexico, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, and Virginia.

References:

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