

## Did You Know?



If you live in parts of the South, that ant mound you see in the backyard could be more than just a nuisance. If they are fire ants, they could sting you, too. When disturbed, fire ants swarm onto a person by the hundreds, biting and stinging to produce painful, pus-filled wounds.

Did you know that ARS scientists have been working hard to develop strategies to control these invasive pests? They have come up with a number of environmentally friendly methods, including special baits and traps, parasitic flies, and microorganisms to help keep fire ant populations in check.

For example, ARS researchers at Gainesville, FL, working with cooperators in Argentina, studied two parasitic microsporidia to curb fire ants. The scientists found that worker ants transfer one species of microsporidia to the queen, reducing her egg production so colonies eventually die out. Another species, tested in Argentina, destroyed fire ant colonies there without infecting other, native ants or arthropods.

Another natural enemy, the phorid fly, from South America has been studied by ARS researchers and has been released in Florida to help control the ant. In Florida, since the fire ant control program began in 1995, five species of phorid flies have been released to parasitize various sizes of fire ants. Each phorid fly lays an egg into individual fire ants. These eggs later develop within the fire ant's head, ultimately causing its demise.

Also, ARS researchers developed a new bait gel formulation in cooperation with private investigators. The bait formulation, which comprises a specific mixture of carbohydrates, lipids and proteins, is weather resistant and can be eaten by ants year-round. It contains 5 percent boric acid, which, in tests, killed fire ant colonies in 2 months or less, depending on their size and the season.

So, thanks to these and other ARS advances, you can look forward to the possibility of fire-ant-free days ahead.

### ***Did you know that...***

- Fire ants first entered the United States about 1918, near Mobile, AL?
- Fire ants are social insects that nest in the soil in large colonies containing tens of thousands to more than 200,000 ants?

Source: [Mississippi Agricultural and Forestry Experiment Station](#)

*Written by Sean Adams, ARS Information Staff.*

#### ***Executive Editor***

Sandy Miller Hays

#### ***Managing Editor***

Tara T. Weaver-Missick

#### ***Writer-Editor***

Mina Chung

#### ***Designer-Editor***

Carol Nathan

#### ***Contributors***

Sean Adams  
Lori Bocher  
Ned Edwards

Jennifer Gilbert  
Tracy Havermann  
Christopher Rees