



# URBAN PEST ANTS

## OF PENINSULAR FLORIDA

THIS USDA STUDY PRESENTS A RECENT SNAPSHOT OF THE MOST COMMON AND ECONOMICALLY SIGNIFICANT SPECIES OF PEST ANTS IN THE SUNSHINE STATE.

BY JOHN KLOTZ,  
JOHN MANGOLD,  
LLOYD R. DAVIS JR.,  
KAREN VAIL &  
RICHARD  
PATTERSON

The U.S. Department of Agriculture, in collaboration with Terminix International, recently completed a one-year survey in Florida to determine the species of ants and types of problems confronting pest control professionals in both commercial and residential buildings. In this article we focus on the most common species of ants encountered and several characteristics of their infestations and control.

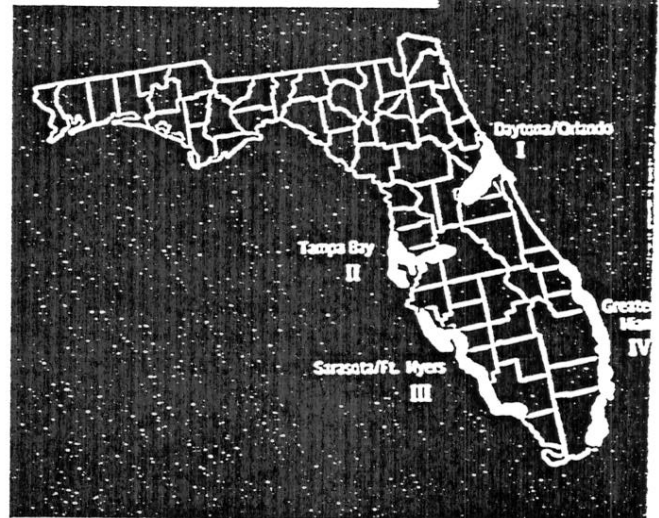
The total number of identified ant samples was 810. Response was heaviest in four major metropolitan areas: Daytona/Orlando (Region 1), Tampa Bay (Region 2), Sarasota/Fort Myers (Region 3), and Greater Miami (Region 4).

**IDENTIFICATION.** Six genera of ants were identified as important pests in Florida. These six genera comprised 84% of the ants collected in our survey.

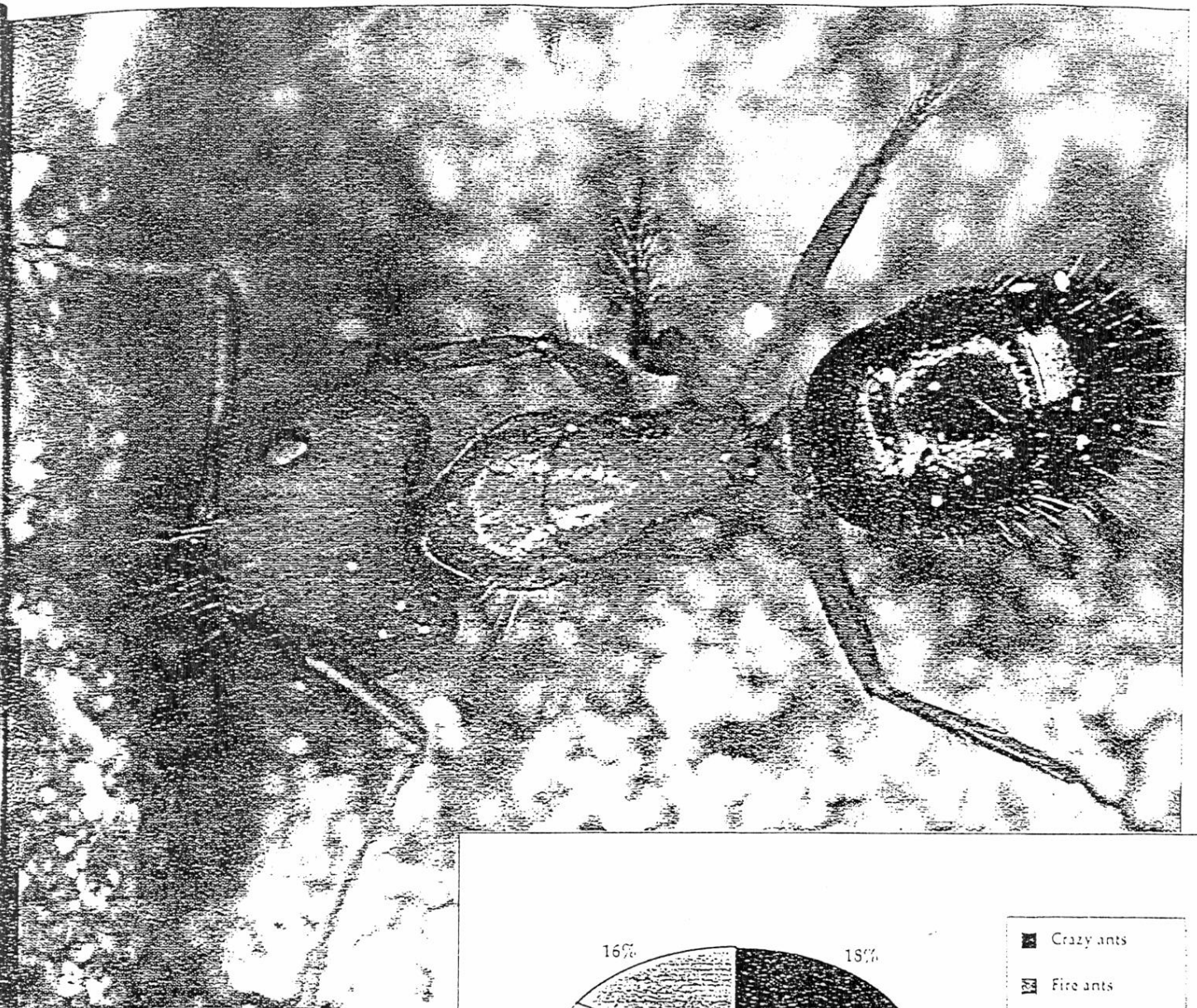
Carpenter ants were the most frequently encountered (20%), and were represented by two different species. By far the most common carpenter ant species was the Florida carpenter ant, *Camponotus abdominalis floridanus*, also known as the bull ant. *Camponotus tortuganus*, the other carpenter ant species encountered, is more common in southern Florida, and closely resembles the Florida carpenter ant in appearance.

The red imported fire ant, *Solenopsis invicta* (14%), is a well known agricultural and public health pest. The ghost ant, *Tapinoma melanocephalum* (14%), and the crazy ant, *Paratrechina longicornis* (18%), are very common urban pests in Florida. However, our understanding of their biology and control is minimal.

The pharaoh ant, *Monomorium pharaonis* (11%), along with the red imported fire ant, are probably the best studied of all with



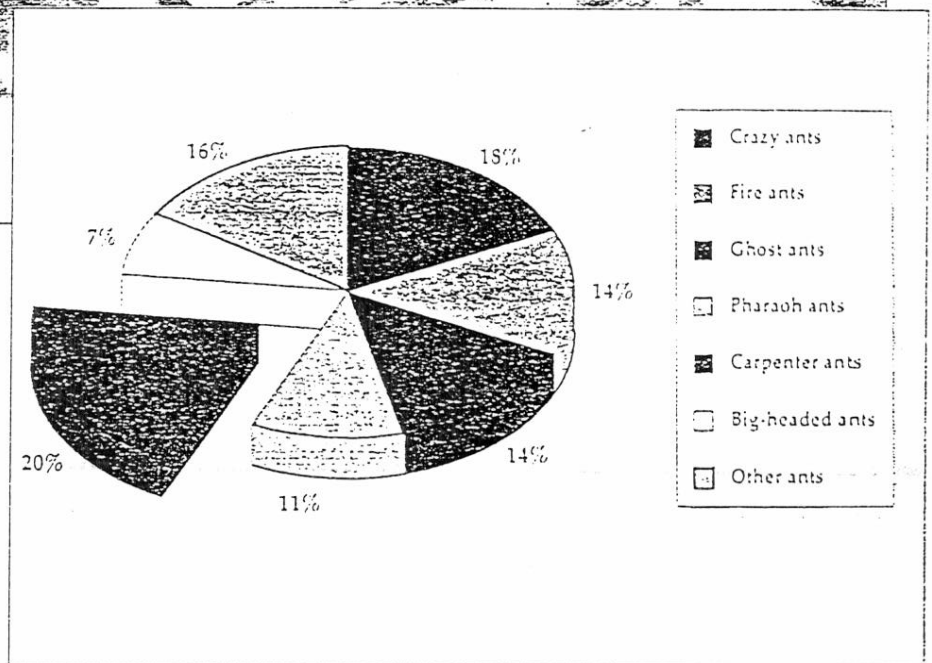
During the USDA's one-year survey, the response for ant samples was heaviest in four metropolitan areas: Daytona/Orlando, Tampa Bay, Sarasota/Fort Myers, and Greater Miami.



respect to their control. The big-headed ant, *Pheidole megacephala*, and *Paratrechina bourbonica* were the least common species encountered. About 20 other occasional ant pests made up the remaining 16% of the ants collected in our survey. These consist of many ants not commonly encountered in structural pest control.

**INFESTATIONS.** Carpenter ants, the ghost ant, and the pharaoh ant are primarily problems indoors, but a significant proportion of all three were found outdoors as well.

Of particular interest is the pharaoh ant, which in the past has been considered exclusively an indoor pest, but both our survey and a study by other USDA researchers showed them to be outdoor pests as well. The pharaoh ant can be effectively controlled with bait placements outside in areas where they are trailing — often near windows and soffits, next to sources of



water such as outdoor spigots, and along edges of the building framework. The baits should be registered for outdoor use and placed up as high as possible to avoid exploitation by fire ants.

In the majority of cases, except for fire ants which primarily nest outside, pest

Top: The Florida carpenter ant, *Camponotus abdominalis floridanus*. Above: This pie chart shows the percentages of common pest ants in Florida.

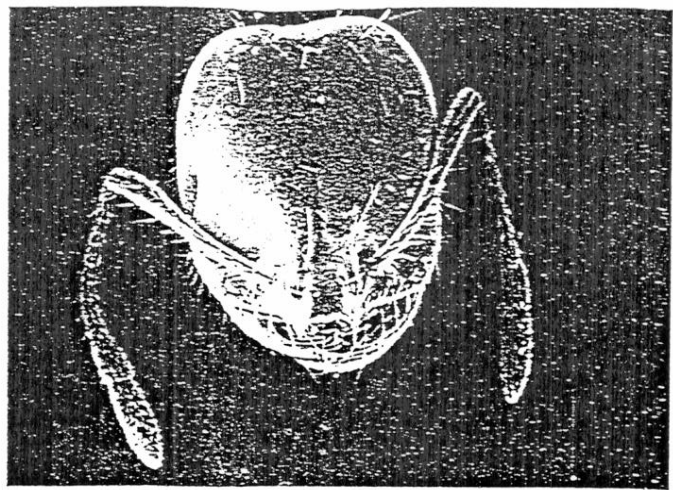
control professionals were unable to locate nest sites. For example, the nests of carpenter ants, which have cryptic (secretive) habits, are very difficult to find. This finding — the difficulty in locating nest sites — emphasizes the importance of bait development, which under certain conditions would reduce the necessity of finding nests in order to control ants.

**CUSTOMER COMPLAINTS.** In the overwhelming majority of cases, customers were calling PCOs because the ants were recognized as a nuisance. This is true even

**In the overwhelming majority of cases, customers called PCOs because ants were a nuisance.**

for wood-destroying organisms such as carpenter ants, which had very few complaints of wood damage. There were a few cases of food infestation with the ghost ant and the pharaoh ant, and several cases of biting and stinging complaints for fire ants.

The close-up of the head of a fire ant shows its characteristic 10-segmented antennae with a 2-segmented club at the end.



**CONTROL.** For ant control, pest control professionals are relying heavily on sprays and dusts. For the pharaoh ant and ghost ant, there was a significant use of bait, mainly due to the commercial availability of several effective baits for these ants. But the lack of baits for the other common species again indicates the necessity for their development, due to their ease of application, efficacy, reduced pesticide use, and the consequent environmental safety.

This survey presents a snapshot of Florida pest ants in 1993. The data collected from this study will enable pest

control professionals and researchers to focus their attention on the identification and control of a few important pest ants in Florida. PCT

*Dr. John H. Klotz, Lloyd David Jr. and Dr. Richard Patterson are entomologists with the USDA Agricultural Research Service Medical and Veterinary Entomology Research Laboratory, Gainesville, Fla. Dr. John Mangold is a technical specialist with Terminix International, Clearwater, Fla. Karen Vail is a graduate student in entomology at the University of Florida, Gainesville, Fla.*

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