

# Caribbean Crazy Ant (proposed common name), *Paratrechina pubens* Forel (Insecta: Hymenoptera: Formicidae: Formicinae)<sup>1</sup>

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# Introduction

Over the last few years reports have escalated of a golden-brown to reddish-brown "crazy ant" infesting properties in and around West Palm Beach, Florida. Thick foraging trails with thousands of ants occur along sidewalks, around buildings, and on trees and shrubs. Pest control operators using liquid and/or granular broad-range insecticides appear unable to control this nuisance ant.

### Distribution

*Paratrechina pubens* Forel (1893) was described from St. Vincent, Lesser Antilles, and has been found on other West Indian islands, including Anguilla, Guadeloupe, and Puerto Rico (Trager 1984). Samples of *P. pubens* collected in Coral Gables and Miami, Florida, date from 1953 (Trager 1984). Klotz et al. (1995) report infestations in Boca Raton, Homestead, and Miami and state that "in 1990, hundreds of these ants were found on the second floor of a large Miami hospital." Deyrup et al. (2000) report that it "is abundant on the campus of the University of Miami, where it resembles a pale *P. bourbonica*, foraging on sidewalks and running up and down tree trunks." L. Davis, Jr. (2003 personal communication) has seen these ants from Everglades National Park, Fort Lauderdale, Jacksonville, and Port St. Lucie. Specimens from Sarasota (F. Santana 2003, personal communication) were also confirmed. These ants seem to have large populations where they occur and are considered a pest in Colombia (Davis 2003, personal communication).

In the West Palm Beach area, two heavily infested sites were observed about 3 miles west of the Intracoastal Waterway. These sites are adjacent to a utility right-of-way running to the port of Palm Beach (site of a Florida Power and Light electrical generating plant). The port may have been the point of debarkation of *P. pubens* into Palm Beach County.

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# Description

*Paratrechina pubens* is part of a group of ants referred to as "crazy ants" due to their quick and erratic movements. The Caribbean crazy ant is a medium-small (2.6-3 mm long), monomorphic, golden-brown to reddish-brown ant. The body surface is smooth and glossy, and covered with dense pubescence (hairs). After feeding, the ant's gaster (rear portion of the abdomen) will appear to be striped due to stretching of the light-colored membrane connecting segments of the gaster. Antennae have 12 segments with no club. The antennal scape is nearly twice the width of the head. This ant has one petiolar segment and does not sting.

**Similar ants:** *Paratrechina guatemalensis* (Forel 1885), the Guatemalan crazy ant, has pale middle and hind coxae, shorter, stouter, and darker pilosity (Davis 2003, personal communication), and is notably smaller than pubens, total length 2.0 to 2.5 mm as compared to 2.6 to 3.0 mm for pubens (Trager 2004 personal communication). Deyrup et al. (2000) state that *P. guatemalensis* is a common species in Dade, Broward and Monroe Counties, but is less common farther north to Hillsborough and Indian River counties, and Deyrup (2002) adds that it is found in south Florida, north to Sarasota and Indian River counties.

*Prenolepis imparis* (Say 1836), the false or small honey ant, has a severely constricted "hour-glass-



**Figure 2.** A Caribbean crazy ant, *Paratrechina pubens* Forel, worker. Credits: F. J. Santana, Sarasota County

shaped" alitrunk (mesosoma), and is found in north Florida, south into Orange County (Deyrup 2002).



**Figure 3.** The false or small honey ant, *Prenolepis imparis* (Say). Arrow shows constriction forming an "hour-glass" shaped alitrunk. Credits: Tim Linksvayer, Carleton College

# Life Cycle

Little is known of the *P. pubens* life cycle. During a cold winter morning in West Palm Beach, Florida, one de-alate queen and several winged males were observed in a soil nest under a log, but the entire colony was not examined. In *P. longicornis* (Latreille), a related species, a single colony may have eight to 40 queens (anon. ag.arizona.edu). It is assumed from observations at West Palm Beach that colonies have several hundred thousand individuals and appear to be polydomous (nesting in several locations) and polygamous (multiple queens).

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**Figure 4.** Caribbean crazy ant, *Paratrechina pubens* Forel, workers tending brood. Credits: F. J. Santana, Sarasota County



**Figure 5.** Caribbean crazy ant, *Paratrechina pubens* Forel, queen (arrow) and workers, tending larvae. Credits: F. J. Santana, Sarasota County



**Figure 6.** Lateral view of a Caribbean crazy ant, *Paratrechina pubens* Forel, worker. Credits: John Warner, University of Florida



**Figure 7.** Frontal view of the head of a Caribbean crazy ant, *Paratrechina pubens* Forel, worker. Credits: John Warner, University of Florida



**Figure 8.** Acidopore (arrow) at apex of gaster of a Caribbean crazy ant, *Paratrechina pubens* Forel, worker. Credits: John Warner, University of Florida

# **Foraging and Feeding**

Trails were not observed on a cold morning (approximately 48°F), but as the temperature increased (60°F), ants foraged from nest sites. Although thick trails were seen along sidewalks, trees, shrubs, and structures, no feeding activity was

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**Figure 9.** Lateral view of a Caribbean crazy ant, *Paratrechina pubens* Forel, male reproductive. Credits: John Warner, University of Florida

observed. It is assumed that as other *Paratrechina* species, *P. pubens* will scavenge for food, feed on dead insects, and tend honeydew producers. Sweet liquid ant bait was fed upon when placed directly on an active trail, but recruitment to the bait was not observed.



**Figure 10.** Caribbean crazy ants, *Paratrechina pubens* Forel, feeding on NecDew© sweet ant bait. Credits: Rudolph H. Scheffrahn, University of Florida

## **Nest Sites**

Ants were observed emerging from soffits, between railroad ties used in landscaping, under wooden debris, underground electrical conduits, and cracks in cement. They will probably nest in numerous locations.

# Pest Status

In the last few years, most of the reports of *P*. *pubens* infestations have come from pest control operators in and around the southeast Florida "Treasure Coast" from West Palm Beach north to



Figure 11. Nest of Carribbean crazy ant, *Paratrechina pubens* Forel. Credits: F. J. Santana, Sarasota County

Port St. Lucie, where trails consisting of thousands of ants have been observed along sidewalks, buildings, and gardens, causing property owners to complain. Sprays and granular applications of residual insecticides seemingly have had little or no effect in controlling this non-biting nuisance ant.

## Management

Until research is done on management techniques, we recommend the use of contact residual insecticides sprayed along active trails and nest sites to reduce ant populations, followed a few days later by sweet ant baits placed at numerous locations along trails and frequently replaced with fresh bait. Always follow label directions.

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