

## THE INTRODUCED BIG-HEADED ANT *PHEIDOLE* *MEGACEPHALA* IN SOUTHERN COLOMBIA

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Previous studies published in 2005 and 2006 about the inventory of urban ants in warm areas of Colombia (24°C, 70% relative humidity, 1000 meters above sea level), included four unidentified species of the genus *Pheidole*, which contributed with a frequency of 11.7%. Only two exotic species showed higher frequency of capture, the ghost ant *Tapinoma melanocephalum* (28.5%) and the crazy ant *Paratrechina longicornis* (25.6%). The current review of the material collected (1322 samples) in five cities of the Department of Valle (Cali, Jamundí, Palmira, Buga and Tulúa) confirmed the presence of the big-headed ant *Pheidole megacephala* Forel in 9.4% of the samples. In all cities the infestation for *P. megacephala* was found in the indoors targeted, principally around bathrooms and kitchens. This species was not found in the city of Buenaventura, located on the Pacific Coast. An analysis of association between urban ants, based on 555 samples from Cali, resulted in negative interactions between *P. megacephala* versus three other alien species: *P. longicornis* ( $X^2 = 9.46$ ,  $P < 0.005$ ), *T. melanocephalum* ( $X^2 = 6.11$ ,  $P < 0.025$ ), and *Linepithema humile* ( $X^2 = 4.27$ ,  $P < 0.05$ ), which is consistent with other studies on interspecific aggression between tramp ants, suggesting competitive interactions between species. On the other hand, in clinics and hospitals, big-headed ant behaved as mechanical vectors of Gram-negative bacteria of the genus *Staphylococcus*. With this work, *P. megacephala* may be regarded as the third exotic ant species associated with urban areas in southwestern Colombia. It is essential to study the activity patterns of big-headed ant, taking into account different environmental conditions (rainy and dry seasons), which may affect foraging and nesting habits (indoors and peridomestic), food preferences and their breeding colonies.

**Key Words** *Tapinoma melanocephalum*, *Paratrechina longicornis*, negative interactions, gram-negative bacteria.