

## INTRODUCTION

Ants (superfamily Formicoidea) are probably the most successful of all insect groups, occurring everywhere in terrestrial habitats (1). Ant species are grouped into the single family of Formicidae, which is further divided into 21 subfamilies (2), 296 genera and more than 11000 described species (1). One of the major ant subfamilies is the Ponerinae which is often considered "primitive" because its members show many of the putative ancestral traits (3). These include low queen-worker dimorphism, small colony sizes and predatory behavior, all of which may explain the simple social structuring and simple communicative needs of ponerine ants (4). Ponerine ants are primarily insectivorous and forage outside their nest in order to capture their prey (5).

The ponerine genus *Pachycondyla* Smith 1858, with 200 described species, is a large group of ants in the tribe Ponerini, mostly known from tropics and sub-tropics (6). The generic names *Brachyponera* and *Ectomomyrmex* are synonymous with *Pachycondyla*. The nesting and social biology of *Pachycondyla* is variable (7, 8). This genus lives in colonies of a few dozen to a few thousand workers. Several species of *Pachycondyla* are specialized termite predators or are nectar feeders; however, most species are leaf litter inhabitants that are generalist scavengers or predators who subdue their prey with their venom (9, 10).

Adverse reactions have been reported in humans after being bitten or stung by ten genera from six subfamilies of such ants (11). Excluding the imported fire ants (*Solenopsis* spp.), *Pachycondyla* is responsible for most cases of anaphylaxis throughout the globe (11). The two most notorious species are *P. chinensis* and *P. sennaarensis*. Allergic and anaphylactic reactions from *P. chinensis* have been reported from China (12), Japan (13), Vietnam (14), New Zealand (15), Korea (16), Taiwan and the United States (13, 17). Similar problems after the stings of *P. sennaarensis* were first reported from the United Arab Emirates (18). *Pachycondyla sennaarensis* (Mayr, 1862), distributed throughout the African tropics, was first described as *Ponera sennaarensis* by Mayr in 1862 (19). It is an aggressive species from the Arabian Peninsula (20, 21). Dejean and Lachaud (22) who studied the species in Zaire, described it as partially feeding on seeds. Iranian Samsum ants were unknown until recently when *Pachycondyla sennaarensis* (Hymenoptera: Formicidae) was reported from southern and southeastern Iran (23, 24). Paknia believes that the evolution of omnivory, including seed consumption, from carnivory