

sented by social parasites, which are rarely collected in tropical environments.

The species that spend most of their life cycles inside the soil, called here subterranean, seldom visit the surface and represent one of the new frontiers in myrmecology, as this is the relatively less known segment of the fauna and so has the potential to reveal relevant new taxa (Silva & Silvestre, 2004). For instance, an exclusively underground ant, *Dolopomyrmex pilatus*, was recently discovered in Southwestern United States (Cover & Deyrup, 2007). In the Neotropical region, subterranean ant guilds are composed mostly by the Cerapachyinae, most Ecitoninae and Leptanilloidinae, certain species of Myrmicinae that either live and forage exclusively in the deeper layers of soil (*Tranopelta*, for instance), and the relatively very small hypogaecic *Carebara* and some *Solenopsis*, which are also very frequent in the upper layers of soil (Silva & Silvestre, 2004).

The techniques currently in use for the collection of hypogaecic ants are subterranean baited pitfall traps (Brandão *et al.*, in press), subterranean baits (Silvestre, 2000; Morini *et al.*, 2004), cylindrical probes (Ryder Wilkie *et al.*, 2007), baited sieve buckets (using palm oil, tuna and cookies) (Berghoff *et al.*, 2003), and soil submitted to Winkler extractor (Silva & Silvestre, 2004). However, these techniques reach relatively small depths, except for the cylindrical probes which can sample ants up to one meter below the surface soil. So, techniques to access the ant diversity that apparently abounds in the middle and lower soil horizons and that remains to be discovered are to be improved (Cover & Deyrup, 2007). We investigated the diet of fossorial reptiles in Central Brazil, based on the analysis of the stomach contents of amphisbaenian reptiles from Minaçu County, Goiás, giving special attention to the ants found in these contents. In so doing, we compare the efficiency of the traditional techniques with the results obtained here. We assume that these reptiles have relatively high mobility and are able to forage at a depth greater than that achieved by the above mentioned techniques.

Several behavioral associations have been reported between ants and different reptiles, such as predation (Riley *et al.*, 1986; Cruz-Neto & Abe, 1993; Barros Filho & Valverde, 1996; Colli & Zamboni, 1999; Kearney, 2003; Wetterer & Moore, 2005; Staller *et al.*, 2005; Bernardo-Silva *et al.*, 2006; Whitfield & Donnelly, 2006; Goldsbrough *et al.*, 2006), and inquilinism (Brandão & Vanzolini, 1985; Riley *et al.*, 1986; Oliveira & Della Lucia, 1993).

The amphisbaenian genus group is represented by *circa* 160 species of fossorial reptiles with world-

wide distribution (Uetz, 2002). In Brazil, this group is represented by six genera (*Amphisbaena*, *Anops*, *Aulura*, *Bronia*, *Cercolophia* and *Leposternon*), comprising 44 species (Barros Filho & Valverde, 1996). These reptiles develop their life cycles almost entirely restricted to the interior of loose or sandy soil of tropical and temperate environments (Kearney, 2003). Due to their habits, they are seldom collected and/or observed, and little is known on their biology and distribution (Gans, 1978; Barros Filho & Valverde, 1996). The use of chemical clues for prey detection and identification was described for *Blanus cireneus* (López & Salvador, 1992, 1994; López & Martin, 1994). However, the prey choice mechanism remains uncertain for most species in this group (López *et al.*, 1991). According to some studies (Riley *et al.*, 1986; Cruz-Neto & Abe, 1993; Barros Filho & Valverde, 1996; Colli & Zamboni, 1999; Kearney, 2003; Bernardo-Silva *et al.*, 2006), the diet of these reptiles consists mainly of small arthropods, mostly isoptera, hymenoptera (especially ants), coleoptera and arachnids. Ants have relatively great importance (volumetric and numeric) in the amphisbaenian diet (Colli & Zamboni, 1999); there are records of both colonial and nomadic species in the stomach contents of these reptiles (Riley *et al.*, 1986; Bernardo-Silva *et al.*, 2006).

MATERIAL AND METHODS

We took advantage of the exceptional opportunity of the filling of the Serra da Mesa hydroelectric dam in Rio Tocantins, and the fauna rescue (from 1992 to 1997) in Minaçu county, state of Goiás, Central Brazil (13°43'S 48°15'W), which resulted in the collection of approximately 400 specimens of fossorial reptiles. From this total, we obtained permission to dissect 64 specimens (25 of *Amphisbaena vermicularis*, 10 of *A. fuliginosa*, 4 of *A. alba*, and 25 of *Leposternum infraorbitale*), which had their digestive tract dissected.

The ants found in the amphisbaenian stomach contents were sorted out into morph-species and, whenever possible, identified to species level by comparison with the material deposited in the Museu de Zoologia da Universidade de São Paulo (MZUSP) ant collection. Most of these ants were found fragmented, so the number of heads was used to estimate the number of individuals of each morph-species.

All amphisbaenians and the ants are deposited in the appropriate MZUSP collections.