

Our results suggest that traditional techniques of hypogaeic ants collection portray with much greater fidelity the underground ant fauna than the analysis of fossorial reptiles' stomach contents, due to the relatively low ant diversity found in this kind of samples, and also to the low observed frequencies in relation to the average size of ant colonies.

Despite the record of *Amphisbaena alba* as a facultative inquiline in nests of *Atta cephalotes* (Riley *et al.*, 1986), we found no *Atta* ants in the stomach contents examined in any of examined reptiles, including *A. alba*.

Notwithstanding the opinion of Webb *et al.* (2000) that the reptiles may evade raiding ant nests, avoiding being onslaught by the great number of workers in most colonies, we believe that the ants' soft bodied larvae and pupae would be quickly digested and thus seldom would be preserved in reptiles' stomach contents, even in ant species which pupae are covered by cocoons. This may explain why we have found no immature in the studied material. However, there is a record of an ant larva in the stomach content of *Bipes biporus* (Kearney, 2003). One of the reviewers of the manuscript, was kind enough to suggest that this may also depend on the time elapsed between capture and fixation of the reptile.

Interestingly we recorded workers of the epigaeic *Eciton* and *Labidus praedator* (Ecitoninae) in the stomach contents of amphisbaenian reptiles, which indicate that amphisbaenians forage also on the soil surface, as suggested by Bernardo-Silva *et al.* (2006) and observed by Gorzula *et al.* (1975). Also, one of the ant individuals found in the stomach contents of an *Amphisbaena alba* is a large soldier of *Eciton mexicanum*, suggesting also that these reptiles are not reluctant to invest against potentially aggressive ants.

Ecitoninae army ants include genera (*Eciton*, *Labidus*, *Neivamyrmex*, *Nomamyrmex* and *Cheliomyrmex*) which show a primarily Neotropical distribution, encompassing predatory, nomadic species, with life cycles that alternate migratory and stationary phases (Palácio, 2003). Ecitoninae includes species that forage both on the soil surface (*Eciton* and *Labidus praedator*) as in the underground (other species of *Labidus*, all species of *Neivamyrmex*, *Nomamyrmex* and *Cheliomyrmex*; Nascimento *et al.* 2004; Quiroz-Robledo *et al.*, 2002). *Eciton*, *Labidus* and some *Neivamyrmex* can be easily spotted in the field by their dense columns composed of sometimes thousands of workers, which move in compact rows. The biology of *Nomamyrmex* remains unknown, but it is believed that it presents hypogaeic habits (Palácio, 2003). We know very little on the biology of *Chelio-*

myrmex species; O'Donnell *et al.* (2005) reported that *C. andicola* prey on large-bodied ground dwelling invertebrates and, probably, vertebrates, using (possibly) their unusual mandibles and stings to pierce and grip the integument of non-arthropod prey animals, and for rapidly subduing large-bodied prey, respectively. Despite the abundance of Ecitoninae in Neotropical forests (Kaspari & O'Donnell, 2003), data on the structure of their communities and ecological impacts are limited (O'Donnell *et al.*, 2007, but see Berghoff *et al.*, 2008, and included references for Panama's Canal Zone). Most of what is known about the biology of Ecitoninae is derived from observations on the behavior of *Eciton burchelli* (see Gotwald, 1995; O'Donnell *et al.*, 2007).

The exclusive occurrence of Ecitoninae ants in stomach contents of fossorial reptiles studied by us could be explained by the ability of amphisbaenians to trace chemical trails, even underground. The experiments made by Riley *et al.* (1986) suggest that *Amphisbaena alba* can follow the chemical trails left by *Atta cephalotes* and that the orientation cue used by these reptiles is predominantly olfactory.

The biology of ant species other than Ecitoninae that also live in the deeper layers of soil is unknown as well. So, new information on this group is expected from the improvement of collection techniques adapted to this habitat, which may result in more intense assessments in this relatively poorly known substrate.

RESUMO

A diversidade de formigas no conteúdo estomacal de répteis fossoriais foi comparada à riqueza de formigas subterrâneas coletadas com o uso de técnicas tradicionais e modernas para sua coleta. Analisamos o trato alimentar de 64 espécimes de anfisbenídeos (4 Amphisbaena alba, 10 A. fuliginosa, 25 A. vermicularis e 25 Leposternon infraorbitale) coletados durante o resgate da fauna para a construção da represa da Hidroelétrica da Serra da Mesa no Rio Tocantins (de 1992 a 1997), na cidade de Minaçu, Goiás, Brasil. Encontramos apenas cinco espécies de formigas presentes nos conteúdos estomacais aqui examinados, todas pertencentes à subfamília das formigas-de-correição, Ecitoninae. Ao contrário, as técnicas tradicionais de coleta de formigas subterrâneas são muito mais eficientes que o exame dos conteúdos estomacais de répteis fossoriais, coletando uma fauna muito mais rica e diversa de formigas. A ocorrência exclusiva de formigas-de-correição no trato alimentar destes répteis fossoriais sugere que eles seguem trilhas químicas deixadas pelas formigas à medida que se elas movimentam no