

Comunicação

Predation on the Small worm lizard *Leposternon microcephalum* (Squamata, Amphisbaenidae) by the snake *Elapomorphus quinquelineatus* (Serpentes, Colubridae, Elapomorphinae) in Marechal Floriano, Espírito Santo, Brazil

Mikael Mansur Martinelli¹ and Thiago Marcial de Castro²

¹Setor de Zoologia, Museu de Biologia Prof. “Mello Leitão”, Avenida José Ruschi, 4, Santa Teresa, Espírito Santo, 29650-000, Brazil.

²Bourscheid Engenharia e Meio Ambiente S.A., Avenida Nossa Senhora da Penha 570, Vitória, Espírito Santo, CEP: 29.055-131, Brazil.

*Autor correspondente: mansurmartinelli.m@gmail.com

ABSTRACT Here we describe the predation of the Small worm lizard *Leposternon microcephalum* (Amphisbaenidae) by the snake *Elapomorphus quinquelineatus* (Colubridae, Elapomorphinae) on 17 May 2008. This event took place at Brunoro's Farm, Marechal Floriano, state of Espírito Santo, Brazil. The specimen was road killed into the farm, after stomach analysis was found an intact *L. microcephalum* less digested, confirming Afisbaenides in diet of *E. quinquelineatus* and the first predation record of *L. microcephalum* by *E. quinquelineatus*.

KEY WORDS: predation, *Leposternon microcephalum*, *Elapomorphus quinquelineatus*.

INTRODUÇÃO

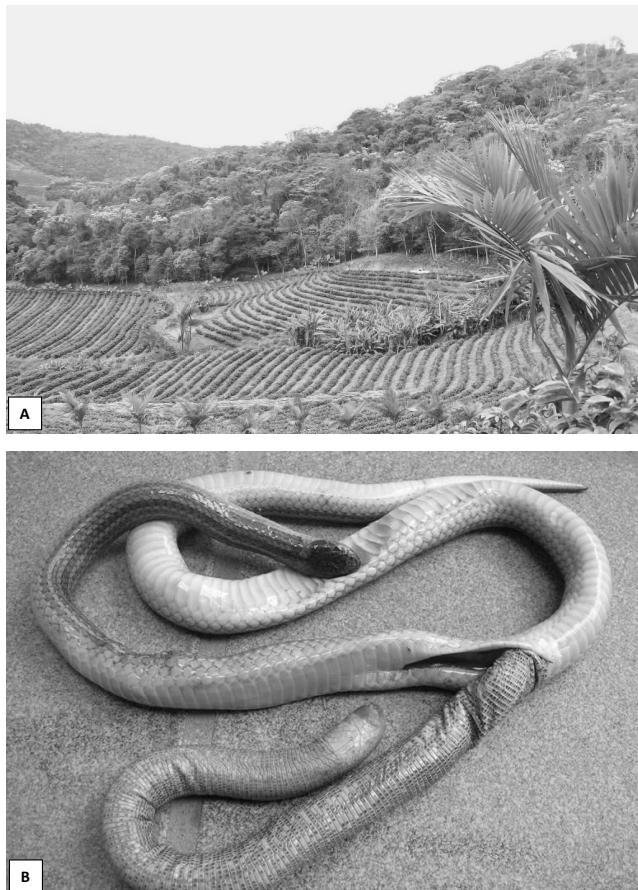
The genus *Elapomorphus* currently comprises 15 species of aquatic xenodontine terrestrial snakes widely distributed in South America, occurring from Colombia to Argentina (LEMA et al., 1983, Vanzolini, 1948). Some published data show that these snakes feed mainly on extended vertebrates and underground vertebrates like amphisbaenas and gymnophionas (the most commonly available prey in the habitats they live), but also prey on slugs and insects (LEMA et al., 1983, Vanzolini, 1948, Hartmann et al., 2009). The Raddi's Lizard-Eating Snake *Elapomorphus quinquelineatus* Raddi, 1820 is a small snake, nocturnal and fossorial, inhabits open areas, special in the border forest, occasionally found in leaf litter in eastern of Minas Gerais and Espírito Santo south to Rio Grande do Sul (Ferrarelli, 1993), it feeds

on amphisbaenas, lizards, snakes, frogs and earthworms (MARQUES et al., 2004; HARTMANN et al., 2009) and is considered a habitual cryptozoic (CARDOSO et al., 2001).

Here we document an unusual predation event based on the examination of one specimen of *Elapomorphus quinquelineatus* collected on 17 May 2008 was collected an adult of *E. quinquelineatus* (Collected by T. M. Castro) on Brunoro Agro-avícola Farm (Figure 1A), Marechal Floriano, state of Espírito Santo, Brazil ($20^{\circ}26'38.75''S/41^{\circ}11'05.98''O$, 920 mts). Field area with historic Montana Atlantic Forest, being replaced by pastures and crops like coffee, leaving only small and isolated fragments. The area has three forest fragments as an area of legal reserve in the recovery stage. Was found an adult the adult *E. quinquelineatus* foraging on the

border of the fragment around 8:00 h p.m.. The specimen was killed by ether inhalation and has the length taken.

Figura 1. A) Brunoro Agro-avícola Farm. B) An adult of *Elapomorphus quinquelineatus* and the prey (*Leposternon microcephalum*).



We dissected the stomach of this *E. quinquelineatus* using a pair of scissors by a short incision in the medium ventral region. Upon dissection, we found that the snake (SVL 775 mm, tail length 75 mm) had ingested an adult of Small head Worm Lizard, *L. microcephalum* (SVL 410 mm, tail length 30 mm) (Figure 1B). The Small head Worm Lizard was bit coverage by a gelatinous secretion and was at an early stage of digestion and positioned head-first in the stomach, which suggests that Lizard was eaten hours before was collected. *L. microcephalum* is a fossorial lizard, has a wide area of occurrence, found in Brazil, Argentina, Bolivia, Paraguay e Uruguay (GANS, 2005) occurring in all non amazonica brasilián area (GANS,

1971; RIBEIRO et al., 2008).

Hartmann et al., 2009 and Marques et al., 2004 reviewed the diet of Brazilian snakes and found that most species feed largely on ectothermic preys, although ophiophagous preys may require low energy expenditure due to easy ingestion (Pough et. al.), and it's could be one of the most frequent item in *Elapomorphus* generous diet (LEMA et al., 1983; CARDOSO et al., 2001; MARQUES et al., 2004; HARTMANN et al., 2009). This is the first record documented of predation on *L. microcephalum* in *E. quinquelineatus* and extends our knowledge about the diet of this snake. Both examples were deposited on Zoological Collection at Museu de Biologia Prof. Mello Leitão (MBML), Santa Teresa, Espírito Santo state under the record MBML 2194 for *Elapomorphus quinquelineatus* and MBML 2195 for *Leposternon microcephalum*.

REFERÊNCIAS BIBLIOGRÁFICAS

- Cardoso, S.T., Rocha, M.M.T. & Puerto, G. (2001) *Elapomorphus quinquelineatus*. **Herp. Rev.** 32(4):262-263.
- Ferrarelli, H. 1993. **Sistemática Filogenia de Elapomorphus, Phalotris e Apostolepis (Serpentes: Colubridae: Xenodontinae)**. Dissertação de Mestrado, Depto. De Zoologia da Universidade de São Paulo. 199pp.
- Gans, C. (1971) **Studies on amphisbaenians (Amphisbaenia, Reptilia): 4. A review of the amphisbaenid genus Leposternon**. Bull. Amer. Mus. Nat. Hist. 144:379-464.
- Gans, C. (2005) **Checklist and bibliography of the Anphisaenae of the world**. Bull. Amer. Mus. Nat. Hist. 289:1-130.
- Hartmann, P.A., Hartmann, M.T. & Martins, M. (2009) Ecologia e história natural de uma taxocenose de serpentes no Núcleo Santa

Virgínia do Parque Estadual da Serra do Mar, no sudeste do Brasil.

Biota Neotrop., 9(3): <http://www.biotaneotropica.org.br/v9n3/pt/abstract?article+bn03609032009>.

Lema, T. Araújo, M.L. & Azevedo, A.C.P. (1983). **Contribuição ao conhecimento da alimentação e do modo alimentar de serpentes do Brasil**. Comum. Mus. Cienc. PUC-RS 26: 41-121.

Marques, O.A.V., Eterovic, A. & Sazima, I. (2004) **Snakes of the Brazilian Atlantic forest: an illustrated field guide for the Serra do Mar Range**. Holos, Ribeirão Preto. 205p.

Pough, F.H., Andrews, R.M., Cadle, J.E., Crump, M.L., Savitzky, A.H., Wells K.D. (2001) **Herpetology**. Prentice-Hall, NJ: Prentice-Hall Inc., 612p.

Ribeiro, S.; Vaz-Silva, W. Santos Jr, AP. 2008. **New pored Leposternon (Squamata, Amphisbaenia) form brazilian cerrado**. Zootaxa, 1930:18-38.

Vanzolini, P.E. (1948). Notas sobre os ofídios e lagartos de Cachoeira das Emas, no município de Pirassununga, Estado de São Paulo. **Rev. Brasil. Biol.**, 8: 377-400.