

Occurrence of *Strongyluris oscar* (Nematoda; Heterakidae) in *Enyalius bilineatus* (Squamata: Leiosaurinae) from the Brazilian Atlantic Forest

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The helminth fauna of South American lizards has recently received great attention, with many new hosts, localities, and species recorded (Bursey et al., 2005a, b; Durette-Desset et al., 2006; Bursey and Goldberg, 2007; Vrcibradic et al., 2008; Ávila and Silva, 2010). *Enyalius* Wied, 1821 is a genus of the Leiosauridae and contains nine species of diurnal insectivorous lizards, widely distributed throughout several Brazilian biomes such as the Atlantic rainforest, Amazon, “*Caatinga*”, semi-arid woodland, and “*Cerrado*”, savannah-like vegetation (Barreto-Lima, 2009; Barreto-Lima et al., 2011). Though *Enyalius* is widely-distributed in Brazil, few studies have investigated its parasite helminth fauna (e.g. Vicente et al., 1993; Durette-Desset et al., 2006; Sousa et al., 2007; Vrcibradic et al., 2007, 2008, Barreto-Lima et al., 2011). *Enyalius bilineatus* (Duméril & Bibron, 1837) is a small tropical lizard which lives in the southeast Brazilian Atlantic Rainforest (Jackson, 1978; Barreto-Lima, 2009) and feeds mainly on terrestrial arthropods like ants, orthopterans and cockroaches (Zamprogno et al. 2001; Teixeira et al. 2005; Barreto-Lima, 2009). Here, we investigated parasites of this lizard species.

Specimens were collected between 2002 and 2003 using pitfall traps in a fragment of regenerating forest in the Fazenda Santa Cândida Municipal Biological Reserve (21°45'35" S, 43°20'50" W - Datum WGS84), Juiz de Fora municipally, Minas Gerais

state, Southeastern Brazil. Adult lizards (three females and one male) were euthanized with ether, fixed in a 10% formalin solution and stored in 70% ethanol. Specimens were dissected before being deposited in the Herpetological Collection of Universidade Federal de Juiz de Fora. Any helminths were removed from the lizards' gastrointestinal tract (stomach, small and large intestines including the caecum), preserved and stored in 70% ethanol. Nematodes were removed, counted, clarified with lactophenol and examined under an optical microscope (Leica DM5000B) coupled with the LAS program (Leica Application Suite) for image analysis. Helminths were deposited in the Helminthology Collection of Faculdade de Engenharia de Ilha Solteira (CHFEIS 005-007).

We found individuals of *Strongyluris oscar* Travassos 1923 (Nematoda: Heterakidae) in the lizards (average = 3/host), indicating a low level of infection. *Strongyluris oscar* seems to be extremely polymorphic, since *S. freitasi* Alho 1969, *S. travassosi* Alho 1969 and *S. sai* Travassos 1926 have been considered a synonymous of *S. oscar* (Vicente, 1981). This parasite species is a generalist with respect to host use, with a heteroxenic life cycle using arthropods as intermediate hosts. This nematode has already been found in other *Enyalius* lizards, such as *E. iheringii* (Vrcibradic et al., 2008) and *E. perditus* (Barreto-Lima et al., 2011 and references), as well as other lizards like *Ameiva ameiva* (Teiidae), *Eurolophosaurus nanuzae*, (Tropiduridae), and several species of *Anolis* (Dactyloidea), *Mabuya* (Scincidae), *Stenocercus* and *Plica* (Tropiduridae). In those cases the sites of infection are the stomach and intestine (Ávila and Silva, 2010). The distribution of *S. oscar* is broad, occurring in the Pantanal, Amazon, “*Caatinga*”, Atlantic Forest biomes from Brazil, and in other South American countries, including Argentina (Chaco), Paraguay (Chaco), Ecuador (Amazon), Peru (Amazon) and Bolivia (Ávila and Silva, 2010). Other parasites of

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E. bilineatus include *Rhabdias* spp. (Rhabdiasidae), *Physaloptera lutzi*, *P. retusa* (Physalopteridae), and *Oswaldocruzia benslimanei* (Molineidae) (Ávila and Silva, 2010). Finally, we suggest that *S. oscari* can be a common gastrointestinal parasite of some *Enyalius* species.

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