

The recurrent cases of sap foraging recorded in this population allow us to infer that this resource is an important dietary supplement for this species. Our observation is the first record of sap foraging by *P. periosus* and the first report of the use of native plants as a food resource by a nocturnal Caatinga lizard species.

We thank N. Melo and L. Melo for logistic support, G. Cadete for the identification of the specimens of *S. brasiliensis*, Conselho Nacional de Desenvolvimento Científico e Tecnológico - CNPq for the scholarships grant to MJMA (165647/2014-0) and EMXF (309424/2011-9), and Sistema de Autorização e Informação em Biodiversidade - SISBIO for the authorization number 47651-1.

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**PODARCIS MURALIS (Common Wall Lizard). PARASITE LOAD.** Herein we present the first record of the tapeworm *Mesocoeloides litteratus* in *Podarcis muralis* in its native range in Western Europe. The life cycle of this parasite comprises presumably two intermediate hosts and one definite host, although details remain unresolved. Most likely, the first intermediate host is a coprophagous arthropod that transmits the tapeworm parasite to its predators, usually a rodent, amphibian, lizard, or bird. The development into the characteristic tetrathyridium larvae occurs in the second intermediate host. Upon ingestion of the intermediate host by a large mammal, the definitive host, the tapeworm reaches its adult stage in the intestinal tract, reproduces and the life cycle is completed. In the second intermediate host (e.g., a lizard), peritoneal infection occurs through active

penetration of the intestinal wall by ingested tapeworm larvae. Here, the worms reproduce asexually by longitudinal fission which leads to the high parasite load typically observed (Bonfanti 2004. J. Vet. Med. A Physiol. Pathol. Clin. Med. 51:435–438).

A number of lizards have been described as intermediate hosts, including several species belonging to the family Lacertidae: the Anatolian lizard *Anatololacerta danfordi*, in Turkey (Gürelli et al. 2007. North-West J. Zool. 3:96–104), the Green Lizard, *Lacerta viridis*, in Bulgaria (Biserkov and Kostadinova 1998. J. Helminthol. 72:267–271), the Balkan Green Lizard, *Lacerta trilineata*, from Turkey (Yildirimhan et al. 2011. Turk. J. Zool. 35:519–535), and the Sand Lizard, *Lacerta agilis*, from the Czech Republic (Literak et al. 2004. Folia Parasitol. 51:45–49). Within the genus *Podarcis*, only *P. muralis* has been previously described as host of *Mesocoeloides lineatus* (cited in Literak et al., *op. cit.*). A low (1 out of 43 animals) level of infection in *P. muralis* by an unidentified *Mesocoeloides* was described in a non-native population in Ohio (Burke et al. 2007. J. Herpetol. 41:755–757), originally introduced from Italy.

As part of an ongoing research project we collected 16 adults (3 males and 13 females) from a *P. muralis* population in the French Pyrenees in April 2015 (Cole de la Core; 42.8586°N, 1.1050°E; 1395 m elev.). The animals were dissected and their parasite load investigated. Two of the animals were infected with larval cestodes. We found 21 tetrathyridia in the peritoneal cavity of one female, and a high load of tetrathyridia in a second female (Fig. 1). In addition, the second female had a large number of encapsulated cestodes in the liver (Fig. 1C). Prevalence of infestation in lizards is usually around 10% (McAllister 1988. J. Wildl. Dis. 24:160–163), which is consistent with our observation (13%).

Species identification based on morphological traits of tetrathyridia is unreliable due to a general lack of diagnostic features. Therefore, we referred to the use of the 18S rRNA gene as a molecular marker. We extracted genomic DNA from three individual larvae using the Qiagen DNeasy Blood & Tissue kit. We PCR amplified part of the 18S rRNA gene with the previously published primers TimA and TimB (Norén and Jondelius 1999. Cladistics 15:103–112). Comparison of the obtained sequences with the NCBI nucleotide database revealed 100% identity to 18S rRNA sequences of *Mesocoeloides litteratus* (e.g., JN088189). We therefore conclude that this is the first report of the *Podarcis muralis* as an intermediate host of *Mesocoeloides litteratus*.

Permits for the research herein were issued by the Direction Régionale de l'Environnement of Midi-Pyrénées, #2012-10 and #2012-11).

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**PTYCHOGLOSSUS PLICATUS (Taylor's Large-scaled Lizard). NESTING.** *Ptychoglossus* is a lizard genus with 15 described species distributed in wet tropical forest from Costa Rica to Brazil and Perú. Knowledge of many of the species in this genus is limited to information about geographic distribution, habitat, and diet (Savage 2002. The Amphibians and Reptiles of Costa Rica: A Herpetofauna between two Continents, between Two Seas. University of Chicago Press, Chicago, Illinois, 934 pp.). Three *Ptychoglossus* species are known to occur in Panamá, including the diurnal *P. plicatus* (Savage 2002, *op.cit.*). Here, we document the first observation of *P. plicatus* laying eggs in the nests of *Cyphomyrmex* sp., a fungus-growing ant.

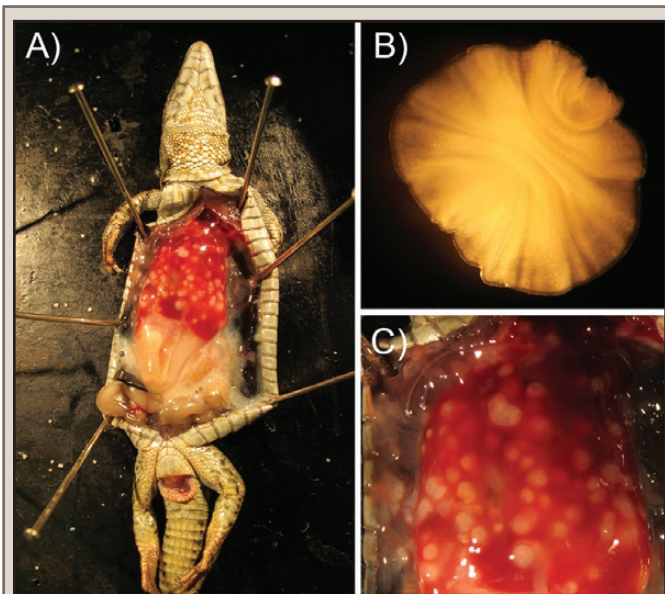


FIG. 1. A) Dissected female of *Podarcis muralis* with heavy infestation by *Mesocoeloides litteratus* (tetrathyridia). B) Single tetrathyridia that was found in the peritoneal cavity. C) Magnification of the liver of the infested female with encapsulated tetrathyridia.