

## A new parasite has been discovered in black green lizards from the Iberian Peninsula

April 3 2009



Male of black green lizard (Lacerta schreiberi). Image: Stuart J.E. Baird/SINC

An international team of scientists has discovered a new acarine species (*Ophionyssus schreibericolus*) that lives off black green lizards from the Iberian Peninsula. This involves the first recording of the *Ophionyssus* genus that feeds off and lives on animals endemic to the peninsula. The



researchers now think that these parasites could be found in other reptiles in the region.

The new acarine species is an ectoparasite that belongs to the *Macronyssidae* (Mesostigmata) family. The interest in this finding lies in the animal that pays host to this parasite, namely the black green lizard (*Lacerta schreiberi*) that lives in the north western region of Spain and Portugal and extends into the Spanish Central System, with a few isolated populations in the south.

"This reptile, captured on the Spanish-Portuguese border, is endemic to the Iberian Peninsula and has continued to exist in geographically isolated populations since the Pleistocene Age (more than 10,000 years ago)", María Lourdes Moraza, the principal author and researcher from the Department of Zoology and Ecology at the University of Navarre (UNAV) explains to SINC.

The research, which has been published recently in the journal entitled *Zootaxa*, shows that both adult individuals (male and female) and certain immature *Ophionyssus schreibericolus* instars feed off the lizard. "This mite feeds on reptile blood and tissue fluid, and has been found in 65% of the reptiles analysed, with a parasitation mean of 6 mites per reptile" Moraza points out.

A total of 127 black green <u>lizards</u>, which are a protected species, was collected in April and May of 2006 and 2007. After examining these lizards and extracting samples from tail tissue, the scientists released them in the same place where they were captured. The scientists detected <u>parasites</u> in 83 reptiles.

The mites have taken on the name *schreibericolus* owing to their relationship with the host species, the black green lizard (*Lacerta schreiberi*). The researchers analysed 137 samples of the mite (the



females are slightly different to the males) in 25 lizards (8 females, 15 males and two of unknown sex).

"Knowledge about the presence and biology of this and other parasite species is important in order to understand the different models of parasitism", Moraza emphasises.

The experts have emphasised to SINC that the information the mite brings is "essential in evaluating their importance in the transmission of diseases, host resistance mechanisms and evolutionary mechanisms".

Source: Plataforma SINC

Citation: A new parasite has been discovered in black green lizards from the Iberian Peninsula (2009, April 3) retrieved 19 April 2024 from <a href="https://phys.org/news/2009-04-parasite-black-green-lizards-iberian.html">https://phys.org/news/2009-04-parasite-black-green-lizards-iberian.html</a>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.