



## New species of *Spauligodon* (Nematoda: Pharyngodonidae) in *Xenosaurus platyceps* (Squamata: Xenosauridae) from Mexico

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During a helminthological examination of flathead knob-scaled lizards, *Xenosaurus platyceps* King and Thompson 1968, from Mexico, 4 of 10 were found to harbor 56 (14 male, 42 female) nematodes of an undescribed species of *Spauligodon* Skrjabin, Schikhobalova and Lagodovskaja, 1960. The lizard family Xenosauridae is composed of two well-differentiated genera: *Shinisaurus* in southern China and *Xenosaurus* in Mexico and Guatemala (Pérez-Ramos *et al.*, 2000). *Xenosaurus platyceps* is a stocky, medium-sized species endemic to the Mexican state of Tamaulipas where it occurs in dry oak and tropical deciduous forests of the Sierra Madre Oriental (Flores-Villela 1993; Flores-Villela and Gerez, 1994). The ecology of *X. platyceps* has been studied (Lemos-Espinal, 1997), but, to our knowledge, there are no helminthological reports for it.

Currently, 43 species are assigned to *Spauligodon*; 20 from Palaearctic realm, 8 from Neotropical realm, 7 from Ethiopian realm, 4 from the Nearctic realm, 2 from the Indo-Pacific realm and 2 from the Australian realm (Bursey *et al.*, 2005). The purpose of this article is to describe the 44<sup>th</sup> species of *Spauligodon*.

**Materials and methods.** Ten *Xenosaurus platyceps* were collected by hand in Tamaulipas State, Mexico during July 1970 from beneath rocks. Three adult lizards were necropsied within 30 days of capture, following euthanasia by Nembutal® and the body cavity was opened by a longitudinal incision from vent to throat. The digestive tract was removed, opened, and searched for helminths under a dissecting microscope. The lungs and body cavity were also searched. Only nematodes were found which were fixed in alcohol-formalin-acetic acid (AFA) and placed in 70% ethanol for storage. The remainder of the sample, six immature and 1 adult, were preserved in formalin and transferred to isopropyl alcohol for storage as museum specimens. These preserved specimens were necropsied in October 2005 (some 35 years after capture) and the adult was found to be parasitized by nematodes; all immature lizards were negative for nematodes. The nematodes, both AFA and formalin fixed, were placed in lactophenol, allowed to clear, and examined under a light microscope. Drawings were made with the aid of a microprojector. Measurements are given in micrometers (unless otherwise stated) as mean  $\pm$  1 SD with range in parentheses. Lizards were deposited in the herpetology collection of the Florida Museum of Natural History, University of Florida, Gainesville, Florida, and catalogued as UF42025-42032, 54911, and 104135; nematodes were deposited in the United States National Parasite Collection (USNPC), Beltsville, Maryland, U.S.A.

### *Spauligodon xenosauri* n. sp.

(Figs 1–8)

**General:** Small nematodes, cylindrical body tapering anteriorly, truncate posteriorly; moderate sexual dimorphism, males about one third length of recently gravid females to one-fifth length of fully gravid females. Cuticle with fine, regular transverse striations, 1–2 apart and distinct annuli, 6–8 wide in males, 15–18 wide in females. Lateral alae present in males, absent in females. Mouth opening triangular, bounded by 3 bilobed lips, 6 cephalic papillae; 2 lateral amphids present. Esophageal bulb separated from corpus by small constriction.

**Male:** Based on 10 specimens. Small, white, fusiform nematodes; distinctly truncated posterior end. Length excluding tail filament  $1.35 \pm 0.10$  mm (1.18–1.47 mm), width at level of excretory pore  $191 \pm 12$  (179–217). Lateral alae extending from level of nerve ring to anterior border of caudal alae; widest (approximately 60) at posterior end. Mouth