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A NEW SPECIES OF *AMPHISBAENA* FROM THE STATE OF MATO GROSSO, BRASIL (REPTILIA: AMPHISBAENIA: AMPHISBAENIDAE)

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ABSTRACT

Amphisbaena talisiae, sp. n., from Serra da Pitomba (15°49'S, 52°10'W), a small, slender species, is characterized by having four preanal pores, 218 body annuli, caudal autotomy on the seventh annulus (tail broken and healed), 10/14 segments to a body annulus.

Amphisbaena talisiae, sp. n.

Holotype MZUSP 78808, Brasil: Mato Grosso: Serra da Pitomba, 15°49'S, 52°10'W, 2.vi.94, field number Miguel Rodrigues 94.6101.

DIAGNOSIS

A small, slender species, with four preanal pores, 218 body annuli, autotomy on the seventh caudal annulus, 10/14 segments to a body annulus.

ETYMOLOGY

The name is a toponymic. "Pitomba" is the pleasant fruit of *Talisia esculenta*, family Sapindaceae.

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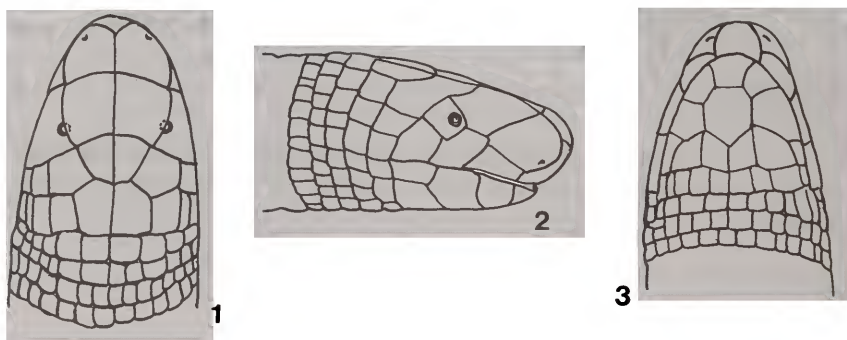
DESCRIPTION (Figs. 1-3)

Small (body length 105 mm), slender (head width 2.5 mm).

Median sutures on the dorsal aspect of the head in the following order of increasing length: (nasals, frontals), parietals, prefrontals. Frontals together oval; parietals pentagonal, moderately elongate; occipitals little differentiated from the segments on their annulus. Nasal large, nostril below and before the center on the scale. Four upper labials, second and third large, the ocular fitting into their upper angle. Fourth upper labial small, squarish. On top of it a large polygonal scale and, on top of this, another large similar scale, in contact with the ocular, the frontal, the parietal, and, behind, with an annulus of scales anchored on the parietals. Symphysial medium-sized, with divergent sides but not quite anvil-shaped. Post-symphysial almost as broad as long, seven-sided. Three lower labials, the second by far the largest, the third small, rectangular. Anterior genials moderate, in ample contact with each other, embracing in front the posterior angle of the post-symphysial. Lateral genials large, in full contact with the third labials. Posterior genials six, the outermost largest.

Body with well marked lateral sulci; no other sulci. Dorsal segments a little longer than broad, broadest ventral ones not quite 1.5 times as broad as long. Preanal pores four, hardly distinguishable. Preanal fold almost semicircular, with six scales.

Color: Dorsally burnt medium brown, darkest on the top of the head, with lighter segment sutures; ventrally uniformly light waxy yellow, the transition gradual on the flanks



Figs. 1 -3. *Amphisbaena talisiae*, holotype.

DISCUSSION

This species is fully characterized by its scale counts. All known forms with four pores and a possible 218 body annuli differ significantly from it in number of segments: *A. munoai* Klappenbach, 1960, from Uruguay, has 12-14/12-20; *A. pericensis* Noble, 1921, from Cajamarca, Peru, 12-16/16-20; *A. plumbea* Gray, 1872, from Argentina, 18-27/20-30; *A. vernicularis* Wagler, 1824, widespread in Central and Northeastern Brasil, 18-26/18-26; *A. spurrelli* Boulenger, 1915, from the Chocó, Colombia, 16-18/16-18.

Of the geographically and ecologically compatible species, *A. neglecta* Dunn and Piatt, 1936, *A. silvestrii* Boulenger, 1902 and *A. leeseri* Gans, 1964 have two pores; *A. camura* Cope, 1862 is a large species with 28-45/27-46 segments; *A. carvalhoi* Gans, 1965, with four pores, has 231-245 body annuli and 12-14/16-18 segments.

ECOLOGICAL COMMENT

The type locality, Serra da Pitomba, or do Barra, is a low mesa, rising to 760 m above mean sea level, over a plain 300 m high. It is made of Devonian sandstones of the Furnas Formation (Drago et al., 1981). Geomorphically, the area is dissected into a series of mesas, the interfluves in the class 3,250-12,720 m, with a very little incised drainage (Mamede, Nascimento and Franco, 1981).

The climate (Nimer, 1979) is typical of Central-Western Brasil ("região Centro-Oeste"): the winter is cool and dry, the summer rainy. Temperatures are moderate: the mean of the warmest month (September or October) does not rise above 26°C, and that of the coldest month (July) falls a little below 20° (let us remember that for subterranean animals the relevant ecological parameter is mean temperature — excesses are buffered by the soil).

Yearly rainfall is good, around 1570 mm, but it is not evenly distributed: 49% of the precipitation falls in the wettest trimester, November-January; in February-April 23%, in August-October 15%; in May-July 3%.

Figure 4 shows the progress of temperature and rainfall along the year at Meruri, Mato Grosso, 15°43'S, 51°44'W, about 50 km WNW of the Serra da Pitomba, at an altitude of 416 m (we may expect the Serra to be a little cooler). It is easy to see that both elements of the climate march in parallel, and that the main feature is a cool dry winter. In fact, there are 4-5 months in the year (usually May to September) that are considered dry, i.e., in which rainfall in

millimeters is less than twice the mean temperature in degrees centigrade (Nimer, 1979).

The soils are mainly dystrophic red-yellow latossols, rather poor chemically, but with very good physical properties and very deep (Rios and Oliveira, 1981). Their depth and texture allow the soils to function as a water reservoir and the vegetation to survive the dry period of the year without stress.

This conjunction of landforms (mesas and other high flat or rolling surfaces), climate and deep soils leads inevitably to cerrado vegetation, and this is what predominates in the area (Dambrós, Dias and Fonzar, 1981). Thus *A. talisiae* joins *A. silvestrii* Boulenger, 1902, *A. neglecta* Dunn and Piatt, 1936, *A. leeseri* Gans, 1964 and *A. carvalhoi* Gans, 1965, in the group of small species of *Amphisbaena* specialized to cerrado.

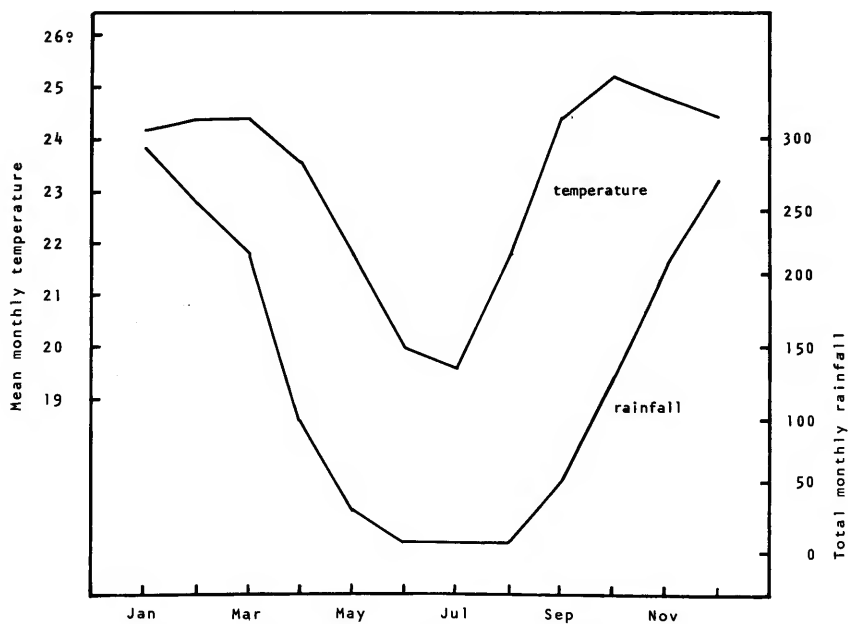


Fig. 4. Temperature and rainfall at Meruri, Mato Grosso, 15°43'S, 51°44'W (data from Ministério da Agricultura, Escritório de Meteorologia, Normais Climatológicas, Vol.5, Mato Grosso e Goiás, Rio de Janeiro, 1969).

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