Papéis Avulsos de Zoologia

MUSEU DE ZOOLOGIA DA UNIVERSIDADE DE SÃO PAULO

ISSN 0031-1049

PAPÉIS AVULSOS ZOOL. 39(3): 29-32

20.XII.1994

A NEW SPECIES OF AMPHISBAENA FROM THE STATE OF SÃO PAULO, BRASIL (REPTILIA, AMPHISBAENIA, AMPHISBAENIDAE)

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ABSTRACT

Amphisbaena sanctaeritae, sp.n., from Santa Rita do Passa Quatro (21°42'S, 47°28'W), is a small, slender species, uniformly colored, with four preanal pores, 269 body annuli, 12/12 segments to a body annulus, autotomy on the 7th caudal annulus. It is compared with South American species having similar scale counts. The ecology of the type locality is briefly discussed.

Keywords: Amphisbaena, Brasil.

Amphisbaena sanctaeritae, sp.n.

Holotype MZUSP 36719, female. Brasil: São Paulo: Santa Rita do Passa Quatro (21°42'S, 47°28'W), September 7, 1974, C.R.F. Brandão coll.

Etymology

From the type locality and its patron saint.

Diagnosis

A small species, uniformly colored, with narrow, pointed, arched head, 269 body annuli, 12/12 segments to a body annulus, autotomy at tail annulus 7.

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Trabalho recebido para publicação em 27.IV.1994 e aceito em 18.V.1994.

Description of holotype (only specimen available)

A small animal (165mm rostro-anal length), slender (3.1mm head width). Head narrow, snout pointed, prominent, high, markedly curved. Only lateral body sulci present, clearly but not strongly marked. Tail broken behind the sixth annulus, break healed.

Rostral scarcely visible from above, narrow, strongly projecting in front of the mouth. Frontals large, oblong, their median suture the longest on top of the head. Parietals moderate, trapezoid, their median suture subequal to that between the nasals. First row of scales behind the parietals with slightly enlarged median scales, barely forming proper occipitals.

Nasals large, parallel-sided; nostril on the antero-inferior corner of the scale, near the suture with the rostral. Three large upper labials, first longest and lowest, second and third subequal in height, third largest in area. Between the third labial and the parietal a large temporal with four unequal sides. Ocular small, diamond-shaped. Eye not visible.

Symphysial small, with curved sides diverging forward, but not quite anvil-shaped. Post-symphysial broad, seven-sided, approximately isodiametric. Three lower labials, second largest. Lateral genials (scale nomenclature according to Vanzolini, 1991) moderate, irregularly triangular. Median genials in two rows, the anterior one with two very large symmetrical elements, the second with three small rounded scales. Post-genial row with eight scales, the outermost one on each side largest.

Body annuli well marked. Segments fairly regular, with reasonably well aligned longitudinal sutures. Four preanal pores, roughly central in position, well formed, functional (with plugs). Anal flap with slightly sinuous edge; with six large scales.

Tail autotomized and healed, with six remaining annuli; tip elongate, with regular longitudinal sutures.

Taxonomy

The combination of scale counts (269 annuli, autotomy on the seventh caudal annulus, 12/12 segments) sets off unambiguously this species among the small amphisbaenas with four pores — in fact among all species of the genus. Only a few forms show comparable scale counts:

Amphisbaena frontalis Vanzolini, 1991, from the fossil sand dunes of the Rio São Francisco (Rodrigues, 1991), an area of very rough caatingas (semi-arid vegetation) has 252-273 annuli, with autotomy on annuli 6-7, but has 14-16/14-16 segments and an entirely different pattern of head scales. Amphisbaena

hastata Vanzolini, 1991, from the same area, has 266-273 body annuli, but 35-37 segments not separated on the flanks by sulci; it has besides a very peculiar and characteristic arrangement of body annuli.

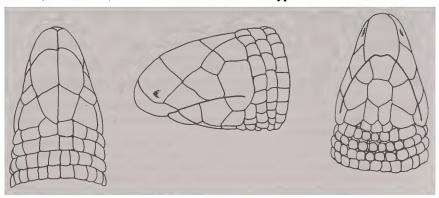
Amphisbaena occidentalis Cope, 1866, from western Peru, redescribed by Gans (1961), has 261-299 annuli; A. minuta Hulse and McCoy, 1979, from the Andes of Argentina in Catamarca, has 265-271, and A. polygrammica Werner, 1901, from Chanchamayo, in the Andes of Perú, has 270. The three forms, however, widely diverge from sanctaeritae in number of segments, besides being geographically and ecologically quite remote.

Amphisbaena neglecta Dunn and Piatt, 1936, from Central Brasil, has 12-14/12-14 segments, but only 151-161 annuli (Gans, 1962).

Ecology

The type locality, Santa Rita do Passa Quatro, lies at an altitude of about 750m (São Paulo, Instituto Geográfico e Geológico, 1962), in moderately hilly country. The rocks belong to the Triassic São Bento Series, and consist of eolian sandstones with doleritic intrusions. The former decompose into very poor soils, the latter into some of the best agricultural soils in Brasil. In the general area of Santa Rita both extreme soil types occur, as well as diverse mixed ones (Setzer, 1942). The pristine vegetation, necessarily dependent upon the quality of the soils, varies from very scrubby cerrados to quite respectable forest with canopy up to 20m high (Setzer, 1942; São Paulo, Instituto Florestal, 1975). Forests have of course been at present almost entirely replaced by agriculture, and even some of the cerrados by pasture.

The collector tells me that the specimen was collected in a low, dry forest ("mata seca") characteristic of intermediate types of soil. It is a facies of



Amphisbaena sanctaeritae, sp.n., holotype.

what Hueck (1966; Hueck and Seibert, 1972) calls "wechselgrüne, mesophytische, subtropische Wälder Ost-und Südbrasiliens, z.T. mit starkem Anteil immergrünen Arten", usually called in Brasil the semi-deciduous forests of the southeast. The climate (Setzer, 1946; Nimer, 1979) is characterized by winters relatively cool (mean temperature of the coldest month below 18°C) and dry (driest month less than 30mm of rainfall, total annual precipitation 1100-1500mm, variable in time and space).

ACKNOWLEDGMENTS

Francisca Carolina do Val kindly drew the illustrations.

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