Papéis Avulsos de Zoologia

Papéis Avulsos Zool., S. Paulo, vol. 24(14):191-195,

31.III.1971

NEW AMPHISBAENIDAE FROM BRASIL (SAURIA)

P. E. VANZOLINI

Amphisbaena miringoera, sp. n. (Pl. 1)

Type locality: Pôrto Velho, Rio Tapirapés, Mato Grosso.

Holotype: MZUSP 13756, collected by Raimundo T. de Lima in

July, 1965.

Paratypes: MZUSP 13754, 13755, 13757 and 13758, same data as the type. One paratype will be deposited in the Museum of Comparative Zoology.

Diagnosis

A small form (rostro-anal length 145 mm); 2 preanal pores; 250-262 body annuli; median sutures between nasals, prefrontals, frontals and parietals subequal, or the latter slightly longer than the others.

Description

Head elongate, with subparallel sides. Dorsal median head sutures subequal, or interparietal a little larger than the others (in one specimen the parietals are broken behind). Occipitals polygonal, relatively large. One large postocular fitting in the angle between the frontal and the parietal. Supralabials 4, second and third highest. Symphysial moderate. Infralabials 4, second largest, third and fourth low. Post-symphysial moderate, followed by 2 scales with transverse posterior margins.

Body annuli 250-262, subequal. Dorsal and lateral sulci distinct, ventral sulcus not apparent. Segments to a midbody annulus 12/12-15. Midventral segments 1,5 to 2 times as broad as long. Preanal pores 2,

small but distinct, rounded, not cicatricial.

Tail with 22-24 annuli; sutures between annuli very well marked,

deep; segments distinct to the tip.

Dorsum isabeline brown, venter lighter. On the posterior third of the back the longitudinal sutures between segments tend to appear as fine white lines, and the posterior margin of the segments to show a dark bar.

Measurements and meristic data in Table 1. The measurements of body length in Table 1 are not very reliable, as the specimens are stiffly fixed in awkward positions. Number 13757 is broken in two

pieces.

Museu de Zoologia, Universidade de São Paulo.

The specific name means "little sister" in Tupi, the language spoken by the Tapirapé Indians, in whose land and with whose help the type series of this very small species was collected.

DISCUSSION

 $A.\ miringoera$ is perfectly characterized by its two preanal pores and 250-262 body annuli.

Another two-pored species, *silvestrii* Boulenger, is sympatric with *miringoera*. The differences are striking: a series of *silvestrii* from the lower Tapirapés at hand has 175-182 body annuli and all specimens show the characteristic reticulate color pattern of chocolate brown segments with lighter margins. There is in addition a completely different arrangement of head shields (cf. Gans, 1962: figs. 3, 7).

Table 1

Amphisbaena miringoera, sp.n.

	Length		Annuli		Segments	
	body	tail	body	tail	dors	ventr
13754	66	7	250	23	12	12
13755	110	11	262	24	12	14
13756	111	11	256	22.	12	14
13757	-	-	-	22	12	15
13758	142	13	256	24	12	14

Another species with 2 pores, neglecta Dunn & Piatt, also occurs in Central Brasil; sympatry is not proven, but it is possible. This form also differs markedly from miringoera in number of body annuli (151-161), tail annuli (14-16), head scutellation and color pattern (cf. Gans, 1962: figs. 4, 8).

The species most closely related to *miringoera* seems to be *mitchelli* Procter, from easternmost Pará. It is also a small two-pored species, with a relatively high number of body annuli (203-220); the head scutellation of the two forms is similar (cf. Gans, 1963: figs. 2, 4).

None of the small species with four pores seems to resemble $\emph{A.}$ $\emph{miringoera}.$

Amphisbaena tragorrhectes, sp. n.

(Pl. 2)

Type locality: Oriximiná, Pará.

Holotype: MZUSP 17518, collected on October 18, 1968, by the "Expedição Permanente da Amazônia" (EPA).

Diagnosis

A small *Amphisbaena* (rostro-anal length about 110 mm); 4 preanal pores; 31 tail annuli; first supralabial very large; post-symphysial narrow and elongate; first and second infralabials fused.

Description

Internasal and interfrontal sutures the longest on the dorsal aspect of the head. Parietals polygonal, large but forming a short median suture. Postocular high and narrow. Supralabials 4, first and second very large. Symphysial small. Post-symphysial narrow, elongate, a little broader behind. Infralabials 3, the first enormous, representing 2 fused shields. Behind the post-symphysial two scales with transverse posterior margin; behind those a transverse row of regular scales, reaching laterally the hind half of the second infralabial.

Body annuli 196. Dorsal sulcus not clearly marked, ventral not apparent, lateral well marked. Segments to a midbody annulus 12/12. Medio-ventral segments about twice as broad as long. Preanal pores 4, large. Preanal segments 6.

Tail smooth, with 31 annuli, the segments at the tip obsolete.

Dorsum dark brown, venter much lighter, the transition, rather sharp, 1-2 segments below the lateral sulcus.

This specimen's vertebral column is broken at midbody; the skin is intact, but body length cannot be accurately measured.

The name refers to the city of Oriximiná, the type-locality, where we have had the help of an excellent group of collectors. It is an approximate Greek rendition of "espouca-bode" (goat burster), the nickname regionally given to natives of Oriximiná because of the peculiar properties of the local cassava meal.

DISCUSSION

This species is easily characterized by the high number of tail annuli and by the ventral scutellation of the head.

Of all species with 4 pores the only that approaches *tragorrhectes* in number of tail annuli is *vermicularis* Wagler (Gans & Amdur, 1966), which has a much higher number of body annuli (211-254) and a very different pattern of head shields.

A. slevini Schmidt, from the region of Manaus, the geographically closest four-pored species, has a much smaller number of tail annuli and a larger one (204-211) of body annuli (Gans, 1963). Another geographically close species, A. mitchelli Procter, from easternmost Pará, has a high number of tail annuli (26-29) but differs in preanal pores (2), in body annuli (203-220) and in head shields.

Bronia kraoh, sp. n. (Pl. 3)

Type locality: Pedro Afonso, Goiás.

Holotype: MZUSP 2520, collected by Harald Schultz in 1949.

Diagnosis

Nasals meeting on the midline; 4 supralabials; 281 body annuli; 13 subequal tail annuli; median pair of preanal segments very large, extending forward and dividing the pore-bearing row in two separate halves, each one with 3 pores.

Description

Head laterally compressed, high. Rostral not readily visible from above. Nasals very large, forming a short median suture. Prefrontals subrectangular, very large. Frontals broad in front, narrow behind. Supralabials 4, second and third very high, fourth small, square. Ocular very large, in contact with the second and third labials, the prefrontal, the frontal (very short contact) and the 2 upper temporals. A vertical row of 3 temporals, the two inferior similar to the fourth labial, the uppermost larger, irregularly trapezoidal. Symphysial small, anvilshaped. Infralabials 3, second very large. Post-symphysial pentagonal, moderate, with concave anterior margin, followed by a row of scales with transverse posterior margins, at the level of the third labial.

Lateral sulci strong, dorsal poorly marked, ventral indicated by preferential folding. Body annuli 281. Segments to a midbody annulus 28/24. Preanal region characteristic: the two median elements are very large, and extend forwards, interrupting the pore-bearing row; three small pores on each side of this pair of large scales.

Tail with 15-16 annuli, the distal sutures and segments poorly defined.

Dorsum dark straw colored, venter lighter. On the median third of the body the dorsal segments have a small central dark spot. 304 + 18 mm.

The name refers to the Kraô Indians, in whose area H. Schultz, an anthropologist, was working when he collected the specimen.

DISCUSSION

Bronia kraoh differs from the only other species of the genus, B. brasiliana Gray, from Pará, in many important features: the nasals meet on the midline; there are 4 instead of 3 supralabials; the number of body annuli is much larger (281 against 222-226); the tail annuli are uniform, subequal, while in brasiliana the basal ones are very short, and the rest longer than in kraoh.

The new species is important to the concept of the genus.

Bronia Gray, 1865, type brasiliana Gray, 1865, until now a monotypic genus, was kept for many years in the synonymy of Amphisbaena. In my arrangement of the family (Vanzolini, 1951) I revalidated the genus, basing my decision on the shape of the rostral part of the skull and on the reduction of the nasal shields.

Bronia kraoh has nasal shields meeting on the midline, thus approaching the condition in Amphisbaena. It would be interesting to examine its skull. Although it is quite possible to remove the skull of an amphisbaenine without damaging the skin, I have refrained from doing so in this case because I have the impression that it is fractured and might come apart under dissection.

Inasmuch as *Bronia kraoh* approaches *Amphisbaena* in the size of the nasal shields, it might be thought advisable to sink the genus. However, the new species shows one character that makes me suspend judgment until the skull is known. In 1951 I did not place emphasis on the absence of parietal and occipital shields in *Bronia brasiliana*. Since *B. kraoh* lacks the same shields and has the same compressed head, with a strongly bent snout, as in *B. brasiliana*, I think it preferable to retain the genus for the present.

ACKNOWLEDGMENTS

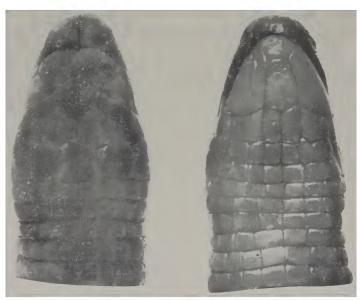
The collections from Barra do Tapirapés were purchased with funds provided by the Fundação de Amparo à Pesquisa do Estado de São Paulo. The type of *A. tragorrhectes* was collected by the Expedição Permanente da Amazônia (EPA), supported by this Museum, the Fundação de Amparo à Pesquisa do Estado de São Paulo, Museu Goeldi (Belém) and Instituto Nacional de Pesquisas da Amazônia (Manaus). Drs. Ulpiano B. de Menezes, H. Sarian and G. Steyskal helped with the species names. The photographs are by Giro Pastore. Ernest E. Williams has read the manuscript.

REFERENCES

- BOULENGER, G. A.
 - 1885. Catalogue of the lizards in the British Museum (Natural History). Vol. 2:xiii + 497 pp., 24 pls. London: Trustees of the British Museum.
- GANS. C.
 - 1962. Redefinition and description of the Brazilian reptiles Amphisbaena silvestrii Boulenger and A. neglecta Dunn & Piatt. Copeia 1962(1):164-170.
 - 1963. Notes on amphisbaenids (Amphisbaenia, Reptilia). 7. Redescription and redefinition of Amphisbaena mitchelli Procter and Amphisbaena slevini Schmidt from the Middle and Lower Amazon, Brazil. Amer. Mus. Nov. 2127:22 pp.
 - 1966. Studies on amphisbaenids (Amphisbaenia, Reptilia). 3. The small forms from southern South America commonly identified as *Amphisbaena darwini*. Bull. Amer. Mus. Nat. Hist. 134:185-260.
- GANS, C. & M. A. AMDUR
 - 1966. Redescription of Amphisbaena vermicularis Wagler, with comments on its range and synonymy. Proc. Calif. Acad. Sci. (4) 33(5):69-90.
- VANZOLINI, P. E.
 - 1951. A systematic arrangement of the family Amphisbaenidae. Herpetologica 7:113-123.



Plate 1. $Amphisbaena\ miringoera.$ Head, MZUSP 13759, tail, MZUSP 13758, paratypes.



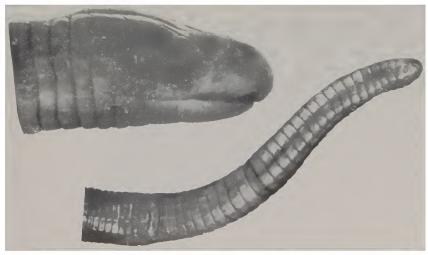


Plate 2. Amphisbaena tragorrhectes, holotype.

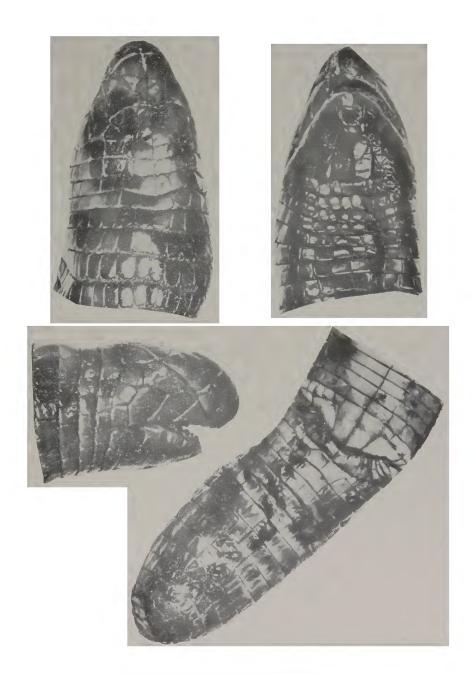


Plate 3. Bronia kraoh, holotype.