

## Reptilia, Amphisbaenidae, *Monopeltis schoutedeni* de Witte, 1933: First record from Gabon, with an updated key to Gabonese worm lizards

Olivier S. G. Pauwels<sup>1</sup>, Jean-Louis Albert<sup>2</sup> and Georges L. Longé<sup>1,2</sup>

<sup>1</sup> Institut Royal du Patrimoine Culturel, Muséum Royal de l'Afrique Centrale, B-1000 Bruxelles, Belgium, E-mail: opauwels@mrca.be

<sup>2</sup> Centre d'écologie et de biogéographie de Montpellier (CEB) / UMR 5145 (Institut des Sciences de l'Evolution, UMR 5205), Université Montpellier II, Montpellier Cedex 4, France (e-mail: longe@ensm.sciences.univ-montp2.fr)

**ABSTRACT.** The amphisbaenian *Monopeltis* is often treated as represented by the West African taxon (which based on a single individual from the eastern, semi-arid part of the country). The species was formerly known only from the Republic of Congo and the Democratic Republic of Congo. It is the 11th amphisbaenid and the 123rd reptile species recorded from Gabon. An identification key to Gabon amphisbaenians is provided.

The amphisbaenian fauna of Gabon is so far known to include three species belonging to the Amphisbaenidae: the endemic *Gerrhonotus aposematicus* (Boulenger, 1896) and *G. vittatus* (Mocquard, 1894), and the non-endemic *Monopeltis galvini* (Dufresnay, 1852) (Pauwels and Vanda Meijger, 2009). All three species occur in the coastal lowland rainforests of Gabon, *Monopeltis galvini* being also known from coastal subtropical Equatorial Gabon and Cérco Island (Gas and Lebeau 1973). While *Monopeltis galvini* is relatively common in western Gabon, having been found near sea level in the provinces of Estuaire, Moyen-Gorée and Ogooué-Maritime provinces, *Gerrhonotus aposematicus* seems to be very scarce, a century after its original description (Branch et al. 2003). The two latter *Gerrhonotus* species are known only from Moyen-Gorée and Ogooué-Maritime provinces, respectively (Pauwels and Vanda Meijger 2009). Morgan's *Pseudotrapelus pembae* (1880) was erroneously cited from Gabon and subsequently deleted from the animal répertoire (cf. see Pauwels and Vanda Meijger 2009), but its presence in Gabon is actually zoogeographically possible.

*Monopeltis galvini* was thus recorded from the interior of Gabon and one of us (JLA) collected on January 25, 2010 one individual 31 km north-east of Libreville [also spelled Libreville], Département du Plateau, Haut-Ogooué Province, in extreme northwestern Gabon. It was found while it was rapidly crossing on a sandy road at around 03:00 p.m. in sunny conditions in a savanna area. The specimen was preserved in 70% ethanol and integrated in the herpetological collections of the Institut Royal des Sciences naturelles de Belgique, under the number IRSNB 17548. It shows a depressed snout with a sharp terminal edge, nostril placed in small nasal scales on the lower snout surface, and longitudinally enlarged teguments on the postorbital region, as typical for the genus *Monopeltis*.

The dorsal head surface is heavily granulated and shows two large, fused shields and a pair of ocelli (Figure 1). The nuchal scale is small, the eye is

indistinguishable (Figure 2). The ventral surface of the mouth and borders the nostril; the mouth and chin are elongate but do not reach the premaxillaries (Figure 3). There are three supralabials, the second of which is the longest and the third the highest. The maxillary scale is small, the postocular is large, in contact with the first and second vibrissal



FIGURE 1. Dorsal head view of *Monopeltis schoutedeni* (IRSNB 17548) from male (IRSNB 17548).



FIGURE 2. Ventral view of *Monopeltis schoutedeni* (IRSNB 17548) from male (IRSNB 17548).

There are 3 infrabradials on each side, the posterior one being much larger than the two anterior ones. There are 4 carinabradials, the outer one is contact with the second and third infrabradials. There are 6 parallel pectoral plates. The two posterior ventral segments are about 50% and a half times as broad as long. The snout-vent length is 215 mm, the tail length 44 mm, and the tail depth represents 12% of the total length of 239 mm. The mid-body diameter is 18 mm. There are 209 body annuli from the first one following the pectoral plates to the prey-bearing annulus, the latter excluded in the count [eventually 16 ventral annuli omitted as singular] (Figure 4). There are ultimately 10 lateral commissural annuli bordering six pectoral plates, i.e., a total number of body annuli of 237. There is a total of 12 preanal pores, arranged in a continuous left series of 6 separated by two intermarginal series from a continuous right series of 6 (Figure 5). There are 20 tail annuli [terminating unsegmented] (Figure 6). All these characteristics adequately fit the descriptions of *Mesopristes aduncus* de Blas, 1933 by de Blas (1933), Lawrence (1941) and Goss and Echelle (1975).

The new species is easily distinguished from *Misophrites galathae* and *M. punctatus* (see Table 5 in Sims and Lehman, 1973) by its high number of body and tail annuli, and its high number of pretanal pores (pores absent in *M. galathae*). Its high number of body and tail annuli and of pretanal pores also precludes an affiliation with *Misophrites punctatus* Beudinger, 1895, a closely related and congeneric species.



Figure 2. Geographical range of *Micromytilus adamsi* (shaded) from 1990 to 2000.

The closest locality from where *Mesopeltis schaefferi* is known is 'D432' (van Gaal and Leibnitz 1973), situated at  $0^{\circ}48'56''S$ ,  $14^{\circ}52'22''E$  in the Eastern Region of the Republic of Congo, at ca. 30 km east of the town Edebolone (Ebolé). The type locality of the species, 'Wananga' (see map in van Gaal and Leibnitz 1973; in Democratic Republic of Congo) is ca. 250 km east-southeast of the Edebolone locality.

Updated identification key to Cuban Anoplomorphs (modified from Tracy 2008; body size numbers for *Nysius* following Gurn and Lohman (1974) counting method, then including the anterior lateroscutellum border as the natural division).



**Figure 3.** Selected lead lines of Mongolian characters (TRIBR 17948) from the 17th century.



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- 2a. Max rounded, without a sharp dorsal edge; raised perist. laterally; segments of the (postoral) region not differentiated; width 25-27 ..... 2 (Oxycephalus)  
 1b. Mouth depressed with a sharp buccal edge; ventral processes small and not on lower surface of snout; segments of the postoral region longitudinally enlarged; width 25-28 ..... 3 (Monopeltis)  
  
 2b. Ocular shield diameter 225-240; body annuli 4-10 predorsal pores; autonomy size at 11<sup>o</sup> model annulus ..... Oxycephalus  
  
 3b. Ocular shield fixed to head; presular and prefrenals 211; body annuli 4-10 predorsal pores; autonomy size at 17<sup>o</sup> model annulus ..... Oxycephalus  
  
 3a. Body annuli 211-232; predorsal pores 0 (fused) / 2, rarely 3 (separated); total annuli 15-20 ..... Monopeltis galionis  
 (b) Body annuli 275-280; predorsal pores 15 (model width 25-29) ..... Monopeltis chlorosticta

The photographs presented here are the first of a few individuals of *Amphisbaena amoenalis*. It is to be noted here that this is an estimated measure; the photograph shown in Evans (2005), taken by the British Ichthyologist Sebastian Laven, is from a female (Dyfed-Minister Province, Wales) and used to represent a female specimen actually showing a few soft white warts (its gonads being ripe, indicating an anapomictic female at that locality). Some confusion with *Wermesia* is the 123<sup>rd</sup> reptile species documented to date from Cebu (Philippines) (Vitt and Narins 2008).

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