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## A NEW SPECIES OF MEROSCOLEX FROM SURINAME (OLIGOCHAETA, GLOSSOSCOLECIDAE)

by

**GILBERTO RIGHI**

Departamento de Zoologia, Universidade de São Paulo, São Paulo, Brazil

With four text-figures

The genus *Meroscolex* Černosvitov, 1934, comprised only two species: *M. guianicus* Černosvitov and *M. longissimus* Černosvitov, both known only from French Guiana (Černosvitov, 1934: 56; 1935: 29). A third species, from Suriname, is described in the present paper.

### ***Meroscolex hoogmoedi* n. sp.**

Material: Suriname, valley of Coeroeni River, approximately 3°20'N 57°20'W, leg. Dienst Bodemkartering Suriname, 24/25 June 1967 (2 clitellate specimens: holotype, coll. no. 5946, paratype, coll. no. 5947). — Suriname, Post Tigrie, New River, 3°20'N 57°30'W, leg. M.S. Hoogmoed, 28/29 June 1968 (5 clitellate specimens, 4 without posterior end, and 1 large acitellate specimen, coll. no. 6055). Material in Rijksmuseum van Natuurlijke Historie, Leiden. The type specimens arrived alive in Leiden one month after they were collected. Observations on these living specimens were made by J. van der Land.

External characters. — The length of the type specimens was 1.6 and 1.5 m, respectively, according to the collectors. After one month they measured 1.3 and 1.0 m, and after fixation in a mixture of alcohol 70% and formaline 5% they measured 0.80 and 0.50 m. Their diameters were then: 16 and 18 mm in the pre-clitellar region, 20 and 18 mm in the clitellum, 9 and 12 mm in the median body region, and 9 mm in the posterior region of both specimens.

“In vivo” the colour of the pre-clitellar region was dorsally dark blue and ventrally light bluish green to light brown; the clitellum was dorsally dark grey-brown, nearly black, and ventrally brown with pink spots around the setae; the ridges of puberty were variable from light grey to cream-coloured.

In the median and posterior regions of the body, the surface of the segments was light blue to bluish green, gradually changing through light brown to dark brown in the intersegmental grooves. In fixed animals the dorsal side of the pre-clitellar region is violet-coloured, near no. 26 of Séguy (1936), and the ventral side is light brown, near no. 233; the clitellar region is dorsally dark brown similar to no. 116, and ventrally pale, contrasting with the milky white of the ridges of puberty. The median and posterior regions of the body are light brown, similar to no. 233, on the surface of the segments alternating with reddish brown in the intersegmental grooves.

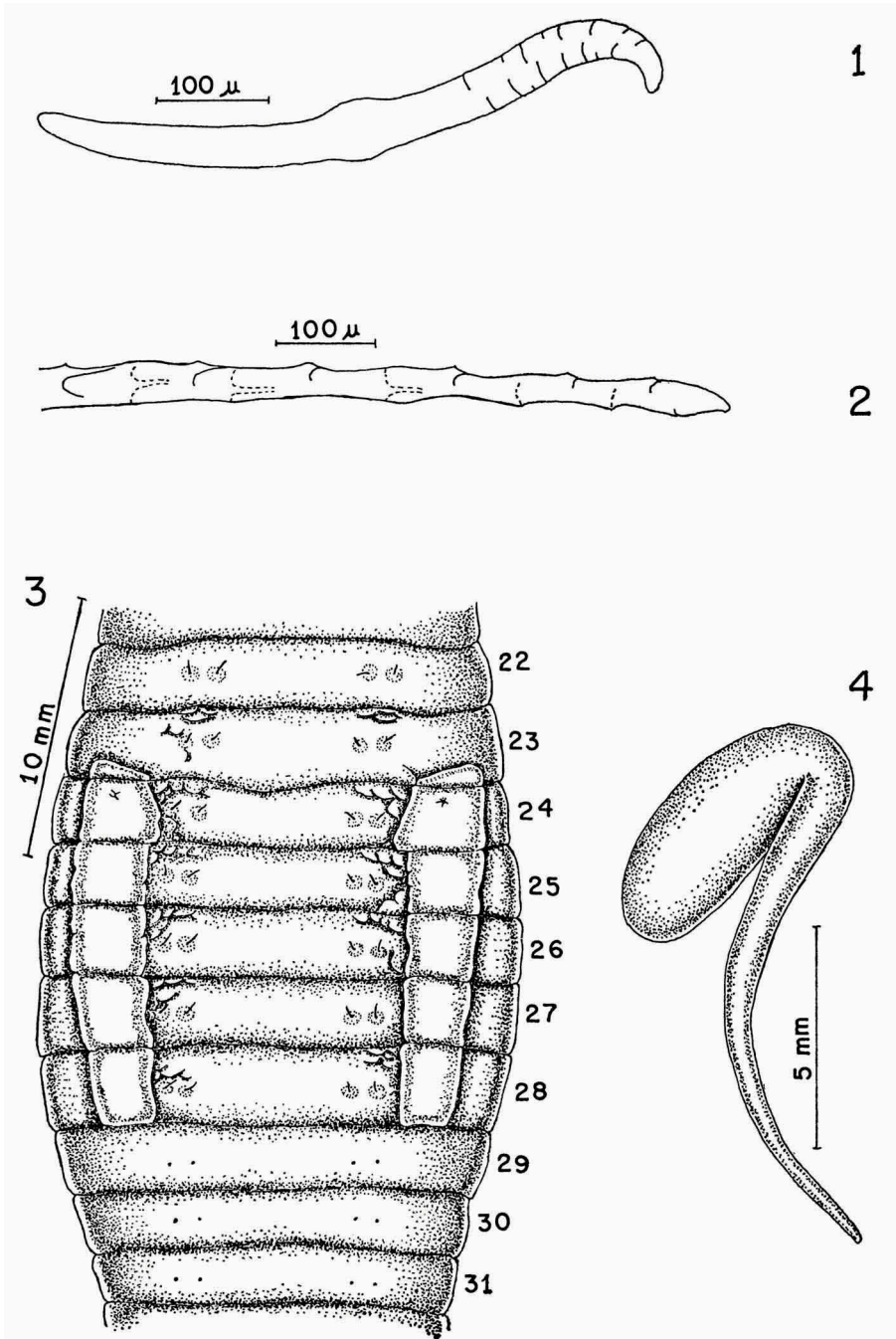
In fixed animals the length is 460 to 800 mm; the diameter in the pre-clitellar region 12 to 18 mm, in the clitellum 14 to 20 mm, in the median body region 9 to 12 mm and in the posterior region 9 to 10 mm.

The prostomium is prolobous. The number of segments is 533 to 570. The rudimentary first segment is almost totally invaginated. The segments I to III have longitudinal furrows all over their surfaces. The other segments, excepting the clitellar, are triangular, with elevated setal areas, especially in the post-clitellar segments.

The setae have a lumbricine arrangement. The ventral series begin from segment XIII and the dorsal from XVI. The normal setae are sigmoid; their apical third is ornamented by broad and shallow scars, disposed in four alternate series of 5 to 6 scars (fig. 1). The setae become shorter from the ventral to the dorsal side and from the median to the posterior region of the body. The average lengths of the setae in the median region are:  $a$ ,  $b = 570 \mu$  and  $c$ ,  $d = 557 \mu$ , and in the posterior region:  $a$ ,  $b = 535 \mu$  and  $c$ ,  $d = 525 \mu$ . The distance  $aa$  in segment XIII is almost twice that of the median region; it decreases from XIII to XVII and then continues uniformly. In the median body region  $aa : ab : bc : cd : dd : \frac{1}{2} C = 30.5 : 3.8 : 31 : 3.2 : 80 : 93.2$ , and in the posterior region  $aa : ab : bc : cd : dd : \frac{1}{2} C = 23 : 3 : 25 : 3 : 62 : 73.5$  in average.

In the segments XIII to XXVII or XXVIII the ventral setae are modified as penial setae. They are almost straight, with the distal half ornamented by 4 series of scars disposed two and two; there are 6 or 7 scars in each series (fig. 2). The length of the penial setae varies from 2.0 to 2.33 mm, average 2.17, and their maximum diameter varies from 0.031 to 0.039 mm, average 0.035; the greater diameters occur in the shorter setae.

The clitellum is saddle-shaped and extends over the segments XIV, XV to XXIX (= 16, 15). The two little thickened ridges of puberty are disposed outside the lines of  $b$  from segment  $\frac{3}{4}$  XXIII to XXVII, XXVIII and from XXIV to XXVII in maturing animals. Rounded and whitish papillae surround the setae in the segments XIII to XXVIII, XXIX (fig. 3).



Figs. 1-4. *Meroscolex hoogmoedi* n. sp. 1, normal seta of the median body region; 2, distal end of a penial seta; 3, ventral surface of segments XXII to XXXI; 4, spermatheca of segment VIII.

The inconspicuous male pores open at the anterior third of XXIV, in the median line of the ridges of puberty. The female pores were not seen. Three pairs of spermathecal apertures on small whitish cushions open in VI/VII to VIII/IX in line with the nephridiopores. These are conspicuous from IV/V and open in series with *cd* in the pre-clitellar region, and in series with *d* in the median and posterior regions of the body.

Internal characters. — The septa VI/VII to X/XI are strongly thickened, and the others fragile. The septum X/XI arises from the median region of segment XI. The digestive system has one thick and globular gizzard in segment VI. Three pairs of bean-shaped calciferous glands of composite-tubular structure open ventro-laterally into the oesophagus in segments VII to IX. The intestine begins in segment XVII.

Five pairs of hearts are present in the segments VII to XI, the last two being most voluminous.

One pair of testis sacs surrounds the hearts in segment XI. The pairs of seminal vesicles are best developed in segments XIII and XIV, where each vesicle is branched into two main lobes and these again in two lobes. Ovaries were not seen. Three pairs of spermathecae lie in segments VII to IX, becoming larger from the first to the third pair; there is no clear limit between duct and ampulla (fig. 4).

The excretory system is holonephridial, with one pair of nephridia in each segment.

The new species is named after Mr. M. S. Hoogmoed, herpetologist of the Leiden museum, who collected most of the specimens.

#### DISCUSSION

*M. hoogmoedi* n. sp. differs from *M. guianicus* by its much greater size (*M. longissimus* is also a large species, although the exact length is unknown). The new species differs from the two other species in length and location of clitellum and ridges of puberty, in the number of scars on the penial setae, and in the disposition of the setae. The differences are summarized in table 1.

TABLE 1

	<i>M. hoogmoedi</i>	<i>M. guianicus</i>	<i>M. longissimus</i>
length (fixed animals):	500-600 mm	135-180 mm	> 380 mm
clitellum in:	XIV, XV-XXIX	XIV-XXVII	XIII-XXVIII
ridges of puberty in:	3/4 XXIII-XXVIII or XXIV-XXVII	XXII-XXVI	XXII-XXVI
penial setae: number of scars per series:	6-7	13-15	4-6
first ventral setae in:	XIII	VII or VIII	V
<i>bc</i> in median body region:	<i>bc</i> = 8 <i>ab</i>		<i>bc</i> = <i>ab</i>

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