

The species of the genus *Schendylurus* Silvestri 1907 of Argentina, Brazil and Paraguay (Chilopoda Geophilomorpha Schendylidae)

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Three new species of *Schendylurus* Silvestri 1907 are described, i.e. *S. coscaroni* n. sp. from State of São Paulo, Brazil; *S. demartini* n. sp. from Province of Misiones, Argentina and *S. placcii* n. sp. from Province of Formosa, Argentina. Seven further species of the same genus are redescribed, viz., *S. bakeri* Chamberlin 1914 (after the holotype); *S. demelloi* Verhoeff 1938 (after the lectotype and paralectotype); *S. fieldi* (Chamberlin 1944) (after the holotype); *S. iguapensis* Verhoeff 1938 (after the holotype); *S. olivaceus* Crabill 1972 (after the holotype); *S. parabybae* (Chamberlin 1914) (after the holotype); *S. paulista* (Brölemann 1904) (after the holotype). Additional data on *S. demangei* Pereira 1981 are given (after the holotype). New material is cited of *S. mesopotamicus* Pereira 1981 and *S. pampeanus* (Pereira & Coscarón 1976). The new combination *S. parabybae* (Chamberlin 1914) is presented, this species originally described under *Adenoschendyla* Brölemann & Ribaut 1911, being transferred from *Pectiniunguis* Bollmann 1890. A key is provided for the identification of the species of *Schendylurus* from Argentina, Brazil and Paraguay.

KEY WORDS: Myriapoda, Chilopoda, Geophilomorpha, Schendylidae, *Schendylurus*, *Pectiniunguis*, systematics, new species, Neotropical Region, Argentina, Brazil, Paraguay.

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INTRODUCTION

The genus *Schendylurus* has a wide distribution in Africa (review in PEREIRA & MINELLI 1995) and especially in the Neotropical Region, with about 40 species known to date. For those from Bolivia, Peru, Ecuador, Northern South America, Central America and the West Indies we have recently provided a key (PEREIRA & MINELLI 1993), whereas the remaining 27 species of the genus, occurring in Argentina, Paraguay and Brazil, are dealt with in the present paper.

The information about these last taxa is scattered in numerous papers from different authors. We have recently had the opportunity to study type material belonging to some of the less known taxa and also specimens that we describe here as belonging to three new species. Accordingly, we offer redescriptions and descriptions together with a key to the Argentinean, Paraguayan and Brazilian species of the genus. Of course, we avoid repeating here detailed descriptions of the species described, or redescribed, in the last few years, mostly by one of us (L.A. Pereira).

Note to text and figures. We use the following abbreviations: *a.a.*, antennal article; *l.*, left; *r.*, right; *v.*, ventral; *d.*, dorsal.

DESCRIPTIONS AND NOTES

Family Schendylidae Cook 1895

Genus *Schendylurus* Silvestri 1907

Diagnosis. Pleurites of second maxillae not fused with coxosternum; apical claw of second maxillae pectinate on both d. and v. edges. Sterna with pore fields. Last pair of legs with seven podomeres; praetarsus in form of a small pilose tubercle or replaced by a small spine or altogether absent; coxopleura of the last leg-bearing

segment each with two internal coxal organs of simple structure ("homogeneous coxal glands" *sensu* BRÖLEMANN & RIBAUT 1912).

Remarks. In good agreement with our generally poor level of understanding of generic circumscriptions and intergeneric relationships within Chilopoda, we can offer only a 'syndrome' of characters by which we can diagnose this genus, although we are not quite sure that it represents a true monophyletic unit within Schendylidae. However, we are confident that this paper will contribute sound comparative evidence towards a modern revision of the whole family, a target of our joint efforts in the forthcoming years.

Type of the genus. *Schendylurus australis* Silvestri 1907, by monotypy.

***Schendylurus anamariae* Pereira 1981**

Schendylurus anamariae PEREIRA 1981: 118; 1984: 64; PEREIRA & MINELLI 1993: 120.

Type locality. Argentina, Province of Entre Ríos: Concordia. This is also the only locality known to date.

Depository of type. Museo de La Plata.

***Schendylurus bakeri* Chamberlin 1914 (Figs 1-21)**

Schendylurus bakeri CHAMBERLIN 1914: 196; ATTEMS 1928: 134; 1929: 77; CRABILL 1972: 21; DEMANGE & PEREIRA 1985: 186; PEREIRA & MINELLI 1993: 121.

Schendylurus backeri (sic!), BÜCHERL 1942a: 202; 1942b: 348.

Diagnosis. A *Schendylurus* species with all pore fields undivided and present from the second to the antepenultimate sternum. Among the Neotropical species of the genus only the present species and *S. lesnei* share this trait. *S. bakeri* can be differentiated from the last by means of the following characters (the corresponding ones in *S. lesnei* are given in parentheses): body length 24 mm (12.50); anterior and posterior coxal organs bilobed (both unilobed).

Type material examined. Holotype, ♀ with 47 pairs of legs; body length 24 mm. Brazil: State of Amazonas: Manaus, Mann and Baker coll. [type TC-32 (1471)]. This specimen is preserved partly in alcohol (trunk) partly in one slide (head and mouth parts). It is labeled as "type". The type has not been designated by CHAMBERLIN in his publication, however, because this female is the only specimen studied by CHAMBERLIN it must be regarded as the holotype of this species.

Type locality. Brazil, State of Amazonas: Manaus. This is also the only locality known to date.

Depository of type. Museum of Comparative Zoölogy, Harvard University, Cambridge, Mass.

Redescription

Female holotype. A total of 47 pairs of legs, body length 24 mm, maximum body width 0.8 mm.

Colour (of preserved specimen) yellowish-orange, with forcipular segment darker.

Antennae ca 2.5 times longer than the cephalic plate, distally attenuate; all articles, the first excepted, longer than wide. Setae on a.a. I-V of different lengths and few in number; those of remaining antennomeres progressively shorter and more numerous towards the tip of the appendage (Fig. 1). Terminal a.a. with claviform sensory setae only present on the external apical edge. Dorsal and v. surface of a.a. II, V, IX and XIII with very small, apically undivided, specialized setae which on v. side are restricted to an internal latero-apical area. Each of a.a. II, V, IX and XIII with 1 of these setae. Similar specialized setae are also present on the d. side, each of a.a. II and V with 1 seta, a.a. IX with 4 setae and a.a. XIII with 3 setae.

Cephalic plate slightly longer than wide (ratio 1.1:1); shape and chaetotaxy as in Fig. 2.

Clypeus with 1 + 1 postantennal setae, 6 + 7 median setae and 1 + 1 praelabral setae (Fig. 3).

Labrum with 19 teeth, those of central arc robust, dark and round-tipped, the lateral ones less sclerotized, each with a relatively long and very sharp medial extension (Fig. 4).

Mandible. Dentate lamellae subdivided into 3 distinct blocks, with 3,2,2 and 4,3,1 teeth respectively (Figs 5-6); pectinate lamellae with about 20 hyaline teeth.

First maxillae with palps on both coxosternum and telopodite. Coxosternum with 2 + 2 setae; median projection of coxosternum subtriangular and provided with 1 + 1 setae. Article II of the telopodite with 3 + 3 v. setae and 6 + 6 d. sensilla (Fig. 7).

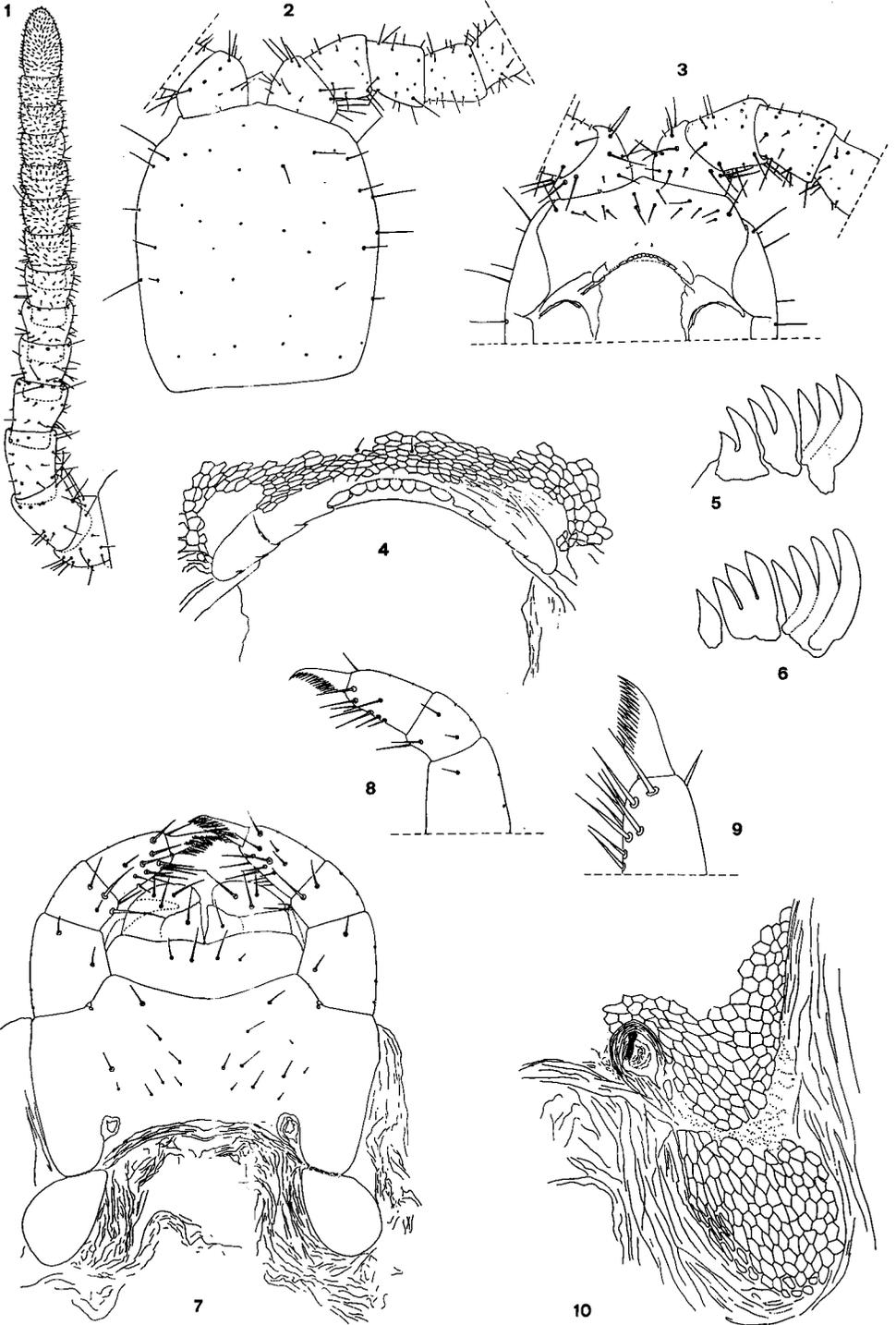
Second maxillae with 8 + 10 setae on coxosternum arranged as in Fig. 7. Apical claw of the telopodite well-developed, bipectinate, the v. edge with 11 teeth, the d. with ca 14-15 teeth (Fig. 9).

Forcipulae. Basal plate with an irregular transverse median row of 8 setae. Telopodites with all articles lacking teeth. Calyx of poison gland cylindrical (Fig. 12); chaetotaxy of coxosternum and telopodites as in Fig. 11.

Legs (last pair excepted) with chaetotaxy uniform throughout the body length; claws ventrobasally with two spines, one anterior one posterior; a third spine, of similar size, occurs internally, very close to the posterior one.

Terga of anterior region of body shallowly but distinctly bisulcate, sparsely setose, remaining ones apparently not bisulcate.

Sterna. Pore fields present from the second to the antepenultimate sternum. All pore fields undivided, their form changing along the trunk as in Figs 13-16. Number



of pores on selected sterna: on sternum II, 31 pores; on VIII, 61; on XXXIV, 20; on XLV, 7.

Last leg-bearing segment without pleurites at the sides of praetergum. Praeternum not divided along the sagittal plane; form and chaetotaxy of sternum and tergum as in Figs 17-18. Coxopleura slightly protruding at their distal v. ends, setae small and more numerous on v. distal medial surface, the remaining surface with bigger setae. Two bilobed ("homogeneous") coxal organs on each coxopleuron, both opening on the membrane between coxopleuron and sternum, covered by the latter (Figs 17, 21). Last legs with seven podomeres, form and chaetotaxy as in Figs 17-18. Praetarsus as a very small tubercle with 3 small apical spines (Figs 19-20).

Terminal segments. Intermediate tergum with posterior margin convex; intermediate sternum with posterior margin slightly concave; first genital sternum with posterior margin strongly concave. Gonopods uniaarticulate, well-developed (Fig. 17).

Male unknown.

Remarks. Due to the state of preservation of the specimen it is impossible to be sure if the absence of claviform sensory setae on the medial apical edge of the terminal a.a. is due to loss or is a character of this species.

To date, the holotype is the only known specimen of this species.

In the foregoing redescription we rectify two faults of CHAMBERLIN's original description: he stated that the antennae are 1.9 times longer than the head (instead of 2.5) and that the ventral pores are present on all sterna except the first and last, whereas they are lacking on the first and the *two* last).

ATTEMS (1928: 134) assigned 37 pairs of legs to this species (instead of 47); the same author (1929: 77) stated that the last legs have no praetarsus, but a praetarsus is actually present (Figs 19-20).

***Schendylurus borellii* (Silvestri 1895) (Fig. 22)**

Geophilus borellii SILVESTRI 1895a: 2; ATTEMS 1903: 263.

Nannophilus borellii, SILVESTRI 1897a: 3; ATTEMS 1903: 195; BRÖLEMANN & RIBAUT 1912: 132.

Schendyla borellii (sic!), BRÖLEMANN 1902a: 45.

Schendyla borellii, BRÖLEMANN 1902b: 687.

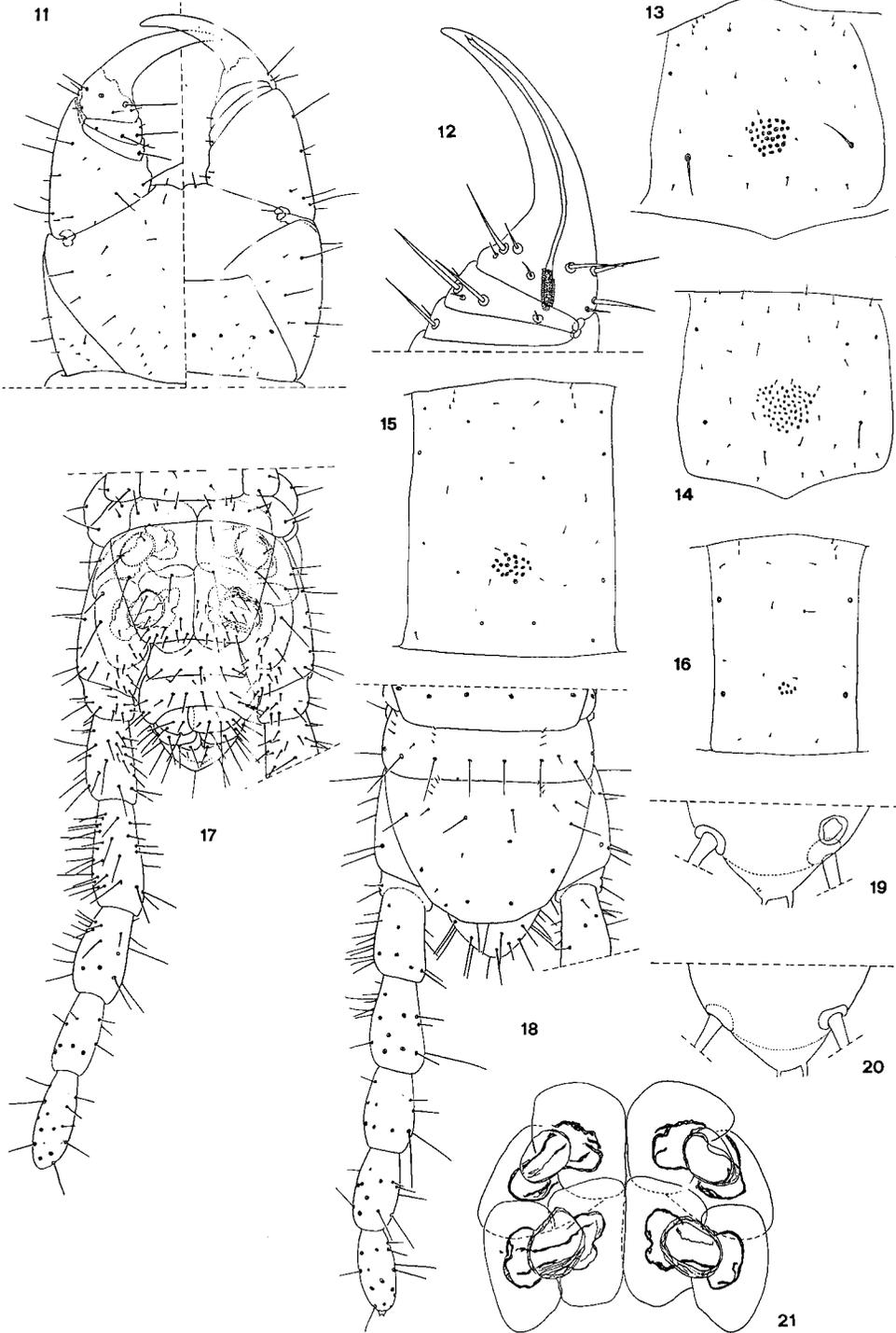
Nannophilus (?) *borellii*, ATTEMS 1929: 71.

Schendylurus borellii, PEREIRA 1983b: 70; PEREIRA & MINELLI 1993: 120.

Type locality. Paraguay: Río Apa. This is also the only locality known to date.

Depository of type. Istituto di Entomologia Agraria, Portici.

Figs 11-21. — *Schendylurus bakeri* Chamberlin: ♀ holotype (Brazil, State of Amazonas: Manaus). Fig. 11, forcipular segment with poison claws, v. (l. side), d. (r. side); Fig. 12, detail of poison gland in l. poison claw, v.; Figs 13-16, sterna II, VIII, XXXIV and XLV; Fig. 17, last leg-bearing segment and terminal segments, v.; Fig. 18, the same, d.; Fig. 19, detail of distal end of last podomere of l. last leg, v.; Fig. 20, the same, d.; Fig. 21, detail of coxal organs, v.



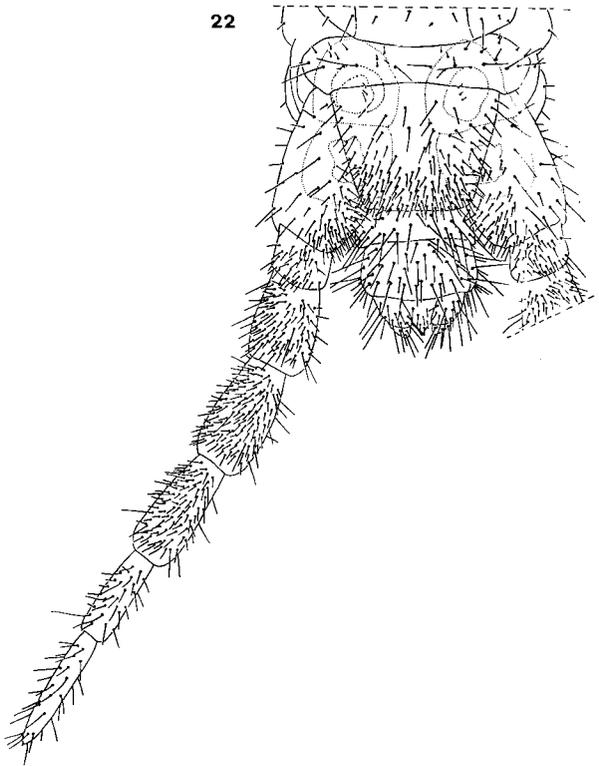
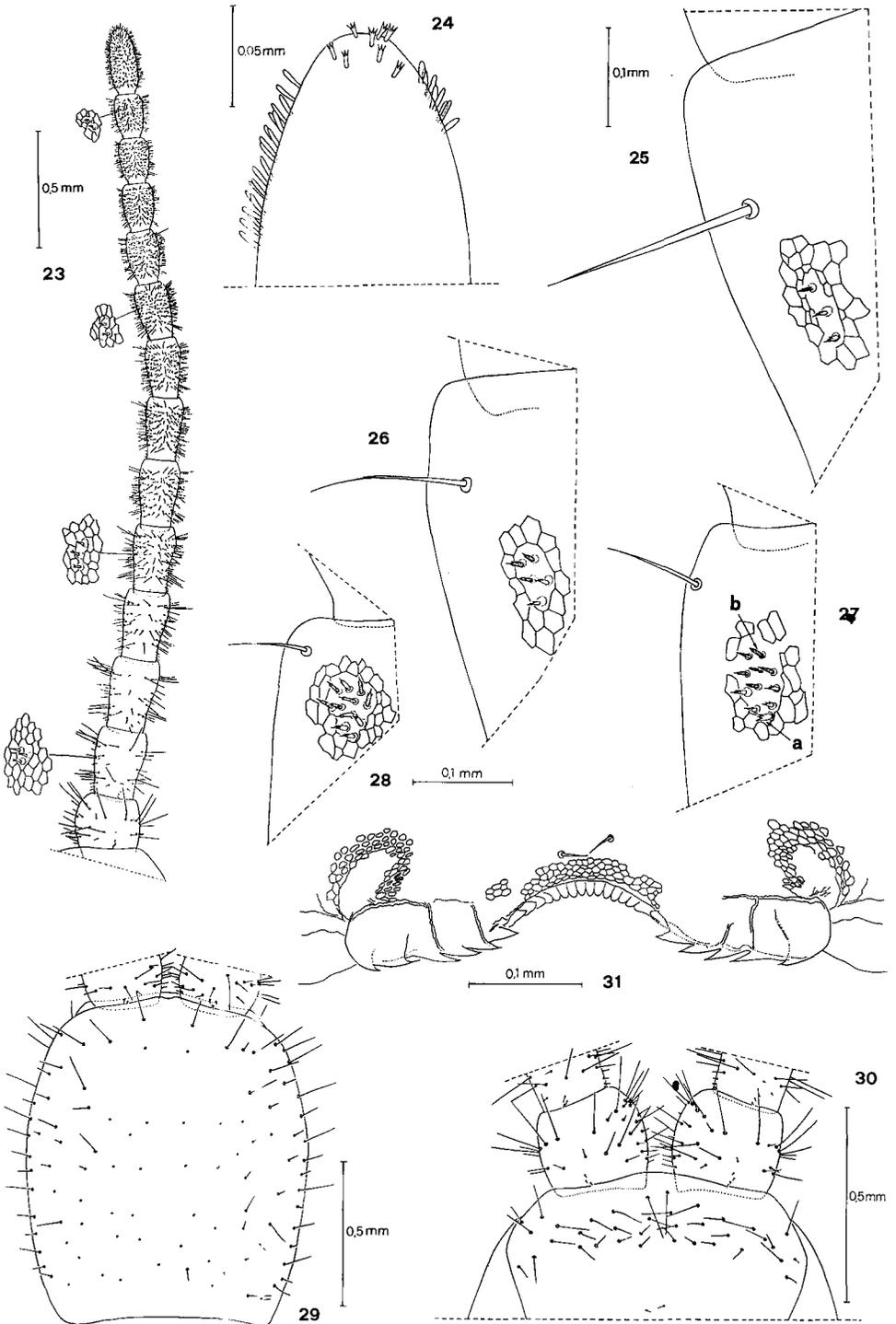


Fig. 22. — *Schendylurus borellii* (Silvestri), (from PEREIRA 1983b), "cotypus" (Paraguay: Río Apa), last leg-bearing segment and terminal segments, v.

***Schendylurus coscaroni* n. sp. (Figs 23-59)**

Diagnosis. A *Schendylurus* species with dentate lamella of mandible subdivided in blocks and pore fields present from the first to the penultimate sternum (undivided on the anterior and posterior sterna but divided in two subsymmetrical areas on the sterna of central portion of the body). Among the Neotropical species of the genus, only the present species, *S. parabybae* (Chamberlin), *S. tropicus* Brölemann & Ribaut and *S. demelloi* Verhoeff share this trait. Among these four species, only *S. coscaroni* has bilobed posterior coxal organs (in the three remaining species these organs are unilobed). The present species can be differentiated from the others cited as ex-

Figs 23-31. — *Schendylurus coscaroni* n. sp., ♀ holotype (Brazil, São Paulo: Serra do Mar). Fig. 23, l. antenna, (with details of special sensory setae on a.a. II, V, IX and XIII), v.; Fig. 24, apical region of last r. a.a., v.; Fig. 25, special sensory setae of l. a.a. II, d.; Fig. 26, special sensory setae of l. a.a. V, d.; Fig. 27, special sensory setae of l. a.a. IX, d. (*a*: type *a* seta; *b*: type *b* seta); Fig. 28, special sensory setae of l. a.a. XIII, d.; Fig. 29, cephalic shield; Fig. 30, clypeus and basis of antennae; Fig. 31, labrum.



plained in the key presented here. It is more closely related to *S. tropicus* and *S. parabybae*. It can be differentiated from *S. tropicus* by means of the following characters (the corresponding ones in the last species are given in parentheses): body length 36 mm (16 mm); coxosternum of second maxillae with ca 34 setae (18); ♀ with 51 pairs of legs (47). It can be differentiated from *S. parabybae* by means of the following characters (the corresponding ones in the last species are given in parentheses): ♀ with 51 pairs of legs (59); last leg-bearing segment with pleurites at the sides of praeterngum (without pleurites).

Type material. Holotype, ♀ with 51 pairs of legs, body length 28 mm; allotype ♂ with 49 pairs of legs, body length 36 mm. Brazil, São Paulo, Serra do Mar: (Region of the Serra de Paranapiacaba), Caminho do Mar, besides the Monument "Pouso Paranapiacaba", 12.VI.1986, L.A. Pereira legit.

Depository of type. Museo de La Plata.

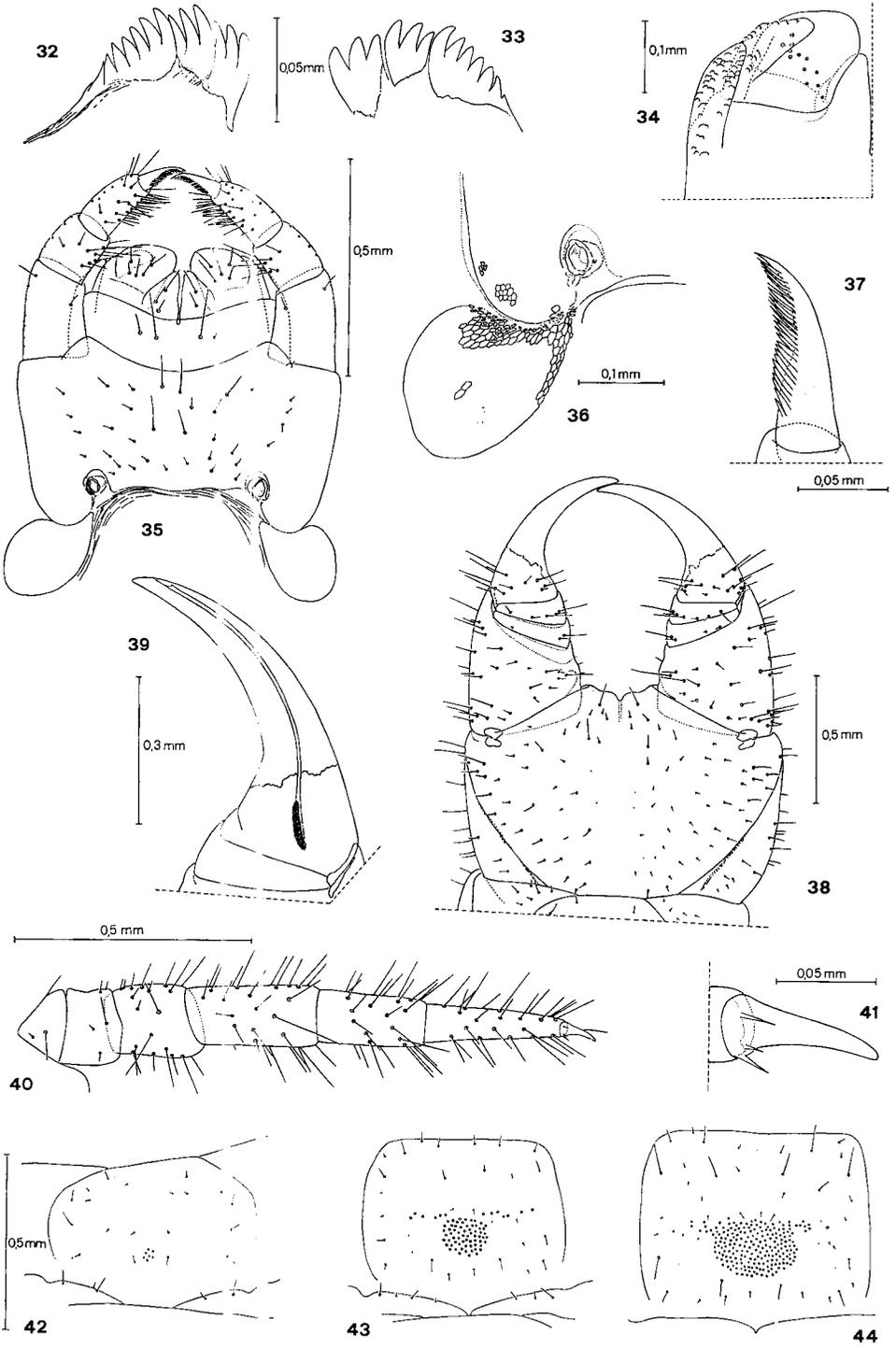
Description

Female holotype. A total of 51 pairs of legs, body length 28 mm, maximum body width 1.2 mm.

Colour. Bright ferrugineous, with head, forcipular segment and I-VI first leg-bearing segments darker.

Antennae ca 3.2 times longer than the cephalic plate, distally slightly attenuate; all articles, the first excepted, longer than wide with the following ratios: on a.a. II, 1.4: 1; on a.a. IV and VII, 1.6:1; on a.a. XII and XIII, 1.5: 1; on a.a. XIV, 2.5: 1. Setae on a.a. I-III of different lengths, and few in number, those of remaining antennomeres progressively shorter and more numerous towards the tip of the appendage (Fig. 23). Terminal a.a. with ca 20-23 claviform sensory setae on the external border and ca 8-10 on the internal border. Distal end of this a.a. with 8 very small specialized setae ending in three small apical branches (Fig. 24). Dorsal and v. surface of a.a. II, V, IX and XIII with very small specialized setae placed in a hyaline unreticulated and unpigmented area that makes these setae to stand out from the remaining surface of the antennomeres, which is bright ferrugineous. On the v. side these setae are restricted to an internal latero-apical area (with a more apical position on a.a. IX and XIII) and are very similar to those of the apex of the terminal article. Each of a.a. II and V has 3 setae; a.a. IX, 2 and a.a. XIII, 2-3 (Fig. 23). Specialized setae on d. side are restricted to an external latero-apical area and are represented by two types: *a* and *b*. Type *a* setae are very similar to the setae at the apex of the terminal a.a. (also found on ventral side); type *b* are a little bigger, ending in two apical diminute branches, and are much darker (ochraceous) in colour (Fig. 27). Each of a.a. II with 2 type *a* and 1 type *b* setae; a.a. V with 2 type *a* and 3-4 type *b* setae;

Figs 32-44. — *Schendylurus coscaroni* n. sp., ♀ holotype (Brazil, São Paulo: Serra do Mar). Figs 32-33, dentate lamellae of l. and r. mandibles; Fig. 34, l. first maxilla, d.; Fig. 35, first and second maxillae, v.; Fig. 36, detail of posterior external region of r. second maxilla, v.; Fig. 37, claw of l. second maxilla, v.; Fig. 38, forcipular segment with poison claws, v.; Fig. 39, detail of poison gland in l. poison claw, v.; Fig. 40, l. leg III, v.; Fig. 41, claw of l. leg III, v.; Figs 42-44, sterna I, II, X.



a.a. IX with 3-5 type *a* and 6-8 type *b* setae and a.a. XIII with 3 type *a* and 8 type *b* setae (Figs 25-28).

Cephalic plate slightly longer than wide (ratio 1.1:1), shape and chaetotaxy as in Fig. 29.

Clypeus with 1 + 1 postantennal setae, 17 + 17 median setae and 1 + 1 praelabral setae (Fig. 30).

Labrum with 16 teeth on the central arc, sidepieces with 6 + 5 teeth each with a very sharp medial extension (Fig. 31).

Mandible. Dentate lamella subdivided into 3 distinct blocks, with 7,3,3 teeth respectively (Figs 32-33); pectinate lamellae with ca 25-28 hyaline teeth.

First maxillae with palps on both coxosternum and telopodite. Coxosternum with 2 + 2 setae, median projections of coxosternum subtriangular well developed and provided with 3 + 2 setae. Article II of telopodite with 5 + 5 v. setae and 12 + 10 d. sensilla (Figs 34-35).

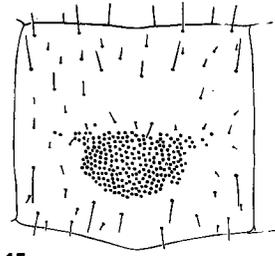
Second maxillae with 17 + 17 setae on coxosternum, arranged as in Fig. 35. Apical claw of telopodite well developed, bipectinate, the d. edge with ca 25-26 teeth and the v. with ca 24-25 (Fig. 37).

Forcipulae. When closed, telopodites not extending beyond anterior margin of head; basal plate with an irregular transverse median row of 12 big setae and a few additional smaller setae dispersed on the surface of posterior half. Telopodites with all articles lacking teeth. Calyx of poison gland cylindrical (Fig. 39); chaetotaxy of coxosternum and telopodites as in Fig. 38.

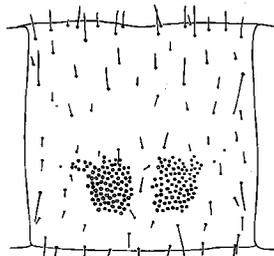
Legs (last pair excepted) with chaetotaxy (Fig. 40) uniform throughout the body length. Claws ventrobasally with two spines, one anterior one posterior; a third spine, smaller in size, occurs internally, very close to the posterior one (Fig. 41).

Sterna. Pore fields present from the first to the penultimate sternum. On sterna I to XX and XLVI to L the fields are undivided, on sterna XXI and XXIII to XLV the fields are divided in two subsymmetrical areas (on sternum XXII the field is incompletely divided, Fig. 47). Except on sternum I, there are a few isolated pores at each anterior side of the central principal areas. Form of fields changing along the trunk as in Figs 42-51. Number of pores on selected sterna: on sternum I, 7 pores; on II, 6 + 65 + 7; on X, 6 + 193 + 8; on XVI, 2 + 231 + 3; on XXI, 1 + 91 + 84 + 2; on XXII, 3 + 188 + 6; on XXIII, 3 + 71 + 90 + 1; on XLV, 41 + 43; on XLVI, 5 + 83 + 1.

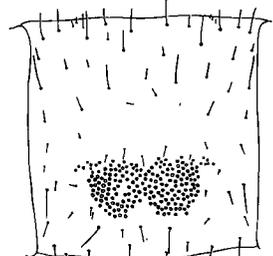
Last leg-bearing segment with pleurites at the sides of praetergum. Praesternum not divided along the sagittal plane; form and chaetotaxy of sternum and tergum as in Figs 52-53. Coxopleura slightly protruding at their distal v. ends, setae small and numerous on distal internal edge, the remaining surface with a few larger setae. Two single ("homogeneous") coxal organs on each coxopleuron, both of them internally with a single area of specialized epithelium; externally, the anterior organs are unilobed and the posterior bilobed (Fig. 54). Coxal organs open on membrane between coxopleuron and sternum covered by the latter (Fig. 52). Last legs with seven



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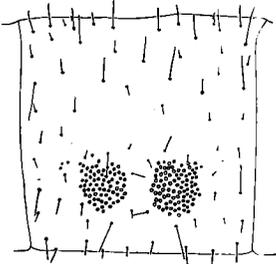


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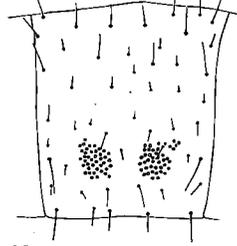


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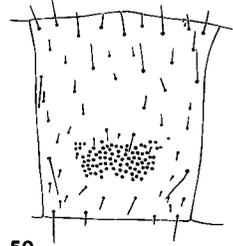
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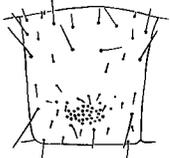
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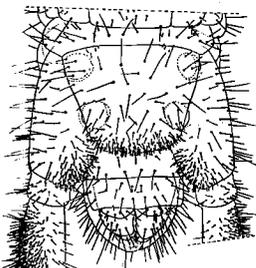


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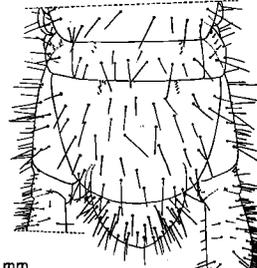


0,5 mm

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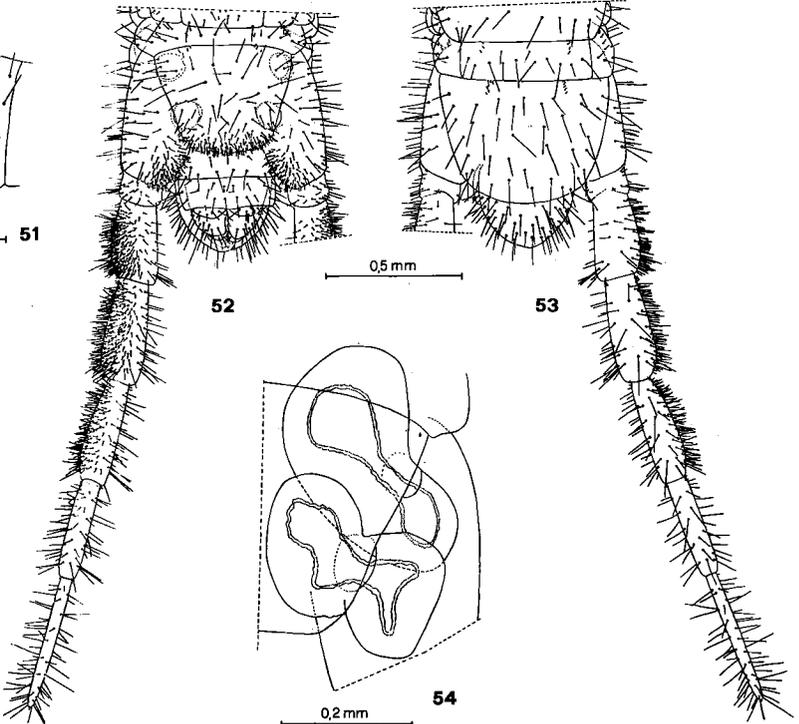


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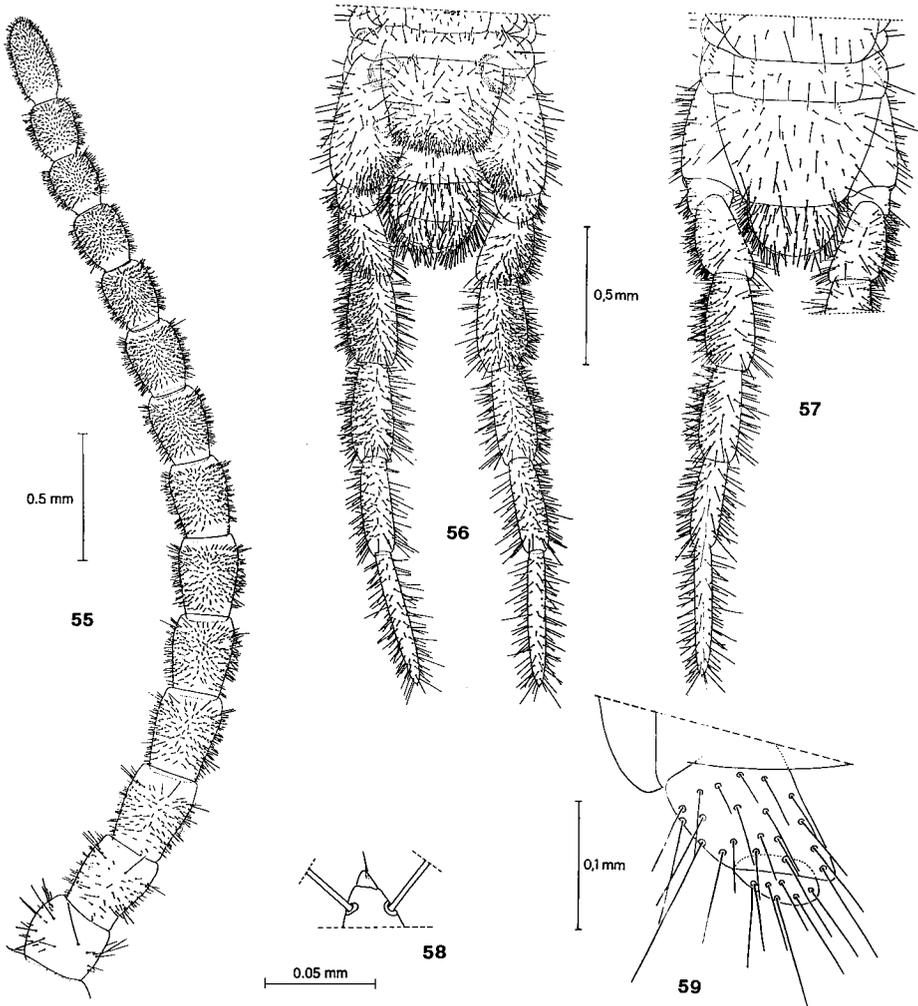
53

0,5 mm



54

0,2 mm



Figs 55-59. — *Schendylurus coscaroni* n. sp., ♂ allotype (Brazil, São Paulo: Serra do Mar); Fig. 55, l. antenna, v.; Fig. 56, last leg-bearing segment and terminal segments, v.; Fig. 57, the same, d.; Fig. 58, detail of distal end of last podomere of r. last leg, d.; Fig. 59, r. gonopod, v.

podomeres, form and chaetotaxy as in Figs 52-53. Praetarsus as a very small tubercle with 1 small apical spine (similar to the male, Fig. 58).

Terminal segments. Intermediate tergum with posterior margin convex; intermediate sternum with posterior margin straight to slightly concave; first genital sternum with posterior margin medially convex, laterally concave. Gonopods uniaarticulate (Fig. 52).

Male allotype. A total of 49 pairs of legs, body length 36 mm, maximum body width 1.3 mm.

All features similar to the female except for the shape and chaetotaxy of antennomeres and for the last leg-bearing segment and the terminal segments.

Antennae. Slightly attenuate distally; all articles, the first excepted, longer than wide in the following ratios: on a.a. II, 1.2: 1; on a.a. IV, 1.3: 1; on a.a. VII, 1.4:1; on a.a. XII and XIII, 1.4: 1; on XIV, 2.3: 1. Setae on a.a. I of different lengths, few in number, setae of the remaining antennomeres progressively shorter and more numerous towards the end of the appendage (Fig. 55). Claviform sensory setae and other specialized setae similar to those in the female.

Last leg-bearing segment: form and chaetotaxy of sternum and tergum as in Figs 56-57. Coxopleura slightly protruding at their distal v. ends, setae small and numerous on distal internal edge, the remaining surface with few setae of different lengths. Podomeres of terminal legs moderately inflated with shape and chaetotaxy as in Figs 56-57.

Terminal segments: intermediate tergum with posterior margin convex; intermediate sternum with posterior margin slightly convex; first genital sternum with posterior margin medially convex, laterally concave. Gonopods biarticulate, basal article with ca 21-22 setae and distal article with 7 setae (Fig. 59), penis dorsally with 4 + 4 apical setae.

Etymology. This species is dedicated to Dr Sixto Coscarón of the Museum of La Plata, who first encouraged one of us (L.A. Pereira) to undertake the study of the Chilopoda Geophilomorpha.

Remarks. This species presents a sexual dimorphism on the antennae, those of the male being proportionally wider and more pilose.

***Schendylurus demangei* Pereira 1981 (Figs 60-83)**

Schendylurus demangei PEREIRA 1981: 115; PEREIRA & MINELLI 1993: 106, 108, 121.

Schendylurus demagei (sic!), PEREIRA 1981: 121.

Diagnosis. A *Schendylurus* species with well defined pore fields on the anterior and posterior segments but without pores on the intermediate ones. Among the Neotropical species of the genus, only the present species, *S. demartini* n. sp., *S. minutus* Pereira & Minelli and *S. placcii* n. sp. share this trait. It can be differentiated from *S. minutus* by means of the following characters (the corresponding ones in the latter species are given in parentheses): body length 29 mm (11 mm); pore field series ending on the antepenultimate sternum (penultimate sternum); dentate lamellae of the mandible with 4,7 or 3,7 teeth (2,3 teeth); coxosternum of the first maxillae with 2 + 2 setae (without setae); ♀ with 65 pairs of legs (53); a.a. II, V, IX and XIII with very small specialized setae ending in three apical branches (specialized setae of a.a. apically undivided). *S. demangei* can be differentiated from *S. demartini* n. sp. and *S. placcii* n. sp. by means of the characters given in the key below.

Type material examined. Holotype, ♀ with 63 pairs of legs; body length 29 mm. Argentina, Province of Chubut, Puerto Lobos, 26.I.1975, E. Maury legit.

Remarks. This is the most Austral species of the genus known up to present.

The original description includes 14 drawings, most of them very poorly printed. In addition, several details were not specified in the text. For this reason we offer here the following additional information together with revised versions of the previous poorly printed figures plus additional new figures.

Type locality. Argentina: Province of Chubut: Puerto Lobos. This is also the only locality known to date.

Depository of type. Museo de La Plata.

Remarks. Additional information after the holotype.

Female. Antennae. Terminal a.a. with ca 12-13 claviform sensory setae on the external border and ca 7-8 on the internal border. Dorsal and v. surfaces of a.a. II, V, IX and XIII with very small specialized setae. On d. side these are located in an external latero-apical and a medio-apical area and are represented by three different types: *a*, *b* and *c*. Type *a* setae are very thin and not apically divided, type *b* setae end in three small apical branches and are very similar to those of the apex of the terminal article; type *c* setae are a little larger, ending in two apical diminute branches, and are much darker (ochraceous) in colour (Fig. 60). Setae *a* occupy the median and apico-median part of the specified a.a., whereas type *b* and *c* setae occur on the external apico-lateral region; a.a. II with 1 type *a* seta; a.a. V with 1 type *a* and 1 type *b* setae; a.a. IX and XIII with 1 type *a*, 1 type *b* and 1 type *c* setae (Fig. 60). On v. side the specialized setae are located in an internal lateral area (with a more apical position on a.a. IX and XIII); a.a. II has 1 type *b* seta; a.a. V, IX and XIII with 1 type *a* and 1 type *b* seta each.

Cephalic plate slightly longer than wide (ratio: 1.2:1).

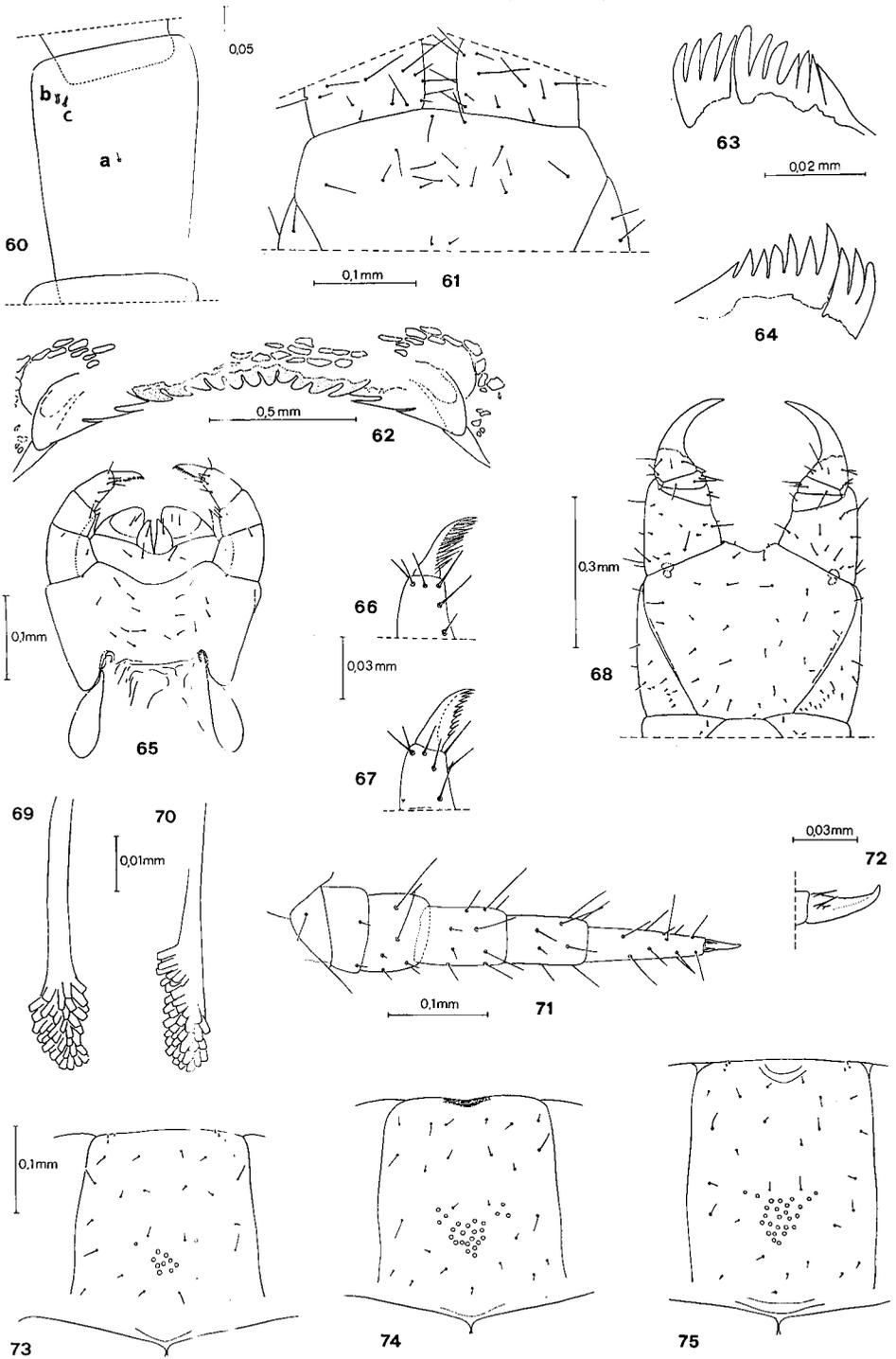
Mandible. Pectinate lamellae with about 13 hyaline teeth.

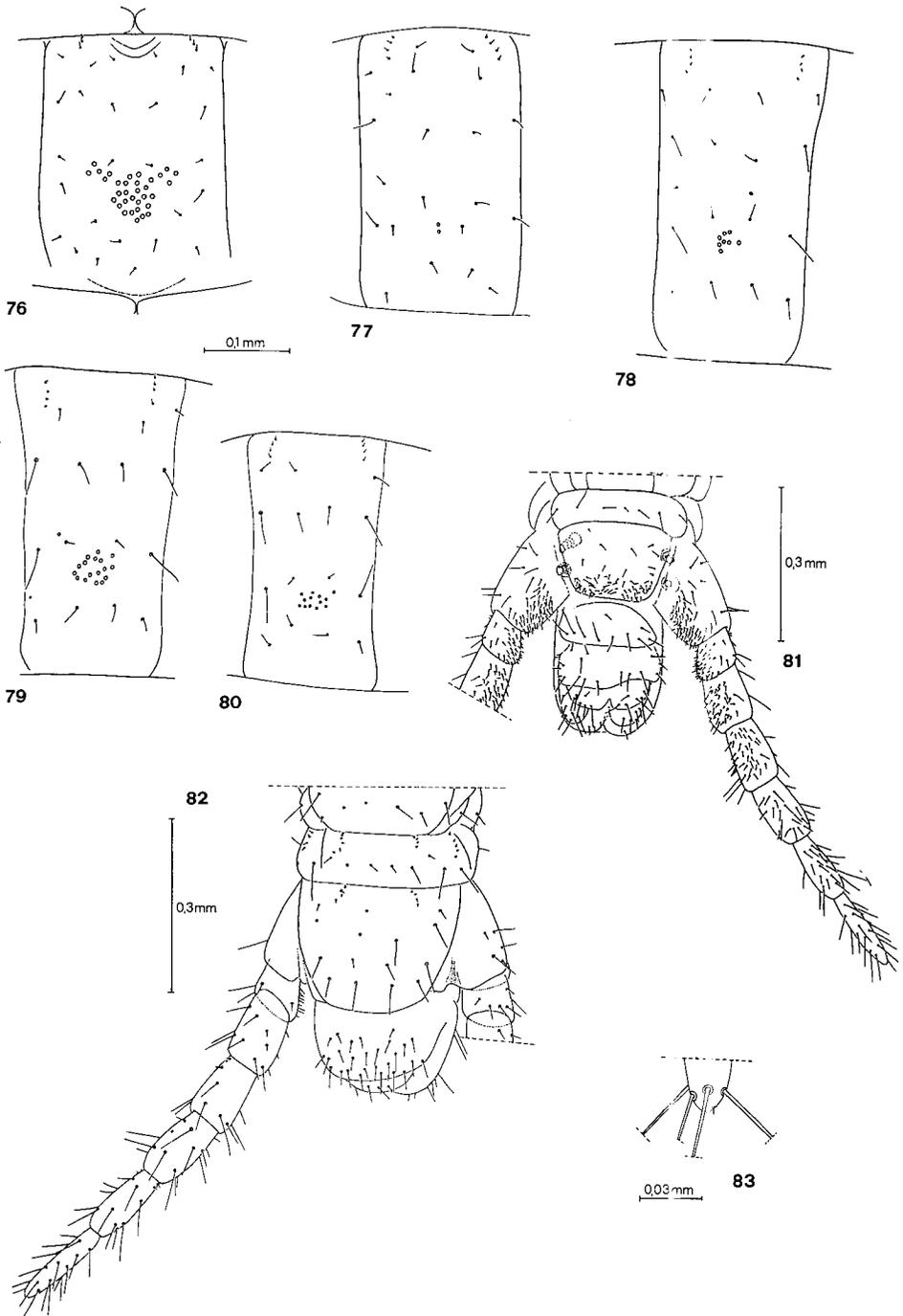
Legs (last pair excepted) with chaetotaxy (Fig. 71) uniform throughout the body length. Claws ventrobasally with two spines, one anterior one posterior; a third spine, smaller in size occurs internally, very close to the posterior one (Fig. 72).

Sterna. Form of pore fields changing along the trunk as in Figs 73-80. Number of pores on selected sterna: on sternum II, 1+9+1; on III, 3+18+3; on VII, 2+22+2; on IX, 5+24+4; on XIX, 2; on LXI, 8; on LXII, 1+17+0; on LXIII, 0+12+1.

Last leg-bearing segment and terminal segments with form and chaetotaxy as in Figs 81-82. Apex of distalmost podomere of terminal legs with praetarsus apparently absent, replaced by a very small seta (Fig. 83).

Figs 60-75. — *Schendylurus demangei* Pereira, ♀ holotype (Argentina, Province of Chubut: Puerto Lobos). Fig. 60, l. a.a. IX, d. (*a*: type *a* seta; *b*: type *b* seta; *c*: type *c* seta); Fig. 61, clypeus and basis of antennae; Fig. 62, labrum; Figs 63-64, dentate lamellae of mandibles; Fig. 65, first and second maxillae, v.; Fig. 66, claw of telopodite of l. second maxilla, d.; Fig. 67, claw of telopodite of r. second maxilla, v.; Fig. 68, forcipular segment with poison claws, v.; Figs 69-70, detail of calyx of both poison glands, v.; Fig. 71, r. leg III, v.; Fig. 72, claw of l. leg. XXIV, postero-v.; Figs 73-75, sterna II, III, VII.





Figs 76-83. — *Schendylurus demangei* Pereira, ♀ holotype (Argentina, Province of Chubut: Puerto Lobos). Figs 76-80, sterna IX, XIX, LXI, LXII, LXIII; Fig. 81, last leg-bearing segment and terminal segments, v.; Fig. 82, the same, d.; Fig. 83, detail of distal end of last podomere of r. last leg, d.

Schendylurus demartini n. sp. (Figs 84-113)

Diagnosis. A *Schendylurus* species with well defined pore fields on the anterior and posterior sterna, but without pores on the intermediate ones. Among the Neotropical species of the genus only the present species, *S. demangei* Pereira, *S. minutus* Pereira & Minelli and *S. placcii* n. sp. share this trait. It is more closely related to *S. placcii* and can be differentiated from this last species by means of the following characters (the corresponding ones in *S. placcii* n. sp. are given in parentheses): antennae 2.6 times longer than the cephalic plate (3.2); last a.a. with ca 1-3 claviform sensory setae on the internal edge (ca 9-10); male a.a. II-XIII as long as wide or 1.1 times longer than wide, a.a. XIV, 2.0 times longer than wide (II-XIII, ca 1.4-1.5; XIV, 2.5); cephalic plate 1.1 times longer than wide (1.2); dentate lamella of mandible subdivided into 2 distinct blocks (3); last leg-bearing segment with pleurites at the sides of praetergum (without pleurites); shape and pilosity of last leg-bearing segment and terminal segments as in Figs 108-109 (as in Figs 302-303).

Type material. Holotype ♂ with 41 pairs of legs, body length 18 mm. Argentina, Province of Misiones: Puerto Iguazú, 14-20.X.1982, De Martin legit.

Depository of type. Museo Civico di Storia Naturale, Verona.

Description

Male holotype. A total of 41 pairs of legs, body length 18 mm, maximum body width 0.7 mm.

Colour of preserved specimen yellowish.

Antennae ca 2.6 times longer than the cephalic plate, distally slightly attenuate; a.a. II-XIII as long as wide or slightly longer than wide (ratio 1:1 to 1.1:1 respectively), a.a. XIV, 2.0 times longer than wide. Setae on a.a. I-IV of different lengths and few in number; those of remaining antennomeres progressively shorter and more numerous towards the tip of the appendage (Fig. 84). Terminal a.a. with ca 6-8 claviform sensory setae on the external border and ca 1-3 on the internal border. Distal end of this a.a. with ca 7-9 very small specialized setae ending in three small apical branches (Fig. 85). Dorsal and v. surface of a.a. II, V and IX with very small specialized setae; on the v. side are restricted to an internal lateral area (with more apical position on a.a. IX) and are very similar to those of the apex of the terminal article. Each of a.a. II, V and XIII have 1 seta (Fig. 86). Specialized setae on d. side are restricted to an external latero-apical and medio-apical areas and are represented by three types: *a*, *b*, and *c*. Type *a* setae are very thin and not apically divided, type *b* setae are very similar to the setae at the apex of the terminal a.a. (also found on v. side); type *c* are a little bigger, ending in two apical diminute branches, and are much darker (ochraceous) in colour (Fig. 87). Setae *a* occupy the apico-median part of the specified a.a., whereas type *b* and *c* setae occur on the external apico-lateral region; a.a. II with 1 type *a* and 1 type *b* seta; a.a. V with 1 type *a*, 1 type *b* and 2 type *c* setae and a.a. IX with 1 type *a*, 3 type *b* and 2 type *c* setae (Fig. 87).

Cephalic plate slightly longer than wide (ratio 1.1:1), shape and chaetotaxy as in Fig. 88.

Clypeus with 1+1 postantennal setae, 5+7 median setae and 1+1 prelabral setae (Fig. 89).

Labrum with 15 teeth on the central arc, sidepieces with 4+5 teeth, each with a very sharp medial extension (Fig. 90).

Mandible. Dentate lamella subdivided into 2 distinct blocks; with 6,3 teeth respectively (Fig. 91); pectinate lamellae with ca 20 hyaline teeth.

First maxillae with palps on both coxosternum and telopodite. Coxosternum with 2+3 setae, median projections of coxosternum subtriangular well developed and provided with 1+1 setae. Article II of telopodite with 3+2 v. setae and 7+7 d. sensilla (Figs 92-93).

Second maxillae with 11+12 setae on coxosternum arranged as in Fig. 93. Apical claw of telopodite well developed and bipectinate, the d. edge with ca 18-19 teeth (Fig. 94) and the v. with ca 12-13 teeth.

Forcipulae. When closed telopodites not extending beyond the anterior margin of the head; basal plate with an irregular transverse median row of 10 big setae and a few additional small setae dispersed on the remaining surface. Telopodites with all articles lacking teeth. Calyx of poison gland cylindrical (Fig. 97); chaetotaxy of coxosternum and telopodites as in Fig. 96.

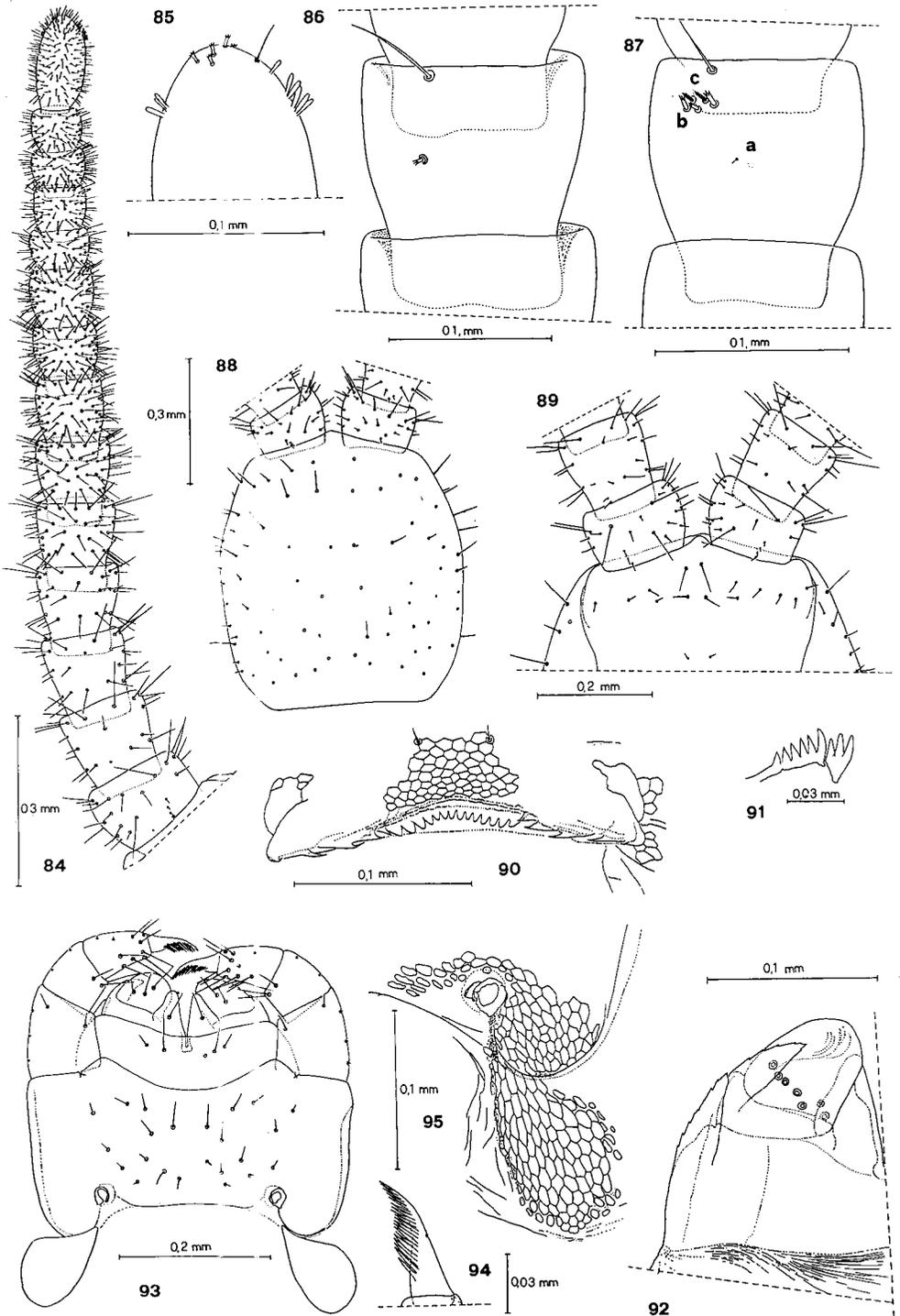
Legs (last pair excepted) with chaetotaxy uniform throughout the body length (Fig. 98). Claws ventrobasally with two spines, one anterior, one posterior; a third spine, smaller in size, occurs internally, very close to the posterior one (Fig. 99).

Sterna. Pore fields present on sterna II to XVIII and XXXVI to antepenultimate (XXXIX); totally absent on the remaining sterna. On sterna II to XV; XVIII and XXXVII to XXXIX the fields are undivided; on sterna XVI to XVII and XXXVI the fields are divided in two subsymmetrical areas. On the anterior sterna there are some isolated additional pores at each anterior side of the central pore field area. Form of fields changing along the trunk as in Figs 100-107. Number of pores on selected sterna: on sternum II, 2+21+2 pores; on VII, 4+45+3; on XV, 2+16+0; on XVI, 6+4; on XVIII, 4+0; on XXXVI, 5+3; on XXXVII, 21; on XXXIX, 38.

Last leg-bearing segment with pleurites at the sides of praeternum. Praesternum not divided along the sagittal plane; form and chaetotaxy of sternum and tergum as in Figs 108-109. Coxopleura slightly protruding at their distal v. ends with setae small and numerous on distal internal half, the remaining surface with a few larger setae. Two single ("homogeneous") coxal organs on each coxopleuron, anterior and posterior coxal organs externally unilobed, opening on membrane between coxopleuron and sternum, covered by the latter (Fig. 110). Last legs with seven podomeres, form and chaetotaxy as in Figs 108-109. Praetarsus as a very thin and small tubercle provided with 1 small apical spine (Fig. 111).

Terminal segments. Intermediate tergum with posterior margin convex; intermediate sternum with posterior margin slightly concave; first genital sternum with

Figs 84-95. — *Schendylurus demartini* n. sp., ♂ holotype (Argentina, Province of Misiones: Puerto Iguazú). Fig. 84, l. antenna, v.; Fig. 85, apical region of last l. a.a., v.; Fig. 86, l. a.a. V, v.; Fig. 87, l. a.a. IX, d. (a: type a seta; b: type b seta; c: type c seta); Fig. 88, cephalic shield; Fig. 89, clypeus and basis of antennae; Fig. 90, labrum; Fig. 91, dentate lamellae of r. mandible; Fig. 92, l. first maxilla, d.; Fig. 93, first and second maxillae, v.; Fig. 94, claw of telopodite of r. second maxilla, d.; Fig. 95, detail of posterior external region of l. second maxilla, v.



posterior margin medially convex, laterally concave (Figs 108-109). Gonopods biarticulate, basal article with 13 setae and distal article with 4 setae (Fig. 113), penis dorsally with 2 + 2 apical setae.

Female unknown.

Etymology. This species is dedicated to the collector of the type specimen, M.P. De Martin.

Remarks. The absence of specialized sensory setae on d. and v. sides of r. and l. a.a. XIII is puzzling. Is this absence a specific character on this species? The lack of these setae could also be an individual abnormality, although such anomalous condition mostly affect one side of the body only.

Schendylurus demelloi Verhoeff 1938 (Figs 114-140)

Schendylurus demelloi VERHOEFF 1938: 378; BÜCHERL 1942a: 203; ATTEMS 1947: 87; CRABILL 1972: 21; PEREIRA & MINELLI 1993: 121.

Schendylurus (Schendylurus) demelloi, BÜCHERL 1942b: 350.

Diagnosis. A *Schendylurus* species with dentate lamella of the mandible subdivided in blocks and pore fields present from the first to the penultimate sternum (fields undivided on anterior and posterior sterna and divided in two subsymmetrical areas on sterna of the middle part of the body). Among the Neotropical species of the genus, only the present species, *S. coscaroni* n. sp., *S. parabybae* (Chamberlin) and *S. tropicus* Brölemann & Ribaut share this trait. *S. demelloi* can be easily differentiated from the three species mentioned above by the large number of pairs of legs: 69; by the large size of the body: up to 70 mm and also by the unusually very large number of setae on the coxosternum of the first maxillae: ca 15-24.

Type material examined. Lectotype ♀ with 69 pairs of legs; body length 70 mm; maximum width 2 mm; "paratype" ♂ with 69 pairs of legs; body length 44 mm; maximum width 1.8 mm. Brazil, São Paulo: Iguape (no data on collector and date). Each specimen is mounted in one original VERHOEFF's microscope slide.

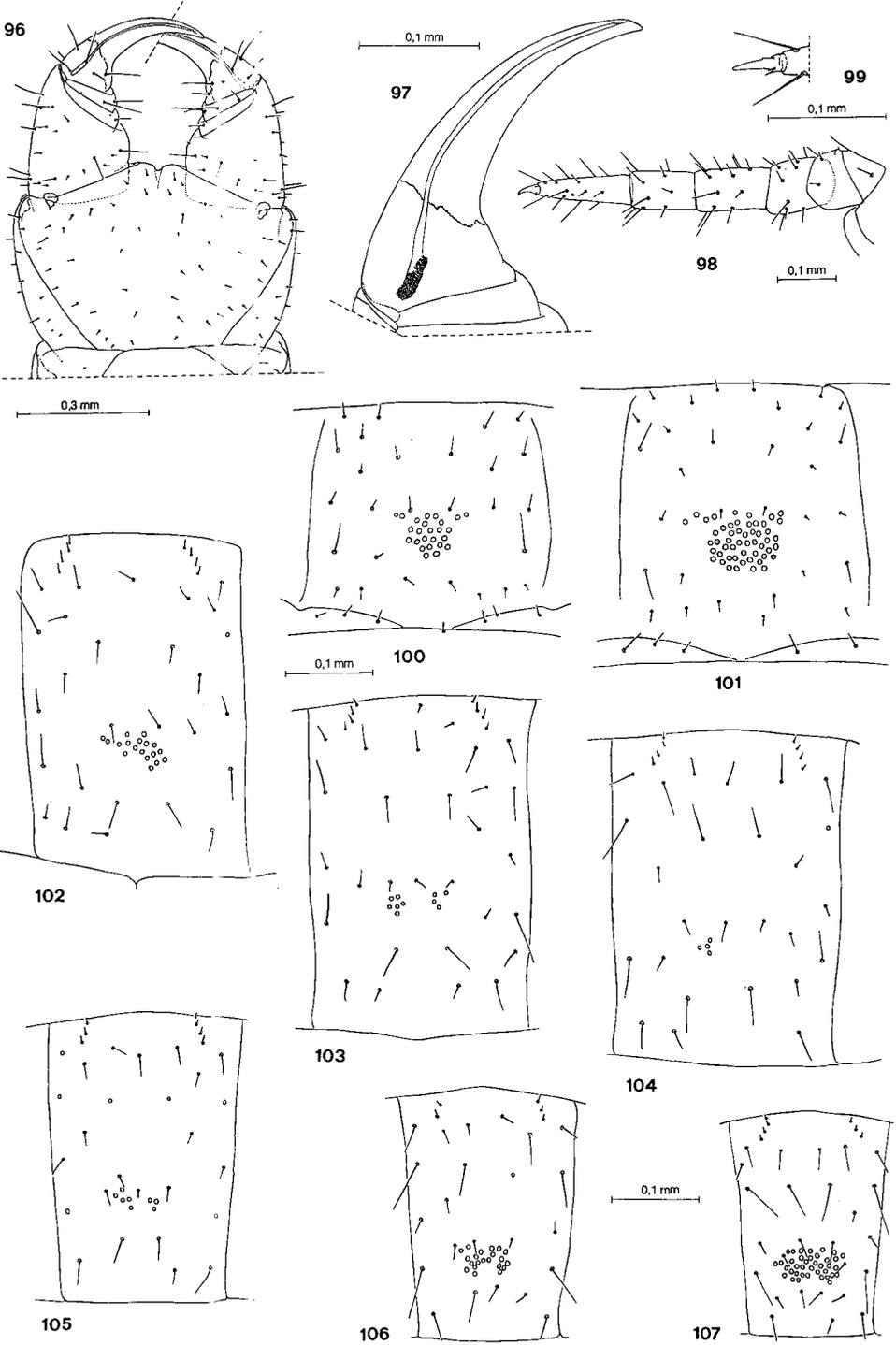
Type locality. Brazil, São Paulo: Iguape. This is also the only locality known to date.

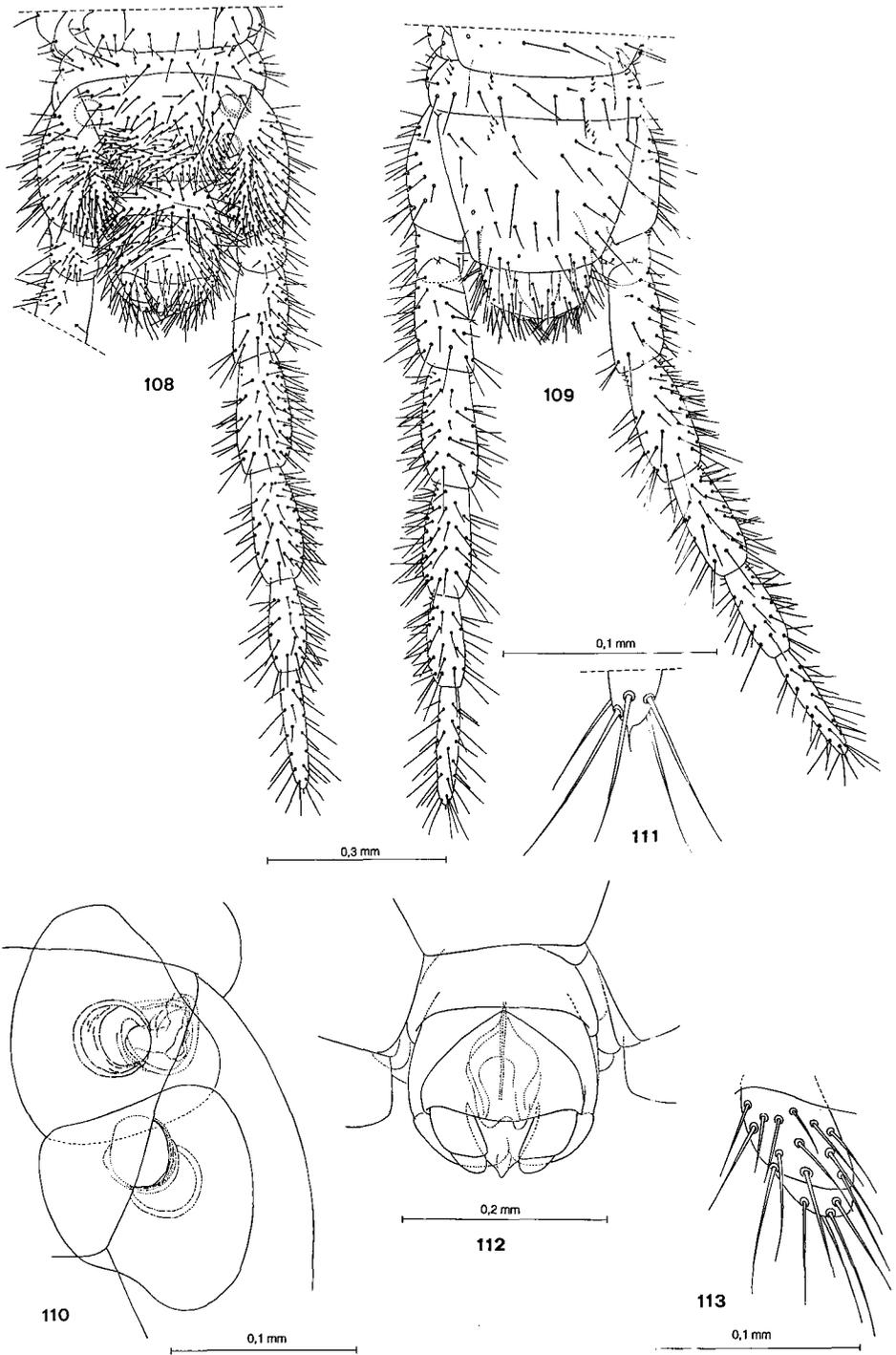
Depository of type. Zoologische Staatssammlung, München.

Redescription

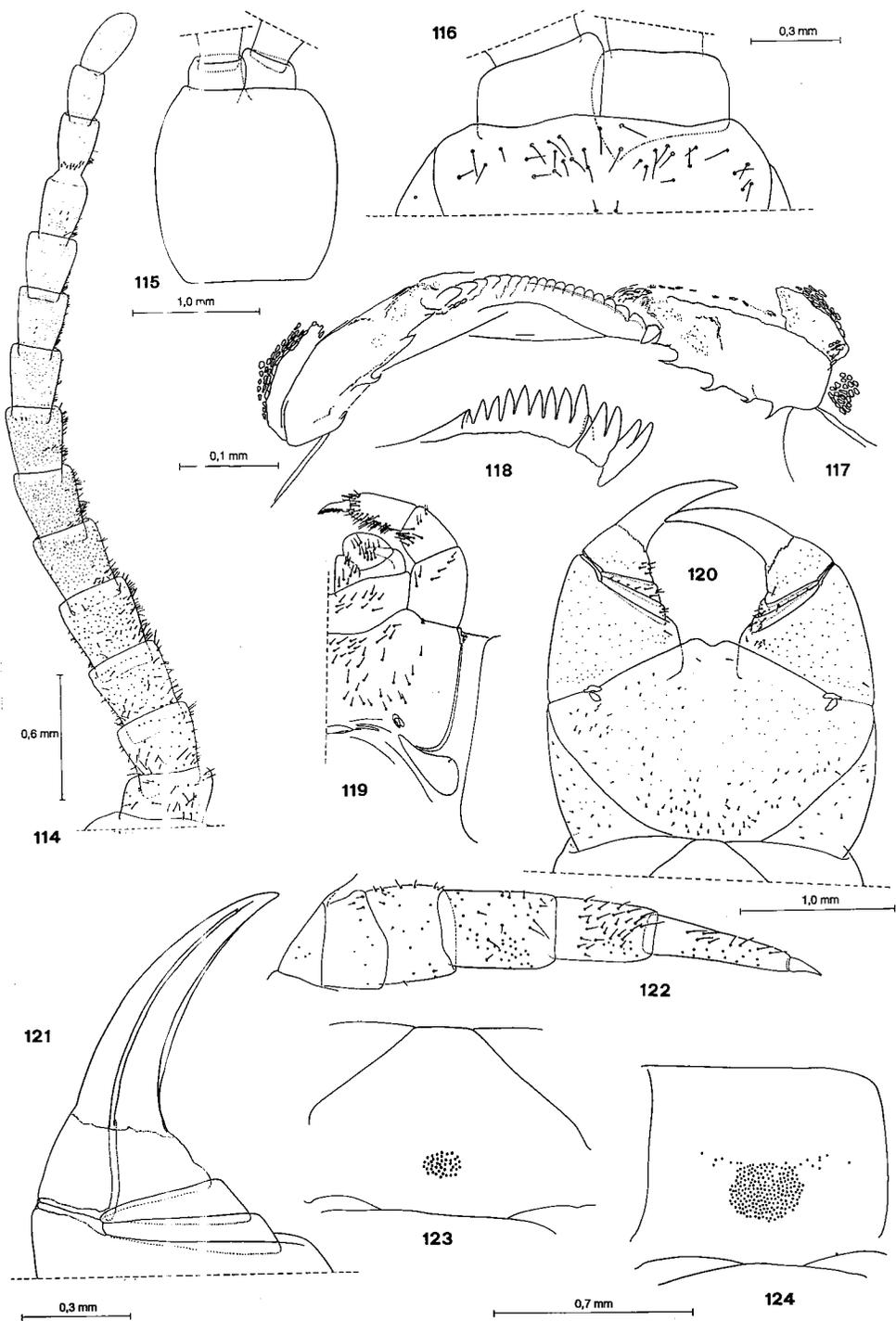
Female lectotype. A total of 69 pairs of legs, body length 70 mm, maximum body width 2 mm.

Figs 96-107. — *Schendylurus demartini* n. sp., ♂ holotype (Argentina, Province of Misiones: Puerto Iguazú). Fig. 96, forcipular segment with poison claws, v.; Fig. 97, detail of poison gland in r. poison claw, v.; Fig. 98, r. leg VII, v.; Fig. 99, claw of r. leg XIV, v.; Figs 100-107, sterna II, XII, XV, XVI, XVIII, XXXVI, XXXVII, XXXIX.

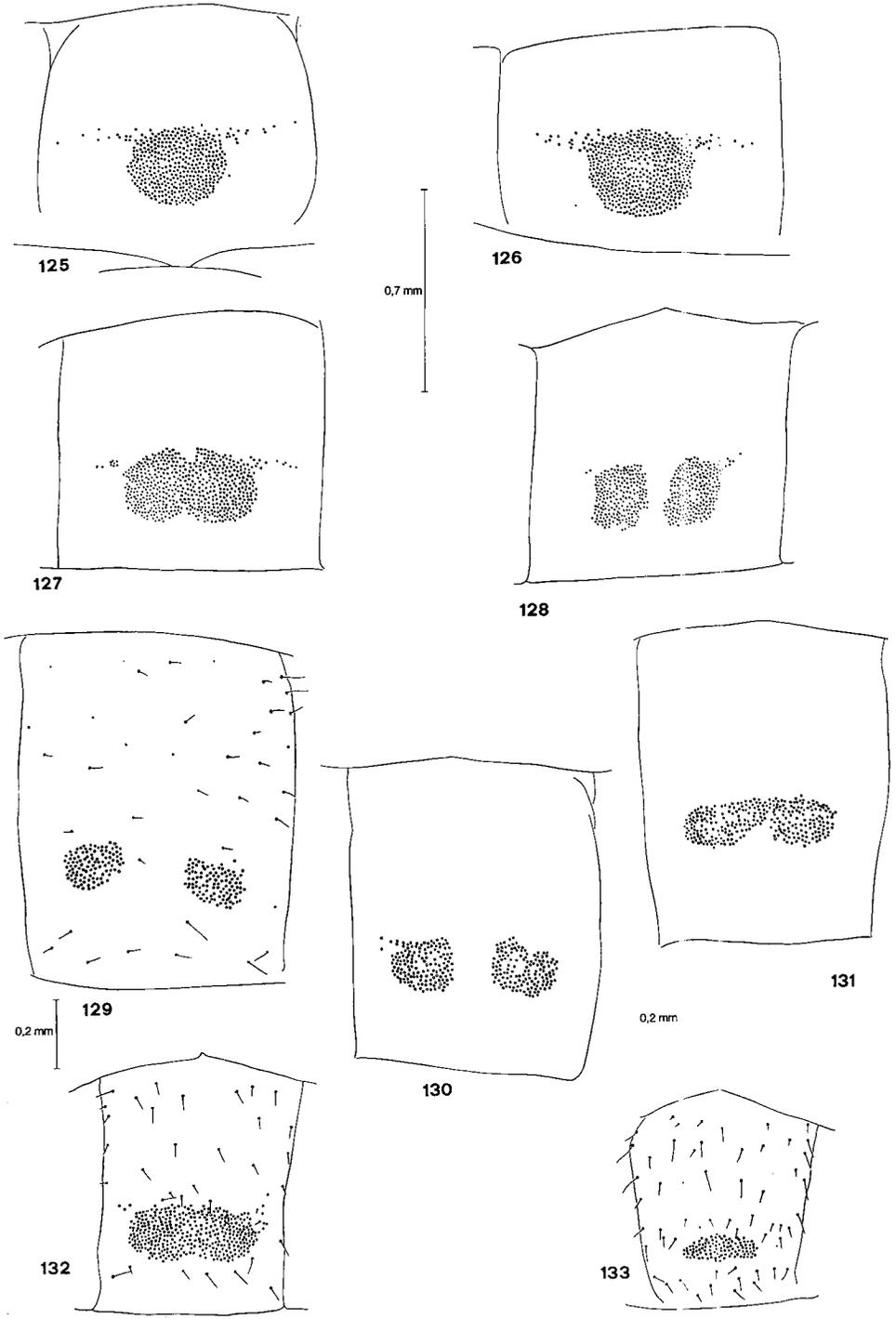




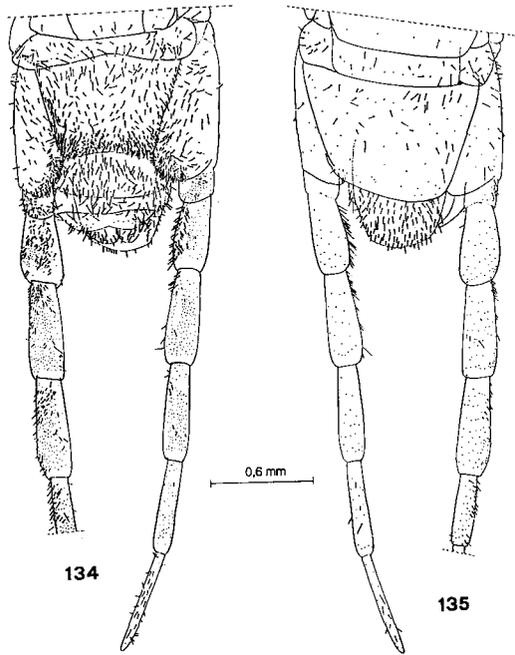
Figs 108-113. — *Schendylurus demartini* n. sp., ♂ holotype (Argentina, Province of Misiones: Puerto Iguazú). Fig. 108, last leg-bearing segment and terminal segments, v.; Fig. 109, the same, d.; Fig. 110, l. coxal organs, v.; Fig. 111, detail of distal end of last podomere of l. last leg, v.; Fig. 112, genital region, v.; Fig. 113, r. gonopod, v.



Figs 114-124. — *Schendylurus demelloi* Verhoeff, ♀ lectotype (Brazil, São Paulo: Iguape). Fig. 114, r. antenna, v.; Fig. 115, cephalic shield; Fig. 116, clypeus and basis of antenna; Fig. 117, labrum; Fig. 118, dentate lamella of mandible; Fig. 119, l. first and second maxilla, v.; Fig. 120, forcipular segment with poison claws, v.; Fig. 121, detail of poison gland in r. poison claw, v.; Fig. 122, l. leg. XV, v.; Figs 123-124, sterna I, II.



Figs 125-133. — *Schendylurus demelloi* Verhoeff, ♀ lectotype (Brazil, São Paulo: Iguape). Sterna VI, XIV, XXII, XXIII, LVIII, LXII, LXIII, LXVII, LXVIII.



Figs 134-135. — *Schendylurus demelloi* Verhoeff, ♀
lectotype (Brazil, São Paulo: Iguape). Fig. 134, last leg-
bearing segment and terminal segments, v.; Fig. 135,
the same, d.

Colour (of preserved specimen in a slide) yellowish, anterior part of the body darker.

Antennae ca 2.8 times longer than the cephalic plate, distally attenuate, all articles (the first excepted) longer than wide; form and chaetotaxy as in Fig. 114. Terminal a.a. with ca 40 claviform sensory setae on the external apical edges, these setae are apparently absent on the internal edge of both terminal a.a.

Cephalic plate slightly longer than wide (ratio 1.03:1), shape as in Fig. 115.

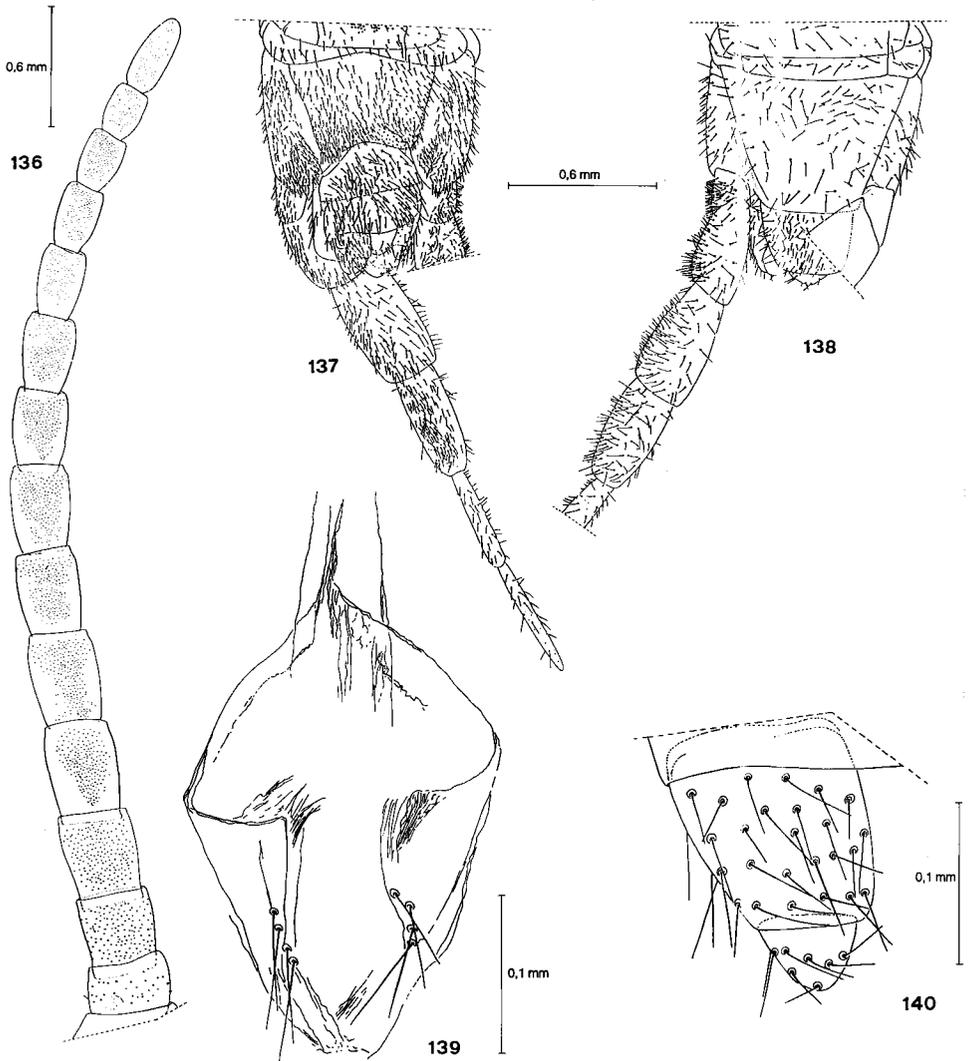
Clypeus with 1 + 1 postantennal setae, ca 15 + 14 median setae and 1 + 1 praelabral setae (Fig. 116).

Labrum with ca 28 teeth, those in the central arc robust and dark, lateral ones less sclerotized, each provided with a relatively long and very sharp medial extension (Fig. 117).

Mandibles. Dentate lamella subdivided into 3 distinct blocks, with 2,3,11 teeth respectively (Fig. 118); pectinate lamellae with ca 30 hyaline teeth.

First maxillae with well developed palps on both coxosternum and telopodites. Coxosternum with 14 + 10 setae, median projections of coxosternum subtriangular, well developed and provided with 6 + 9 setae. Article II of telopodite with 17 + 16 v. setae (Fig. 119).

Second maxillae with ca 60 setae on coxosternum, arranged as in Fig. 119. Apical claw of telopodite well developed, bipectinate, the v. and d. edges with ca 26 teeth.



Figs 136-140. — *Schendylurus demelloi* Verhoeff, ♂ paralectotype (Brazil, São Paulo: Iguape). Fig. 136, r. antenna, v.; Fig. 137, last leg-bearing segment and terminal segments, v.; Fig. 138, the same, d.; Fig. 139, penis, d.; Fig. 140, r. gonopod, v.

Forcipulae. Basal plate with ca 90 setae dispersed on almost whole surface. Telopodites with all articles lacking teeth. Calyx of poison gland cylindrical (Fig. 121); chaetotaxy of coxosternum and telopodites as in Fig. 120.

Legs (last pair excepted) with chaetotaxy as in Fig. 122.

Sterna. Pore fields present from the first to the penultimate sternum. Fields on sterna I to XXII and LXIII to LXVIII undivided; fields on sterna XXIII to LXII divided in two subsymmetrical areas. Form of fields changing along the trunk as in Figs 123-133. Number of pores on selected sterna: on sternum I, 43 pores; on II,

7 + 220 + 8; on VI, 11 + 396 + 14; on XIV, 12 + 496 + 15; on XXII, 9 + 540 + 6; on XXIII, 2 + 224 + 219 + 6; on LVIII, 107 + 106; on LXII, 151 + 143; on LXIII, 292; on LXVII, 3 + 375 + 6; on LXVIII, 108.

Last leg-bearing segment with pleurites at the sides of praetergum. Praesternum not divided along the sagittal plane; form and chaetotaxy of sternum and tergum as in Figs 134-135. Coxopleura apparently slightly prominent at their distal v. ends, setae small and numerous on v. distal medial edge, the remaining surface with a few larger setae. Two single ("homogeneous") coxal organs on each coxopleuron opening on the membrane between coxopleuron and sternum, with pores covered by the latter (Fig. 134-135). Last legs with seven podomeres, form and chaetotaxy as in Figs 134-135. Praetarsus apparently as a very small tubercle.

Terminal segments. Intermediate tergum and sternum with posterior margin convex; first genital sternum with posterior margin medially convex, laterally concave. Gonopods uniarticulate (Figs 135).

Male. A total of 69 pairs of legs, body length 44 mm, maximum body width 1.8 mm.

All features similar to those in the female except for the antennae and the last leg-bearing segment and terminal segments.

Antennae distally attenuate; all articles, the first excepted, longer than wide. Setae on a.a. II-IV proportionally more numerous than on the antennae of the female (Fig. 136).

Last leg-bearing segment: form and chaetotaxy of sternum and tergum as in Figs 137-138. Coxopleura protruding at their distal v. ends, setae small and numerous on v. side, the remaining surface with few setae; legs with pilosity covering whole surface of articles (Figs 137-138).

Terminal segments. Intermediate tergum and sternum with posterior margin slightly convex; first genital sternum with posterior margin medially convex and slightly concave laterally (Figs 137-138). Gonopods biarticulate, basal article with ca 29 setae and distal with ca 7 setae (Fig. 140); penis dorsally with 4 + 4 apical setae (Fig. 139).

Remarks. We are unable to describe the specialized sensory setae presumed to be present on both sides of a.a. II, V, IX and XIII and apex of XIV, due to damage following excess caustic treatment of the specimens preserved on the original slides. For the same reason, it is very difficult to observe the number and placement of the sensilla on the dorsal side of the article II of the telopodite of the first maxillae and it is not possible to ascertain the presence of a tubercle at the apex of the distalmost podomere of the terminal legs.

VERHOEFF stated in his original description: "Zahnblatt der Mandibeln 2,2,8-9". We have observed that the teeth can be also 2,3,11. He also stated: "Der Clypeus beim ♂ nackt, beim ♀ vorn jederseits mit 6 Borsten", but we have observed on the lectotype ♀ and "paratype" ♂ that the clypeus has ca 30 setae on the middle.

***Schendylurus elegantulus* (Meinert 1886)**

Geophilus elegantulus MEINERT 1886: 145; ATTEMS 1903: 265; 1929: 323.

Schendylurus elegantulus, PEREIRA 1981: 122; 1983b: 85; 1985 (1986): 24; PEREIRA & MINELLI 1993: 121.

Type locality. Argentina, Province of Chaco: Río de Oro.

Known range. Argentina, Province of Chaco: Río de Oro; Province of Buenos Aires: Florencio Varela, La Plata, Sierra de La Ventana.

Depository of type. Zoologisk Museum, København.

Schendylurus fieldi (Chamberlin 1944) (Figs 141-166)

Pectiniunguis fieldi CHAMBERLIN 1944: 187; PEREIRA & COSCARÓN 1975-1976: 72.
Schendylurus fieldi, PEREIRA 1981: 126; PEREIRA & MINELLI 1993: 121.

Diagnosis. A *Schendylurus* species with pore fields series uninterrupted and present along all the trunk from the second to the antepenultimate sternum; fields on the anterior and posterior sterna undivided, fields on the middle part of the body divided in two subsymmetrical areas. Among the Neotropical species which share these traits, it seems more closely related to *S. elegantulus* (Meinert). It can be differentiated from the latter as follows (traits for *S. elegantulus* are in parentheses): body length 30 mm (28 mm); antennae about 2.8 times longer than head (3.2-3.8); undivided pore fields of anterior region of the body present up to sternum XXV (present up to sterna XVIII-XIX); divided pore fields present on eight sterna of middle part of the body (present in 21 to 23 sterna); ♀ with 43 pairs of legs (with 45-47); antennae with three types of special sensory setae (with two types).

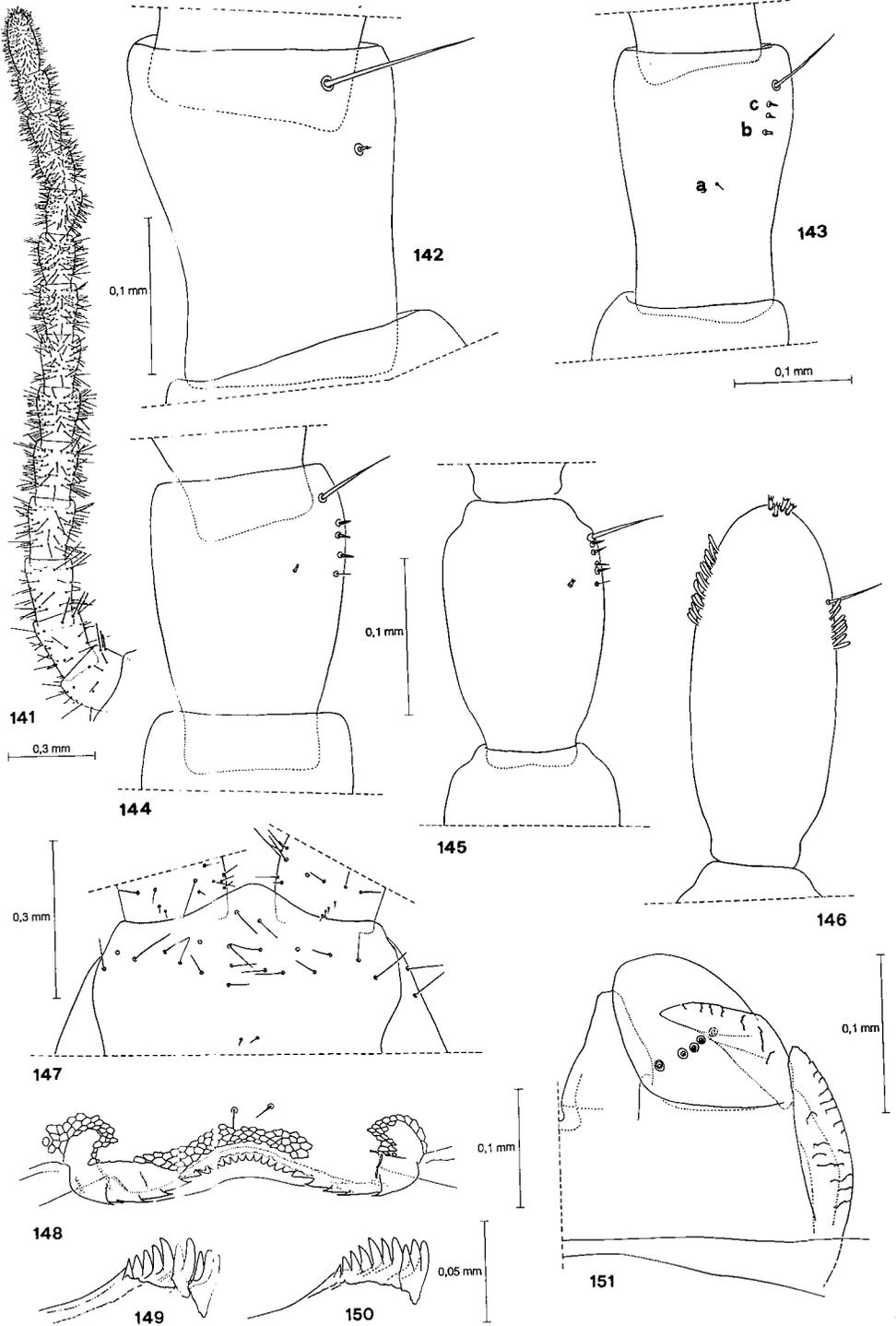
Type material examined. Holotype ♀ with 43 pairs of legs; body length 28 mm. Argentina, Province of Misiones: "Río Paranay", 20.IX.1926, K.P. Schmidt legit. The trunk is in alcohol, in poor conditions of preservation; head and mouth parts in one slide (original of CHAMBERLIN).

Type locality. Argentina, Province of Misiones: "Río Paranay" (Río Paraná!). This is also the only (ill-defined) locality known to date.

Depository of type. Field Museum of Natural History, Chicago.

Remarks. This species was poorly described and illustrated by CHAMBERLIN (1944) and wrongly placed under the genus *Pectiniunguis*. PEREIRA (1981: 126) established the new combination *Schendylurus fieldi* and gave a partial redescription of this species based only on the trunk of the holotype because it was impossible at that time to recover the head and mouth parts of this specimen. Recently, the slide containing the up to now "missing" parts of this specimen has been located at the Smithsonian Institution. Thanks to this fortunate fact we are now able to give a complete redescription and illustration of this species.

Figs 141-151. — *Schendylurus fieldi* (Chamberlin), ♀ holotype (Argentina, Province of Misiones: Río Paraná). Fig. 141, l. antenna, v.; Fig. 142, r. a.a. II, v.; Fig. 143, r. a.a. V, d. (a: type a seta; b: type b seta; c: type c seta); Fig. 144, r. a.a. IX, v.; Fig. 145, r. a.a. XIII, v.; Fig. 146, r. a.a. XIV, v.; Fig. 147, clypeus and basis of antennae; Fig. 148, labrum; Figs 149-150, dentate lamellae of mandibles; Fig. 151, r. first maxilla, d.



Redescription

Female holotype. A total of 43 pairs of legs, body length 28 mm, width 1 mm.

Colour. According to CHAMBERLIN: "the head and anterior segments and posterior segments are somewhat orange in color, the intervening segments appearing much darker and apparently in life with a median longitudinal pale line dividing the broad dark area".

Antennae ca 2.8 times longer than the cephalic plate, distally slightly attenuate, form and chaetotaxy of a.a. as in Fig. 141. Terminal a.a. with ca 14 claviform sensory setae on the external border and ca 8 on the internal. Distal end of this a.a. with ca 4-5 very small specialized setae ending in three small apical branches (Fig. 146). Dorsal and v. surface of a.a. II, V, IX and XIII with very small specialized setae of three different types: *a*, *b*, and *c*. Type *a* setae are very thin and not apically divided; type *b* setae are thicker and very similar to those present on distal end of the last antennomere; type *c* setae are bigger than type *b*, not apically divided and much darker (ochraceous) in colour (Fig. 143). On v. side these setae are located on the internal latero-apical area; a.a. II with 1 type *b* seta (Fig. 142); a.a. V with 1 type *a* and 1 type *b* setae; a.a. IX with 1 type *a* 1 type *b* and 2-3 type *c* setae (Fig. 144); a.a. XIII with 1 type *a*, 1 type *b* and 4 type *c* setae (Fig. 145). Specialized setae on d. side also of three types (*a*, *b* and *c*, similar to those of v. side) and are restricted to an external latero-apical area, except in a.a. V where type *a* setae are located in the submedian part; a.a. II with 1 type *b* seta; a.a. V with 1 type *a*, 1 type *b* and 2 type *c* setae (Fig. 143); a.a. IX with 1 type *a*, 1 type *b* and 3-4 type *c* setae; a.a. XIII with 1 type *a*, 1 type *b* and 4-5 type *c* setae.

Cephalic plate slightly longer than wide (ratio 1.1:1).

Clypeus with 1 + 1 postantennal setae, 10 + 8 median setae and 1 + 1 praelabral setae (Fig. 147).

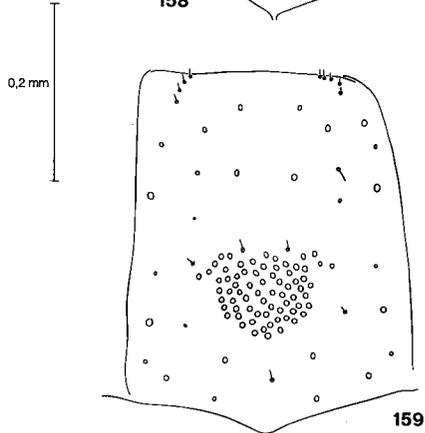
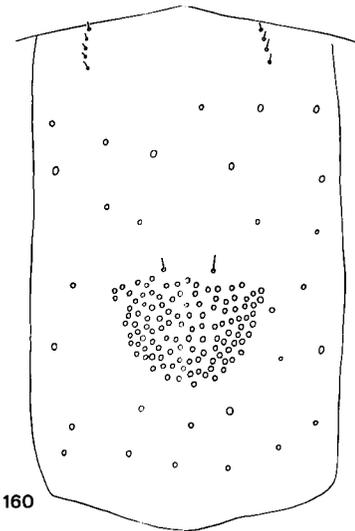
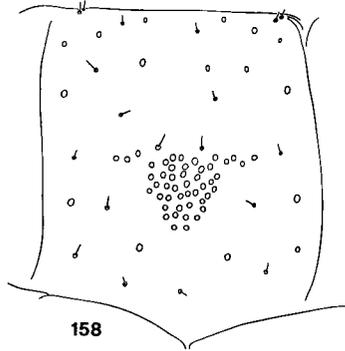
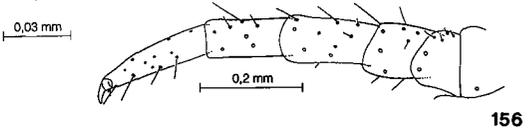
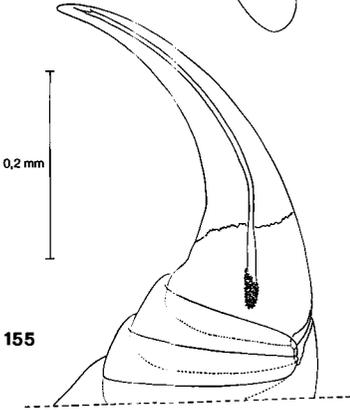
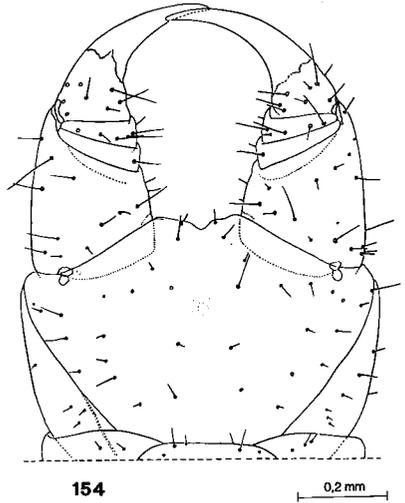
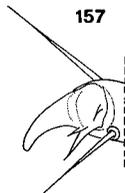
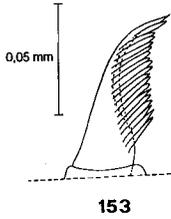
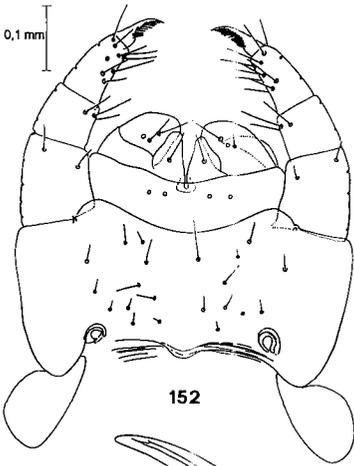
Labrum with 14 round-tipped teeth on the central arc, sidepieces with 5 + 4 teeth, each with a very sharp medial extension (Fig. 148).

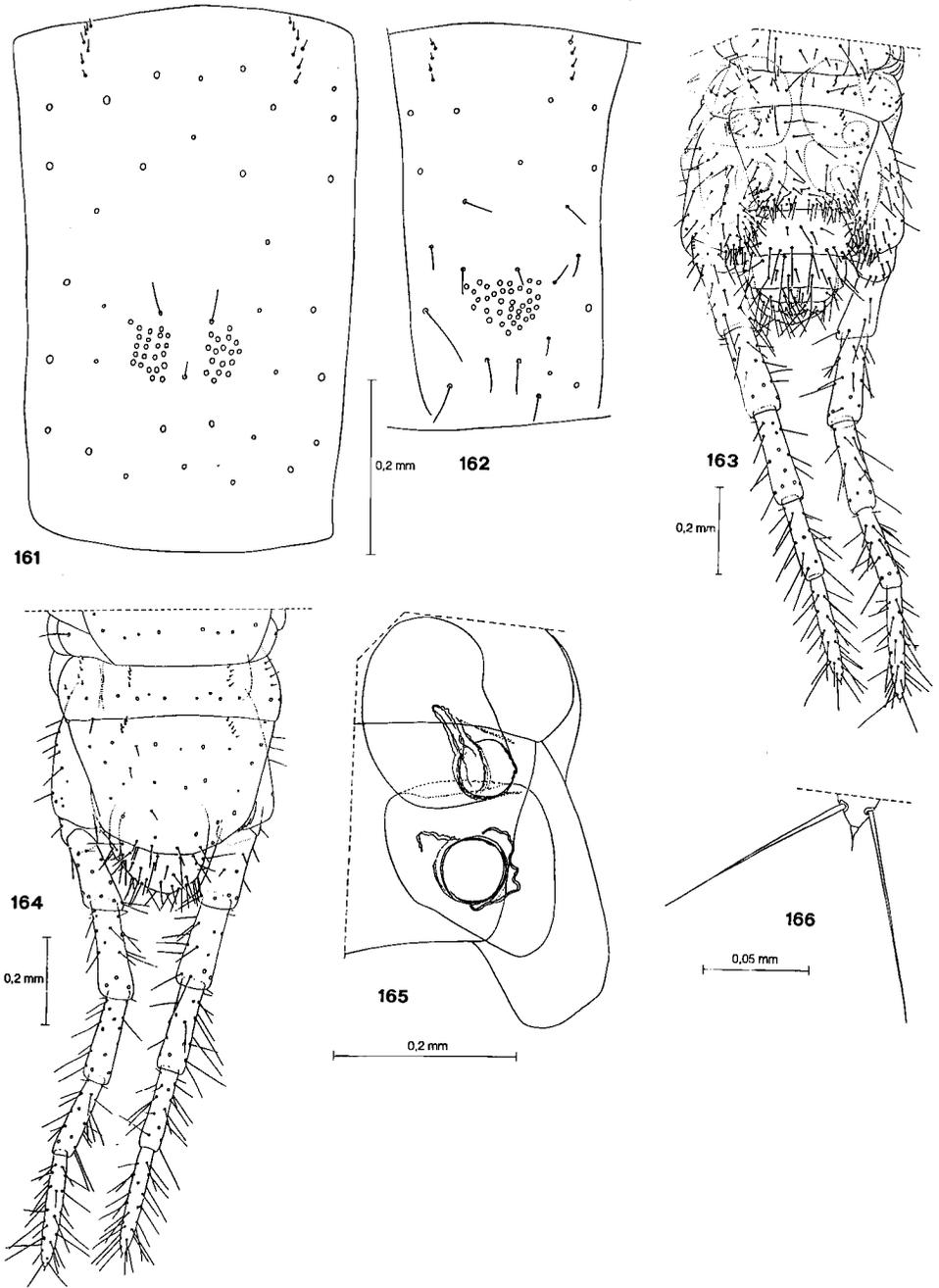
Mandible. Dentate lamellae subdivided into 2-3 apparently not well separated blocks, with 7,3 and 6,2,3 teeth respectively (Figs 149-150); pectinate lamellae with about 20 hyaline teeth.

First maxillae with palps on both coxosternum and telopodites. Coxosternum with 2 + 2 setae, median projections of coxosternum subtriangular well developed and provided with 1 + 1 setae. Article II of telopodite with 3 + 3 v. setae and 6 + 5 d. sensilla (Figs 151-152).

Second maxillae with 11 + 10 setae on coxosternum, arranged as in Fig. 152. Apical claw of telopodite well developed, bipectinate, the d. edge with ca 18 teeth (Fig. 153) and the v. with ca 14 teeth.

Figs 152-160. — *Schendylurus fieldi* (Chamberlin), ♀ holotype (Argentina, Province of Misiones: Rio Paraná). Fig. 152, first and second maxillae, v.; Fig. 153, claw of telopodite of l. second maxillae, d.; Fig. 154, forcipular segment with poison claws, v.; Fig. 155, detail of calyx of poison gland in l. poison claw, v.; Fig. 156, r. leg V, antero-v.; Fig. 157, claw of r. leg. V, v.; Figs 158-160, sterna II, III, XIV.





Figs 161-166. — *Schendylurus fieldi* (Chamberlin), ♀ holotype (Argentina, Province of Misiones: Rio Paraná). Figs 161-162, sterna XXVI, XLI; Fig. 163, last leg-bearing segment and terminal segments, v.; Fig. 164, the same, d.; Fig. 165, l. coxal organs, v.; Fig. 166, distal end of the last podomere of the l. last leg, v.

Forcipulae. Basal plate with an irregular transverse median row of 14 setae. Telopodites with all articles lacking teeth. Calyx of poison gland short and cylindrical (Fig. 155); chaetotaxy of coxosternum and telopodites as in Fig. 154.

Legs (last pair excepted) with chaetotaxy uniform throughout the body length (Fig. 156). Claws ventrobasally with two spines, one anterior one posterior; a third spine, smaller in size, occurs internally, very close to the posterior one (Fig. 157).

Sterna. Pore fields present from the second to the antepenultimate sternum. On sterna II to XXV and XXXIV to XLI the fields are undivided; on sterna XXVI to XXXIII the fields are divided in two areas. On sternum II there are some additional pores at each anterior side of the central pore area. On sternum III and in the few following ones the presence of these pores is much less evident; in the remaining sterna they disappear completely. Form of fields changing along the trunk as in Figs 158-162. Number of pores on selected sterna: on sternum II, 3 + 41 + 4 pores; on III, 71; on XIV, 115; on XXVI, 23 + 17; on XLI, 36.

Last leg-bearing segment with pleurites at the sides of praetergum. Praesternum not divided along the sagittal plane; form and chaetotaxy of sternum and tergum as in Figs 163-164. Coxopleura slightly protruding at their distal v. ends, setae small and numerous on v. distal internal edge, the remaining surface with a few larger setae. Two single ("homogeneous") coxal organs on each coxopleuron; coxal organs open on membrane between coxopleuron and sternum, covered by the latter (Fig. 165). Last legs with seven podomeres, form and chaetotaxy as in Figs 163-164. Praetarsus as a very small tubercle provided with 1 small apical spine (Fig. 166).

Terminal segments: intermediate tergum with posterior margin convex; intermediate sternum with posterior margin slightly concave; first genital sternum with posterior margin slightly concave. Gonopods uniarticulate (Fig. 163).

Male unknown.

Remarks. In describing the holotype, CHAMBERLIN stated of the mandible: "... dental plate divided into three blocks which bear 3 + 2 + 5 teeth". A careful examination of this specimen reveals that there are 7,3 teeth in one mandible and 6,2,3 in the other. About the maxillae he stated: "Apparently only one pair of lappets on first maxillae, these produced from coxal piece and not long". A detailed observation reveals that the palps are also present on the telopodites. About the ventral pore fields, he stated: "Ventral pores in a circular area on each sternite from second to the antepenultimate". From this sentence it is possible to interpret that all the pore fields are single, but a careful examination of the sterna of the middle part of the body reveals that the fields are double on sterna XXVI to XXXIII. There are also two errors in the treatment of this species by PEREIRA (1981: 128), when stating that all pore fields are undivided and present up to penultimate sternum.

Schendylurus gounellei (Brölemann 1902)

Schendyla gounellei BRÖLEMANN 1902b: 685; 1903: 84; 1909: 6; BÜCHERL 1939: 314.

Schendylurus (Ploutoschendylurus) gounellei, BRÖLEMANN & RIBAUT 1912: 115.

Schendylurus gounellei, BRÖLEMANN & RIBAUT 1912: 119; CHAMBERLIN 1914: 200; ATTEMS 1929: 77;

BÜCHERL 1942a: 202; 1942b: 349; PEREIRA 1984: 63; PEREIRA & MINELLI 1993: 121.

Schendylurus gounelli (sic!), ATTEMS 1928: 134; CRABILL 1972: 21.

Type locality. Brazil, São Paulo: Alto da Serra, Fazenda Nova Nicaragua.

Known range. Brazil, São Paulo: Alto da Serra, Fazenda Nova Nicaragua; Rio de Janeiro.

Depository of type. Muséum National d'Histoire Naturelle, Paris. Coll. Myriapodes M. 244.

Remarks. This species was described by BRÖLEMANN on the basis of a female (1902b: 685). Later, BRÖLEMANN & RIBAUT (1912: 119) gave a complement to the original description based on an additional ♀ specimen, collected together with its juveniles (apparently in Rio de Janeiro). Because these two specimens are the only ones mentioned by the author of this species, it is not clear why BÜCHERL (1942b: 349) mentions: "Paratipos: 3 exemplares na coleção quilopódica do Instituto Butantan".

***Schendylurus iguapensis* Verhoeff 1938 (Figs 167-181)**

Schendylurus iguapensis VERHOEFF 1938: 378; BÜCHERL 1942a: 203; CRABILL 1972: 20; PEREIRA & MINELLI 1993: 121.

Schendylurus (Schendylurus) iguapensis, BÜCHERL 1942b: 349.

Schendylurus (Schendylotyn) iguapensis, ATTEMS 1947: 87.

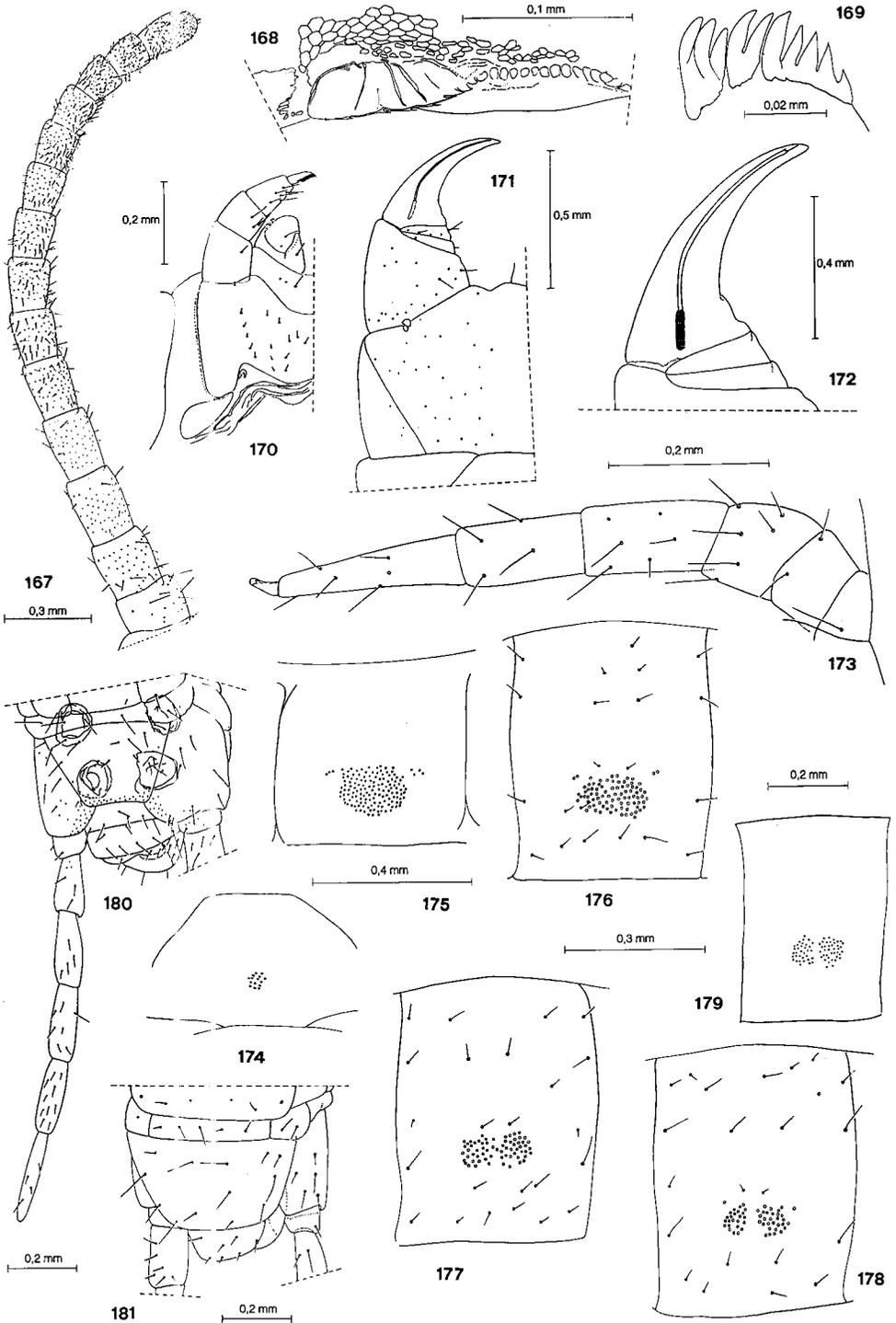
Diagnosis. A *Schendylurus* species with ventral pore fields present from the first to the antepenultimate sternum; fields undivided on anterior and posterior parts of the body and divided in two subsymmetrical areas on the middle part. Among the Neotropical species of the genus, only the present species, *S. borellii* (Silvestri), *S. longitarsis* (Silvestri) and *S. mesopotamicus* Pereira share this trait. *S. iguapensis* can be differentiated from these species as explained in the key below.

Type material examined. Holotype ♀ with 49 pairs of legs; body length 27 mm; maximum body width 1 mm. Brazil, São Paulo: Iguape (no data about collector and date). This specimen is mounted in one original VERHOEFF's microscope slide.

Type locality. Brazil, S. Paulo: Iguape. This is also the only locality known to date.

Depository of type. Zoologische Staatssammlung, München.

Figs 167-181. — *Schendylurus iguapensis* Verhoeff, ♀ holotype (Brazil, São Paulo: Iguape). Fig. 167, r. antenna, v.; Fig. 168, central and r. portion of labrum; Fig. 169, dentate lamella of mandible; Fig. 170, r. first and second maxilla; Fig. 171, r. half of forcipular segment with poison claws, v.; Fig. 172, detail of calyx of poison gland in r. poison claw, v.; Fig. 173, r. leg XLV, v.; Figs 174-179, sterna I, VIII, XIX, XX, XXI, XLII; Fig. 180, last leg-bearing segment, v.; Fig. 181, the same, d.



Redescription

Female holotype. A total of 49 pairs of legs; body length 27 mm, width 1 mm.

Colour. Yellowish, with forcipular segment pale orange.

Antennae ca 3.2 times longer than the cephalic plate, distally slightly attenuate, all articles, the first excepted, longer than wide; form and chaetotaxy of a.a. as in Fig. 167. Terminal a.a. with 9 claviform sensory setae on the external border and 5 on the internal border.

Cephalic plate slightly longer than wide (ratio 1.1 to 1).

Clypeus with 1 + 1 postantennal setae, ca 10 median setae and apparently 1 + 1 praelabral setae.

Labrum with ca 33 teeth, those of central arc robust and dark, the lateral ones less sclerotized, each with a relatively long and very sharp medial extension (Fig. 168).

Mandible. Dentate lamella subdivided in 3 distinct blocks, with 3,2,7 teeth on the left and 3,2,5 on the right (Fig. 169); pectinate lamella with ca 20 hyaline teeth.

First maxillae with well developed palps on both coxosternum and telopodites. Coxosternum with 3 + 2 setae; median projections of coxosternum subtriangular, well developed and provided with 1 + 1 setae. Article II of telopodite with 3 + 2 v. setae and 4 + 5 d. sensilla (Fig. 170).

Second maxillae with ca 24 setae on coxosternum arranged as in Fig. 170. Apical claw of telopodite well developed, bipectinate, the d. and v. edges with ca 20 teeth.

Forcipulae: basal plate with an irregular transverse median row of ca 12 setae. Telopodites with all articles lacking teeth; calyx of poison gland cylindrical (Fig. 172); chaetotaxy of coxosternum and telopodites as in Fig. 171.

Legs (last pair excepted) with chaetotaxy (Fig. 173) uniform throughout the body length.

Terga distinctly bisulcate.

Sterna. Pore fields present from the first to the antepenultimate sternum. Fields on sterna I to XIX and XLIII to XLVII undivided; fields on sterna XX to XLII divided in two subsymmetrical areas. Form of fields changing along the trunk as in Figs 174-179. Number of pores on selected sterna: on sternum I, 15 pores; on VIII, 3 + 138 + 4; on XIX, 2 + 82 + 2; on XX, 66; on XXI, 1 + 24 + 29 + 1; on XLII, 34 + 39.

Last leg-bearing segment with pleurites at the sides of praetergum. Praesternum not divided along the sagittal plane; form and chaetotaxy of sternum and tergum as in Figs 182-183. Coxopleura apparently slightly protruding at their distal ventral ends, setae small and numerous on distal internal v. edge, the remaining surface with few bigger setae. Two single ("homogeneous") coxal organs on each coxopleuron, with opening on the membrane between coxopleuron and sternum, covered by the latter (Fig. 180). Last legs with seven podomeres, form and chaetotaxy as in Figs 180-181. Praetarsus, apparently, as a very small tubercle.

Terminal segments. Intermediate tergum with posterior margin convex; intermediate sternum with posterior margin slightly concave; first genital sternum with posterior margin convex. Gonopods uniarticulate (Fig. 180).

Male unknown.

Remarks. Unfortunately, it is impossible to describe the special sensory setae supposedly present on both sides of a.a. II, V, IX and XIII and apex of the terminal

a.a., because of damage due to an excess of caustic treatment of the specimen on the original slide. For the same reason it is very difficult to observe the exact location and number of clypeal setae and to ascertain whether the terminal legs bear a praetarsus or not. Fig. 168 does not represent the true morphology of the labrum which is modified by an excess of caustic treatment and by an incorrect position on the slide. VERHOEFF stated in his original description: "Zahnblatt der Mandibeln 3,2,2,1,1,1" but a careful examination of the respective dentate lamellae shows that the disposition of the teeth is 3,2,5.

***Schendylurus interfluvius* Pereira 1984**

Schendylurus interfluvius PEREIRA 1984: 64; PEREIRA & MINELLI 1993: 121.

Type locality. Argentina, Province of Entre Ríos: Salto Grande.

Known range. Argentina, Province of Entre Ríos: Salto Grande; Gualeguaychú.

Depository of type. Museo de La Plata.

***Schendylurus lesnei* Brölemann & Ribaut 1911**

Schendylurus lesnei BRÖLEMANN & RIBAUT 1911: 220; 1912: 118; CHAMBERLIN 1921: 20, 22; ATTEMS 1928: 134; 1929: 76; CRABILL 1972: 21; DEMANGE & PEREIRA 1985: 186; PEREIRA & MINELLI 1993: 121.

Schendylurus (Ploutoschendylurus) lesnei, BRÖLEMANN & RIBAUT 1912: 115.

Type locality. Brazil, Haut Carsévène. This is also the only locality known to date.

Depository of type. Muséum National d'Histoire Naturelle, Paris. Coll. Myriapodes M. 245.

***Schendylurus longitarsis* (Silvestri 1895)**

Geophilus longitarsis SILVESTRI 1895a: 3; ATTEMS 1903: 263; 1929: 328.

Nannophilus longitarsis, SILVESTRI 1897a: 3; ATTEMS 1903: 195; BRÖLEMANN & RIBAUT 1912: 132; ATTEMS 1929: 72.

Schendyla longitarsis, BRÖLEMANN 1902a: 45; 1902b: 687.

Schendylurus longitarsis, PEREIRA 1983b: 75; PEREIRA 1983a: 188; PEREIRA & MINELLI 1993: 121.

Type locality. Paraguay ("Paraguay centrale"), according to SILVESTRI (1895a) but without specification of locality.

Known range. Central Paraguay. Argentina, Province of Misiones: Montecarlo; Apostoles.

Depository of type. Istituto di Entomologia Agraria, Portici.

***Schendylurus luederwaldi* Brölemann & Ribaut 1911**

Schendylurus luederwaldi, BRÖLEMANN & RIBAUT 1911: 220.

Schendylurus (Ploutoschendylurus) lüderwaldi, BRÖLEMANN & RIBAUT 1912: 115.

Schendylurus lüderwaldi, BRÖLEMANN & RIBAUT 1912: 117; ATTEMS 1928: 133; 1929: 75; BÜCHERL 1942a: 202; 1942b: 348.

Schendylurus luederwaldi (sic!), CHAMBERLIN 1914: 154, 196.

Schendylurus luederwaldi, CRABILL 1972: 21; PEREIRA 1984: 64; PEREIRA & MINELLI 1993: 121.

Diagnosis. A *Schendylurus* species with pore fields present only on some anterior sterna. Among the Neotropical species which share this trait, it seems to be more closely related to *S. interfluvius* Pereira. It can be differentiated from the latter as follows (traits for *S. interfluvius* are given in parentheses): first sternum with pores (without pores); dentate lamellae of mandibles subdivided into 3 blocks (2 blocks); last legs with metatarsus no longer than tarsus (metatarsus longer than tarsus).

Type material examined. Holotype ♀ with 41 pairs of legs; body length 15 mm; Brazil, State of Rio de Janeiro: Campo Itatiaya.

Type locality. Brazil, State of Rio de Janeiro: Campo Itatiaya.

Known range. According to BÜCHERL (1942a, 1942b): “Brasil, Estado do Rio de Janeiro: Campo Itatiáia; Estado de São Paulo: Arredores da Capital, Itanhaen, Alto da Serra, Campo Limpo”.

Depository of type. Muséum National d’Histoire Naturelle, Paris. Coll. Myriapodes M. 246.

Remarks. BRÖLEMANN & RIBAUT (1911) did not establish a type but stated (1912): “L’original est au Museu Paulista”. Nevertheless at the Muséum National d’Histoire Naturelle, Paris, exists a single specimen (evidently the one described by these authors), which has a label of type (Coll. Myriapodes M. 246). Because this species has been described on the basis of this single specimen and in addition its authors did not mention any other specimen, it is puzzling why BÜCHERL (1942b: 348) stated: “Paratipos: 6 exemplares na coleção quilópoda do Instituto Butantan”. Also puzzling is the range given by this author, because the only specimen cited in the literature is the one described by BRÖLEMANN & RIBAUT from the type locality (in parentheses: this locality is given by BÜCHERL as Campo Itatiáia, rather than Campo Itatiaya).

BRÖLEMANN & RIBAUT (1912: 117) regarded their single specimen as a juvenile. Of the ventral pores fields, they stated that these occur on sterna I to XIII, but also that, because the specimen was an immature, “il y a lieu de remarquer que, chez les adultes, cette limite se trouvera probablement reculée jusqu’à l’extrémité du corps”. Having examined this specimen, we can say that it must be regarded as an adult; by consequence, the presence of ventral pores on the anterior region of the body only must be regarded as a characteristic of this species.

***Schendylurus madariagensis* Pereira 1981**

Schendylurus madariagensis PEREIRA 1981: 128; PEREIRA & MINELLI 1993: 121.

Type locality. Argentina, Province of Buenos Aires: General Madariaga. This is also the only locality known to date.

Depository of type. Museo de La Plata.

***Schendylurus mesopotamicus* Pereira 1981 (Figs 182-183)**

Schendylurus mesopotamicus PEREIRA 1981: 132; 1983b: 75; PEREIRA & MINELLI 1993: 121.

Material examined (new material). Argentina, Province of Misiones: Parque Nacional Iguazú, 23.XII.1993, L.A. Pereira legit: 2 ♀♀ with 57 pairs of legs, body length 30 and 32 mm; 1 ♀ with 59 pairs of legs, body length 25 mm; 1 ♂ with 55 pairs of legs, body length 21 mm; 2 ♂♂ with 57 pairs of legs, body length 23 and 25 mm (in the collections of the Museo de La Plata).

Type locality. Argentina, Province of Entre Ríos: Concordia.

Known range. Argentina, Province of Entre Ríos: Concordia; Province of Misiones: Puerto Iguazú; Parque Nacional Iguazú.

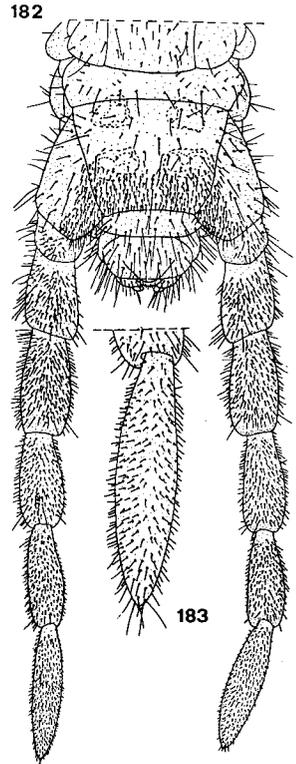
Depository of type. Museo de La Plata.

Remarks. Up to now only females with 59 pairs of legs were known. The new specimens extend the range for this sex to 57 pairs of legs.

***Schendylurus olivaceus* Crabill 1972 (Figs 184-217)**

Schendylurus olivaceus CRABILL 1972: 19; PEREIRA & MINELLI 1993: 121.

Diagnosis. A *Schendylurus* species with ventral pore fields present from the second sternum to that preceding the antepenultimate one. Among the known Neotropical species of the genus, only the present species and *S. paulista* (Brölemann) share this trait. This species can be differentiated from the last named by means of the following characters (the corresponding ones in *S. paulista* are given in parentheses): sterna of anterior part of the body with undivided pore fields, those of middle and posterior parts of the body with pore fields divided



Figs 182-183. — *Schendylurus mesopotamicus* Pereira (from PEREIRA 1983b), ♂ (Argentina, Province of Entre Ríos: Concordia). Fig. 182, last leg-bearing segment and terminal segments, v.; Fig. 183, detail of metatarsus of last l. leg, v.

in two subsymmetrical areas (sterna of anterior and posterior parts of the body with undivided pore fields, only sterna of middle part of the body with pore fields divided in two subsymmetrical areas); body length (of ♂) 35 mm [(of ♀) 28 mm]; 49 pairs of legs (♂), [61 pairs of legs (♀)]; central arc of labrum with 17 teeth (11 teeth); dentate lamellae of mandible divided in three blocks (apparently undivided); antennae ca 3.5 times longer than the cephalic plate (2.5); clypeus with 19 + 19 setae on anterior half (8 + 11); apical claw of second maxillae provided with 26-27 d. teeth and 20-21 v. teeth (11-14 and 9).

Type material examined. Holotype ♂ with 49 pairs of legs; body length 35 mm. Brazil, Rio de Janeiro: Serra dos Orgãos, 1900-2100 m a.s.l., 19-20.IV.1965, H.W. Levi legit. This specimen is preserved in four slides (no. 1: head and mouth parts dissected; no. 2: forcipulae followed by the first leg-bearing segment and the last 8 leg-bearing segments with terminal segments; no. 3: leg-bearing segments VIII to XXVIII; no. 4: leg-bearing segments XXIX to XLIII).

Type locality. Brazil, Rio de Janeiro: Serra dos Orgãos. This is also the only locality known to date.

Depository of type. Museum of Comparative Zoology, Harvard University, Cambridge, Mass.

Remarks. This species is well described by CRABILL but his description lacks illustrations. We give here information about characters not specified by this author as well as illustrations of different parts of the body.

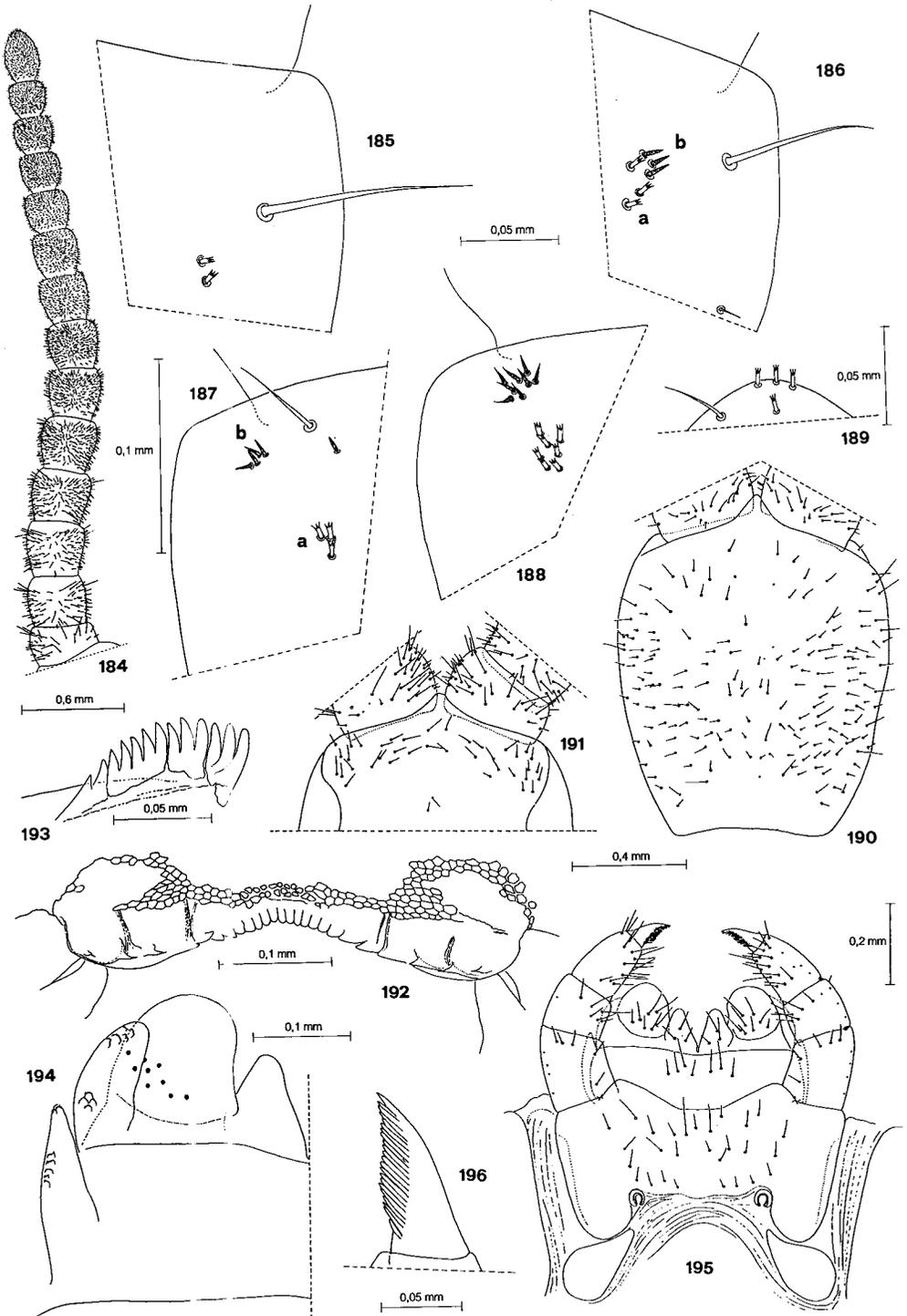
Redescription

Male holotype. A total of 49 pairs of legs, body length 35 mm, maximum body width 1.5 mm.

Colour. According to CRABILL (1972), head and legs bright yellowish-orange; dorsum pale olivaceous.

Antennae ca 3.5 times longer than the cephalic plate, distally slightly attenuate; form and chaetotaxy of antennomeres as in Fig. 184. Terminal a.a. with ca 25-30 claviform sensory setae on the external border and ca 20-25 on the internal. Distal end of this a.a. with ca 4-5 very small specialized setae ending in three small apical branches (Fig. 189). Dorsal and v. surface of a.a. II, V, IX and XIII with very small specialized setae which on the v. side are restricted to an internal latero-apical area and are represented by two different types: *a* and *b*. Type *a* setae are very similar to those at the apex of the terminal a.a., type *b* are a little bigger, not apically divided and much darker (ochraceous) in colour (Fig. 186); a.a. II with 2 type *a* setae; a.a. V

Figs 184-196. — *Schendylurus olivaceus* Crabill, ♂ holotype (Brazil, Rio de Janeiro). Fig. 184, l. antenna, v.; Fig. 185, r. a.a. II, v.; Fig. 186, r. a.a. V, v. (*a*: type *a* seta; *b*: type *b* seta); Fig. 187, l. a.a. IX, v. (*a*: type *a* seta; *b*: type *b* seta); Fig. 188, l. a.a. XIII, d.; Fig. 189, apical region of the last l. a.a., v.; Fig. 190, cephalic shield; Fig. 191, clypeus and basis of antennae; Fig. 192, labrum; Fig. 193, dentate lamella of mandible; Fig. 194, l. first maxilla, d.; Fig. 195, first and second maxilla, v.; Fig. 196, apical claw of l. second maxillae, v.



with 3 type *a* and 3 type *b* setae; a.a. IX with 3 type *a* and 3-5 type *b* setae; and a.a. XIII with 2-4 type *a* and 4-6 type *b* setae (Figs 185-187). Specialized setae on d. side located in the external latero-apical area, represented by type *a* and type *b* setae also found on the ventral side; a.a. II with 2 type *a* setae, a.a. V with 4 type *a* and 2 type *b* setae, a.a. IX with 5 type *a* and 6 type *b* setae and a.a. XIII with 7 type *a* and 8 type *b* setae (Fig. 188).

Cephalic plate distinctly longer than wide (ratio 1.2:1), shape and chaetotaxy as in Fig. 190.

Clypeus with 19 + 19 median setae and 1 + 1 praelabral setae (Fig. 191). (Pair of postantennal setae: displaced posteriad or absent?).

Labrum with 17 round-tipped teeth on the central arc, sidepieces with 4 + 4 teeth, each with a very sharp medial extension (Fig. 192).

Mandible. Dentate lamellae subdivided into 3 distinct blocks, with 7,3,3 and 5,3,3 teeth (Fig. 193); pectinate lamellae with 23-25 hyaline teeth.

First maxillae with palps on both coxosternum and telopodites. Coxosternum with 4 + 3 setae, median projections of coxosternum subtriangular, well developed and provided with 3 + 3 setae. Article II of telopodite with 7 + 8 v. setae and 9 + 10 d. sensilla (Figs 194-195).

Second maxillae with 14 + 14 setae on coxosternum, arranged as in Fig. 195. Apical claw of telopodite well developed, bipectinate, the d. edge with ca 26-27 teeth and the v. with ca 20-21 (Fig. 196).

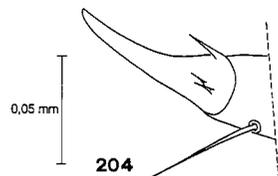
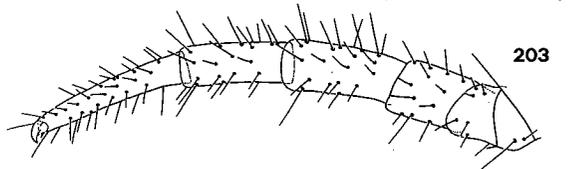
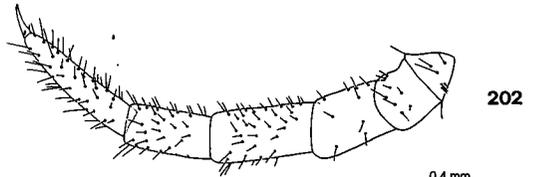
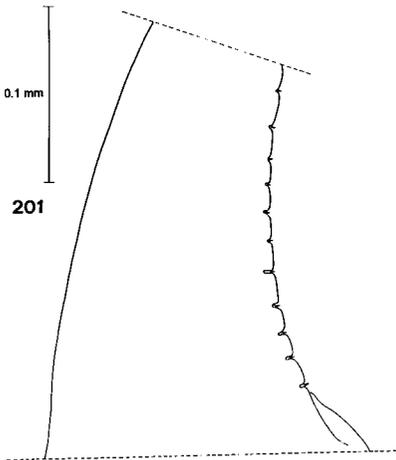
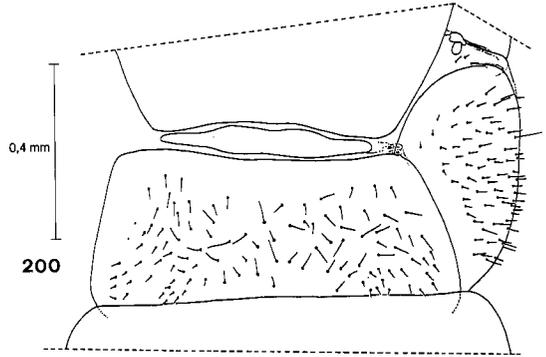
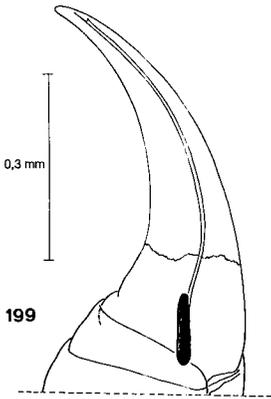
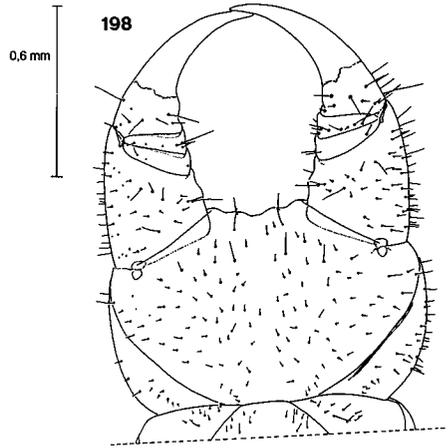
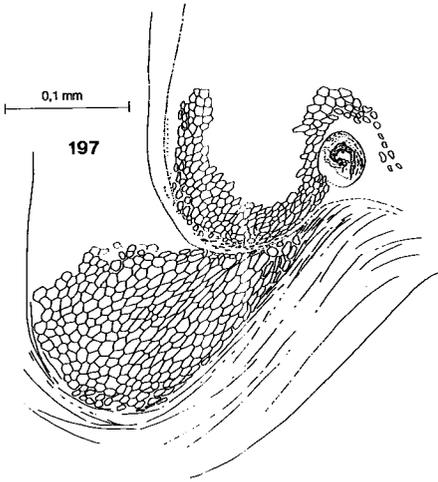
Forcipulae. Basal plate with numerous setae dispersed on whole surface (Fig. 200). Telopodites with all articles lacking teeth. Calyx of poison gland cylindrical (Fig. 199); chaetotaxy of coxosternum and telopodites as in Fig. 198.

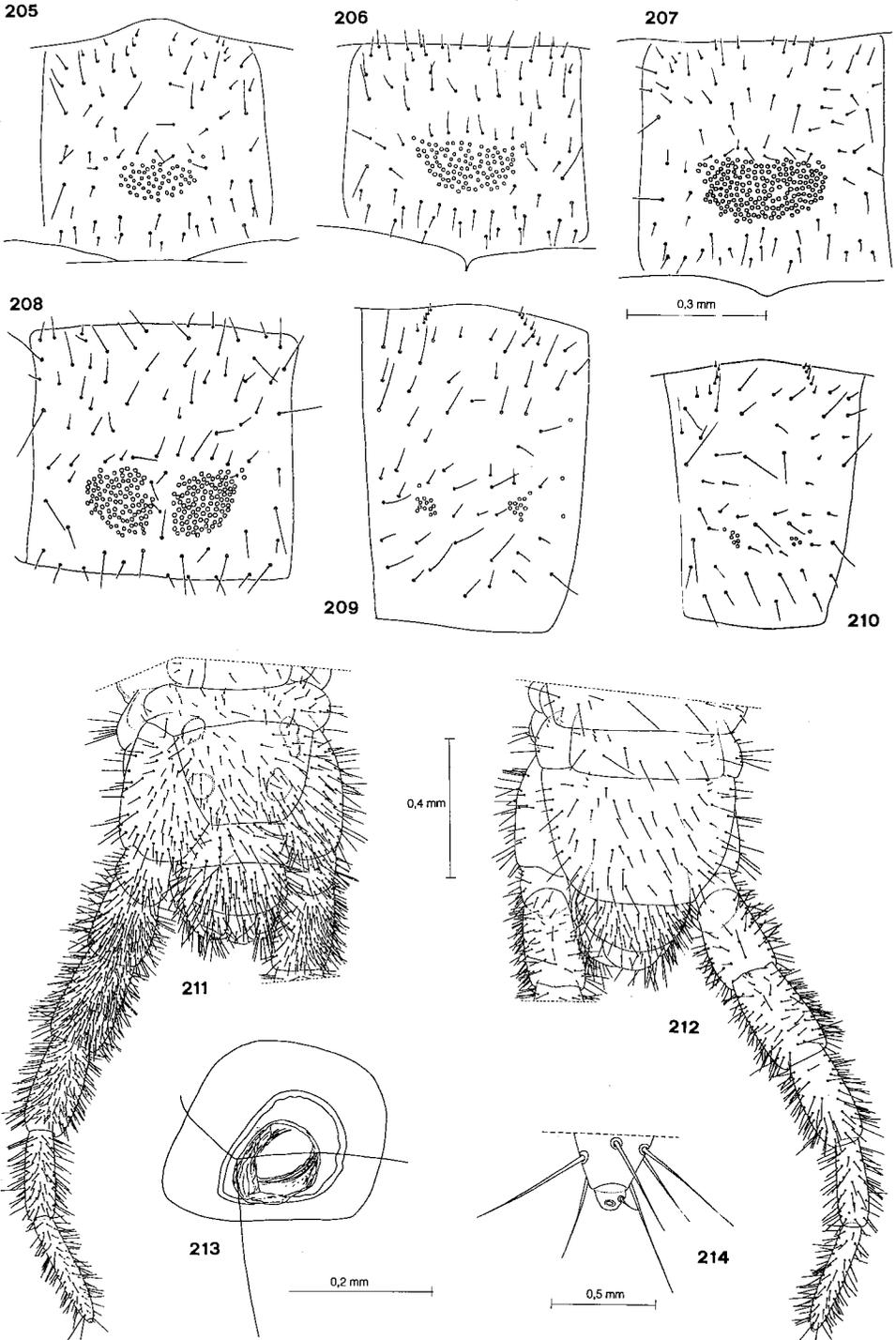
Legs (last pair excepted). Chaetotaxy on anterior legs represented by setae slightly less numerous and smaller than in the posterior ones (Figs 202-203). Claws ventrobasally with two spines, one anterior one posterior; a third spine, smaller in size, occurs internally, very close to the posterior one (Fig. 204).

Sterna. Pore fields present from the second sternum to that preceding the antepenultimate. On sterna II to XIV, fields are undivided, their form changing from transversally elliptical to subrectangular; on sterna XV to XLVI the fields are divided in two subsymmetrical subcircular areas (Figs 205-210). Number of pores on selected sterna: on sternum II, 55 pores; on III, 95; on VII, 179; on XV, 93 + 96; on XLII, 14 + 12; on XLVI, 7 + 5.

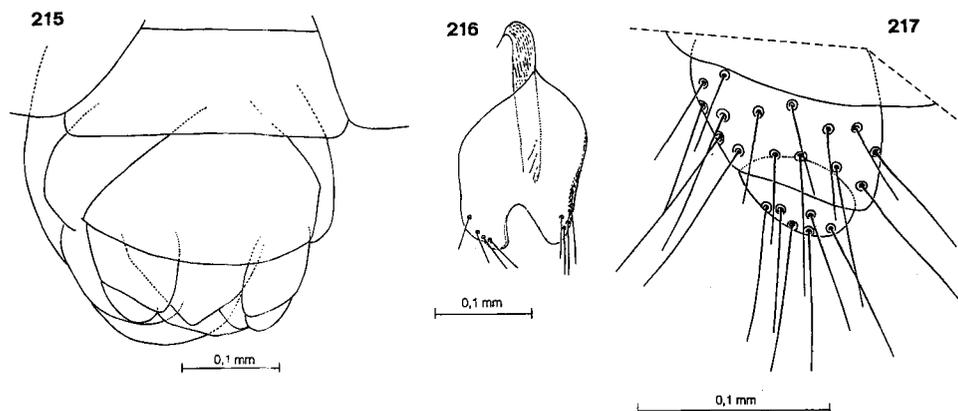
Last leg-bearing segment with pleurites at the sides of praetergum. Praesternum not divided along the sagittal plane; form and chaetotaxy of sternum and tergum as in Figs 211-212. Coxopleura slightly protruding at their distal ventral ends, with setae covering whole surface. Two single ("homogeneous") coxal organs on each coxopleuron; coxal organs open on membrane between coxopleuron and sternum, covered by the latter (Figs 211, 213). Last legs with seven moderately inflated podomeres, form and chaetotaxy as in Figs 211-212. Praetarsus as a small tubercle provided with 2 small apical spines (Fig. 214).

Figs 197-204. — *Schendylurus olivaceus* Crabill, ♂ holotype (Brazil, Rio de Janeiro). Fig. 197, detail of posterior external region of r. second maxilla, v.; Fig. 198, forcipular segment with poison claws, v.; Fig. 199, detail of calyx of poison gland in l. poison claw, v.; Fig. 200, proximal portion of forcipular segment, d.; Fig. 201, detail of proximal portion of r. poison claw, v.; Fig. 202, r. leg II, v.; Fig. 203, r. leg XLIV, antero-v.; Fig. 204, claw of r. leg II, postero-v.





Figs 205-214. — *Schendylurus olivaceus* Crabill, ♂ holotype (Brazil, Rio de Janeiro). Figs 205-210, sterna II, III, VII, XV, XLII, XLVI; Fig. 211, last leg-bearing segment and terminal segments, v.; Fig. 212, the same, d.; Fig. 213, detail of r. anterior coxal organ, v.; Fig. 214, distal end of the r. last leg, v.



Figs 215-217. — *Schendylurus olivaceus* Crabill, ♂ holotype (Brazil, Rio de Janeiro). Fig. 215, genital region, v.; Fig. 216, penis, d.; Fig. 217, r. gonopod, v.

Terminal segments. Intermediate tergum with posterior margin convex; intermediate sternum with posterior margin slightly concave; first genital sternum with posterior margin convex (Figs 211-212). Gonopods biarticulate, basal article with ca 15 setae, distal article with ca 6 setae (Fig. 217). Penis dorsally with 4 + 4 apical setae (Fig. 216).

Female unknown.

Remarks. In describing this species, CRABILL (1972) stated the following about the chaetotaxy of the clypeus: "Setae: sparse, the majority lateral, only about 12 anterocentral; posteriorly none except the 2 prelabral". Careful examination of the holotype reveals that the total number of the anterior setae (central and lateral) is 19 + 19. CRABILL gives the number of teeth of the dentate lamellae (7,3,3) for only one mandible, however, the other is different: 5,3,3. CRABILL stated that the ventral pore fields are undivided on sterna II to XV, but careful examination of the holotype reveals that on sternum XV the pore field is divided. Of the antennae, CRABILL states: "Filiform, each article except the first much longer than wide": our Fig. 184 does not show those proportions for the a.a. II-XIII. Apparently this is an artefact of preparation: the form has been altered in the microscope slide, probably when drying the mounting medium contracted and squashed the antennae changing the length to width ratio of the antennomeres.

Schendylurus pampeanus (Pereira & Coscarón 1976)

Pectiniunguis pampeanus PEREIRA & COSCARÓN 1976: 60.

Schendylurus pampeanus, PEREIRA 1981: 137; PEREIRA & MINELLI 1993: 108, 121.

Material examined (new material). Argentina, Province of Buenos Aires: Burzaco, 15.XII.1991, M. Manfrino & A. García legerunt: 1 ♂ with 49 pairs of legs, body length 32 mm; La Plata (M.B.

Gonnet), 8.XII.1986, L.A. Pereira legit: 1 ♀ with 53 pairs of legs, body length 35 mm; La Plata, 26.VIII.1986, L.A. Pereira legit: 1 ♂ with 51 pairs of legs, body length 31 mm; Magdalena, 6.VI.1986, S. Roig legit: 1 ♂ with 51 pairs of legs, body length 38 mm (in the collections of the Museo de La Plata).

Type locality. Argentina, Province of Buenos Aires, Florencio Varela: Bosques.

Known range. Argentina, Province of Buenos Aires, Florencio Varela; Tandil; Cerro Cura Malal; Las Flores; La Plata; Berisso; Villa Elisa; Boulogne; Vella Vista; Moreno; Ing. Maschwitz; Burzaco.

Depository of type. Museo de La Plata.

Schendylurus paraguayensis (Silvestri 1895)

Geophilus paraguayensis SILVESTRI 1895b: 768; ATTEMS 1903: 264.

Nannophilus paraguayensis, SILVESTRI 1897a: 3; ATTEMS 1903: 195; BRÖLEMANN & RIBAUT 1912: 132; ATTEMS 1929: 72.

Schendyla paraguayensis, BRÖLEMANN 1902a: 45; 1902b: 687.

Schendylurus paraguayensis, PEREIRA 1983b: 81; PEREIRA & MINELLI 1993: 121.

Type locality. Paraguay: Río Apa. This is also the only locality known to date.

Depository of type. Istituto di Entomologia Agraria, Portici.

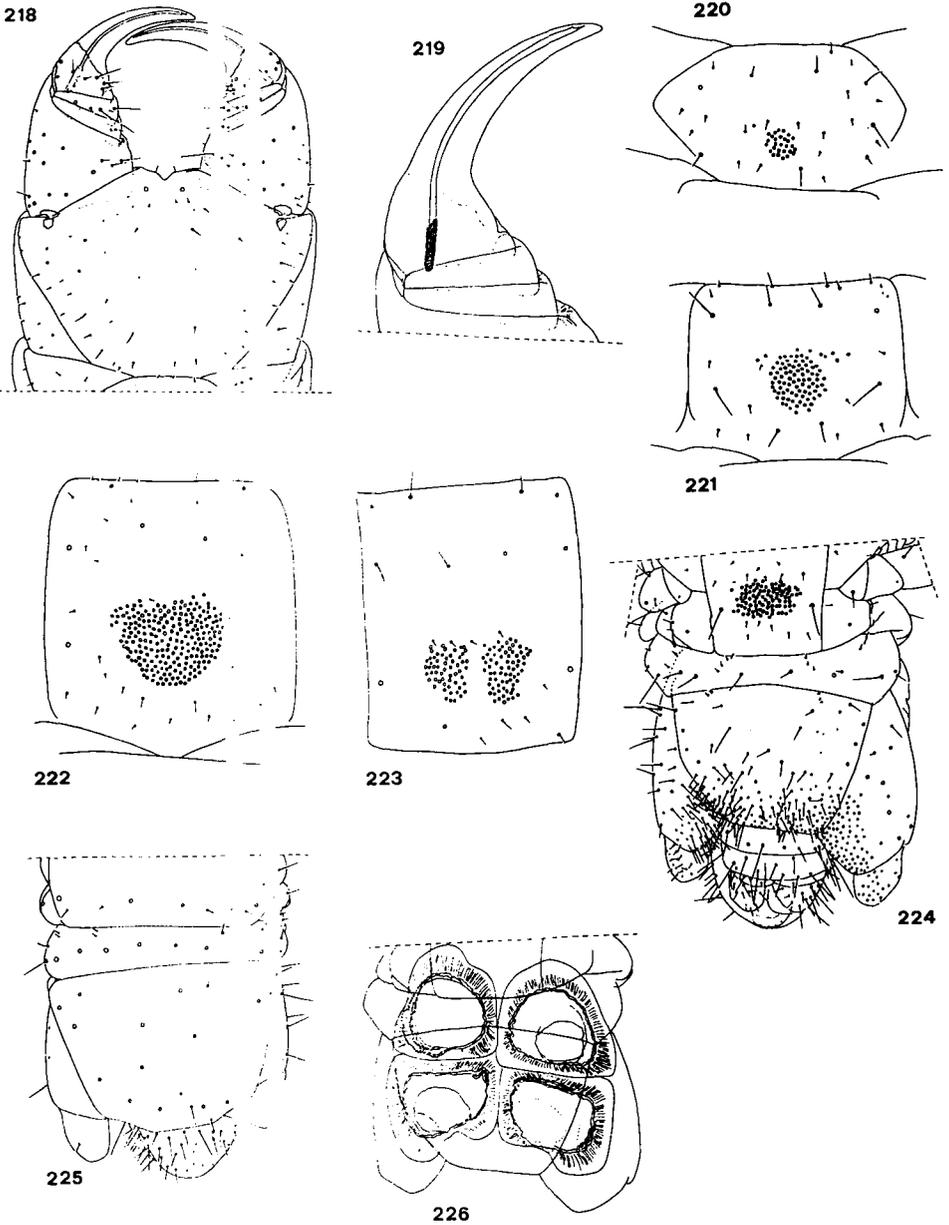
Schendylurus parahybae (Chamberlin 1914) new comb. (Figs 218-226)

Adenoschendyla parahybae CHAMBERLIN 1914: 201-202; BÜCHERL 1942a: 204; 1942b: 350.

Pectiniunguis parahybae, ATTEMS 1929: 83; PEREIRA & COSCARÓN 1976: 68, 72.

Remarks. While revising the type material of this species, we observed that the coxal organs are single ("homogeneous"). Accordingly, this species must be referred to the genus *Schendylurus* rather than to *Pectiniunguis*.

Diagnosis. A *Schendylurus* species with dentate lamellae of the mandible subdivided in blocks and pore fields present from the first to the penultimate sternum (undivided on anterior and posterior sterna and divided in two subsymmetrical areas on the sterna of the middle part of the body). Among the Neotropical species of the genus, only the present species, *S. demelloi* Verhoeff, *S. tropicus* Brölemann & Ribaut and *S. coscaroni* n. sp. share this trait. *S. parahybae* can be differentiated from the others cited as explained in the key below. It is more closely related to *S. tropicus* and *S. demelloi*. It can be differentiated from *S. tropicus* by means of the following characters (the corresponding ones for the last species are given in parentheses): ♂ with 59 pairs of legs (47); body length 38 mm (16 mm); last leg-bearing segment without pleurites at the sides of praetergum (with pleurites). It can be differentiated from *S. demelloi* by means of the following characters (the corresponding ones for the last species are given in parentheses): body length 38 mm (51-70 mm); ♂ with 59 pairs



Figs 218-226. — *Schendylurus parabybae* (Chamberlin), ♂ holotype (Brazil, State of Paraíba: Independência). Fig. 218, forcipular segment with poison claws, v.; Fig. 219, detail of poison gland in r. poison claw, v.; Figs 220-223, sterna, I, II, XIV, XXV; Fig. 224, penultimate and last leg-bearing segments and terminal segments, v.; Fig. 225, last leg-bearing segment and terminal segments, d.; Fig. 226, detail of coxal organs, v.

of legs (69); last leg-bearing segment without pleurites at the sides of praetergum (with pleurites).

Material examined. Brazil, State of Paraíba: Independencia, Mann & Heath leg., ♂ holotype [TC-16 (1470)] with 59 pairs of legs, body length 38 mm, represented by the trunk in alcohol. (At the level of the leg-bearing segments LVI and LVII the two full spermatecae can be seen). The 5 distal podomeres of both last legs are lost; head and mouth parts are missing. Certainly CHAMBERLIN made a slide of these pieces but this has not been found in the collections of the Museum of Comparative Zoology.

Type locality. Brazil, State of Parahyba (Paraíba!): Independencia. This is also the only locality known to date.

Depository of type. Museum of Comparative Zoology, Harvard University, Cambridge, Mass.

Redescription

Female holotype. A total of 59 pairs of legs; body length 38 mm; maximum body width 1 mm.

Colour (of preserved specimen in alcohol) yellowish-orange with forcipular segment darker.

Head and mouth parts, as stated above, are missing in the holotype and CHAMBERLIN (1914) did not give any data about the clypeus, labrum, mandibles, first maxillae and second maxillae and simply wrote the following about head and antennae: "Cephalic plate much longer than wide (4:3) widest caudad, conspicuously narrowed or constricted in frontal region at anterior end; anterior border subtriangular, caudal margin slightly concave; sides nearly straight from a little in front of caudal corners cephalad to frontal region. Antennae strictly filiform as usual. Long, being a little more than three times the length of the cephalic plate. Articles mostly long, excepting those immediately preceding the ultimate. Ultimate article longer than the two preceding taken together. Hairs of articles of distal region very short, dense; those of proximal articles conspicuously longer and more sparse".

Forcipulae. Basal plate with an irregular transverse median row of 12 setae. Telopodites with all articles lacking teeth. Calyx of poison gland cylindrical (Fig. 219); chaetotaxy of coxosternum and telopodites as in Fig. 218.

Legs (last pair excepted) with chaetotaxy uniform throughout the body length.

Sterna. Pore fields present from the first to the penultimate sternum. Fields undivided on I to XXIV and LIV to LVIII sterna, divided in two subsymmetrical areas on XXV to LIII sterna. Number of pores on selected sterna: on sternum I, 28 pores; on II, 90; on XIV, 226; on XXV, 58 + 70; on LVIII, 96 (Figs 220-224).

Last leg-bearing segment without pleurites at the sides of praetergum. Praesternum not divided along the sagittal plane, form and chaetotaxy of sternum and tergum as in Figs 224-225. Coxopleura slightly protruding at their distal v. ends, setae numerous on v. distal internal edge, the remaining surface with larger setae. Two single well developed ("homogeneous") coxal organs on each coxopleuron; coxal organs open on membrane between coxopleuron and sternum covered by the latter

(Fig. 226). Trochanter of last legs with chaetotaxy as in Figs 224-225 (rest of podomeres missing).

Terminal segments. Intermediate tergum, sternum and first genital sternum with posterior margin convex. Gonopods uniaarticulate (Figs 224-225).

Male unknown.

Schendylurus paulista (Brölemann 1903) (Figs 227-257)

Schendyla paulista, BRÖLEMANN 1903: 83; 1909: 6.

Schendylurus (?) *paulista*, BRÖLEMANN & RIBAUT 1912: 158; ATTEMS 1929: 79.

Schendylurus paulista, CHAMBERLIN 1914: 200; BÜCHERL 1939: 314; 1942a: 202; 1942b: 349; PEREIRA & MINELLI 1993: 121.

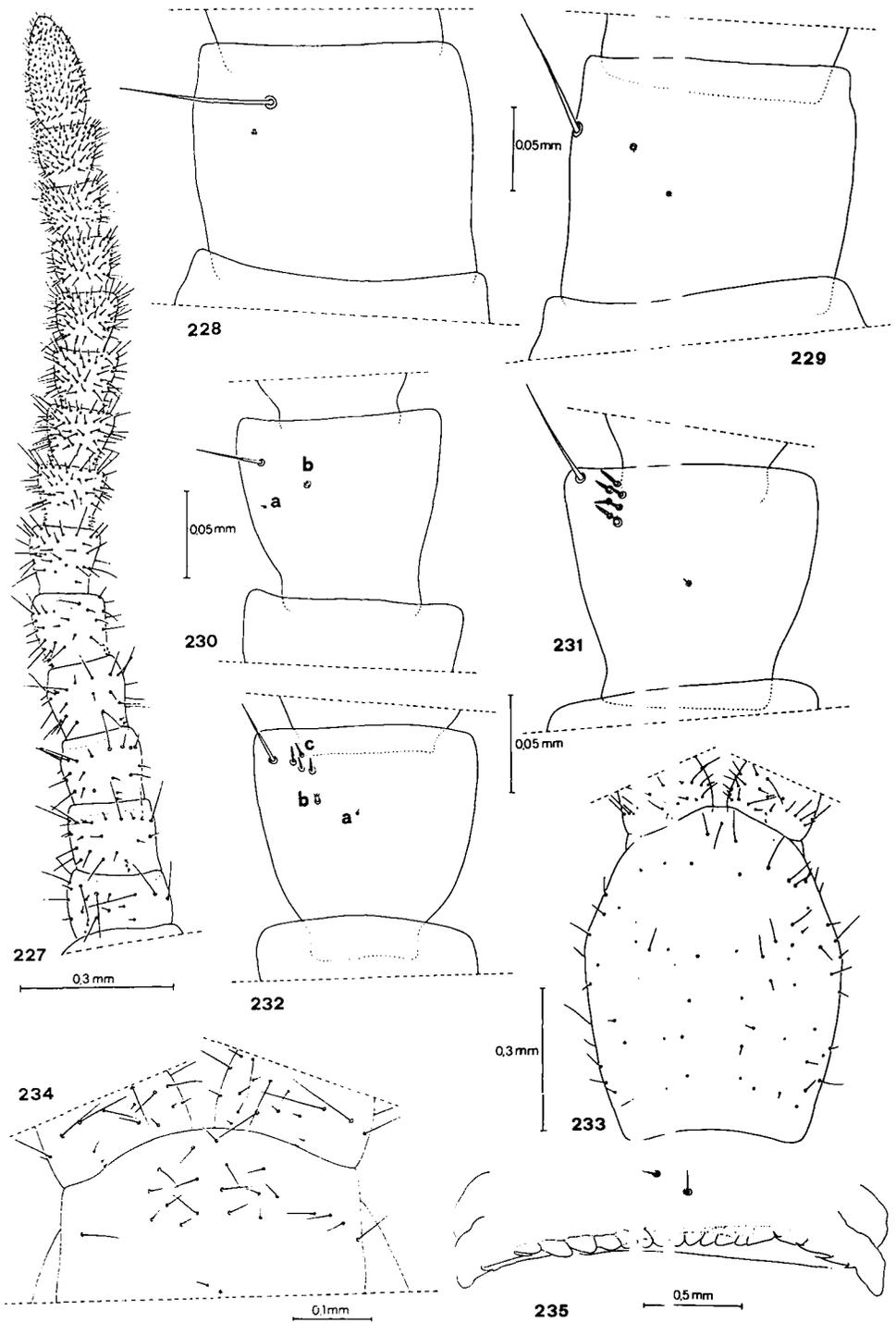
Diagnosis. A *Schendylurus* species with ventral pores present from the second sternum to that preceding the antepenultimate one. Among the known Neotropical species of the genus, only the present species and *S. olivaceus* Crabill share this trait. This species can be differentiated from the last one by means of the following characters (the corresponding ones in *S. olivaceus* are given in parentheses): anterior and posterior sterna with undivided pore fields, sterna of middle part of the body with pore fields divided in two subsymmetrical areas (anterior sterna with undivided pore fields, sterna of middle and posterior parts of the body with pore fields divided in two subsymmetrical areas); body length 28 mm (♀) (35 mm, ♂); 61 pairs of legs (♀) (49 pairs of legs, ♂); central arc of labrum with 11 teeth (17 teeth); dentate lamellae of mandibles apparently undivided (divided into 3 distinct blocks); antennae ca 2.5 times longer than the cephalic plate (3.5); clypeus with 8+11 setae on anterior half (19+19); apical claw of second maxillae with ca 11-14 d. teeth and 9 v. teeth (ca 26-27 d. and ca 20-21 v.).

Type material examined. Holotype ♀ with 61 pairs of legs; body length 28 mm; Brazil, São Paulo: Poço Grande. (No information about date and collector). The whole specimen was preserved in alcohol with an original label of Brölemann which says: "*Schendyla paulista* Brölemann, État de São Paulo. Poço Grande (♀ type) H.W.B.". The type has not been designated as such in the original description, (but the label has that designation). Because this ♀ is the only specimen on which the original description has been based it is then the "holotype". We have dissected head and mouth parts and mounted them in a permanent slide.

Type locality. Brazil, São Paulo: Poço Grande. This is also the only locality known to date.

Depository of type. Museu de Zoologia da Universidade de São Paulo.

Remarks. This species has been poorly described by BRÖLEMANN (1903) under the genus *Schendyla*. In his "Catalogue des Myriapodes du Brésil" this author (1909) cited this species under the same genus. In their monography of 1912, BRÖLEMANN & RIBAUT established the possibility that this species belonged to the genus *Schendylurus* ("Nous n'avons pas reçu cette forme, insuffisamment décrite par son auteur. Il est probable qu'elle appartient au genre *Schendylurus*"). In 1914 CHAMBERLIN cited this



Figs 227-235. — *Schendylurus paulista* (Brölemann), ♀ holotype (Brazil, São Paulo: Poço Grande). Fig. 227, l. antenna, v.; Fig. 228, l. a.a. II, v.; Fig. 229, l. a.a. II, d.; Fig. 230, l. a.a. IX, v. (*a*: type *a* seta; *b*: type *b* seta); Fig. 231, l. a.a. IX, d.; Fig. 232, l. a.a. XIII, d. (*a*: type *a* seta; *b*: type *b* seta; *c*: type *c* seta); Fig. 233, cephalic shield; Fig. 234, clypeus and basis of antennae; Fig. 235, labrum.

species under this last genus. In 1929 ATTEMS cited this species under the same genus, but with doubt. In his 1942a paper, BÜCHERL cited this species under *Schendylurus* and as range says: "Estado de São Paulo: Poço Grande e Alto da Serra". The same year in another paper (1942b) he wrote: "Hab.: Brasil, Estado de São Paulo, Alto da Serra (o tipo de Bröl.), Poço Grande". In addition says: "Paratipos: 2 exemplares, porém em estado defeituoso, na coleção quilopódica do Instituto Butantan". However, there cannot be paratypes of this species, based as it was on a single specimen! BÜCHERL also mentions: "Alto da Serra" as locality for this species and says: "Alto da Serra (o tipo de Bröl)", but the label of the type specimen says "Poço Grande". This author also says: (1942a: 203): "No tocante a muitas características morfológicas, esta especie e parecida com *Sch. gounellei*, de maneira que pode bem ser que seja apenas uma variedade da ultima"; (1942b: 349): "Esta especie aproxima-se muito a *Sch. gounellei*, de maneira que são necessarios novos exames morfológicos em material bem conservado". But it is clear that the two species are good ones and very different one of the other. Because the original description of BRÖLEMANN is very short and did not include the description of many characters, having only three (not detailed) figures, we give here the following redescription.

Redescription

Female holotype. A total of 61 pairs of legs, body length 28 mm, maximum body width 0.6 mm.

Colour. The specimen preserved in alcohol is yellowish (BRÖLEMANN described the colour as "ferrugineuse").

Antennae ca 2.5 times longer than the cephalic plate, distally slightly attenuate; shape and chaetotaxy of antennomeres as in Fig. 227. Terminal a.a. with ca 16 claviform sensory setae on the external border and ca 8 on the internal border. Distal end of this a.a. with ca 6 very small specialized setae ending in three small apical branches. Dorsal and v. surface of a.a. II, V, IX and XIII with very small specialized setae which on the v. side are restricted to an internal latero-apical area and are represented by two different types: *a* and *b*. Type *a* setae are very thin and not apically divided, type *b* setae are thicker and very similar to those on distal end of the terminal a.a. (*a-b* Fig. 230); a.a. II with 1 type *b* seta; a.a. V, IX and XIII with one type *a* and 1 type *b* seta (Figs 228, 230). Specialized setae on d. side represented by three different types: *a* and *b*, similar to type *a* and *b* of v. side, type *c* setae larger, not apically divided and much darker (ochraceous) in colour. Type *a* setae are placed on the median part of the specified a.a., type *b* and *c* setae are restricted to an external latero-apical area; a.a. II and V with 1 type *a* and 1 type *b* setae; a.a. IX with 1 type *a*, 1 type *b* and 6 type *c* setae; a.a. XIII with 1 type *a*, 1 type *b* and 4 type *c* setae (Figs 229, 231-232).

Cephalic plate distinctly longer than wide (ratio 1.2:1), shape and chaetotaxy as in Fig. 233.

Clypeus with 1 + 1 postantennal setae, 8 + 11 median setae and 1 + 1 praelabral setae (Fig. 234).

Labrum with 13 round-tipped teeth on the central arc, sidepieces with 2 + 4 teeth each with a very sharp medial extension (Fig. 235).

Mandible. Dentate lamella apparently undivided, with 12 teeth; pectinate lamellae with ca 16 hyaline teeth (Fig. 236).

First maxillae with palps on both coxosternum and telopodite. Coxosternum provided with 2 + 2 setae; median projections of coxosternum subtriangular, well developed and provided with 2 + 2 large setae and 1 + 1 very small setae. Article II of telopodite with 3 + 3 v. setae and 6 + 5 d. sensilla (Figs 237-238).

Second maxillae with 11 + 12 setae on coxosternum, arranged as in Fig. 238. Apical claw of telopodite well developed, bipectinate, the d. edge with ca 11-13 teeth, the v. with ca 9-10 teeth (Figs 239-240).

Forcipulae. Basal plate with an irregular transverse median row of 12 setae (Fig. 243). Telopodites with all articles lacking teeth. Calyx of poison gland cylindrical (Fig. 244); chaetotaxy of coxosternum and telopodites as in Fig. 242.

Legs (last pair excepted) with chaetotaxy (Fig. 245) uniform throughout the body length. Claws ventrobasally with two spines, one anterior one posterior; a third spine occurs internally, very close to the posterior one (Fig. 246).

Sterna. Pore fields present from the second sternum to that preceding the antepenultimate. On sterna II to XXV and LIV to LVIII the fields are undivided; on sterna XXVI to LIII the fields are divided in two subsymmetrical areas. The undivided pore fields of the anterior region of the body are subcircular in form; the individual areas of the divided pore fields of the middle part of the body are subcircular to irregular in form; the undivided pore fields of the posterior region of the body are irregular in form (Figs 247-253). Number of pores on selected sterna: on sternum II, 44; on VII, 89; on XVII, 109; on XXVI, 42 + 42; on LIII, 12 + 16; on LIV, 37; on LVIII, 27.

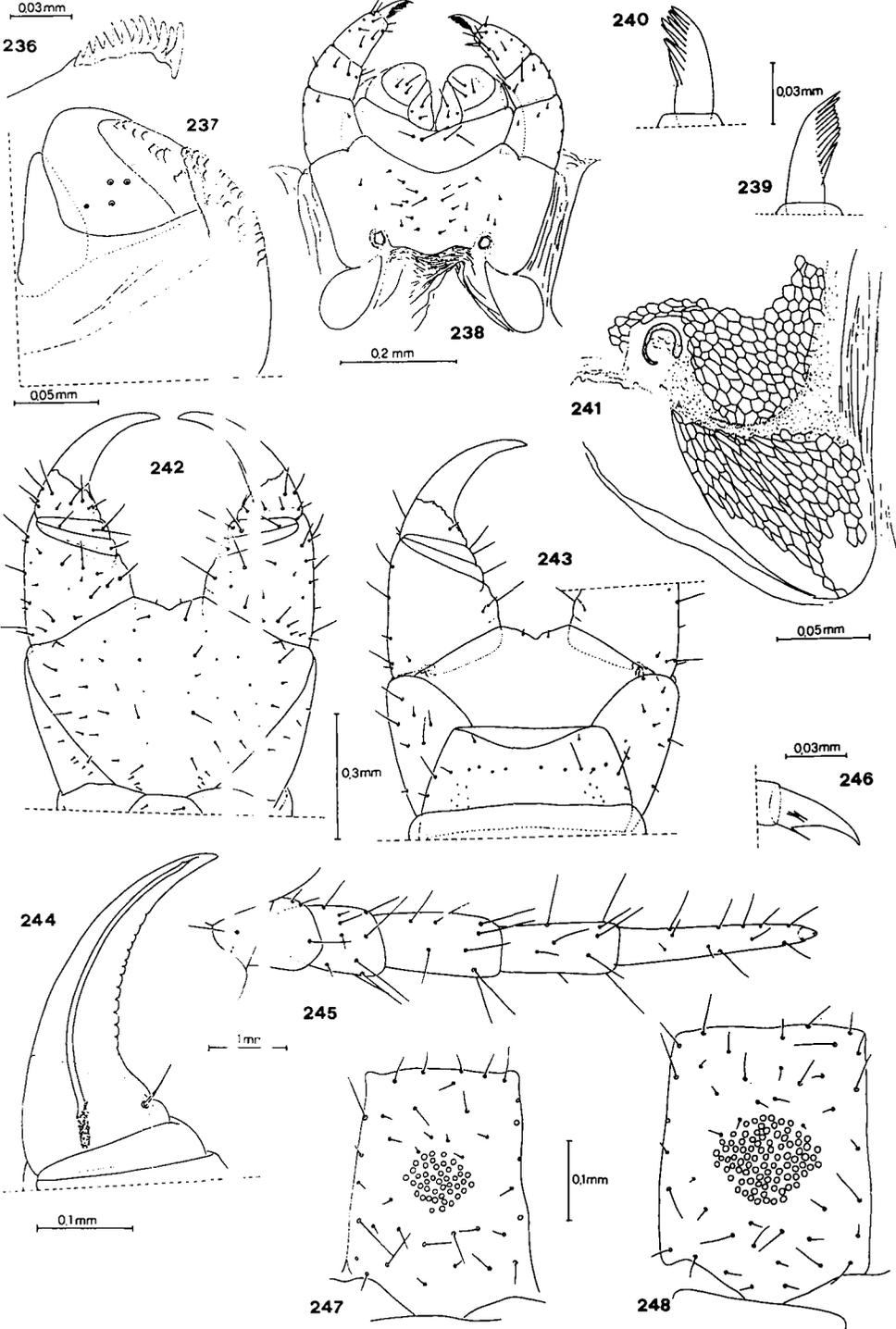
Last leg-bearing segment with pleurites at the sides of praetergum. Praesternum not divided along the sagittal plane; form and chaetotaxy of sternum and tergum as in Figs 254-255. Coxopleura not protruding at their distal v. ends, setae small and numerous on distal v. half, the remaining surface with few bigger setae. Two single "homogeneous" coxal organs on each coxopleuron; coxal organs open on membrane between coxopleuron and sternum, covered by the latter (Figs 254-256). Last legs with seven podomeres, form and chaetotaxy as in Fig. 255. Praetarsus as a small tubercle provided with 1 small apical spine (Fig. 257).

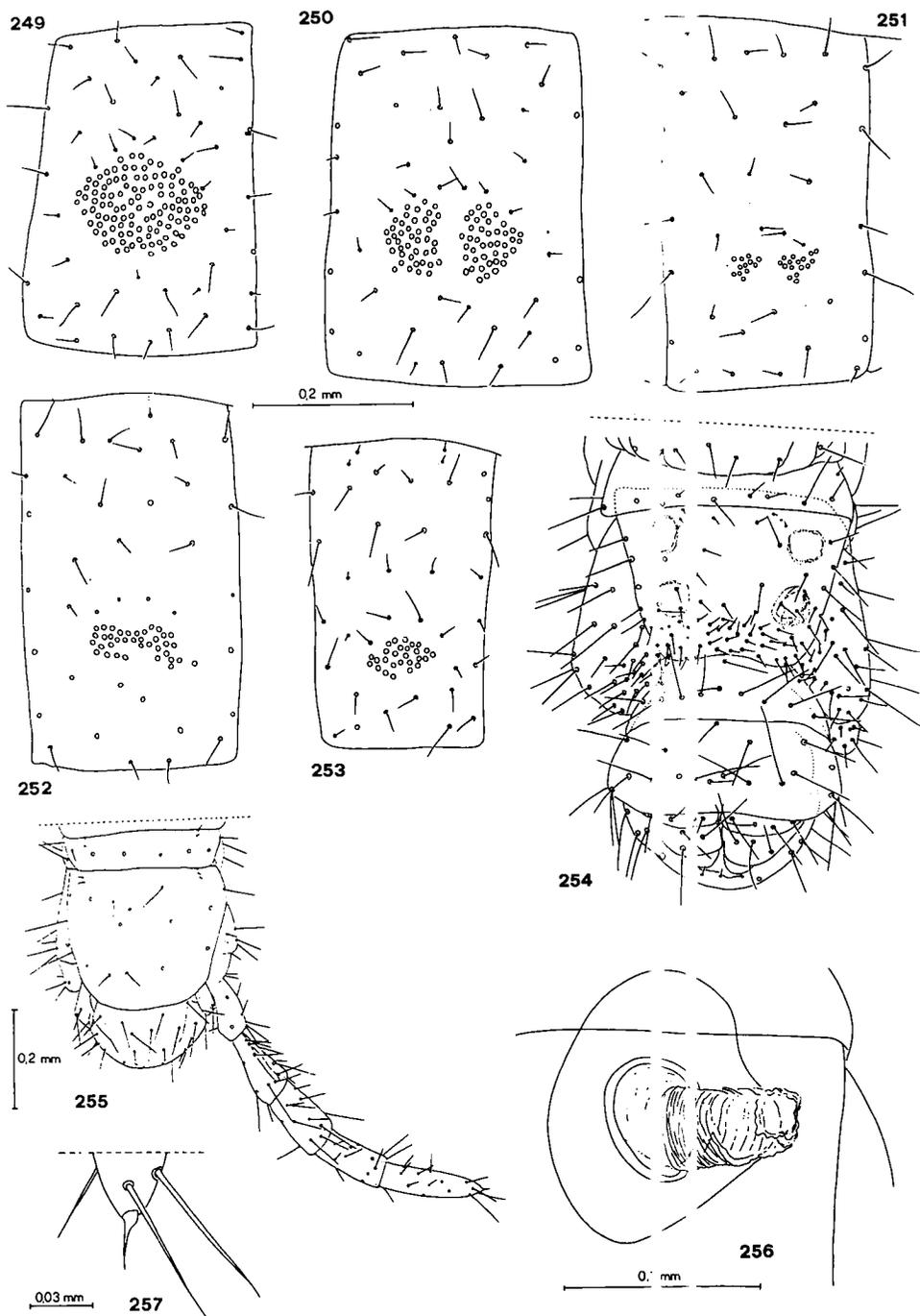
Terminal segments. Intermediate tergum with posterior border convex; intermediate sternum with posterior border slightly concave; first genital sternum with posterior border slightly concave medially and slightly convex laterally (Figs 254-255). Gonopods uniaarticulate and separated medially (Fig. 254).

Male unknown.

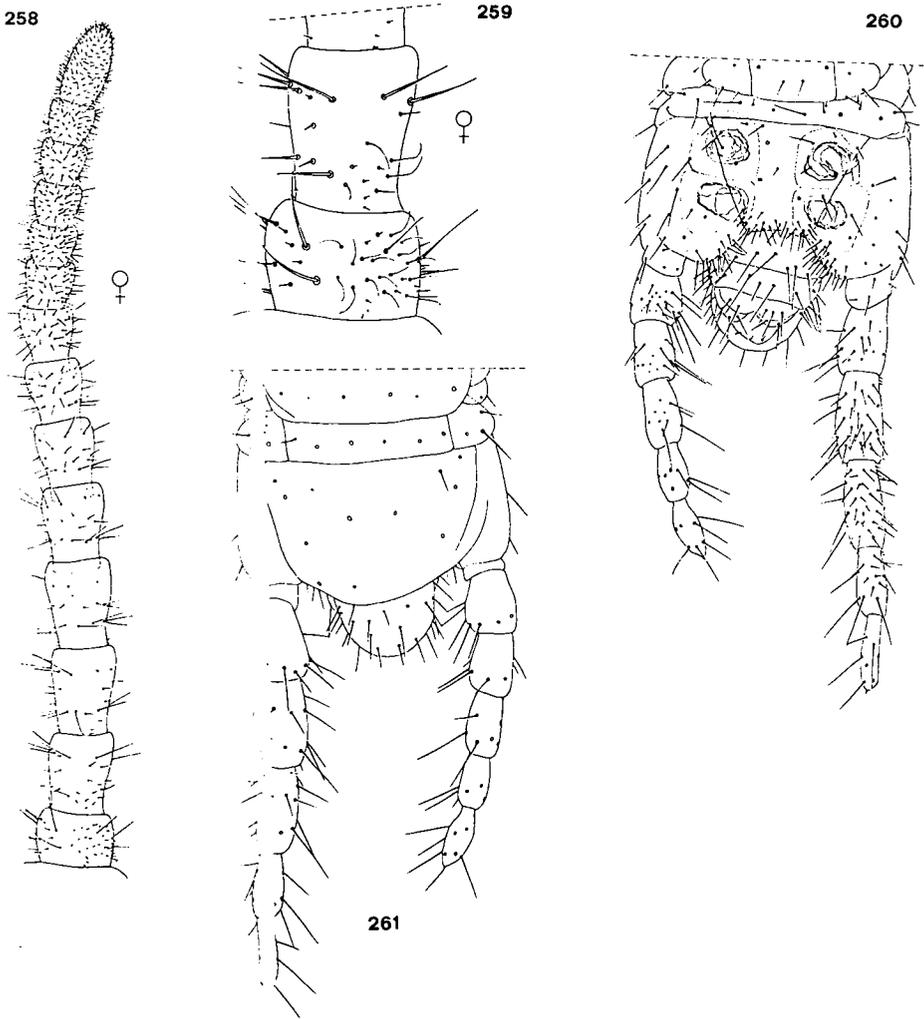
Remarks. In describing this species, BRÖLEMANN (1903: 84) stated about the ventral pore fields: "... semblant même divisé en deux champs, dans la moitié

Figs 236-248. — *Schendylurus paulista* (Brölemann), ♀ holotype (Brazil, São Paulo: Poço Grande). Fig. 236, dentate lamella of mandible; Fig. 237, r. first maxilla, d.; Fig. 238, first and second maxillae, v.; Fig. 239, claw of telopodite of r. second maxilla, v.; Fig. 240, claw of telopodite of l. second maxilla, v.; Fig. 241, detail of posterior external region of l. second maxilla, v.; Fig. 242, forcipular segment with poison claws, v.; Fig. 243, the same, d.; Fig. 244, detail of calyx of poison gland in r. poison claw, v.; Fig. 245, l. leg VII, v.; Fig. 246, claw of r. leg III, postero-v.; Figs 247-248, sterna II, VII.





Figs 249-257. — *Schendylurus paulista* (Brölemann), ♀ holotype (Brazil, São Paulo: Poço Grande). Figs 249-253, sterna XVII, XXVI, LIII, LIV, LVIII; Fig. 254, last leg-bearing segment and terminal segments, v.; Fig. 255, the same, d.; Fig. 256, detail of l. anterior coxal organs, v.; Fig. 257, detail of distal end of last podomere of r. last leg, v.

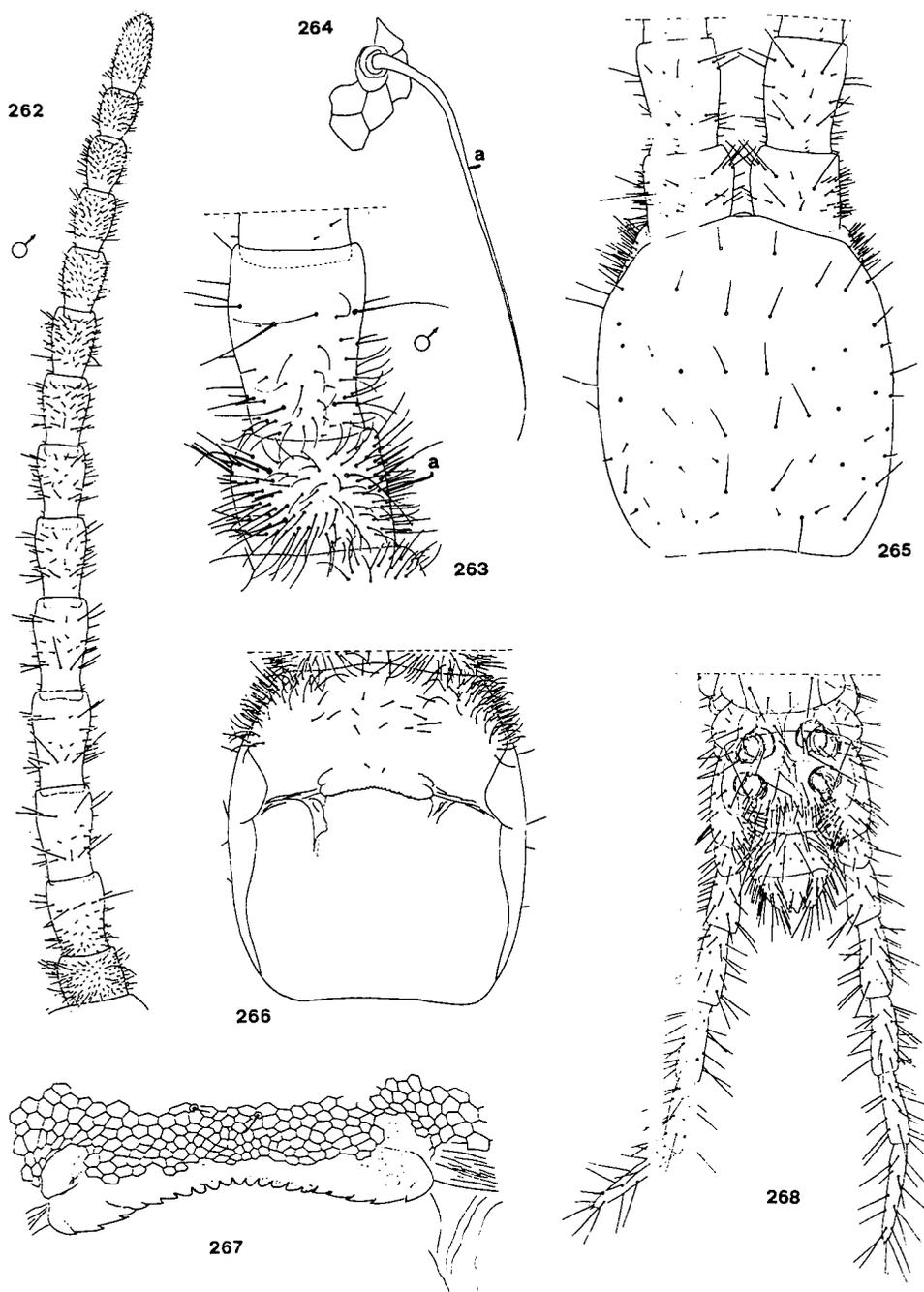


Figs 258-261. — *Schendylurus perditus* Chamberlin (from PEREIRA 1986), ♀ paralectotype (Brazil, Paraíba: Independência). Fig. 258, l. antenna, v.; Fig. 259, base of left antenna, v.; Fig. 260, last leg-bearing segment and terminal segments. v.; Fig. 261, the same, d.

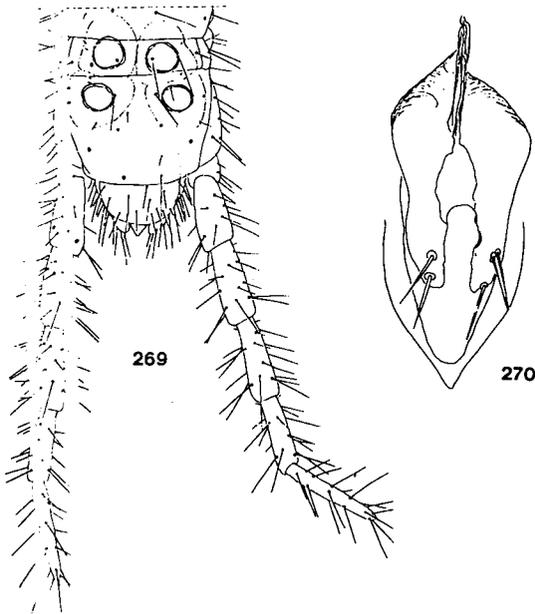
postérieure”, but a careful examination of the holotype reveals that the last four sterna have undivided pore fields.

***Schendylurus perditus* Chamberlin 1914 (Figs 258-270)**

Schendylurus perditus CHAMBERLIN 1914: 198; 1921: 22; ATTEMS 1928: 134; 1929: 76; BÜCHERL 1942a: 202; 1942b: 348; CHAMBERLIN 1955: 8; CRABILL 1972: 21; PEREIRA 1986: 18; PEREIRA & MINELLI 1993: 121.



Figs 262-268. — *Schendylurus perditus* Chamberlin (from PEREIRA 1986), ♂ lectotype (Brazil, Paraíba: Independência). Fig. 262, l. antenna, v.; Fig. 263, base of l. antenna, v. (a: specialised seta); Fig. 264, detail of setae marked as "a" on the previous figure; Fig. 265, cephalic shield; Fig. 266, head capsule and basis of antennae; Fig. 267, labrum; Fig. 268, last leg-bearing segment and terminal segments, v.



Figs 269-270. — *Schendylurus perditus* Chamberlin (from PEREIRA 1986), ♂ lectotype (Brazil, Paraíba: Independencia). Fig. 269, the last leg-bearing segment and terminal segments, d.; Fig. 270, penis, d.

Diagnosis. A *Schendylurus* species with ventral pores lacking on the first sternum and with well defined pore fields only on anterior region of the body. Among the Neotropical species of the genus, the present species, *S. anamariae*, *S. andesicola*, *S. dentifer*, *S. edentatus*, *S. interfluvius*, *S. lomanus*, *S. pallidus*, *S. paolettii*, *S. peruanus*, *S. potosius*, *S. titicacaensis* and *S. virgingordae* share these traits. *S. perditus* can be differentiated very easily from all these species by the presence on the clypeus and two first a.a. of numerous setae characterized by having their distal part very thin and long (Figs 259, 263, 266). The sexual dimorphism of the antennae is also very characteristic: the setae just described are much more numerous on the ♂ than on the ♀ and the antennae of the ♂ are proportionally longer than those of the ♀ (Figs 258, 262, 259, 263).

Type locality. Brazil, State of Paraíba: Independencia. This is also the only locality known to date.

Depository of type. Museum of Comparative Zoölogy, Harvard University, Cambridge, Mass.

Remarks. This species has been described in detail by PEREIRA (1986: 18). Nevertheless the figures were poorly printed. For this reason, we incorporate them anew in the present contribution.

***Schendylurus placcii* n. sp.** (Figs 271-308)

Diagnosis. A *Schendylurus* species with well defined pore fields on the anterior and posterior segments, but without pores on the intermediate ones. Among the Neotropical species of the genus only the present species, *S. demangei* Pereira, *S. minutus* Pereira & Minelli and *S. demartini* n. sp. share this trait. *S. placcii* can be differentiated from these species as explained in the key below. It is more closely related to *S. demartini* and can be differentiated from this last species by means of the following characters (the corresponding ones for *S. demartini* are given in parentheses): antennae 3.2 times longer than the cephalic plate (2.6); terminal a.a. with ca 9-10 claviform sensory setae on the median edge (ca 1-3); male a.a. II-XIII, ca 1.4-1.5 times longer than wide, a.a. XIV, 2.5 times longer than wide (a.a. II-XIII as long as wide, or 1.1 times longer than wide, a.a. XIV, 2.0 times longer than wide); cephalic plate 1.2 times longer than wide (1.1); dentate lamellae of mandible subdivided into 3 distinct blocks (2); last leg-bearing segment without pleurites at the sides of praetergum (with pleurites); shape and pilosity of last leg-bearing segment and terminal segments as in Figs 302-303, 307 (as in Figs 108-109, 112).

Type material. Holotype ♂ with 43 pairs of legs, body length 18 mm. Argentina, Province of Formosa: Formosa, Rio Pilagá, IV.1990, G. Placci legit.

Depository of type. Museo de La Plata.

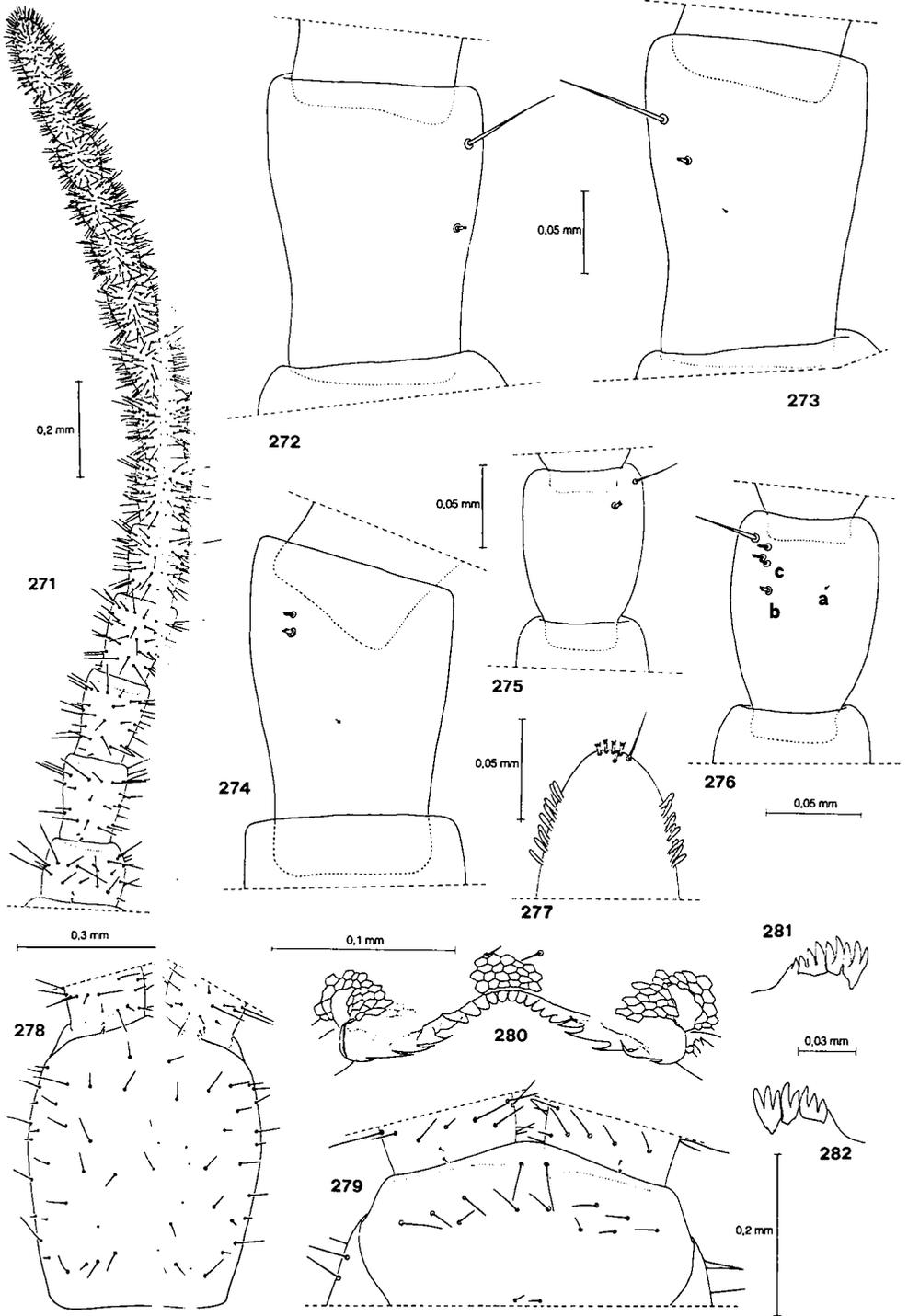
Description

Male holotype. A total of 43 pairs of legs, body length 18 mm, maximum body width 0.5 mm.

Colour of preserved specimen yellowish.

Antennae ca 3.2 times longer than the cephalic plate, distally slightly attenuate; a.a. II-XIII, 1.4-1.5 times longer than wide, a.a. XIV, 2.5 times longer than wide. Setae on a.a. I-III of different lengths, and few in number, those of remaining antennomeres progressively shorter and more numerous towards the tip of the appendage (Fig. 271). Terminal a.a. with ca 10-12 claviform sensory setae on the external and internal apical edges. Distal end of this a.a. with ca 5-6 very small specialized setae ending in three small apical branches (Fig. 277). Dorsal and v. surface of a.a. II, V, IX and XIII with very small specialized setae which on v. side are restricted to an internal lateral area (in more apical position on a.a. IX and XIII) and are very similar to those on the apex of a.a. XIV. Each of a.a. II, V, IX and XIII with 1 seta (Figs 272, 275). Specialized setae on d. side are restricted to an external latero-apical and a medio-apical area and are represented by three different types: *a*, *b*

Figs 271-282. — *Schendylurus placcii* n. sp., ♂ holotype (Argentina, Province of Formosa: Formosa). Fig. 271, r. antenna, v.; Fig. 272, r. a.a. II, v.; Fig. 273, l. a.a. II, d.; Fig. 274, l. a.a. V, d.; Fig. 275, r. a.a. XIII, v.; Fig. 276, l. a.a. XIII, d. (*a*: type *a* seta; *b*: type *b* seta; *c*: type *c* seta); Fig. 277, apical region of last r. a.a., v.; Fig. 278, cephalic shield; Fig. 279, clypeus and basis of antennae; Fig. 280, labrum; Figs 281-282, dentate lamellae of r. and l. mandibles.



and *c*. Type *a* setae are very thin and not apically divided; type *b* setae are very similar to those of the apex of a.a. XIV (also found on ventral side); type *c* are a little larger ending in two diminutive branches and are much darker (ochraceous) in colour (Fig. 276). Setae *a* occur on the median or apico-median part of the specified a.a., type *b* and *c* setae on the external apico-lateral region; a.a. II with 1 type *a* and 1 type *b* seta; a.a. V with 1 type *a*, 1 type *b* and 1 type *c* setae; a.a. IX and XIII with 1 type *a*, 1 type *b* and 3 type *c* setae (Figs 273-274, 276).

Cephalic plate slightly longer than wide (ratio 1.2:1), shape and chaetotaxy as in Fig. 278.

Clypeus with 1 + 1 postantennal setae, 5 + 6 median and 1 + 1 prelabral setae (Fig. 279).

Labrum with 21 teeth, those on the central arc round-tipped, the lateral ones with a very sharp medial extension (Fig. 280).

Mandible with dentate lamella subdivided into three distinct blocks, with 5,2,3 and 4,2,3 respectively (Figs 281-282); pectinate lamellae with ca 20 hyaline teeth.

First maxillae with palps on both coxosternum and telopodite. Coxosternum with 2 + 2 setae, median projections of coxosternum subtriangular well developed and provided with 1 + 2 setae. Article II of telopodite with 2 + 2 v. setae and 5 + 5 d. sensilla (Figs 283-284).

Second maxillae with 9 + 1 + 8 setae on coxosternum arranged as in Fig. 284. Apical claw of telopodite well developed, bipectinate, the d. edge with ca 12-15 teeth (Fig. 285) and the v. with ca 10-11 teeth.

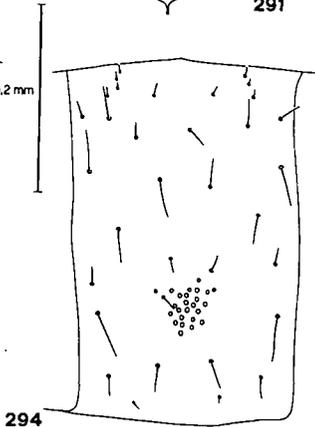
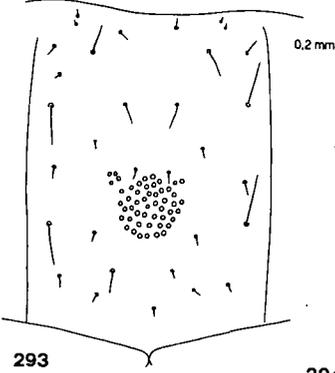
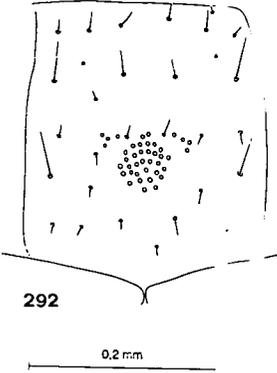
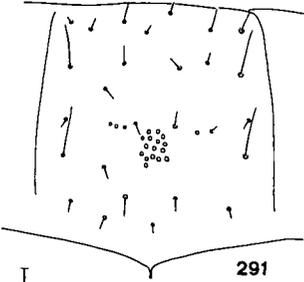
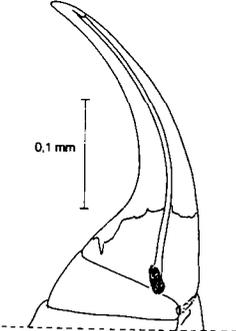
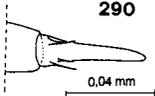
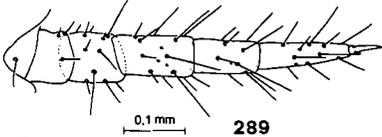
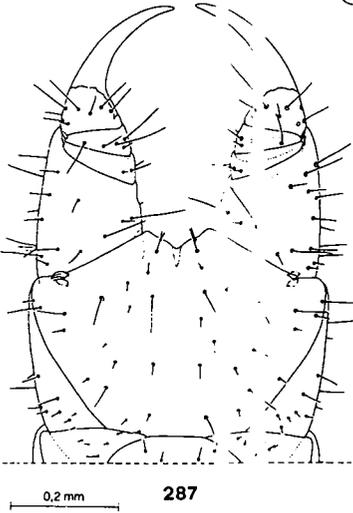
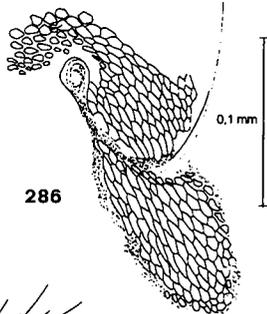
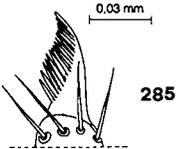
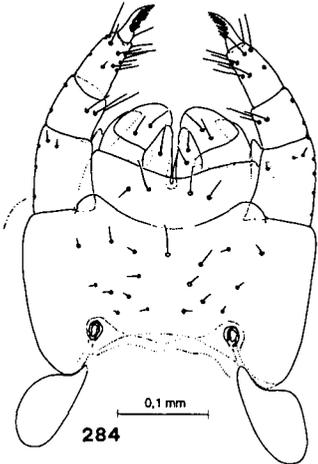
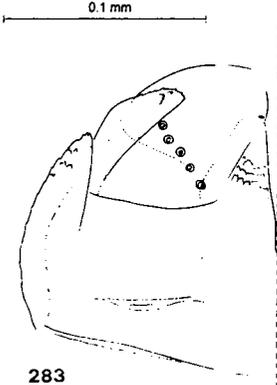
Forcipulae. When closed, telopodites do not extend beyond anterior margin of head; basal plate with an irregular transverse median row of 8 big setae and a few additional small setae dispersed on remaining surface. Telopodites with all articles lacking teeth. Calyx of poison gland short and cylindrical (Fig. 288); chaetotaxy of coxosternum and telopodites as in Fig. 287.

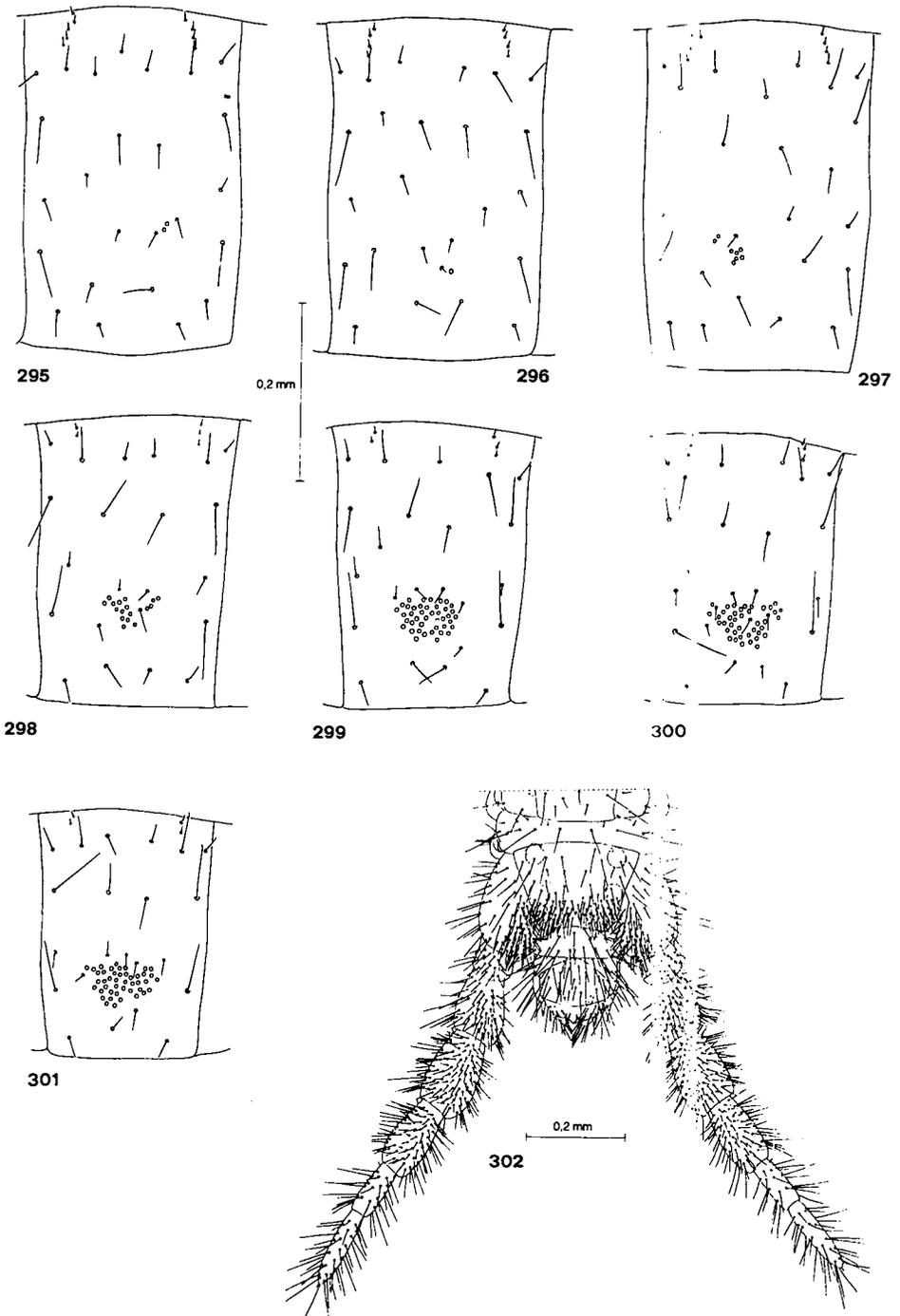
Legs (last pair excepted) with chaetotaxy (Fig. 289) uniform throughout the body length. Claws ventrobasally with two spines, one anterior one posterior; a third spine, smaller in size occurs internally, very close to the posterior one (Fig. 290).

Sterna. Pore fields present on sterna II to XXI and XXXVIII to XLI (antepenultimate), totally absent on the remaining sterna. All fields undivided; on the anterior sterna there are some isolated additional pores at each anterior side of the principal central area. Form of fields changing along the trunk as in Figs 291-301. Number of pores on selected sterna: on sternum II, 3 + 16 + 1; on III, 4 + 33 + 4; on X, 4 + 46 + 0; on XVIII, 25; on XIX, 2; on XX, 1; on XXI, 2 + 6 + 0; on XXXVIII, 17; on XXXIX, 42; on XL, 40; on XLI, 44.

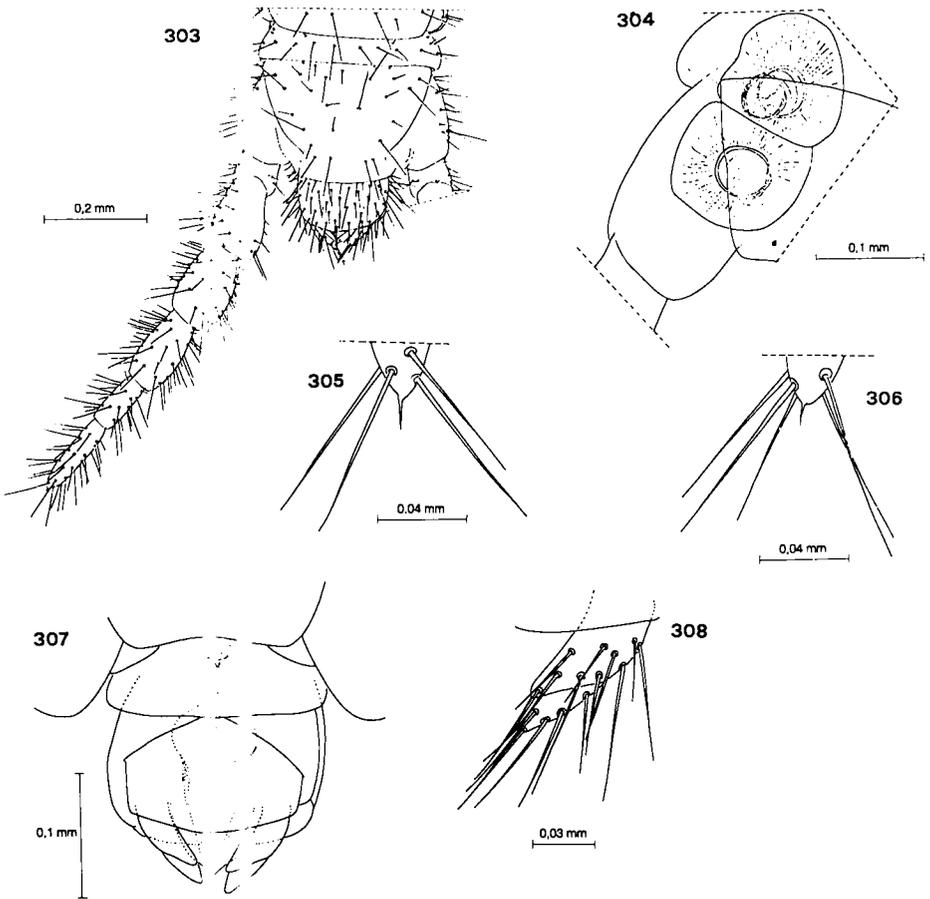
Last leg-bearing segment without pleurites at the sides of praeternum. Praeternum not divided along the sagittal plane; form and chaetotaxy of sternum and tergum as in Figs 302-303. Coxopleura slightly protruding at their distal v. ends, setae small

Figs 283-294. — *Schendylurus placcii* n. sp., ♂ holotype (Argentina, Province of Formosa: Formosa). Fig. 283, l. first maxilla, d.; Fig. 284, first and second maxillae, v.; Fig. 285, claw of telopodite of r. second maxilla, d.; Fig. 286, detail of posterior external region of l. second maxilla, v.; Fig. 287, forcipular segment with poison claws, v.; Fig. 288, detail of calyx of poison gland in l. poison claw, v.; Fig. 289, l. leg V, v.; Fig. 290, claw of l. leg V, v.; Figs 291-294, sterna II, III, X, XVIII.





Figs 295-302. — *Schendylurus placcii* n. sp., ♂ holotype (Argentina, Province of Formosa: Formosa). Figs 295-301, sterna XIX, XX, XXI, XXXVIII, XXXIX, XL, XLI; Fig. 302, last leg-bearing segment and terminal segments, v.



Figs 303-308. — *Schendylurus placii* n. sp., ♂ holotype (Argentina, Province of Formosa: Formosa). Fig. 303, the last leg-bearing segment and terminal segments, d.; Fig. 304, r. coxal organs, v.; Fig. 305, detail of distal end of last podomere of r. last leg, v.; Fig. 306, detail of distal end of last podomere of l. last leg, v.; Fig. 307, genital region, v.; Fig. 308, l. gonopod, v.

and numerous on distal internal edge, the remaining surface with few bigger setae. Two single (“homogeneous”) coxal organs on each coxopleuron, anterior and posterior coxal organs externally unilobed, opening on membrane between coxopleuron and sternum, covered by the latter (Figs 302, 304). Last legs with seven podomeres, form and chaetotaxy as in Figs 302-303. Praetarsus as a very thin and small tubercle provided with 1 small apical spine (Figs 305-306).

Terminal segments. Intermediate tergum with posterior margin convex; intermediate sternum with posterior margin slightly convex; first genital sternum with posterior margin convex (Fig. 307). Gonopods biarticulate, basal article with 10 setae and distal article with 5 setae (Fig. 308); penis dorsally with 2+2 apical setae.

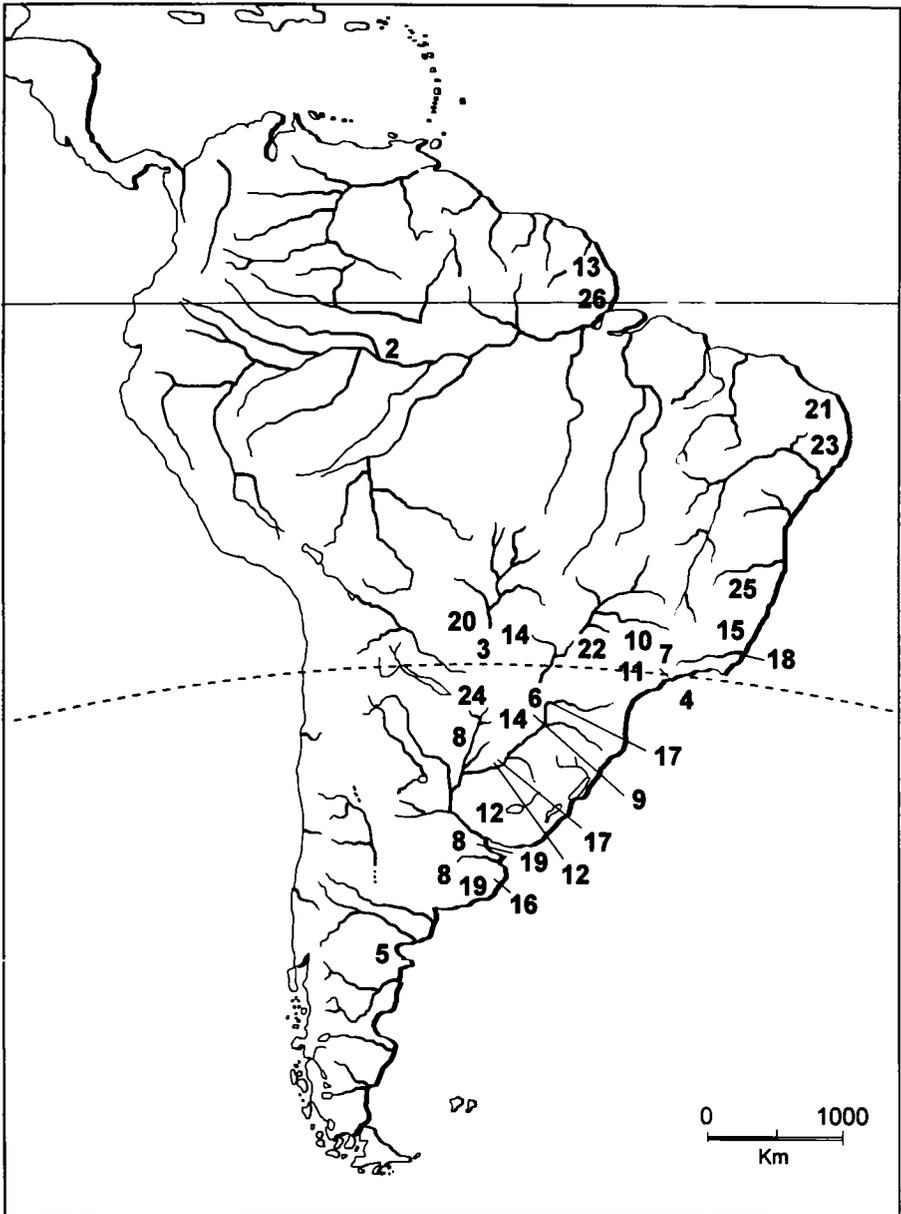


Fig. 309. — Geographical distribution of the species of *Schendylurus* of Argentina, Paraguay and Brazil. 1, *S. anamariae*; 2, *S. bakeri*; 3, *S. borellii*; 4, *S. coscaroni*; 5, *S. demangei*; 6, *S. demartini*; 7, *S. demelloi*; 8, *S. elegantulus*; 9, *S. fieldi*; 10, *S. gounellei*; 11, *S. iguapensis*; 12, *S. interfluvius*; 13, *S. lesnei*; 14, *S. longitarsis*; 15, *S. luederwaldi*; 16, *S. madariagensis*; 17, *S. mesopotamicus*; 18, *S. olivaceus*; 19, *S. pampeanus*; 20, *S. paraguayensis*; 21, *S. parabybae*; 22, *S. paulista*; 23, *S. perditus*; 24, *S. placcii*; 25, *S. sublaevis*; 26, *S. verboeffi*.

Female unknown.

Etymology. This species is dedicated to the collector of the type specimen, Dr G. Placci of the Centro de Estudio de las Yungas, Province of Tucumán, Argentina.

***Schendylurus sublaevis* (Meinert 1870)**

Geophilus sublaevis MEINERT 1870: 72; ATTEMS 1903: 262; BRÖLEMANN 1909: 4; ATTEMS 1929: 326.

(?)*Geophilus (Schendylurus ?) sublaevis*, CHAMBERLIN 1914: 154.

Schendylurus sublaevis, PEREIRA 1983b: 81; 1983a: 183. PEREIRA & MINELLI 1993: 121.

Type locality. Brazil, Minas Geraes: Lagoa Santa. This is also the only locality known to date.

Depository of type. Zoologisk Museum København.

***Schendylurus verhoeffi* Brölemann & Ribaut 1911**

Schendylurus verhoeffi BRÖLEMANN & RIBAUT 1911: 221; ATTEMS 1928: 134; 1929: 78; CRABILL 1972: 21; PEREIRA & MINELLI 1993: 121.

Schendylurus (Ploutoschendylurus) verhoeffi, BRÖLEMANN & RIBAUT 1912: 115.

Type locality. Brazil, Bas Carsévène. This is also the only locality known to date.

Depository of type. Muséum National d'Histoire Naturelle, Paris: Coll. Myriapodes M. 253.

SPECIES INQUIRENDA

***Schendylurus brasilianus* (Silvestri 1897)**

Nannophilus brasilianus SILVESTRI 1897b: 346; ATTEMS 1903: 195; BRÖLEMANN & RIBAUT 1912: 132; ATTEMS 1929: 72.

Schendyla brasiliانا, BRÖLEMANN 1902a: 45; 1909: 6; BÜCHERL 1939: 314.

(?)*Schendylurus brasilianus*. CHAMBERLIN 1914: 200.

Schendylurus brasilianus, BÜCHERL 1942a: 203; PEREIRA 1983b: 86; PEREIRA & MINELLI 1993: 120.

Schendylurus (Schendylurus) brasilianus, BÜCHERL 1942b: 349.

Type locality. Brazil (without specification of locality). This is also the only "locality" known to date.

Depository of type. Istituto di Entomologia Agraria, Portici.

KEY TO THE SPECIES OF *SCHEMDYLURUS*
OF ARGENTINA, BRAZIL AND PARAGUAY (Fig. 30%)

- | | | |
|----|--|--|
| 1 | Well defined pore fields present only on some anterior sterna | 2 |
| — | Well defined pore fields present on both anterior and posterior sterna | 5 |
| 2 | First sternum with pores | <i>S. luederwaldi</i> Brölemann & Ribaut |
| — | First sternum without pores | 3 |
| 3 | Lateral margins of clypeus covered by numerous setae (Fig. 266) | <i>S. perditus</i> Chamberlin |
| — | Lateral margins of clypeus not covered by numerous setae | 4 |
| 4 | Maximum body length 28 mm; in some specimens, 2-4 dispersed pores can be present near the posterior margin of last 4-5 sterna; dentate lamellae of mandibles divided in 3 blocks; coxosternum of first maxillae with 2+2 setae; antennae 4.8-5.5 times longer than the cephalic plate; pore fields present from II to XVI-XVII sternum; ♀ with 51, 53 or 55 pairs of legs; ♂ with 49, 51 or 53 pairs of legs; clypeus with ca 8+8 median setae | <i>S. anamariae</i> Pereira |
| — | Maximum body length 19 mm; all specimens always completely lacking pores on all posterior sterna; dentate lamellae of mandibles divided in 2 blocks; coxosternum of first maxillae with 1+1 setae; antennae 3.2 times longer than the cephalic plate; pore fields present from II to XII-XIV sternum; ♀ with 41 pairs of legs; ♂ with 39 or 41 pairs of legs; clypeus with ca 4+4 median setae | <i>S. interfluvius</i> Pereira |
| 5 | Pore field series interrupted in the middle part of the trunk | 6 |
| — | Pore field series uninterrupted | 8 |
| 6 | Body length 29 mm; 65 pairs of legs | <i>S. demangei</i> Pereira |
| — | Body length 18 mm; 41-43 pairs of legs | 7 |
| 7 | Antennae of ♂ 2.6 times longer than the cephalic plate, last a.a. with 1-3 claviform sensory setae on the median edge; ♂ a.a. II to XIII as long as wide or 1.1 times longer than wide, a.a. XIV, 2.0 times longer than wide; cephalic plate 1.1 times longer than wide; dentate lamellae of mandible subdivided into 2 distinct blocks; last leg-bearing segment with pleurites at level of praetergum; shape and pilosity of last leg-bearing segment and terminal segments as in Figs 108-109 | <i>S. demartini</i> n. sp. |
| — | Antennae of ♂ 3.2 times longer than the cephalic plate; last a.a. with ca 9-10 claviform sensory setae on the median edge; ♂ a.a. II to XIII, ca 1.4-1.5 times longer than wide, a.a. XIV 2.5 times longer than wide; cephalic plate 1.2 times longer than wide; dentate lamellae of mandible subdivided into 3 distinct blocks; last leg-bearing segment without pleurites at the sides of praetergum; shape and pilosity of last leg-bearing segment and terminal segments as in Figs 302-303 | <i>S. placcii</i> n. sp. |
| 8 | First sternum with pores | 9 |
| — | First sternum without pores | 15 |
| 9 | Pore fields end on penultimate sternum | 10 |
| — | Pore fields end on antepenultimate sternum | 12 |
| 10 | Body length up to 70 mm; 69 pairs of legs; coxosternum of first maxillae with ca 15-24 setae | <i>S. demelloi</i> Verhoeff |
| — | Body length up to 40 mm; 47-59 pairs of legs; coxosternum of first maxillae with ca 4-6 setae | 11 |
| 11 | Anterior coxal organs unilobed, posterior coxal organs bilobed (Fig. 54); body length 36 mm; ♀ with 51 pairs of legs; last leg-bearing segment with pleurites at the sides of praetergum | <i>S. coscaroni</i> n. sp. |
| — | Anterior and posterior coxal organs unilobed (Fig. 226); body length 40 mm; ♀ with 59 pairs of legs; last leg-bearing segment without pleurites at the sides of praetergum | <i>S. parabybae</i> (Chamberlin) |
| 12 | 49 pairs of legs | <i>S. iguapensis</i> Verhoeff |
| — | 55-61 pairs of legs | 13 |

- 13 Labrum with ca 25 + 25 teeth on the side pieces; dentate lamellae of mandibles with ca 17-23 teeth grouped into 3 blocks; clypeus with ca 34 median setae
S. longitarsis (Silvestri)
- Labrum with ca 6-7 + 6-7 teeth on the side pieces; dentate lamellae of mandibles with ca 10-15 teeth grouped into 2-3 blocks; clypeus with ca 13-20 median setae 14
- 14 Metatarsus of terminal legs of ♂ as in Figs 182-183 *S. mesopotamicus* Pereira
- Metatarsus of terminal legs of ♂ as in Fig. 22 *S. borellii* (Silvestri)
- 15 Pore fields series ends on sternum prior to the antepenultimate 16
- Pore fields series ends on penultimate or antepenultimate sternum 17
- 16 Anterior sterna with undivided pore fields, sterna of middle and posterior parts of the body with pore fields subdivided in two subsymmetrical areas; 49 pairs of legs (♂); dentate lamellae of mandibles subdivided into 3 blocks; antennae ca 3.5 times longer than the cephalic plate; clypeus with 19 + 19 median setae; apical claw of telopodite of second maxillae provided with ca 26-27 d. teeth and ca 20-21 v. teeth
S. olivaceus Crabill
- Anterior and posterior sterna with undivided pore fields, sterna of middle part of the body with pore fields subdivided in two subsymmetrical areas; 61 pairs of legs (♀); central arc of labrum with 11 teeth; dentate lamellae of mandible apparently undivided; antennae ca 2.5 times longer than the cephalic plate; clypeus with 8 + 11 median setae; apical claw of telopodite of second maxillae provided with ca 11-14 d. teeth and 9 v. teeth *S. paulista* (Brölemann)
- 17 Pore fields series ends on penultimate sternum
S. pampeanus (Pereira & Coscarón)
- Pore fields series ends on antepenultimate sternum 18
- 18 All pore fields undivided; anterior and posterior coxal organs unilobed or both bilobed 19
- Pore fields on middle part of the body subdivided in two areas; anterior and posterior coxal organs unilobed 20
- 19 Anterior and posterior coxal organs unilobed; body length 12.5 mm
S. lesnei Brölemann & Ribaut
- Anterior and posterior coxal organs bilobed (Fig. 21); body length 24 mm
S. bakeri Chamberlin
- 20 Side pieces of labrum with ca 40 + 46 teeth; dentate lamellae of mandibles not subdivided into blocks with ca 25- 30 teeth; clypeus with 7 prelabral setae
S. sublaevis (Meinert)
- Side pieces of labrum with a maximum of 7 + 7 teeth; dentate lamellae of mandibles subdivided into 2 or 3 blocks with ca 9-14 teeth; clypeus with 2 prelabral setae 21
- 21 Body length 70 mm; central arc of labrum with ca 30 teeth; 63-65 pairs of legs (♀); clypeus with ca 40 median setae *S. gounellei* (Brölemann)
- Body length 15-38 mm; central arc of labrum with ca 11-14 teeth; 41-51 pairs of legs; clypeus with ca 16-20 median setae 22
- 22 Body length 38 mm; 51 pairs of legs (♀) *S. verhoeffi* Brölemann & Ribaut
- Body length 15-30 mm; 41-49 pairs of legs 23
- 23 Body length 15 mm; 41 pairs of legs (♂) *S. paraguayensis* (Silvestri)
- Body length 28-30 mm; 43-49 pairs of legs 24
- 24 Second maxillae with ca 30 setae on coxosternum; 45- 49 pairs of legs
S. madariagensis Pereira
- Second maxillae with ca 16-21 setae on coxosternum; 43-47 pairs of legs 25
- 25 Body length 30 mm; antennae ca 2.8 times longer than the cephalic plate; undivided pore fields of anterior region of the body present up to sternum XXV; divided pore fields present on eight sterna of middle part of the body; ♀ with 43 pairs of legs; antennae with three types of specialized sensory setae *S. fieldi* (Chamberlin)
- Maximum body length 28 mm; antennae 3.2-3.8 times longer than the cephalic plate; undivided pore fields of anterior region of the body present up to sterna XVIII-XIX;

divided pore fields present on 21-23 sterna of middle part of the body; ♀ with 45-47 pairs of legs; antennae with two types of specialized sensory setae

S. elegantulus (Meinert)

Note on the key. *Schendylurus brasilianus* (Silvestri) is not included in the key because its characters are too poorly known.

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