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Description of nine new centipede species from Amazonia and related matters on Neotropical geophilomorphs (Chilopoda: Geophilomorpha)

by

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Abstract

Nine new species of geophilomorph centipedes, all from Amazonian sites, are described: one species belongs to Ballophilidae (*Ityphilus demoraisi* n.sp.), three to Geophilidae (*Ribautia (Schizoribautia) difficilis* n.sp., *R. (R.) ducalis* n.sp., *R. (R.) proxima* n.sp.), and five to Schendylidae (*Pectiniungus ducalis* n.sp.). The ♂ allotype of *Ityphilus crabilli* PEREIRA, MINELLI & BARBIERI, 1994 is designated and described. Descriptive data and/or taxonomic comments are given for several Neotropical species of the genus *Ribautia*: *R. (Schizoribautia) montana* KRAUS, 1954 is regarded as a good species and redescribed from type material. *R. (S.) seydi* RIBAUT, 1923, *R. (S.) peruana* VERHOEFF, 1941 and *R. (S.) titicacae* TURK, 1955 are regarded here as distinct species. *Ribautia silvana* KRAUS, 1954 is placed in the subgenus *Ribautia (Schizoribautia)* and the ♂ holotype is described.

Keywords: **Amazon, Neotropics, Chilopoda, Geophilomorpha.**

Resumo

Nove espécies de centopéias geofilomorfas, todas da região da Amazônia, são descritas: uma espécie representa os Ballophilidae (*Ityphilus demoraisi* n.sp.), três os Geophilidae (*Ribautia (Schizoribautia) difficilis* n.sp., *R. (R.) ducalis* n.sp., *R. (R.) proxima* n.sp., cinco os Schendylidae (*Pectiniungus ducalis* n.sp., *Schendylurus continuus* n.sp., *S. janauarius* n.sp., *S. marchantariae* n.sp., *S. oligopus* n.sp.). O ♂ alotipo de *Ityphilus crabilli* PEREIRA, MINELLI & BARBIERI, 1994 é designado e descrito. Dados descritivos e/ou comentários taxonômicos são dados para várias espécies Neotropicais do gênero *Ribautia*: *R. (Schizoribautia) montana* KRAUS, 1954, é considerada uma espécie válida e redescrita baseada em material tipo, *R. (S.) seydi* RIBAUT, 1923, *R. (S.) peruana* VERHOEFF, 1941 e *R. (S.) titicacae* TURK, 1955 são consideradas espécies distintas. *Ribautia silvana* KRAUS, 1954 é colocada no subgênero *Ribautia (Schizoribautia)* e redescrita baseada no ♂ holótipo.

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Introduction

The recent collections of Doz. Dr. J. ADIS (Plön) in the Amazonian region are rapidly revealing an amazing diversity of undescribed centipedes. A new genus and five new species, all of them collected in the very selective environment of the Amazonian inundation forests near Manaus, have been recently described by us (PEREIRA, MINELLI & BARBIERI, 1994), but many more new taxa are still awaiting description.

In this paper we describe nine new species and provide some additional descriptive notes and taxonomic comments on other Neotropical species of some of the genera involved.

Material

Holotypes, allotypes and some paratypes of the new species, as well as most non-type specimens, have been deposited in the collection of the Instituto Nacional de Pesquisas da Amazonia, Manaus (INPA); some paratypes and other specimens are in the following collections: Museum of La Plata (MLP), Coll. A. MINELLI, Padova (AM) and Coll. J. ADIS, Plön (JA), as indicated thereafter.

The following abbreviations are used throughout the text and in the figure legends: a.a. = antennal article(s); b.l. = body length; d. = dorsal; l. = left; p.l. = pair(s) of legs; r = right; v. = ventral.

Descriptions

Family Ballophilidae

Genus *Ityphilus* COOK, 1899

Diagnosis. - Antennae conspicuously clavate. Central arc of labrum membranous, without teeth or with minute hairlike structures. Forcipular coxosternum with complete or virtually complete chitinlines; medial edge of tarsungulum unarmed to conspicuously serrate. Ventral pores arranged in transversally elliptical or subcircular fields. Coxopleura of the last leg-bearing segment each with two internal coxal organs of simple structure ("homogeneous coxal glands") sensu BRÖLEMANN & RIBAUT, 1912. Last pair of legs with seven podomeres, praetarsus in form of a setiform structure, basally "tubercle-like".

Ityphilus crabilli PEREIRA, MINELLI & BARBIERI, 1994 (Figs. 1-2)

Ityphilus crabilli PEREIRA, MINELLI & BARBIERI, 1994 - Amazoniana 13 (1/2): 165.

Type material. - Allotype ♂, here designated, with mature spermatozoa visible by transparence inside the body, 47 p.l., b.l. 15 mm. Brazil: Amazonas: Reserva Fl. A. Ducke, 10.11.1982, J.W. DE MORAIS legit (INPA).

Other additional material examined. All from the same locality and collector as the allotype: 1 ♂ with mature spermatozoa, 47 p.l., b.l. 13 mm, 19.1.1982 (MLP). 1 ♂ with mature spermatozoa, 47 p.l., b.l. 13 mm, 8.9.1982 (AM). 1 ♀ juv. with only 1+1 coxal organs, 49 p.l., b.l. 12 mm, 12.4.1983 (AM). 1 juv. (sex?) with only 1+1 coxal organs, 49 p.l., b.l. 10 mm, 11.7.1983 (AM). 1 ♀ with the two spermatecae full of spermatozoa, 51 p.l., b.l. 18 mm, 10.11.1982 (AM). 1 ♀ with the two spermatecae full of spermatozoa, 49 p.l., b.l. 19 mm, 6.9.1983 (MLP). 1 ♀ juv.with only 1+1 coxal organs, 47 p.l., b.l. 7 mm, 6.9.1983 (JA). 1 ♀, 49 p.l., b.l. 13 mm, 6.9.1983 (JA).

Type locality. - Brazil: Amazonas: Rio Tarumã Mirim, igapó.

Known range. - Brazil: Amazonas: Rio Tarumã Mirim, igapó; Reserva Fl. A. Ducke.

Remarks. - This species was described on the basis of a single specimen (female holotype) by PEREIRA, MINELLI & BARBIERI (1994: 165).

Description

Male allotype. - 47 p.l., b.l. 15 mm, maximum body width 0.6 mm.

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

Last leg-bearing segment: form and chaetotaxy of sternum and tergum as in Figs. 1-2. Coxopleura with numerous setae on v. side, the remaining surface with few setae (Figs. 1-2). Last legs with seven podomeres, strongly thickened, subconically narrowing from base to distal end, form and chaetotaxy as in Figs. 1-2.

Terminal segments: intermediate tergum with posterior border convex; intermediate sternum with posterior border slightly concave; first genital sternum with posterior border slightly concave medially, slightly convex laterally (Figs. 1-2). Gonopods apparently uniarticulate, with ca. 5-7 setae; penis seemingly without apico-dorsal setae (Fig. 1).

Variation. - All the three males we have seen have 47 pairs of legs. The females have 47, 49 or 51 pairs of legs.

Ityphilus demoraisi n.sp. (Figs. 3-42)

Diagnosis. - An *Ityphilus* species with pore fields present from the first to the penultimate sternum and forcipular ungulum with internal edge serrate. Of the remaining Neotropical species of the genus, those closest to *I. demoraisi* n. sp. seem to be *I. calinus* CHAMBERLIN, 1957, *I. crabilli* PEREIRA, MINELLI & BARBIERI, 1994, *I. guianensis* CHAMBERLIN, 1921, *I. idanus* CRABILL, 1960, *I. lilacinus* COOK, 1899, *I. perrieri* (BRÖLEMANN, 1909) and *I. savanus* CHAMBERLIN, 1943. For differential characters see table 1.

Type material examined. - Holotype ♀, 69 p.l., b.l. 32 mm. Brazil: Amazonas: Reserva Fl. A. Ducke, 6.9.1983, J. W. de MORAIS legit. Paratype ♀, 67 p.l., b.l. 27 mm, same locality and collector, 5.1.1983 (all INPA).

Other material examined. - 1 ♀ juv. with only 1+1 coxal organs, 69 p.l., b.l. 18 mm, same locality and collector, 13.3.1983 (INPA).

Description

Female holotype. - 69 pairs of legs, body length 32 mm, maximum body width 1 mm. Colour of preserved specimen pale ochre.

Antennae ca. 2.1 times as long as the cephalic plate, distally conspicuously clavate. The apical club extends over a.a. IX to XIV of which a.a. IX is transitional, being narrow at the base and strongly widening distad. Articles, the last excepted, all wider than long. Ventral chaetotaxy: setae on a.a. I-VIII of different lengths and few in number, those of remaining articles much shorter and very numerous (Fig. 3); d. chaetotaxy: setae on a.a. I-VIII similar to those on v. side, setae on a.a. IX-XIV larger and much less numerous than those on v. side (Fig. 4). Terminal a.a. with ca. 22 claviform sensory setae on the external border and ca. 12 on the internal border (Fig. 12). Distal end of this a.a. with ca. 19 very small hyaline specialized setae apparently not split apically (Fig. 12). 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 the apex of the terminal a.a. (*a*, *b*, Fig. 6). A.a. II with 1 type *b* seta (Fig. 5); a.a. V, IX and XIII with 1 type *a* and 1 type *b* setae (Figs. 6-8). Specialized setae on d. side are represented by three different types: *a* and *b*, similar to *a* and *b* of v. side and type *c* setae.

"spine-like" (or "claviform"), much bigger and much darker (ochraceous) in colour (*a*, *b*, *c*, Fig. 10). Type *a* and *b* setae occupy the external-medial apical area of the specified a.a., whereas type *c* setae are more widely distributed on the surface of the articles. A.a. II with 1 type *a* seta (Fig. 9); a.a. V with 1 type *a*, 1 type *b* and 9 type *c* setae (Fig. 10); a.a. IX with 1 type *a*, 2 type *b* and 8 type *c* setae (Fig. 11) and a.a. XIII with 1 type *a*, 4 type *b* and 6 type *c* setae (Fig. 12).

Cephalic plate slightly wider than long (ratio 1.1: 1), shape and chaetotaxy as in Fig. 13.

Clypeus with 4 setae near the anterior margin of the head and 2 setae on the middle; praelabral setae absent (Figs. 14-15).

Labrum without teeth on the central arc, lateral pieces with 5+5 very small teeth (Fig. 16).

Mandible: dentate lamella not subdivided into blocks, with 12 teeth (Fig. 17); pectinate lamella with ca. 30 hyaline teeth.

First maxillae with palps on both coxosternum and telopodite, those of coxosternum rudimentary (Fig. 19). Coxosternum without setae, median projections of coxosternum well developed, subtriangular and provided with 1+1 setae. Article II of telopodite with 1+1 v. setae and 5+4 d. sensilla (Figs. 18-19).

Second maxillae with 8+10 setae on coxosternum arranged as in Fig. 18. Apical claw of telopodite well developed, bipectinate, the d. edge with ca. 29 teeth (Fig. 20), the v. with ca. 20 teeth (Fig. 21).

Forcipulae: when closed, telopodites do not extend beyond the anterior margin of the head; basal plate with ca. 35 setae dispersed on almost the whole surface. Coxosternum with complete chitinlines. All articles of telopodites lack teeth. Tarsungulum basally with an internal small blunt and very poorly pigmented projection. Proximal half of the internal edge of the ungulum serrate (Figs. 22-24). Calyx of poison gland short and subcylindrical (Fig. 24); chaetotaxy of coxosternum and telopodites as in Figs. 22-23.

Legs (last pair excepted) with chaetotaxy uniform throughout the body length (Fig. 25). Claws ventrobasally with three very small spines, their arrangement and relative size as in Fig. 26.

Sterna: pore fields present from the first to the penultimate sternum, all fields undivided and placed on a subcircular-subovoidal raised prominence. Form and relative size of fields changing along the trunk as in Figs. 27-36. Number of pores on selected sterna: on sternum I, 19 pores; on II, 32; on IV, 63; on IX, 78; on XVIII, 113; on XXX, 100; on XXXVI, 87; on L, 59; on LXIII, 56; on LXVIII, 50.

Last leg-bearing segment with pleurites at the sides of praetergum. Praesternum apparently divided along the sagittal plane; form and chaetotaxy of sternum and tergum as in Figs. 37-38. Coxopleura with numerous setae on v. side, the remaining surface with few setae. Two single ("homogeneous") coxal organs on each coxopleuron opening on the membrane between coxopleuron and sternum (Fig. 39). Last legs with seven podomeres, strongly thickened, subconically narrowing from base to distal end, form and chaetotaxy as in Figs. 37-38. Praetarsus represented by a long, straight, setiform structure, accompanied by a very small spine (Figs. 40-41).

Terminal segments' intermediate tergum with posterior margin strongly convex, intermediate sternum with posterior margin slightly convex; first genital sternum with posterior margin medially concave. Gonopods uniarticulate (Fig. 42).

Male. - Unknown.

Etymology.- This species is named after the collector J. W. de MORAIS.

Family Geophilidae

Genus *Ribautia* BRÖLEMANN, 1909

Diagnosis. - Coxosternites of the second maxillae united by a small bridge only, antero-internal corners of coxosternum with a more or less developed process. Forcipulae: pleurocoxosternal sutures extend obliquely beyond to the outer margin, chitinlines present. Coxopleura of the last leg-bearing segment each with numerous coxal organs opening separately or joined in one to three clusters. Praetarsus of last legs claw-like or tubercle-like.

We are not ready to offer a comprehensive review of this genus. We are even in doubt as to its

monophyly and its precise circumscription from related genera. However, the description of three new Amazonian species of *Ribautia* gives us the opportunity to revise other Neotropical species of this genus.

Two subgenera can be recognized, *Ribautia* BRÖLEMANN, 1909, and *Schizoribautia* BRÖLEMANN, 1912, the first including the species with coxal organs opening independently on the coxopleura, the second those with coxal organs grouped in 1-3 clusters.

Ribautia (Ribautia) bouvieri BRÖLEMANN, 1909 (Figs. 43-45)

Ribautia bouvieri BRÖLEMANN, 1909a - Arch. Zool. exp. gén., sér 5 (3): 336 (without description).
Ribautia bouvieri BRÖLEMANN, 1909b - Bull. Mus. Hist. Nat. Paris n. 7: 421.
Ribautia bouvieri, RIBAUT, 1912 - Mém. Soc. Neuchâtel. 5: 83, 84, 85, 86.
Ribautia bouvieri, CHAMBERLIN, 1914 - Bull. Mus. Comp. Zool. Harvard Coll. 58(3): 214.
Ribautia bouvieri, RIBAUT, 1923 - N. Caledonia. A. Zool. 3 (1): 70.
Ribautia bouvieri, ATTEMS, 1928 - Ann. S. Afr. Mus. 26: 173.
Ribautia bouvieri, ATTEMS, 1929 - Das Tierreich 52: 287.
Ribautia bouvieri, BRÖLEMANN, 1931 - Arch. Zool. exp. gén. 72: 308.
Ribautia bouvieri, VERHOEFF, 1939 - Ann. Natal Mus. 9(2): 222.
Ribautia bouvieri, ATTEMS, 1952-1953 - Ann. Mus. Royal Congo Belge ser. n° 8, 18: 123, 124, 126.
Ribautia (Ribautia) bouvieri, KRAUS, 1954 - Senck. 34 (4/6): 313, 314.
Ribautia bouvieri, CHAMBERLIN, 1955-1956 - Acta Univ. Lund Avd. 2 N. S. 51(5): 17.

Diagnosis. - Among the known Neotropical species of the subgenus *Ribautia (Ribautia)*, only in this species, in *R. (R.) proxima* n. sp. and in *R. (R.) ducalis* n. sp. the last pairs of legs have a tubercle-like praetarsus. Characters differentiating these three species are given in Table 2.

Type locality. - Brazil: Haut-Carsévène. This is the only locality known to date.

Ribautia (Ribautia) ducalis n. sp. (Figs. 46-87)

Diagnosis. - A *Ribautia (Ribautia)* species with praetarsus of last pair of legs in form of a small tubercle. Characters in table 2 differentiate it from the two other Neotropical species of the subgenus sharing the same trait.

Type material. - All specimens from Brazil: Amazonas: Reserva Fl. A. Ducke, J. W. de MORAIS legit. Holotype ♀, 41 p.l., b.l. 11 mm, 5.6.1983; allotype ♂, 41 p.l., b.l. 14 mm, 8.12.1982; paratype *A* (♂), 41 p.l., b.l. 12 mm, 10.5.1983; paratype *B* (♂), 41 p.l., b.l. 13 mm, 13.10.1982; paratype *C* (♂), 41 p.l., b. l. 13 mm, 12.1.1983. Depository of types: INPA (holotype, allotype); AM (paratype *A*); MLP (paratype *B*); JA (paratype *C*).

Other material examined. - All specimens from the same locality and collector as the type series. 1 ♀ juv. with only 2+2 coxal organs, 43 p.l., b.l. 9 mm, 8.9.1982 (MLP). 1 ♀ juv. with only 2+2 coxal organs, 41 p.l., b.l. 7 mm, 10.11.1982 (MLP). 1 ♂, 41 p.l., b.l. 8 mm; 1 juv. with only 1+1 coxal organs (sex?), 41 p.l., b.l. 6.5 mm and 1 fragmentary juv. (sex?), 12.1.1983, (MLP). 1 ♀ juv. with only 2+2 coxal organs, 41 p.l., b.l. 7 mm, 12.2.1983 (INPA). 1 incomplete specimen (sex?), 13.3.1983, (AM). 1 ♂, 41 p.l., b.l. 12 mm, 10.5.1983, (AM). 1 ♂, 41 p.l., b.l. 11 mm, 9.6.1983, (AM). 1 fragmentary juv. with only 2+2 coxal organs, 11.7.1983, (JA). 1 juv. (sex?) with only 1+2 coxal organs, 41 p.l., b.l. 6 mm, 11.7.1983, (JA). 1 ♀, 43 p.l., b.l. 11 mm, 6.9.1983, (JA).

Description

Female holotype. - 41 pairs of legs, body length 11 mm, maximum body width 0.45 mm. Colour (of preserved specimen in alcohol) pale yellowish with forcipular segment pale ochre.

Antennae ca. 2.2 times longer than the cephalic plate, distally very slightly attenuate. Setae on a.a. I

to V-VI of different lengths and few in number, those of remaining articles progressively shorter and more numerous towards the tip of the appendage (Figs. 46-47). Terminal a.a. with ca. 10 claviform sensory setae on the external border and ca. 12 on the internal border (Fig. 55). Distal end of this a.a. with ca. 5 very small specialized setae which at the light microscope look as in Fig. 55. Dorsal and v. surface of a.a. II, V, IX and XIII with very small specialized setae. On the v. side these are restricted to an internal latero-apical area and occur in two different types: *a* and *b*. Type *a* setae are very thin and not divided apically, type *b* setae are thicker than type *a*, have two diminutive apical branches and are pale in colour (*a*, *b*, Fig. 50). A.a. II with 1 type *b* seta (Fig. 48); a.a. V, IX and XIII (Figs. 49-51) with 1 type *a* and 1 type *b* setae. Similar specialized setae are also present on d. side and are restricted to an external latero-apical area. A.a. II and V with 1 type *a* and 1 type *b* setae (Figs. 52-53); a.a. IX with 1 type *a* and 2 type *b* setae (Fig. 54) and a.a. XIII with 1 type *a* and 3 type *b* setae (Fig. 55).

Cephalic plate nearly rectangular but sides curved, distinctly longer than wide (ratio 1.5: 1), shape and chaetotaxy as in Fig. 56.

Clypeus with 1+1 antero-lateral setae; two pairs of setae located on the clypeal area and also 2 more posterior setae on the middle (Fig. 57). Clypeal area with surface very densely reticulated (Fig. 58).

Labrum: midpiece well developed and sclerotized, with 2 short and sharp pointed teeth on the middle and 1+2 long hyaline filaments on both sides. Side pieces with 5+3 long hyaline filaments (Fig. 59).

Mandible: pectinate lamella with ca. 10 hyaline teeth, shape as in Fig. 60.

First maxillae without palps on coxosternum, telopodites with a very small palp (Fig. 62). Coxosternum without setae; median projections of coxosternum subtriangular, well developed and provided with 3+3 setae. Article II of telopodite with 2+2 v. setae and 2+1 d. sensilla (Figs. 61-62).

Second maxillae: the two coxites bearing 5+5 setae near the internal margins and 1+1 sensilla near the lateral margins are joined centrally only by a non-areolate membranous isthmus (Fig. 61). Chaetotaxy of telopodites represented by setae of different thickness as shown in Figs. 63-65.

Forcipulae: when closed telopodites reach the level of the anterior margin of the head or slightly project beyond. Basal plate with an irregular transverse row of 6 large setae near the posterior margin. Telopodites: trochanteropraefemur apically with a poorly pigmented tooth on medial edge and proximally near the vestigial suture between trochanter and praefemur with an unpigmented poorly developed protuberance. Tarsungulum basally with a poorly pigmented denticle; ungular blade not serrulate. Calyx of poison gland as in Figs. 67-68; chaetotaxy of coxosternum and telopodites as in Fig. 66.

Legs (last pair excepted) with chaetotaxy (Fig. 69) uniform throughout the body length. Claws ventrobasally with one anterior and one posterior spine (Fig. 70).

Sterna: pore fields present from the second to the penultimate sternum. Fields undivided on sterna II-XIII and XXXVI-XL, but divided in two subsymmetrical areas on sterna XIV-XXXV. Form of fields changing along the trunk as in Figs. 71-76. Number of pores on selected sterna: on sternum II, 9 pores; on III, 14; on VI, 23; on XIV, 8+9; on XXXVII, 18; on XL, 12.

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. 77-78. Coxopleura slightly protruding at their distal v. ends, setae small and numerous on the distal internal edge, the remaining surface with few bigger setae. Three single ("homogeneous") coxal organs on each coxopleuron, opening near the membrane between coxopleuron and sternum (Figs. 77, 79). Last legs with seven podomeres, form and chaetotaxy as in Figs. 77-78. Praetarsus as a very small tubercle with 1 small apical spine (Fig. 80).

Terminal segments: intermediate tergum with posterior margin convex, intermediate sternum apparently covered in part by the sternum of the last leg-bearing segment, first genital sternum as in Fig. 77; anal organs present.

Male allotype. - 41 pairs of legs, body length 14 mm, maximum body width 0.5 mm. All features similar to those in the female except for the shape and chaetotaxy of the last leg-bearing segment and the terminal segments.

Last leg-bearing segment: form and chaetotaxy of sternum and tergum as in Figs. 81-82. Coxopleura protruding at their distal v. ends, setae small and numerous on the distal v. half, the remaining surface with few setae of different lengths. Podomeres of terminal legs inflated, with shape and chaetotaxy as in Figs.

81-82.

Terminal segments: intermediate tergum with posterior margin convex; intermediate sternum and first genital sternum with posterior margin concave. Gonopods inarticulate ventrally, dorsally inconspicuously articulated, each gonopod with ca. 9-11 setae (Fig. 81); penis dorsally with 2+2 apical setae (Fig. 83).

Variation. - The number of pairs of legs in the females is 41 or 43; in the males always 41.

In all adult specimens there are 3 coxal organs in each coxopleuron, in a few cases the anterior organ is smaller than the other two (maturus junior specimens?). (Figs. 86-87); in other cases even having similar size than the remaining, it can be difficult to be seen in ventral view because it can be covered (in different degrees) by the middle one (Fig. 84).

Other characters (pilosity, number of teeth of labrum, etc.) with no significative variations (the usual in this group).

Ribautia (Ribautia) proxima n. sp. (Figs. 88-122)

Diagnosis. - This species is very closely related to *R. (R.) bouvieri* BRÖLEMANN, 1909, from which it can be differentiated as follows (characters in *R. (R.) bouvieri* are given in parentheses): first sternum without pore fields (with pore fields); a maximum of 20 % of the posterior border of the lateral pieces of labrum provided with hyaline filaments, Figs. 97, 122 (half of the posterior border of the lateral pieces of labrum provided with hyaline filaments; Fig. 43). These differences are stable enough in this group of geophilomorphs to allow us to describe our specimens as belonging to a new species. The differences between *R. (R.) proxima* n. sp., *R. (R.) bouvieri* and *R. (R.) ducalis* n.sp. are summarized in table 2.

Type material. - All specimens from Brazil: Amazonas: Reserva Fl. A. Ducke, J. W. de MORAIS legit. Holotype ♀, 75 p.l., b.l. 39 mm; allotype ♂, 75 p.l., b.l. 37 mm, 6.9.1983 (both INPA). Paratype *A* (♂), 75 p.l., b.l. 43 mm, 10.11.1982 (AM). Paratype *B* (♂), 75 p.l., b.l. 28 mm, 12.1.1983 (MLP). Paratype *C* (♀), 77 p.l., b.l. 38 mm, 6.7.1983 (JA).

Other material examined. - All from the same locality and collector as the type series. 1 ♂, 77 p.l., b.l. 35 mm, 12.1.1983 (MLP). 1 ♀, 77 p.l., b.l. 40 mm, 12.2.1983, (MLP). 1 ♂, 73 p.l., b.l. 26 mm, 6.9.1983, (MLP). 1 fragmentary ♂, 10.11.1982, (INPA). 1 fragmentary ♀, 13.3.1983, (INPA). 1 juv. (sex?), 77 p.l., b.l. 24 mm, 11.7.1983, (INPA). 1 ♀, 79 p.l., b.l. 26 mm, 12.4.1983, (AM). 1 ♂, 73 p.l., b.l. 28 mm, 9.8.1983 (AM). 1 ♂, 75 p.l., b.l. 32 mm, 8.9.1982, (JA). 1 ♀, 79 p.l., b.l. 26 mm, 10.11.1982, (JA). 1 fragmentary ♀, 9.6.1983, (JA).

Description

Female holotype. - 75 pairs of legs, body length 39 mm, maximum body width 0.9 mm. Colour (of preserved specimen in alcohol) pale ochre, forcipular segment darker.

Antennae ca. 2.1 times as long as the cephalic plate, distally attenuate. Setae on a.a. I to VI of different thickness and length and few in number, those of remaining articles progressively shorter and more numerous towards the tip of the appendage (Figs. 88-89). Relative size and thickness of v. setae of a.a. I-V as in Fig. 90. Terminal a.a. with ca. 18 claviform sensory setae on the external border and ca. 11-13 on the internal border (Fig. 93). Distal end of this a.a. with ca. 4 very small specialized setae, apparently not split apically (Fig. 93). Dorsal and v. surfaces 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 split apically. Type *b* setae are thicker than type *a*, have two diminute (almost imperceptible) apical branches and are pale in colour (*a*, *b*, Fig. 91). A.a. II with 1 type *b* seta; a.a. V, IX and XIII (Fig. 91) with 1 type *a* and 1 type *b* seta. Similar specialized setae also occur on an external latero-apical area of the d. side. A.a. II and V with 1 type *a* and 1 type *b* setae; a.a. IX with 1 type *a* and 2 type *b* setae and a.a. XIII (Fig. 92) with 1 type *a* and 3 type *b* setae.

Cephalic plate nearly rectangular, but sides curved distinctly longer than wide (ratio 1.7:1), shape and chaetotaxy as in Fig. 94.

Clypeus with 3+3 antero-medial setae and 1+1 setae in the middle (Fig. 95). Surface of clypeal area very densely reticulated (Fig. 96).

Labrum: midpiece well developed and sclerotized, separating the sidepieces and partially overlapped by them, with 1 robust dark and sharply pointed teeth in the middle and 1+1 long hyaline filaments on both sides. Side pieces with 3+3 long hyaline filaments (Fig. 97).

Mandible: pectinate lamella with ca. 28 hyaline teeth, shape as in Fig. 98.

First maxillae without palps on coxosternum, telopodites almost without palps (Fig. 101). Coxosternum without setae; median projections of coxosternum subtriangular, well developed and provided with 6+7 setae (Fig. 99). Article II of telopodite with 5+5 v. setae with thickness as in Fig. 100, d. side with 5+5 sensilla (Fig. 101).

Second maxillae: the two coxites with 6+6 setae near the internal margins and 2+2 sensilla near the lateral margins are joined only by a non-areolate membranous isthmus (Fig. 99). Chaetotaxy of telopodites represented by setae of different thickness as in Figs. 102-103. Apical claw of telopodite very well developed, not bipectinate and almost straight (shape as in Figs. 102-103).

Forcipulae: when closed, telopodites reach the level of the anterior margin of the head or slightly project beyond; basal plate with an irregular transverse row of 6 large setae near the posterior margin. Telopodites: trochanteropraefemur apically with a conspicuous subtriangular deeply pigmented tooth on the medial edge, proximally and contiguous to it there is an unpigmented projection. Femur and tibia with a proximal unpigmented projection. Tarsungulum basally with a well developed deeply pigmented denticle, ungular blade with d. and v. edges not serrulate. Calyx of poison gland subtriangular (Figs. 105-106); chaetotaxy of coxosternum and telopodites as in Fig. 104.

Legs (last pair excepted) with chaetotaxy (Fig. 107) uniform throughout the body length. Claws ventrobasally with one anterior and one posterior spine (Fig. 108).

Sterna: pore fields present from the second to the penultimate sternum. All pore fields undivided, subcircular in form (Figs. 109-114). Number of pores on selected sterna: on sternum II, 48 pores; on IV, 96; on VIII, 120; on XIX, 112; on XXXV, 78; on LXXIV, 79.

Last leg-bearing segment without pleurites at the sides of praetergum. Praesternum divided along the sagittal plane; shape and chaetotaxy of sternum and tergum as in Figs. 115-116. Coxopleura slightly protruding at their distal v. ends, setae small and numerous on distal internal edge, the remaining surface with few bigger setae. Each coxopleuron with ca. 10 single coxal organs opening independently on nearly the whole surface (Figs. 115-117).

Last legs with seven podomeres, shape and chaetotaxy as in Figs. 115-116. Praetarsus as a very small tubercle with 1 small apical spine (Figs. 118-119).

Terminal segments: intermediate tergum with posterior margin convex, intermediate sternum seemingly covered by the sternum of the last leg-bearing segment; first genital sternum as in Fig. 115. Anal organs present.

Male allotype. - 75 pairs of legs, body length 37 mm, maximum body width 0.8 mm. All features similar to those in the female except for the shape and chaetotaxy of the last leg-bearing segment and the terminal segments.

Last leg-bearing segment: form and chaetotaxy of sternum and tergum as in Figs. 120-121. Coxopleura sligthly protruding at their distal v. ends, setae small and numerous on the distal v. half, the remaining surface with few setae of different lengths. Podomeres of terminal legs inflated, with shape and chaetotaxy as in Figs. 120-121.

Terminal segments: intermediate tergum with posterior margin convex; intermediate sternum with posterior margin concave; first genital sternum with posterior margin as in Fig. 120. Gonopods seemingly uniarticulate, with ca. 12-15 setae (Fig. 120); penis dorsally with 3+4 apical setae.

Variation. - The number of pairs of legs is 73, 75 or 77 in the males; 75, 77 or 79 in the females. In some specimens the midpiece of labrum has a robust, dark and sharply pointed tooth and hyaline filaments at both sides (Fig. 97), but in other specimens it lacks the central tooth (Fig. 122).

Other characters with no significant variation.

In all specimens studied the lateral pieces of labrum present hyaline filaments only on the 20% or less

of their posterior edge; this character is very constant in all specimens of our large series.

Etymology. - The name of this species refers to its close similarity to *R. (R.) bouvieri*.

Ribautia (Schizoribautia) difficilis n. sp. (Figs. 123-152)

Diagnosis. - A *Ribautia (Schizoribautia)* species with coxal organs grouped in 3+3 clusters and ventral pores present on anterior as well as posterior sterna. Among the Neotropical species of the subgenus which share these traits it seems more closely related to *R. (S.) montana* KRAUS, 1954 and *R. (S.) peruana* VERHOEFF, 1941. Differential characters are given in Table 3.

Type material. - Holotype ♂, 49 p.l., b.l. 22 mm from Brazil: Amazonas: Lago Janauarí, mixedwater inundation forest, 31.7.1987, J. ADIS leg. Allotype ♀ with 49 p.l., b.l. 17 mm; paratype ♂ with 47 p.l., b.l. 18 mm, same locality, 14.8.1987, J. ADIS leg. - Depository of types. - INPA (holotype, allotype); AM (paratype).

Other material examined. - 1 immature ♀, 49 p.l., b.l. 16 mm, same locality, 14.2.1988, J. ADIS legit (AM).

Description

Male holotype - 49 pairs of legs, body length 22 mm, maximum body width 0.6 mm. Colour (of preserved specimen in alcohol) pale orange, forcipular segment darker (ochreous).

Antennae ca. 3.1 times longer than the cephalic plate, distally attenuate, all articles longer than wide. Setae on a.a. I-VI of different lengths and few in number; those of remaining articles progressively shorter and more numerous towards the tip of the appendage (Figs. 123-124). Terminal a.a. with ca. 20 claviform sensory setae on the external border and ca. 10 on the internal border. Distal end of this a.a. with ca. 5-7 very small specialized setae apparently not divided apically. 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 divided apically, type *b* setae are thicker and very similar to those on the distal end of the terminal a.a. (*a*, *b*, Fig. 125). A.a. II, V (Fig. 125) and IX with 1 type *a* and 2 type *b* setae; a.a. XIII with 1 type *a* and 2-3 type *b* setae. Specialized setae on d. side restricted to an external latero-apical area and represented by three different types: *a* and *b*, similar to type *a* and *b* of v. side, type *c* setae similar to type *b* but a little smaller and having basally, still within the a.a. a small dark semicircular-semiovoidal structure (*a*, *b*, *c*, Fig. 127). A.a. II with 1 type *a* and 1 type *b* setae (Fig. 126); a.a. V with 1 type *a* and 2 type *b* setae; a.a. IX with 1 type *a*, 4 type *b* and 2 type *c* setae and a.a. XIII with 1 type *a*, 6-10 type *b* and 2-3 type *c* setae (Fig. 127).

Cephalic plate nearly rectangular but with curved sides, distinctly longer than wide (ratio 1.53: 1), shape and chaetotaxy as in Fig. 128.

Clypeus with 4 antero-central setae on a subcircular clypeal area and 5 smaller setae on the central part of the anterior half (Fig. 129). Surface of clypeal area very densely reticulated (Fig. 130).

Labrum: midpiece large, with 12 hyaline teeth, the central ones shorter than the lateral ones. Sidepieces with 8+8 hyaline filaments (Fig. 131).

Mandible: pectinate lamella with ca. 18 hyaline teeth, shape as in Fig. 132.

First maxillae without palps on coxosternum; telopodites with rudimentary palps (Fig. 134). Coxosternum without setae; median projections of coxosternum subtriangular, well developed and provided with 7+6 setae. Article II of telopodite with 3+3 v. setae and 3+3 d. sensilla (Figs. 133-134).

Second maxillae. The two coxites bearing 13+14 small setae are joined only by a non-areolate membranous isthmus (Fig. 133). Apical claw of telopodite well developed and without teeth.

Forcipulae, when closed, the telopodites are at the same level of the anterior margin of head or extend slightly beyond it. Basal plate with an irregular transverse row of 6 large setae near the posterior margin and a few additional smaller setae dispersed on the surface of the posterior half. Telopodites: trochanteropraefemur with two denticles, the distal one deeply pigmented and subtriangular, proximal denticle shorter than the distal and unpigmented (Fig. 137). Femur and tibia without denticles.

Tarsungulum basally with a well developed and deeply pigmented denticle; d. and v. edge of the ungular blade not serrulate. Calyx of poison gland subtriangular (Figs. 138-139). Chaetotaxy of coxosternum and telopodites as in Fig. 136.

Legs (last pair excepted) with chaetotaxy (Fig. 140) uniform throughout the body length. Claws ventrobasally with one anterior and one posterior spine (Fig. 141).

Sterna: pore fields present from the second to the penultimate sternum. Fields undivided on sterna II-XIV and XLVIII, but divided in two subsymmetrical areas on sterna XV-XLVII. Form of fields changing along the trunk as in Figs. 142-148. Number of pores on selected sterna: on sternum II, 44 pores; on V, 64; on IX, 77; on XIV, 68; on XV, 51+49; on XLVII, 20+26; on XLVIII, 32.

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. 149-150. Coxopleura protruding at their distal v. ends, setae small and numerous on distal internal edge, the remaining surface with few larger setae. Coxal organs arranged in 3+3 clusters, the anterior pore opens on the membrane between coxopleuron and praesternum, covered by the latter; middle and posterior pores open on the membrane between coxopleuron and sternum, covered by the latter (cf. female, Fig. 151). Last legs with seven podomeres, form and chaetotaxy as in Figs. 149-150. Praetarsus unguiform, relatively smaller than those of the preceding legs.

Terminal segments: intermediate tergum with posterior margin convex, intermediate sternum and first genital sternum with posterior margin concave. Gonopods apparently uniarticulate (suture between presumptive basal and apical articles not evident) with ca. 11 setae (Fig. 149); penis with 3+3 apical setae dorsally. Anal organs present.

Female allotype. - 49 pairs of legs, body length 17 mm, maximum body width 0.6 mm.

All features similar to those in the male except for the shape and pilosity of the last leg-bearing segment and terminal segments.

Last leg-bearing segment: form and chaetotaxy of sternum and tergum as in Figs. 151-152. Coxopleura sligthly protruding at their distal v. ends, setae small and numerous on the distal internal edge, the remaining surface with few bigger setae. Podomeres of terminal legs with shape and chaetotaxy as in Figs. 151-152.

Terminal segments: shape and chaetotaxy as in Figs. 151-152.

Variation. - In our small series, the number of pairs of legs varies as follows: in the males 47 and 49; the females only show 49.

Ribautia (Schizoribautia) limaensis KRAUS, 1957 (Fig. 153)

Ribautia (Schizoribautia) limaensis KRAUS, 1957 - Senck. biol. 38(5/6): 376.

Diagnosis. - Among the known Neotropical species of the subgenus *Ribautia (Schizoribautia)* only this species and *R. (S.) silvana* present only one cluster of coxal organs on each coxopleuron. They can be differentiated as in Table 4.

Type locality. - Peru: Lomas de Atocongo, close to Lima. This is also the only locality known to date.

Ribautia (Schizoribautia) montana KRAUS, 1954 (Figs. 154-160)

Ribautia (Schizoribautia) montana KRAUS, 1954 - Senckenbergiana 34(4-6): 315.

Remarks. - This species described by KRAUS in 1954 was subsequently regarded by the same author (KRAUS 1957: 378) as a synonym of *Ribautia seydi* RIBAUT, 1923. KRAUS (1957: 378) also regarded *Ribautia peruana* VERHOEFF, 1941 as another synonym of *Ribautia (Schizoribautia) seydi*. However we believe that there are reasons for revalidating these species. First, in *Ribautia seydi* the pore fields are

present only on the anterior region of the body, but on *Ribautia montana* and *Ribautia peruana* the pore fields are present along all the body, in consequence the two last cannot be conspecific with the first. Second, as explained in the following (see also KRAUS, 1954) *R. montana* has two significative differences with *R. peruana* and for that reason these two species should be different and valid ones.

Diagnosis. - A *Ribautia (Schizoribautia)* species with coxal organs grouped in 3+3 clusters and ventral pores present on both anterior and posterior sterna. Among the Neotropical species of the genus which share these traits it seems more closely related to *R. (S.) difficilis* n.sp. and *R. (S.) peruana* VERHOEFF. *R. (S.) montana* can be differentiated from these species by means of the characters in table 3.

Type material examined. - 'Paratypoid' ♀ with 55 (57 ?) p.l., b.l. 24 mm. Peru: Hacienda Taulis (6°50'S, 79°10'W), Quebrada Pajonal, (mountain forest at m 2700 a.s.l.) KOEPCKE leg. 27.12.1952 (SMF 2146/1). This specimen is preserved partly in one slide (the two last leg-bearing segments and terminal segments) partly in alcohol (forcipular segment followed by 53 leg-bearing segments, head and mouth parts). - KRAUS says in the original description: "Beinpaare: 47 (Typus), 53 oder 57 (Paratypoide)". Because the paratypoid studied by us has 55 pairs of legs, we do not know if this is a typographic mistake or 2 leg-bearing segments are missing in the specimen.

Type locality. - Peru: At Km 35 of the Route Olmos-Jaën 6°10'S, 79°10'W, mountain woodland at m 1400 a.s.l., under stones and logs.

Known range. - Peru: Km 35 along the way from Olmos to Jaën, at 6° 10' S, 79° 10' W.

Depository of type. - Senckenberg Museum Frankfurt.

Additional information based on ♀ 'Paratypoid' SMF 2146/1. With 55 (57 ?) pairs of legs, body length 24 mm, maximum body width 0.8 mm.

Colour (of preserved specimen in alcohol) yellowish, forcipular segment pale ochre.

Antennae ca. 2.5 times longer than the cephalic plate, distally attenuate, all articles longer than wide.

Cephalic plate nearly rectangular but sides curved, distinctly longer than wide (ratio 1.54:1).

Clypeus with 3 antero-central setae placed on a subcircular clypeal area and 3 bigger setae on the antero-central part of the anterior half. Surface of clypeal area very densely reticulated (Fig. 154).

Labrum: midpiece large, separating sidepieces and slightly overlapped by them, with ca. 9 hyaline teeth, the more central ones shorter than the lateral ones. Sidepieces with ca. 13+13 hyaline filaments.

First maxillae without palps on coxosternum; telopodites with a very small palp (Fig. 156). Coxosternum without setae; median projections of coxosternum subtriangular, well developed and provided with 11+7 setae. Article II of telopodite with 5+4 v. setae and 3+3 d. sensilla (Figs. 155-156).

Second maxillae: the two coxites with 7+8 setae near the internal margins and 4+6 sensilla near the lateral margins are joined centrally only by a non-areolate membranous isthmus (Fig. 155). Apical claw of telopodite well developed and without teeth.

Forcipulae: basal plate with an irregular transverse row of 7 large setae near the posterior margin and a few additional smaller setae dispersed on the surface of the posterior half. Telopodites: trochanteropraefemur with two denticles, the distal one deeply pigmented, the proximal denticle much shorter than the distal and unpigmented (relative size of both teeth as in Fig. 158). Tarsungulum basally with a well developed and deeply pigmented denticle; ungular blade with dorsal and ventral edges not serrulate (Fig. 158). Calyx of poison gland subtriangular (Fig. 159).

Sterna: the undivided subovoidal pore fields are slightly longer than wide (Fig. 160), sternum VII with 161 pores.

Last leg-bearing segment without pleurites at the sides of praetergum. Praesternum apparently divided along the sagittal plane.

Remarks. - This description is incomplete, because the antennal setae of this specimen are lost, the small specialized setae are also missing and the terminal segments of the body are badly collapsed in the slide.

Ribautia (Schizoribautia) peruana VERHOEFF, 1941 (Fig. 161)

Schizoribautia peruana VERHOEFF, 1941 - Beiträge zur Fauna Perus 1(2): 71.

Ribautia peruana, ATTEMS, 1947 - Ann. Naturhistor. Mus. Wien 55: 143.

Schizoribautia peruana, CHAMBERLIN, 1957 - Proc. Biol. Soc. Wash. 70: 27.

Schizoribautia peruana peruana, TURK, 1955 - Proc. Zool. Soc. Lond. 125(3-4): 487.

Diagnosis. - This species seems to be closely related to *R. (S.) montana*, *R. (S.) titicacae* and *R. (S.) difficilis* n. sp. For differential characters see table 3.

Type locality. - Peru: Sivia.

Known range. - Peru: Sivia (VERHOEFF, 1941); Quebrada de Cajuraga (TURK, 1955).

Remarks. - The type material of this species is unfortunately lost. However, according to literature descriptions this species must be considered as a valid one, not as a synonym of *R. (S.) seydi* as suggested by KRAUS (1957: 358).

Ribautia (Schizoribautia) seydi RIBAUT, 1923

Ribautia seydi RIBAUT, 1923 - N. Caledonia, Zool. 3 (Lief. 1): 71.

Ribautia seydi, ATTEMS, 1928 - Ann. S. Afr. Mus. 26: 173.

Ribautia seydi, ATTEMS, 1929 - Das Tierreich 52: 295.

Ribautia zeydi (sic.), VERHOEFF, 1941 - Beiträge zur Fauna Perus 1(2): 72.

Schizoribautia seydi, KRAUS, 1954 - Senck. 34(4/6): 315.

Schizoribautia seydi, TURK, 1955 - Proc. Zool. Soc. London 125: 485-487.

Ribautia seydi, CHAMBERLIN, 1955-1956 - Acta Univ. Lund Avd. 2 N.S. 51(5): 17.

Schizoribautia seydi, CHAMBERLIN, 1957 - Proc. Biol. Soc. Wash. 70: 28.

Ribautia (Schizoribautia) seydi, KRAUS, 1957 - Senck. biol. 38(5/6): 378.

Remarks. - Contrary to the opinion of KRAUS (1957: 378) that *Schizoribautia peruana* VERHOEFF and *Ribautia (Schizoribautia) montana* KRAUS are synonyms of this species, we regard the characters given in table 3 as strong enough to support the validity of these three species.

Type locality. - Peru (without specification of locality).

Known range. - Peru: 40 mi. E of Abancay; Cajamanca (m 2700 a.s.l.).

Ribautia (Schizoribautia) silvana KRAUS, 1954 (Figs. 162-186)

Ribautia (Ribautia) silvana KRAUS, 1954 - Senck. 34 (4/6): 313.

Ribautia (Ribautia?) silvana, KRAUS, 1957 - Senck. biol. 38 (5/6): 379.

Remarks. - This species was originaly described by KRAUS as a member of the subgenus *Ribautia (Ribautia)*. Later, the same author (1957: 379) cited this species as "*Ribautia (Ribautia?) silvana*", his doubts concerning the subgeneric assignment being probably due to the kind of coxal organs present in this species. Thanks to the great kindness of Dr. M. GRASSHOFF we were able to study the holotype of this species. So, we can agree with Prof. KRAUS as for the need to change the subgeneric position of this species. In fact, the coxal organs are grouped in one cluster in each coxopleuron. For this reason *silvana* must be referred to *Ribautia (Schizoribautia)*. We give a redescription of this species below, including details of characters not included in the original description.

Diagnosis. - A *Ribautia* species with coxal organs grouped in one cluster on each side. Of the Neotropical species of the genus, only this species and *Ribautia (S.) limaensis* KRAUS share this trait. These two species can be differentiated as in table 4.

Type material examined. - Holotype ♂, 49 p.l., b.l. 14 mm. Peru: Hacienda Monteseco, 6°50'S; 79°10'W, mountain woodland at m 1200 a.s.l., under logs and stones: specimen on 7 slides: (1) head capsule and mandibles; (2) first and second maxillae; (3) forcipular segment followed by the first two leg-bearing segments; (4) leg-bearing segments III to XI; (5) leg-bearing segments XII to XLVII; (6) last

two leg-bearing segments with terminal segments; (7) last left leg. - Depository of type. - Senckenberg Museum Frankfurt (SMF 2152).

Type locality. - Peru: Hacienda Monteseco, 6° 50' S; 79° 10' W. This is also the only locality known to date.

Redescription

Male holotype. - 49 pairs of legs, body length 14 mm, maximum body width 0.7 mm. Colour of preserved specimen on slides apparently pale yellowish with forcipular segment a little darker.

Antennae ca. 3.2 times longer than the cephalic plate, distally slightly attenuate, all articles longer than wide. Setae on a.a. I to VII of different length and few in number, those of remaining articles progressively shorter and more numerous towards the tip of the appendage (Figs. 162-163). Terminal a.a. with ca. 11 claviform sensory setae on the external border and ca. 12 on the internal border (Fig. 165). Distal end of this a.a. with ca. 5 very small specialized setae apparently not split apically (Fig. 165). 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 split apically. Type *b* setae are thicker and very similar to those on the distal end of the terminal a.a. (*a*, *b*, Fig. 164). A.a. II with 1 type *b* seta; a.a. V (Fig. 164), IX and XIII with 1 type *a* and 1 type *b* seta.

Cephalic plate nearly rectangular, but sides curved distinctly longer than wide (ratio 1.45:1), shape and chaetotaxy as in Fig. 166.

Clypeus with 4 antero-central setae placed on a subcircular clypeal area and 2+2 setae on the postero-central part of the anterior half (Fig. 167). Surface of clypeal area densely reticulated (Fig. 168).

Labrum: midpiece well developed with 13 teeth, the more external longer than the central ones. Sidepieces with ca. 9+10 hyaline filaments (Fig. 169).

Mandible: the mandibles are not dissected from the head capsule in the original slide of KRAUS, their position on this slide does not allow us to observe the number of teeth of the pectinate lamellae.

First maxillae without palps on both coxosternum and telopodites. Coxosternum without setae; median projections of coxosternum subtriangular, well developed and provided with 4+4 setae. Article II of telopodite with 2+2 setae and 1+1 small sensilla on v. side (Fig. 170), d. side not clearly from the slide.

Second maxillae: the two coxites with 4+4 setae near the internal margins and 1+1 sensilla near the lateral margins are joined only by a non-areolate membranous isthmus (Fig. 170). Apical claw of telopodite well developed, not bipectinate and almost straight, shape and chaetotaxy of telopodites as in Fig. 170.

Forcipulae: basal plate with an irregular transverse row of 7 large setae near the posterior margin and a few additional smaller setae dispersed on the remaining surface. Telopodites: trochanteropraefemur distally with a well developed and deeply pigmented tooth on medial edge. Femur and tibia without teeth. Tarsungulum basally with a well developed and deeply pigmented tooth, ungular blade with d. and v. edges not serrulate. Calyx of poison gland as in Fig. 172; chaetotaxy of coxosternum and telopodites as in Fig. 171.

Legs (last pair excepted) with chaetotaxy (Fig. 173) uniform throughout the body length. Claws ventrobasally with one anterior and one posterior spine (Fig. 174).

Sterna: pore fields present from the second to the penultimate sternum. All pore fields undivided, fields of anterior and posterior sterna subovoidal, those of middle part of the body subcircular in form (Figs. 175-181). Number of pores on selected sterna: on sternum II, 26 pores; on III, 40; on VI, 48; on XXXV, 14; on XXXVIII, 18; on XLIV, 35; on XLVIII, 45.

Last leg-bearing segment apparently without pleurites at the sides of praetergum. Praesternum apparently divided along the sagittal plane; shape and chaetotaxy of sternum and tergum as in Figs. 182-183. Coxopleura apparently slightly protruding at their distal v. ends, setae small and numerous on distal internal edge, the remaining surface with few bigger setae. Each coxopleuron with one cluster of coxal organs, 9 coxal organs on the r. coxopleuron and 10 on the l. (Fig. 182).

Last legs with seven podomeres, shape and chaetotaxy as in Figs. 184-185. Praetarsus as a very small tubercle with 1 small apical spine (Fig. 186).

Terminal segments: Gonopods apparently biarticulate with ca. 6 basal setae and ca. 4 distal ones, penis dorsally with 3+3 apical setae. Anal organs present.

Female. - Unknown.

Remarks. - KRAUS stated in his original description: "Clypealarea mit nur einer Borste" but on the contrary there are three setae on the clypeal area, he also stated "ohne Terminalporen" but the anal organs are present. We are not able to give details of the special sensory setae on d. side of a.a. II, V, IX and XIII, nor further details of the last leg-bearing segment and the terminal segments, owing to their poor condition in the slides.

Ribautia (Schizoribautia) titicacae TURK, 1955 (Fig. 187)

Schizoribautia peruana subsp. *titicacae* TURK, 1955 - Proc. Zool. Soc. Lond. 125(3/4): 487.

Schizoribautia titicacae, CHAMBERLIN, 1957 - Proc. Biol. Soc. Wash. 70: 27.

Remarks. - The characters cited by TURK for this taxon are enough to recognize it as a good species. It is not clear why KRAUS (1957) regarded *R. (S.) andecola* KRAUS, 1954 as a synonym of it. *R. (S.) andecola* has 2+2 clusters of coxal organs, but in the case of *titicacae*, which TURK considered as a subspecies of *peruana*, it is reasonable to suspect, even though TURK did not specify it, that in *titicacae* there are 3+3 clusters of coxal organs. For differences between *R. (S.) montana* and *R. (S.) peruana* see table 3.

Type locality. - Peru: Puno (m. 3900 a.s.l.). Only confidently known from this locality.

Family Schendylidae

Genus *Pectiniunguis* BOLLMAN, 1889

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 composite structure ("heterogeneous coxal glands" sensu BRÖLEMANN & RIBAUT, 1912).

Pectiniunguis ducalis n.sp. (Figs. 188-225)

Diagnosis. - A *Pectiniunguis* species with pore fields present on anterior and posterior sterna. Among the Neotropical species currently included in the genus *Pectiniunguis*, it seems more closely related to *P. gaigei* (CHAMBERLIN, 1921). *P. ducalis* n. sp. can be differentiated from this species by means of the following characters (the corresponding ones in *P. gaigei* are given in parentheses): teeth of lateral pieces of labrum very different in shape, size and colour from those of the midpiece and resembling long hyaline filaments, Fig. 198 (teeth of the lateral pieces small, subtriangular with a sharp medial extention); ♀ with 65, 67 or 69 pairs of legs, ♂ with 65 or 67 pairs of legs (♀ with 55 or 57 pairs of legs, ♂ with 53 pairs of legs); ventral pores present from second to penultimate sternum (from second to antepenultimate); last leg-bearing segment without pleurites at the sides of praetergum (with pleurites).

Type material. - All specimens from Brazil: Amazonas: Reserva Fl. A. Ducke, J. W. de MORAIS legit. Holotype ♂, 67 p.l., b.l. 52 mm, 10.11.1982. Allotype ♀, 69 p.l., b.l. 52 mm, 6.9.1983. Paratype *A* (♀), 69 p.l., b.l. 44 mm, 8.9.1982. Paratype *B* (♂), 67 p.l., b.l. 32 mm, 13.3.1983. Paratype *C* (♂), 65 p.l., b.l. 36 mm, 6.9.1983. - Depository of types. - INPA (holotype, allotype); MLP (paratype *A*); AM (paratype *B*); JA (paratype *C*).

Other material examined. - Same locality and collector as the type series, 1 fragmentary specimen,

8.9.1982 (INPA). 1 ♂ juv. with only 1+1 coxal organs, 67 p.l., b.l. 15 mm, 13.10.1982 (INPA). 1 ♀ juv. (A) with only 1+1 coxal organs, 69 p.l., b.l. 18 mm, 13.10.1982 (INPA). 1 ♀, 67 p.l., b.l. 40 mm; 1 ♀, 69 p.l., b.l. 17 mm, 8.12.1982 (INPA). 1 ♀, 65 p.l., b.l. 20 mm, 12.1.1983 (MLP). 1 ♀, 67 p.l., b.l. 16 mm, 12.2.1983 (MLP). 1 ♂ juv. with only 1+1 coxal organs, 67 p.l., b.l. 21 mm, 13.3.1983 (MLP). 1 ♀ juv. with only 1+1 coxal organs, 67 p.l., b.l. 22 mm, 13.3.1983 (MLP). 1 fragmentary specimen, 12.4.1983 (AM). 1 ♀, 67 p.l.,b.l. 25 mm, 12.4.1983 (AM). 1 ♂, 65 p.l., b.l. 37 mm; 1 ♀, 65 p.l., b.l. 26 mm, 10.5.1983 (AM). 1 ♂, 67 p.l., b.l. 23 mm, 5.6.1983 (AM). 1 ♀ juv with only 1+1 coxal organs, 67 p.l., b.l. 17 mm, 9.8.1983 (JA). 1 ♀ juv with only 1+1 coxal organs, 69 p.l., b.l. 20 mm, 6.9.1983 (JA). 1 ♀, 69 p.l., b.l. 24 mm, 6.9.1983 (JA).

Description

Male holotype. - 67 pairs of legs, body length 52 mm, maximum body width 1.60 mm. Colour (of preserved specimen in alcohol) pale orange, forcipular segment darker (ochreous-orange).

Antennae ca. 4.3 times as long as the cephalic plate, distally slightly attenuate; all articles longer than wide. Setae on a.a. I to VI-VII of different lengths and few in number, those of remaining articles progressively shorter and more numerous towards the tip of the appendage (Figs. 188-189). Terminal a.a. with ca. 34 claviform sensory setae on the external border and only 1 on the internal border (Fig. 194). Distal end of this a.a. with ca. 8 very small specialized setae apparently not divided apically (Fig. 195). Dorsal and v. surfaces 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 very similar to those of the apex of the terminal a.a. but a little thicker and shorter. Each of a.a. II (Fig. 190), V, IX and XIII (Fig. 191) with 1 seta. 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 specialized setae on the v. side; type *b* setae are equal in shape to those of the apex of the terminal a.a. but darker (pale ochreous) in colour (*a*, *b*, Fig. 193). A.a. II (Fig. 192) and V with 1 type *a* seta; a.a. IX (Fig. 193) and XIII with 1 type *a* and 1 type *b* seta.

Cephalic plate longer than wide (ratio 1.3:1), shape and chaetotaxy as in Fig. 196.

Clypeus with 1+1 post antennal setae, 10+8 median setae and 1+1 praelabral setae (Fig. 197).

Labrum with 15 robust, dark and round-tipped teeth, sidepieces with 14+15 teeth very different in shape, size and colour from those of the midpiece, looking like long hyaline filaments (Fig. 198).

Mandible: dentate lamella subdivided into three distinct blocks, l. mandible with 3,3,7 teeth, r. mandible with 3,3,5 teeth (Figs. 199-200); pectinate lamella with ca. 26 hyaline teeth.

First maxillae with well developed palps on both coxosternum and telopodites (Fig. 202). Coxosternum with 7 setae arranged as in Fig. 201; median projections of coxosternum subtriangular, well developed and provided with 3+3 setae. Article II of the telopodite with 5+5 v. setae and 9+12 d. sensilla (Figs. 201-202).

Second maxillae (Figs. 201, 203-204) with 14+17 setae on the coxosternum, arranged as in Fig. 201. Apical claw of telopodite well developed, bipectinate, v. edge with ca. 10 teeth (Fig. 204), d. edge with ca. 12 teeth.

Forcipulae: when closed, the telopodites do not extend beyond the anterior margin of the head; basal plate with an irregular transverse median row of 6 large setae and a few additional smaller setae scattered on the posterior half. Trochanteropraefemur of telopodite with a small round-tipped tooth on the apical medial edge; remaining articles without teeth. Calyx of poison gland cylindrical (Fig. 206). Chaetotaxy of coxosternum and telopodites as in Fig. 205.

Legs (last pair excepted) with chaetotaxy (Fig. 207) uniform throughout the body length; claws ventrobasally with one anterior spine and two posterior spines of different size (Fig. 208).

Sterna: pore fields present from the second to penultimate sternum. All pore fields undivided and subcircular. Form of fields changing along the trunk as in Figs. 209-215. Number of pores on selected sterna: on sternum II, 86 pores; on VI, 119; on XIV, 142; on XXII, 155; on LIII, 51; on LXV, 113; on LXVI, 91.

Last leg-bearing segment without pleurites at the sides of practergum. Praesternum not divided along the sagittal plane; shape and chaetotaxy of sternum and tergum as in Figs. 216-217. Coxopleura slightly protruding at their distal v. ends, setae small and numerous on the distal v. half, the remaining surface with

few larger setae. Two compound ("heterogeneous") coxal organs on each coxopleuron (Figs. 216, 218). Coxal organs open on the membrane between coxopleuron and sternum, covered by the latter (Fig. 216). Last legs moderately inflated, with seven podomeres, shape and chaetotaxy as in Figs. 216-217. Praetarsus as a very small tubercle with ca. 9-13 small apical spines (Fig. 219).

Terminal segments: intermediate tergum with posterior margin convex, intermediate sternum with posterior margin medially slightly convex; first genital sternum with posterior margin medially slightly convex, laterally slightly concave (Fig. 216). Gonopods biarticulate, basal article with ca. 18 setae and apical with ca. 11 setae (Fig. 220), penis dorsally with 1+1 apical setae (Fig. 221).

Female allotype. - 69 pairs of legs, body length 52 mm, maximum body width 1.60 mm.

All features similar to those in the male except for the shape and chaetotaxy of the last leg-bearing segment and terminal segments.

Last leg-bearing segment: form and chaetotaxy of sternum and tergum as in Figs. 222-223. Coxopleura slightly protruding at their distal v. ends, setae small and numerous on the distal half, the remaining surface with few setae of different lengths. Podomeres of terminal legs with shape and chaetotaxy as in Figs. 222-223.

Terminal segments (Figs. 222-225): intermediate tergum with posterior margin convex, intermediate sternum with posterior margin medially slightly convex, laterally slightly concave; first genital sternum with posterior margin straight (Fig. 222). Gonopods uniarticulate (Fig. 222).

Variation. - There is variation in the number of pairs of legs: 65 or 67 in the males; 65, 67 or 69 in the females.

Etymology. - The name of this species refers to its type locality.

Genus Schendylurus SILVESTRI, 1907

Diagnosis. - Pleurites of second maxillae not fused to the 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).

Schendylurus andesicola CHAMBERLIN, 1957 (Figs. 226-228)

Schendylurus andesicola CHAMBERLIN, 1957 - Proc. Biol. Soc. Wash. 70: 21.

Schendylurus andesicola, PEREIRA, 1983 - Rev. Soc. ent. Arg. 42: 56.

Schendylurus andesicola, PEREIRA, 1985 - Boll. Lab. Ent. agr. Filippo Silvestri, 42: 51.

Schendylurus andesicola, PEREIRA & MINELLI, 1993 - Tropical Zoology, Special Issue, N° 1: 120, 122.

Type locality. - Equator: 30 miles South of Alausi, m 4000 a.s.l. (Chimborazo).

Known range. - Equator: 30 miles South of Alausi, Chimborazo; Province of Cotopaxi, 5 Km E of Zumbahua, m. 4000 a.s.l.; Province of Pichincha: 15 Km E of Pifo.

Schendylurus continuus n. sp. (Figs. 229-265)

Diagnosis. - A *Schendylurus* species with all pore fields undivided, occurring in an uninterrupted series from the second to penultimate sternum. Among the Neotropical species of the genus only the present species and *S. colombianus* CHAMBERLIN, 1921 share this trait. *S. continuus* n.sp. can be differentiated from the latter by means of the following characters (the corresponding ones in *S. colombianus* are given in parentheses): ♀ with 43 pairs of legs (♂ with 59 pairs of legs); body length 18

mm (32 mm); length of specialized setae on the apex of the terminal a. a. conspicuously longer than the claviform setae, Fig. 235 (distinctly shorter than the claviform setae); palps of coxosternum of first maxillae very small (well developed); all sterna with pore fields lacking additional pores at the sides of the main pore area (some sterna of anterior region of the body with a few additional pores at the anterior sides of the main pore area); last leg-bearing segment with pleurites at the sides of praetergum (without pleurites); anterior coxal organs internally with a single area of specialized epithelium, posterior coxal organs with ca. 2-3 areas of specialized epithelium (anterior and posterior coxal organs internally with a single specialized area).

Among the remaining Neotropical species of the genus, *S. continuus* n.sp. seems to be also closely related to *S. lesnei* BRÖLEMANN & RIBAUT, 1911, but it can be differentiated from the latter by means of the following characters (the corresponding ones in *S. lesnei* are given in parentheses): pore fields present from second to penultimate sternum (from second to antepenultimate); last leg-bearing segment with pleurites at the sides of praetergum (without pleurites); anterior coxal organs internally with a single area of specialized epithelium, posterior with ca. 2-3 areas of specialized epithelium (anterior and posterior coxal organs internally with a single area); lateral pieces of labrum anteriorly separated from the clypeus ("elles ne sont pas circonscrites en avant par une bande claire").

Type material. - Holotype ♀, 43 p.l., b.l. 18 mm, Brazil: Amazonas: Reserva Fl. A. Ducke, 12.1.1983, J. W. de MORAIS legit (INPA).

Other material examined. - 1 ♀ juv., 43 p.l., b.l. 9 mm, Brazil: Amazonas: Reserva Fl. A. Ducke, 10.5.1983, J. W. de MORAIS legit (AM). 1 ♂ juv., 41 p.l., b.l. 8 mm, same locality and collector, 6.9.1983 (AM). 1 ♀ juv., 43 p.l., b.l. 10 mm, same locality and collector, 6.9.1983, (JA). 1 ♀ juv. (adolescens 1 ?) with only 1+1 coxal organs and ventral pores only on anterior half of the body, 45 p.l., b.l. 7 mm, Brazil: Amazonas: Lago Janauarí, mixedwater inundation forest, 10.11.1987, J. ADIS et al. legerunt, (JA).

Description

Female holotype. - 43 pairs of legs, body length 18 mm, maximum body width 0.7 mm. Colour (of preserved specimen in alcohol) pale ochre with forcipular segment darker.

Antennae ca. 3 times as long as the cephalic plate, distally slightly attenuate; all articles, the first excepted, longer than wide. Setae on a.a. I to V of different lengths and few in number, those of remaining articles progressively shorter and more numerous towards the tip of the appendage (Figs. 229-230). Terminal a.a. with ca. 15 claviform sensory setae on the external border and ca. 9 on the internal border (Figs. 235, 240). Distal end of this a.a. with ca. 6 very small specialized setae, which are larger than the claviform setae and apparently split into two very diminute apical branches (Figs. 235, 240). Dorsal and v. surfaces 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 very similar to those of the apex of the terminal a.a. Each of a.a. II, V, IX and XIII with 1 seta (Figs. 231-234). 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 specialized setae on the v. side; type *b* setae are bigger, not divided apically and much darker (ochreous) in colour (*a*, *b*, Fig. 237). A.a. II with 1 type *a* seta (Fig. 236); a.a. V with 1 type *a* and 1 type *b* setae (Fig. 237); a.a. IX and XIII with 1 type *a* and 2 type *b* setae (Figs. 238-239).

Cephalic plate slightly longer than wide (ratio 1.2:1), shape and chaetotaxy as in Fig. 241.

Clypeus with 1+1 postantennal setae, 3+2 setae on the middle and 1 praelabral seta (Fig. 242).

Labrum with 29 teeth, those of the central arc dark and round tipped, the lateral ones less sclerotized, each with a relatively long, very sharp medial extension (Fig. 243).

Mandible: dentate lamella subdivided into three distinct blocks with 3,3,2 teeth (Figs. 244-245); pectinate lamella with ca. 16 hyaline teeth.

First maxillae with palps on both coxosternum and telopodites, those of coxosternum very small (Fig. 247). Coxosternum without setae, median projections of coxosternum subtriangular, well developed and provided with 2+2 setae. Article II of the telopodite with 2+3 v. setae and 5+5 d. sensilla (Figs. 246-247).

Second maxillae (Figs. 246, 248-249): with 8+9 setae on coxosternum, arranged as in Fig. 246. Apical

claw of telopodite bipectinate, the v. and d. edge with ca. 8 teeth (Fig. 248).

Forcipulae: when closed, the telopodites do not extend beyond the anterior margin of the head; basal plate with an irregular transverse median row of 11 setae. All articles of the telopodites lack sclerotized dark teeth, trochanteropraefemur with a very small and not sclerotized round-tipped prominence on apical medial edge. Calyx of poison gland cylindrical and short (Fig. 252); chaetotaxy of coxosternum and telopodites as in Figs. 250-251.

Legs (last pair excepted) with chaetotaxy (Fig. 253) uniform throughout the body length; claws ventrobasally with one anterior and two posterior spines (Fig. 254).

Sterna: pore fields present from the second to the penultimate sternum. All pore fields undivided and subcircular in form (Figs. 255-260). Number of pores on selected sterna: on sternum II, 36 pores; on VII, 60; on XII, 57; on XX, 53; on XXXIII, 32; on XLII, 19.

Last leg-bearing segment with pleurites at the sides of the praetergum. Praesternum not divided along the sagittal plane; form and chaetotaxy of sternum and tergum as in Figs. 261-262. Coxopleura slightly protruding at their distal v. ends, with chaetotaxy as in Figs. 261-262. Two single ("homogeneous") coxal organs on each coxopleuron. Anterior coxal organs internally with a single area of specialized epithelium; posterior coxal organs internally with two or three independent areas of specialized epithelium; externally, the anterior organs are unilobed, the posterior inconspicuously bilobed (Figs. 263-264). Coxal organs open on the membrane between coxopleuron and sternum, partially covered by the latter (Fig. 261). Last legs with seven podomeres, shape and chaetotaxy as in Figs. 261-262. Praetarsus as a very small tubercle with 2-3 small apical spines (Fig. 265).

Terminal segments: intermediate tergum with posterior margin convex, intermediate sternum with posterior margin slightly convex. First genital sternum as in Fig. 261.

Variation. - Other female specimen with 45 pairs of legs.

Male. - With 41 pairs of legs. All features apparently similar to those in the female, except for the shape and chaetotaxy of the last leg-bearing segment and terminal segments.

Etymology. - The name of this species refers to the uninterrupted series of sternal pore areas.

Remarks. - The female holotype presents all the characters of an adult specimen, including the presence of spermatecae full of spermatozoa and also the presence of mature eggs. The two spermatecae are very clearly visible by transparence at level of segments XXXIX and XL.

Our only male specimen is an immature one, so it seems to us inappropriate to describe or illustrate here the morphology of the last leg-bearing segment and terminal segments.

Schendylurus janauarius n. sp. (Figs. 266-293)

Diagnosis. - A *Schendylurus* species lacking pore field on the first sternum and with pore fields present only on some anterior sterna. Among the Neotropical species of the genus which share these traits the present species seems to be very closely related to S. *andesicola* CHAMBERLIN which is distributed in the high Andes of Equator at about m 4000 a.s.l. Differential characters are given in table 5.

Type material. - Holotype ♂, 43 p.l., b.l. 21 mm; paratype ♂, 43 p.l., b.l. 17 mm. Brazil: Amazonas: Lago Janauarí, mixedwater inundation forest, K, 14.09.1987, J. ADIS legit. - Depository of types: INPA.

Description

Male holotype. - 43 pairs of legs, body length 21 mm, maximum body width 0.6 mm. Colour (of preserved specimen in alcohol) yellowish.

Antennae ca. 4.7 times longer than the cephalic plate, distally slightly attenuate; all articles, the first excepted, longer than wide. Setae on a.a. I-III of different lengths and few in number, those of remaining articles progressively shorter and more numerous towards the tip of the appendage (Figs. 266-267). Terminal a.a. with ca. 17 claviform sensory setae on the external border and ca. 3 on the internal border. Distal end of this a.a. with ca. 5 very small specialized setae apparently not divided apically. Dorsal and v. surfaces 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 very similar to those of the apex of the terminal a.a. Each of a.a. II, V, IX and XIII (Fig. 268) with 1 seta. Similar specialized setae are also present on the d. side, where they are restricted to an external latero-apical area. Each of a.a. II and V with 1 seta; each of a.a. IX and XIII with 2 setae.

Cephalic plate slightly longer than wide (ratio 1.1:1), shape and chaetotaxy as in Fig. 269.

Clypeus with 8+4 setae on the anterior half and 1+1 praelabral setae (Fig. 270).

Labrum with 21 teeth, those of central arc dark and round tipped, the lateral ones less sclerotized, each with a relatively long and very sharp medial extension (Fig. 271).

Mandible: dentate lamella subdivided into three distinct blocks, l. mandible with 4,3,2 teeth, r. mandible with 3,3.2 teeth; pectinate lamellae with ca. 16 hyaline teeth.

First maxillae with palps on both coxosternum and telopodites, those of coxosternum very poorly developed (Fig. 273). Coxosternum without setae, median projections of coxosternum subtriangular, well-developed and provided with 1+1 setae. Article II of the telopodite with 1+2 v. setae and 3+3 d. sensilla (Figs. 272-273).

Second maxillae (Figs. 272, 274-275) with 8+8 setae on the coxosternum, arranged as in Fig. 272. Apical claw of telopodite well developed, bipectinate, the d. edge with ca. 10 teeth (Fig. 274), the v. edge with ca. 7 teeth.

Forcipulae: when closed, the telopodites do not extend beyond anterior margin of head; basal plate with an irregular transverse median row of 12 large setae and a few additional smaller ones, scattered on the posterior half. All articles of the telopodites lack sclerotized dark teeth. Tarsungulum with a small round-tipped prominence on the basal medial edge. Calyx of poison gland subcircular (Fig. 277); chaetotaxy of coxosternum and telopodites as in Fig. 276.

Legs (last pair excepted) with chaetotaxy (Fig. 278) uniform throughout the body length; claws ventrobasally with two spines (one anterior, one posterior), a third smaller spine occurs internally, very close to the posterior one (Fig. 279).

Sterna: pore fields on sterna II-XV only. Form of fields changing along the trunk as in Figs. 280-287. Number of pores on selected sterna: on sternum II, 21 pores; on III, 29; on IV, 34; on V, 40; on VIII, 46; on X, 54; on XI, 45; on XV, 16.

Last leg-bearing segment without pleurites at the sides of praetergum. Praesternum not divided along the sagittal plane; shape and chaetotaxy of sternum and tergum as in Figs. 288-289. Coxopleura slightly protruding at their distal v. ends, setae small and numerous on the distal medial edge, the remaining surface with few and larger setae. Two single ("homogeneous") coxal organs on each coxopleuron (Fig. 290). Coxal organs open on the membrane between coxopleuron and sternum, covered by the latter (Figs. 288, 290). Last legs with seven podomeres, shape and chaetotaxy as in Figs. 288-289. Praetarsus as a very small tubercle with 3-4 small apical spines (Fig. 291).

Terminal segments: intermediate tergum with posterior margin convex, intermediate sternum with posterior margin slightly concave; first genital sternum with posterior margin medially convex, laterally slightly concave (Fig. 292). Gonopods biarticulate, basal article with ca. 7 setae and apical with ca. 4 setae (Fig. 293), penis dorsally with 0+1 apical setae.

Female. - Unknown.

Etymology. - The name of this species refers to the type locality.

Schendylurus iguapensis VERHOEFF, 1938 (Figs. 294-299; Table 6)

Schendylurus iguapensis VERHOEFF, 1938 - Zool. Jahrb., Syst. 71: 378.

Schendylurus iguapensis, BÜCHERL, 1941-42a - Mem. Inst. Butantan 15: 203.

Schendylurus (Schendylurus) iguapensis, BÜCHERL, 1941-42b -Mem. Inst. Butantan 15: 349.

Schendylurus (Schendylotyn) iguapensis, ATTEMS, 1947 - Ann. Naturhist. Mus. Wien 55: 87.

Schendylurus iguapensis, CRABILL, 1972 - Proc. ent. Soc. Wash. 74(1): 20.

Schendylurus iguapensis, PEREIRA & MINELLI, 1993 - Tropical Zoology, Special Issue, 1: 121.

Schendylurus iguapensis, PEREIRA & MINELLI, in press - Tropical Zoology.

Diagnosis. - A *Schendylurus* species with pore fields present from the first to the antepenultimate sternum. The pore fields are undivided on anterior and posterior sterna but divided in two subsymmetrical areas on the sterna of the middle part of the trunk.

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

Schendylurus marchantariae n. sp. (Figs. 300-336)

Diagnosis. - A *Schendylurus* species with pore fields present from the first to the antepenultimate sternum (undivided on anterior and posterior sterna but divided in two subsymmetrical areas on the sterna of the middle part of the trunk). Among the Neotropical species of the genus, only the present species, *S. amazonicus* PEREIRA, MINELLI & BARBIERI, 1994; *S. borellii* (SILVESTRI, 1895); *S. iguapensis* VERHOEFF, 1938; *S. longitarsis* (SILVESTRI, 1895) and *S. mesopotamicus* PEREIRA, 1981 share this trait. The present species seems to be more closely related to *S. iguapensis* which is only known from Iguape (State of São Paulo) a locality more than 3,000 Km away from the only site where the new species is known to occur and under different ecological conditions. Differential characters between *S. marchantariae* and *S. iguapensis* are given in table 6.

Type material. - Holotype ♀, 53 p.l., b.l. 30 mm, Brazil: Amazonas: Rio Solimões, Ilha de Marchantaria, 59°58'W, 3°15'S, 10.3.1993, várzea, in fresh water sponge on tree trunk, J. ADIS legit. - Depository of type: INPA.

Description

Female holotype. - 53 pairs of legs, body length 30 mm, maximum body width 1.2 mm. Colour (of preserved specimen in alcohol): head and forcipular segment bright ferrugineous, rest of the body pale orange. Deeply pigmented bodies (nephrocytes?) collectively forming a long geminate band are visible through the cuticle.

Antennae ca. 4.2 times as long as the cephalic plate, distally slightly attenuate; all articles, the first excepted, longer than wide. Setae on a.a. I-IV of different lengths and few in number, those of remaining articles progressively shorter and more numerous towards the tip of the appendage (Figs. 300-301). Terminal a.a. with ca. 20-35 claviform sensory setae on the external border and ca. 11-15 on the internal border. Distal end of this a.a. with ca. 5 very small specialized setae ending in three small apical branches (Fig. 304). Dorsal and v. surface of a.a. II, V, IX and XIII with very small specialized setae occurring in a hyaline unreticulated and unpigmented area that makes these setae to stand out from the remaining surface of the articles, which is bright ferrugineous. On the v. side these setae 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 divided apically, type *b* setae are very similar to those of the apex of the terminal article (*a*, *b*, Fig. 302). A.a. II with 2 type *b* setae; a.a. V (Fig. 302), IX and XIII (Fig. 303) with 1 type *a* and 2 type *b* setae. Specialized setae on the d. side are represented by three different types: *a* and *b* similar to *a* and *b* of the v. side and type *c* setae similar in size to type *b*, but with two very small apical branches and much darker (ochreous) in colour (*a*, *b*, *c*, Fig. 305). The position of type *a* setae varies from median-external in a.a. II to apico-internal in a.a. XIII, whereas type *b* and *c* setae always occur on the external apico-lateral region of the specified a.a. A.a. II with 1 type *a* and 1 type *b* setae; a.a. V with 1 type *a*, 2 type *b* and 3 type *c* setae; a.a. IX with 1 type *a*, 2 type *b* and 4-5 type *c* setae and a.a. XIII (Fig. 305) with 1 type *a*, 1-2 type *b* and 6 type *c* setae.

Cephalic plate slightly longer than wide (ratio 1.1: 1), shape and chaetotaxy as in Fig. 306.

Clypeus with 1+1 postantennal setae, 11+11 median setae and 1+1 praelabral setae (Fig. 307).

Labrum with 27 teeth, those of the central arc dark and round tipped, the lateral ones less sclerotized, each with a relatively long and very sharp medial extension (Fig. 308).

Mandible: dentate lamella subdivided into 4 to 6 distinct blocks, with 3,3,3,2,2,1 teeth on the r. mandible (Fig. 309) and 3,4,6,1 on the l. (Fig. 310); pectinate lamella with ca. 28 hyaline teeth.

First maxillae with large palps on both coxosternum and telopodites (Fig. 312). Coxosternum with 3+3 setae, median projections of coxosternum subtriangular, well developed and provided with 2+2 setae and 1+1 small sensilla. Article II of the telopodite with 6+4 v. setae and 8+9 d. sensilla (Figs. 311-312).

Second maxillae (Figs. 311, 313-314) with 16+17 setae on the coxosternum, arranged as in Fig. 311. Apical claw of telopodite bipectinate, the v. edge with ca. 12 teeth (Fig. 313), the d. with ca. 18 teeth.

Forcipulae: basal plate with an irregular transverse median row of 9 setae. All articles of telopodites lack teeth. Calyx of poison gland cylindrical (Fig. 316); chaetotaxy of coxosternum and telopodites as in Fig. 315.

Legs (last pair excepted) with chaetotaxy (Fig. 317) uniform throughout the body length. Claws ventrobasally with two spines, one anterior one posterior; a third smaller spine occurs internally, very close to the posterior one (Fig. 318).

Sterna: pore fields present on first to antepenultimate sternum. On sterna I to XXII and XLVII to LI the fields are undivided, on sterna XXIII to XLVI the fields are divided in two subsymmetrical areas. Only on sterna I and II there is a small group of pores at both sides of the anterior border of the main pore area, in all the remaining sterna the corresponding pores are not separated from the main area. Shape of fields changes along the trunk as in Figs. 319-331. Number of pores on selected sterna: on sternum I, 2+27+2 pores; on II, 5+65+6; on V, 151; on VIII, 172; on XIX, 203; on XXII, 168; on XXIII, 68+67; on XXXII, 40+36; on XLVI, 35+39; on XLVII, 73 and on LI, 68.

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. 332-333. Coxopleura slightly protruding at their distal v. ends, setae small and numerous on the distal ventral half, the remaining surface with few bigger setae. Two single ("homogeneous") coxal organs in each coxopleuron (Figs. 334-335). Coxal organs open on the membrane between coxopleuron and sternum, covered by the latter (Fig. 334). Last legs with seven podomeres, shape and chaetotaxy as in Figs. 332-333. Praetarsus as a very small tubercle with 1 small apical spine (Fig. 336).

Terminal segments: intermediate tergum with posterior margin convex; intermediate sternum with posterior margin concave; first genital sternum with posterior margin medially slightly convex, laterally slightly concave. Gonopods uniarticulate and well separated on the sagittal plane (Fig. 332).

Male. - Unknown.

Etymology. - The species is named after the locus typicus, Ilha de Marchantaria.

Schendylurus oligopus n. sp. (Figs. 337-371)

Diagnosis. - *S. oligopus* n. sp. finds a place within the Neotropical *Schendylurus* species with ventral pores only on the anterior sterna other than the first one. It can be differentiated very easily from all other species of this group by the very unusual characteristic of having only 29 or 31 leg-bearing segments; the very small body size is also very distinctive.

Type material. - All specimens from Brazil: Amazonas: Reserva Fl. A. Ducke, J. W. de MORAIS legit. Holotype ♀, 31 p.l., b.l. 8 mm, 6.3.1983. Allotype ♂, 29 p.l., b.l. 7 mm; paratype *A* (♀), 31 p.l., b.l. 9 mm; paratype *B* (♀), 31 p.l., b.l. 7 mm, 10.5.1983. Paratype *C* (♀), 31 p.l., b.l. 8 mm, 8.9.1982. Paratype *D* (♀), 31 p.l., b.l. 9 mm; paratype *E* (♀), 31 p.l., b.l. 7 mm; paratype *F* (♀), 31 p.l., b.l. 6 mm, 13.10.1982. Paratype *G* (♀), 31 p.l., b.l. 9.5 mm, 9.8.1983. Paratype *H* (♂), 29 p.l., b.l. 7 mm, 12.2.1983. Paratype *I* (♀), 31 p.l., b.l. 8 mm, 10.11.1982. - Depository of types. - INPA (holotype, allotype, paratypes *A* and *B*); MLP (paratype *C*); AM (paratypes *D*, *E*, *F*); JA (paratypes *G*, *H*, *I*).

Other material examined. - All specimens from the same locality as the type series and also (but for the exception noted below) from the same collector. 1 ♀, 31 p.l., b.l. 8 mm, 8.9.1982, J. W. de MORAIS legit (AM). 1 ♀ juv. with only 1+1 coxal organs, 31 p.l., b.l. 4.5 mm, 12.2.1983 (AM). 1 ♀ juv. with only 1+1 coxal organs, 31 p.l., b.l. 4 mm; 1 ♀ juv. with the anterior coxal organs incompletely developed, 31 p.l., b.l. 6 mm, 13.10.1982 (AM). 2 ♀♀ juv. with only 1+1 coxal organs, 31 p.l., b.l. 4.5 and 5 mm respectively, 13.10.1982 (AM). 3 ♀♀, 31 p.l., b.l. 7.5, 8 and 8.5 mm respectively; 1 ♀ juv. with only 1+1

coxal organs, 31 p.l., b.l. 5 mm, 12.1.1983 (AM). 1 ♀, 31 p.l., b.l. 7 mm, 6.9.1983 (JA). 2 ♀♀, 31 p.l., b.l. 7.5 and 8.5 mm respectively and 1 ♂, 29 p.l., b.l. 6.5 mm, 6.9.1983 (MLP).

Description

Female holotype. - 31 pairs of legs, body length 8 mm, maximum body width 0.45 mm. Colour (of preserved specimen in alcohol) pale yellowish.

Antennae ca. 2.4 times as long as the cephalic plate, distally slightly attenuate. Setae on a.a. I to IV-V of different lengths and few in number, those of remaning articles progressively shorter and more numerous towards the tip of the appendage (Figs. 337-338). Terminal a.a. with ca. 6-7 claviform sensory setae on the external border and ca. 2-3 on the internal border (Fig. 340). Distal end of this a.a. with ca. 4-5 very small specialized setae apparently not divided apically (Fig. 340). 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 divided apically, type *b* setae are very similar to those of the apex of the terminal article but have two very small apical branches (*a*, *b*, Fig. 339). A.a. II with 1 type *b* seta; a.a. V (Fig. 339), IX and XIII with 1 type *a* and 1 type *b* setae. Specialized setae on d. side represented by three different types: *a* and *b* similar to *a* and *b* of v. side, type *c* setae are much bigger, not divided apically and much darker (ochreous) in colour (*a*, *b*, *c*, Fig. 343). The position of type *a* setae varies according to the article as in figures 341-343, whereas type *b* and *c* setae occur always on the external apico-lateral region. A.a. II with 1 type *a* seta (Fig. 341); a.a. V with 1 type *a* and 1 type *b* setae (Fig. 342); a.a. IX and XIII (Fig. 343) with 1 type *a*, 1 type *b* and 1 type *c* setae.

Cephalic plate slightly longer than wide (ratio 1.1:1), shape and chaetotaxy as in Fig. 344.

Clypeus with 3+3 setae on the anterior half and 1+1 praelabral setae (Fig. 345) and a small anterior area with thicker reticulation (Fig. 346).

Labrum with 19 teeth, those of the central arc dark and round tipped, the lateral ones less sclerotized, each with a relatively long and very sharp medial extension (Fig. 347).

Mandible: dentate lamella subdivided into three distinct blocks, with 3,3,2 teeth (Fig. 348); pectinate lamella with ca. 13 hyaline teeth.

First maxillae with small palps on both coxosternum and telopodites (Fig. 350). Coxosternum without setae; median projections subtriangular, well developed and provided with 1+1 setae. Article I of telopodite with 0+1 setae; article II with 1+1 v. setae and 1+1 d. sensilla (Figs. 349-350).

Second maxillae (Figs. 349, 351-354) with 4+4 setae on coxosternum, arranged as in Fig. 349. Distal end of apical claw of telopodite very thin, (Figs. 351-353), bipectinate, the v. and d. edge with ca. 6-7 teeth (Fig. 351).

Forcipulae: basal plate with an irregular transverse median row of 8 setae. All articles of the telopodites lack teeth, tarsungulum with a very small tubercle on basal medial edge. Calyx of poison gland poorly developed, shape as in Fig. 356. Chaetotaxy of coxosternum and telopodites as in Fig. 355.

Legs (last pair excepted) with chaetotaxy (Fig. 357) 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. 358).

Sterna: pore fields on sterna II-XIII only. All fields undivided, shape changing along the trunk as in Figs. 359-365. Number of pores on selected sterna: on sternum II, 7 pores; on III, 11; on V, 15; on VII, 15; on IX, 17; on XII, 10 and on XIII, 2.

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. 366-367. Coxopleura slightly protruding at their distal v. ends, with chaetotaxy as in Figs. 366-367. Two single ("homogeneous") coxal organs on each coxopleuron, the anterior smaller than the posterior (Figs. 366, 368). Coxal organs open on the membrane between coxopleuron and sternum, partially covered by the latter (Figs. 366, 368). Praetarsus as a very small tubercle with 2 small apical spines (Fig. 369).

Terminal segments: intermediate tergum with posterior margin convex; intermediate and first genital sternum with posterior margin convex. Gonopods uniarticulate, well developed and clearly separated on

the sagittal plane (Fig. 366).

Male allotype. - 29 pairs of legs, body length 7 mm, maximum body width 0.4 mm.

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

Last leg-bearing segment: form and chaetotaxy of sternum and tergum as in Figs. 370-371. Coxopleura slightly protruding at their distal v. ends, setae numerous on the distal internal edge, the remaining surface with few setae. Podomeres of terminal legs inflated, shape and chaetotaxy as in Figs. 370-371.

Terminal segments: intermediate tergum with posterior margin convex; intermediate sternum with posterior margin straight to very slightly concave; first genital sternum with posterior margin medially convex, laterally concave (Fig. 370). Gonopods biarticulate, basal article with ca. 6-8 setae and distal with ca. 4-5 setae (Fig. 370), dorsal aspect of penis apparently with 0+1 seta.

Variation. - In all specimens studied the pore field series begins on sternum II but the posterior limit varies between XII and XIV.

All females have 31 p.l., all males 29.

Etymology. - The name *oligopus* refers to the small number of legs in this species.

Remarks. - As far as known, 29 pairs of legs represent the lowest number occurring in geophilomorph centipedes. This condition had been previously recorded for two geophilids only, i.e. *Dinogeophilus oligopodus* PEREIRA, where this is the number of leg-bearing segments in all male and female specimens studied to date, and *Geophilus richardi* BRÖLEMANN, where only a part of the males have such a reduced number of segments. The discovery of another species with 29 pairs of legs in the male sex is, therefore, of some relevance, the more so, because *Schendylurus oligopus* n. sp. is the first member of the Schendylidae known to share this trait. For comments on segmentation in centipedes see MINELLI & BORTOLETTO (1988: 323-343; 1990: 81-88).

Schendylurus oligopus should be probably regarded as a paedomorphic species. All specimens we could investigate looks like juveniles, because they are very small and have a pale coloration. Nevertheless, a careful examination revealed that almost all of them were fully adult. It was possible to see by transparence inside the body of the females the two spermatecae full of spermatozoa, also mature ova; the body of the males are full of mature spermatozoa.

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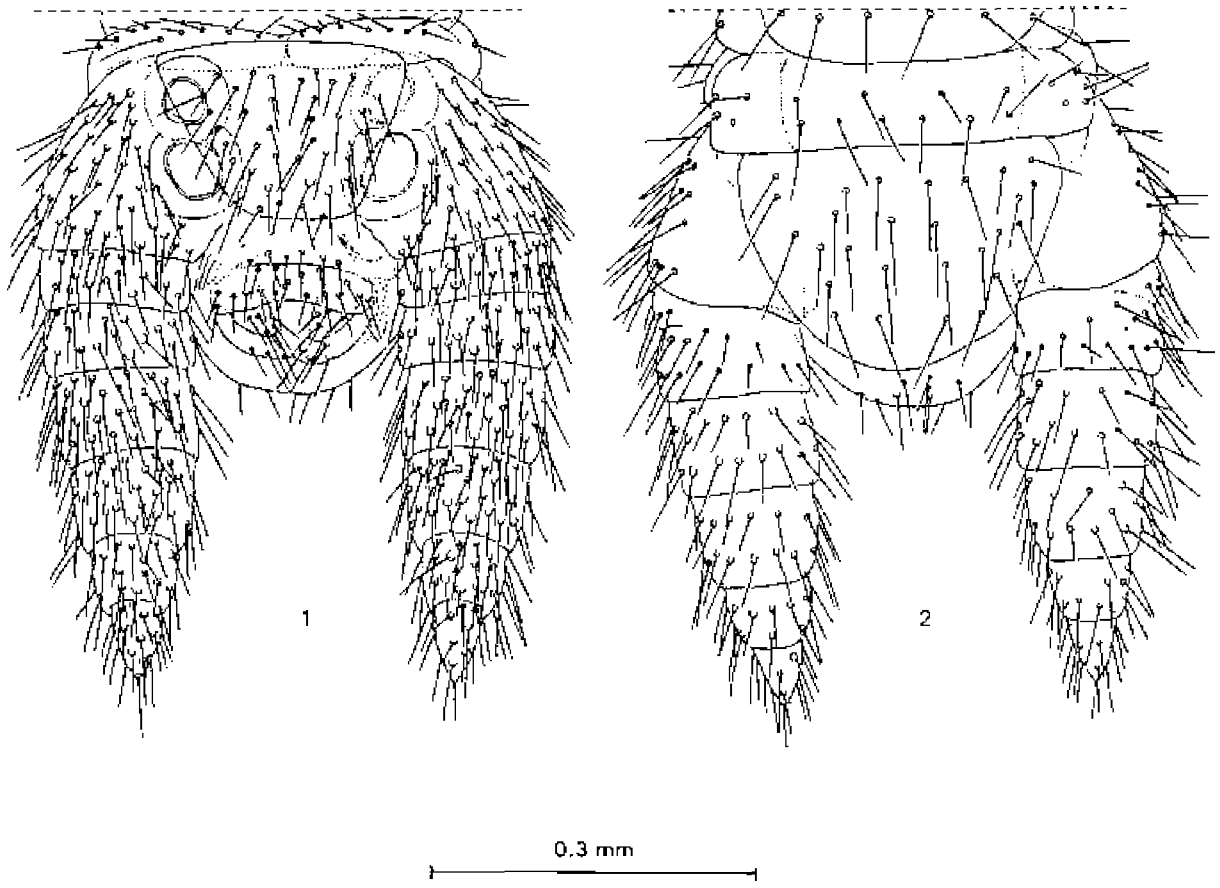
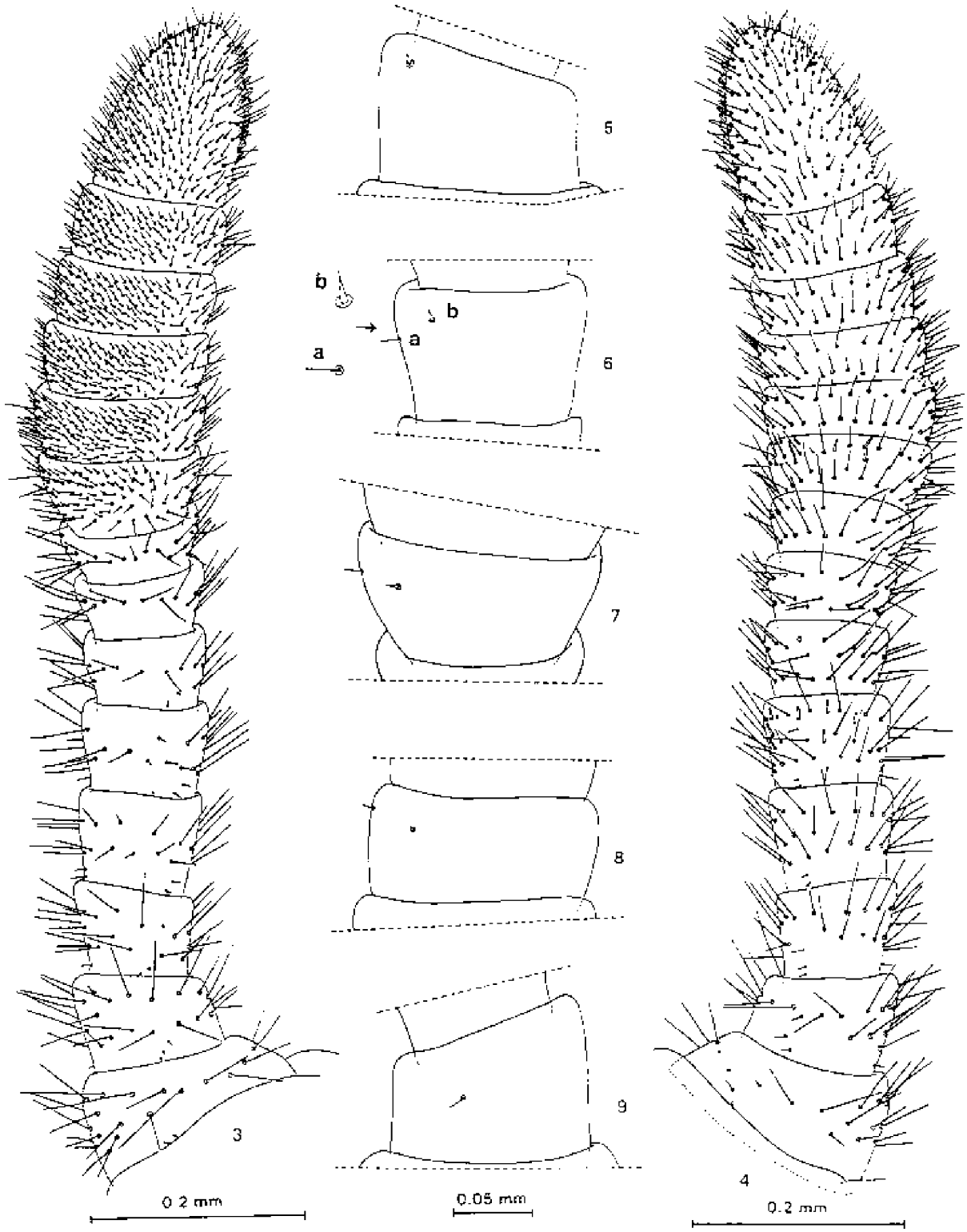


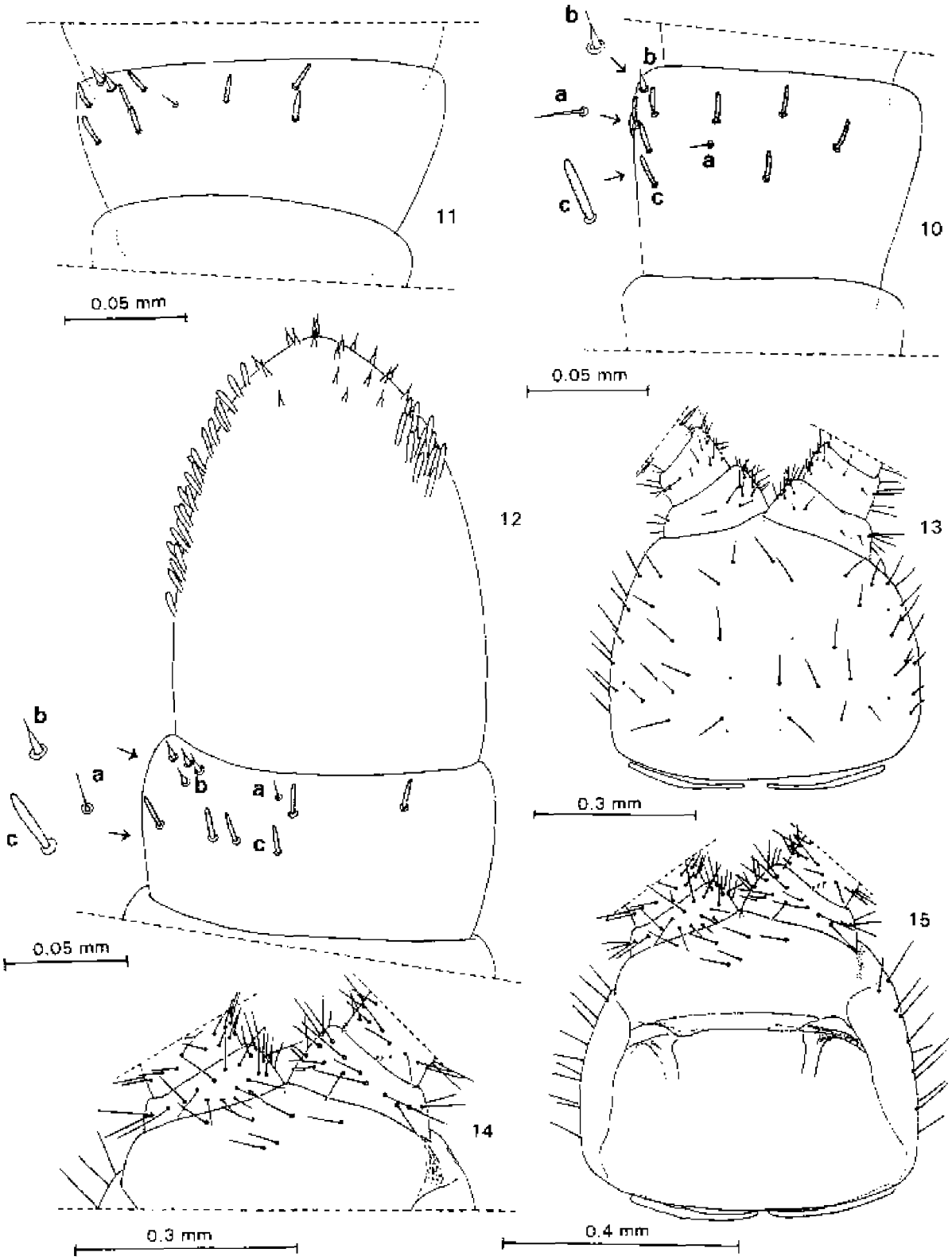
Figs. 1-2:
Ityphilus crabilli PEREIRA, MINELLI & BARBIERI, 1994, ♂ allotype (Brazil: Amazonas: Reserva Fl. A. Ducke). 1: last leg-bearing segment and terminal segments, v.; 2: the same, d.



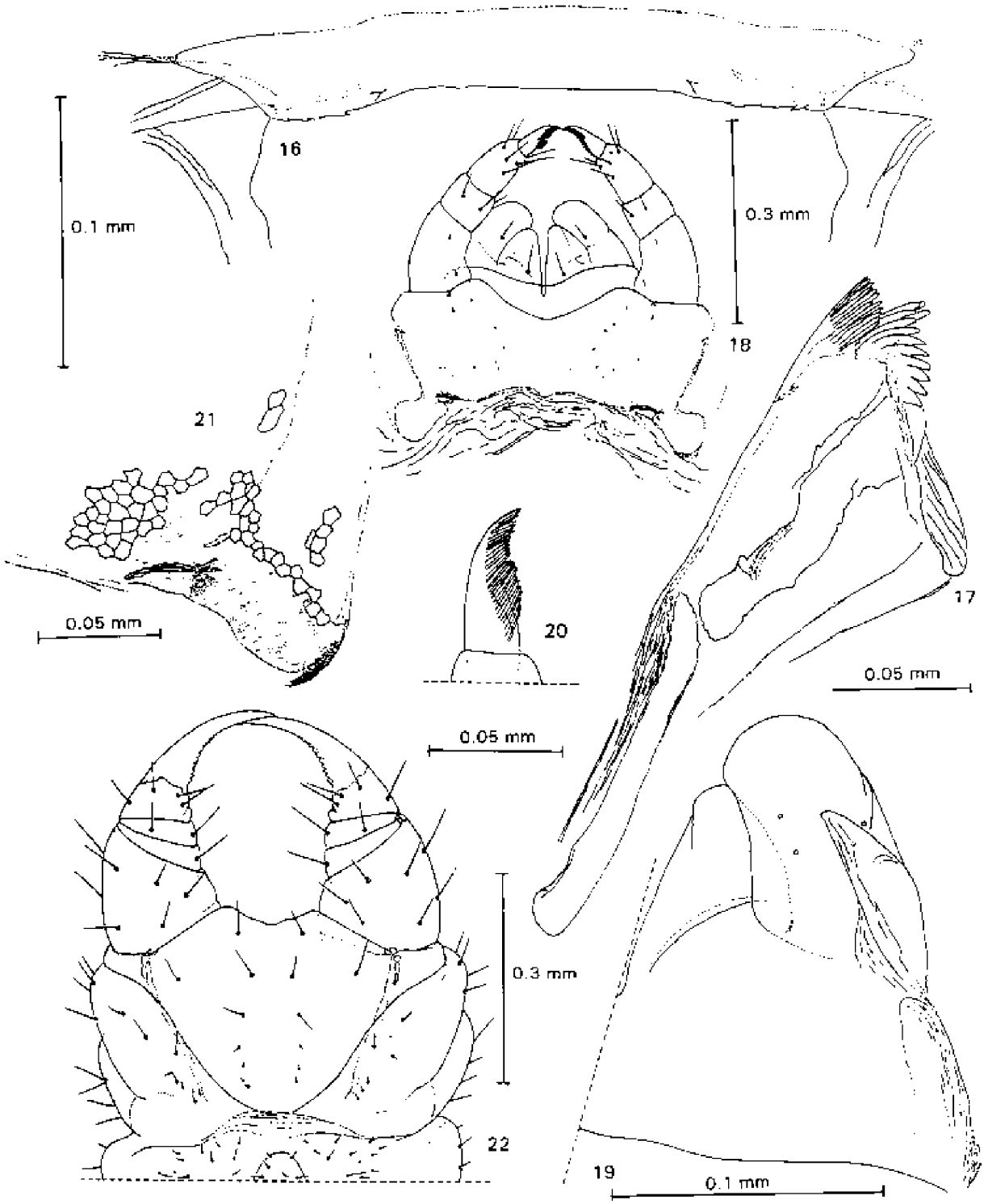
Figs. 3-9:

Ityphilus demoraisi n.sp. ♀ holotype (Brazil: Amazonas: Reserva Fl. A. Ducke).

3: l. antenna, v.; **4**: the same, d.; **5**: l. a.a. II, v.; **6**: l. a.a. V, v.; **7**: l. a.a. IX, v.; **8**: l. a.a. XIII, v.; **9**: l. a.a. II, d.



Figs. 10-15:
Ityphilus demoraisi n.sp. ♀ holotype (Brazil: Amazonas: Reserva Fl. A. Ducke).
10: l. a.a. V, d.; **11**: l. a.a. IX, d.; **12**: l. a.a. XIII and XIV, d.; **13**: cephalic shield;
14: clypeus and bases of antennae; **15**: head capsule and bases of antennae.



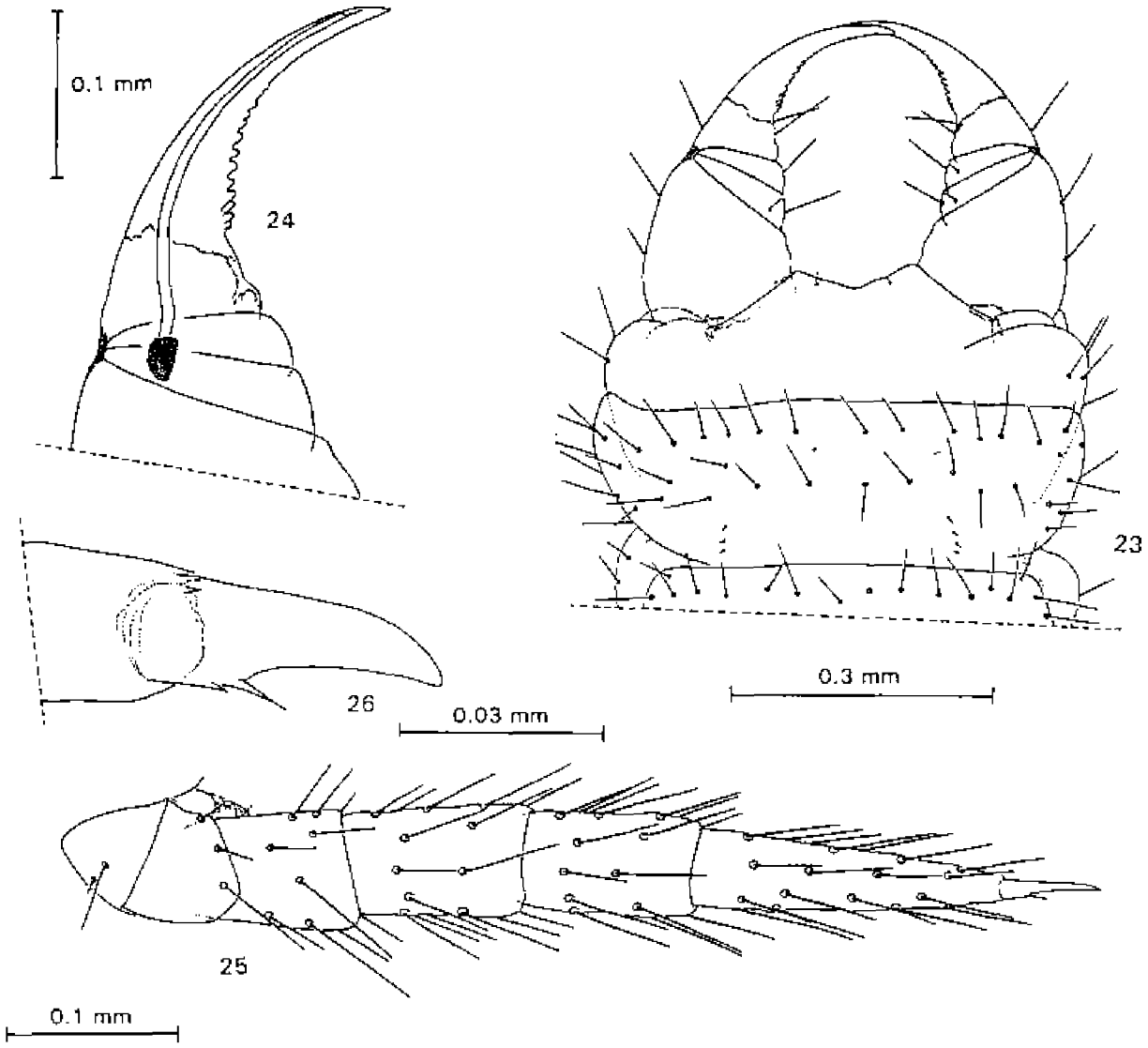
Figs. 16-22:

Ityphilus demoraisi n.sp. ♀ holotype (Brazil: Amazonas: Reserva Fl. A. Ducke).

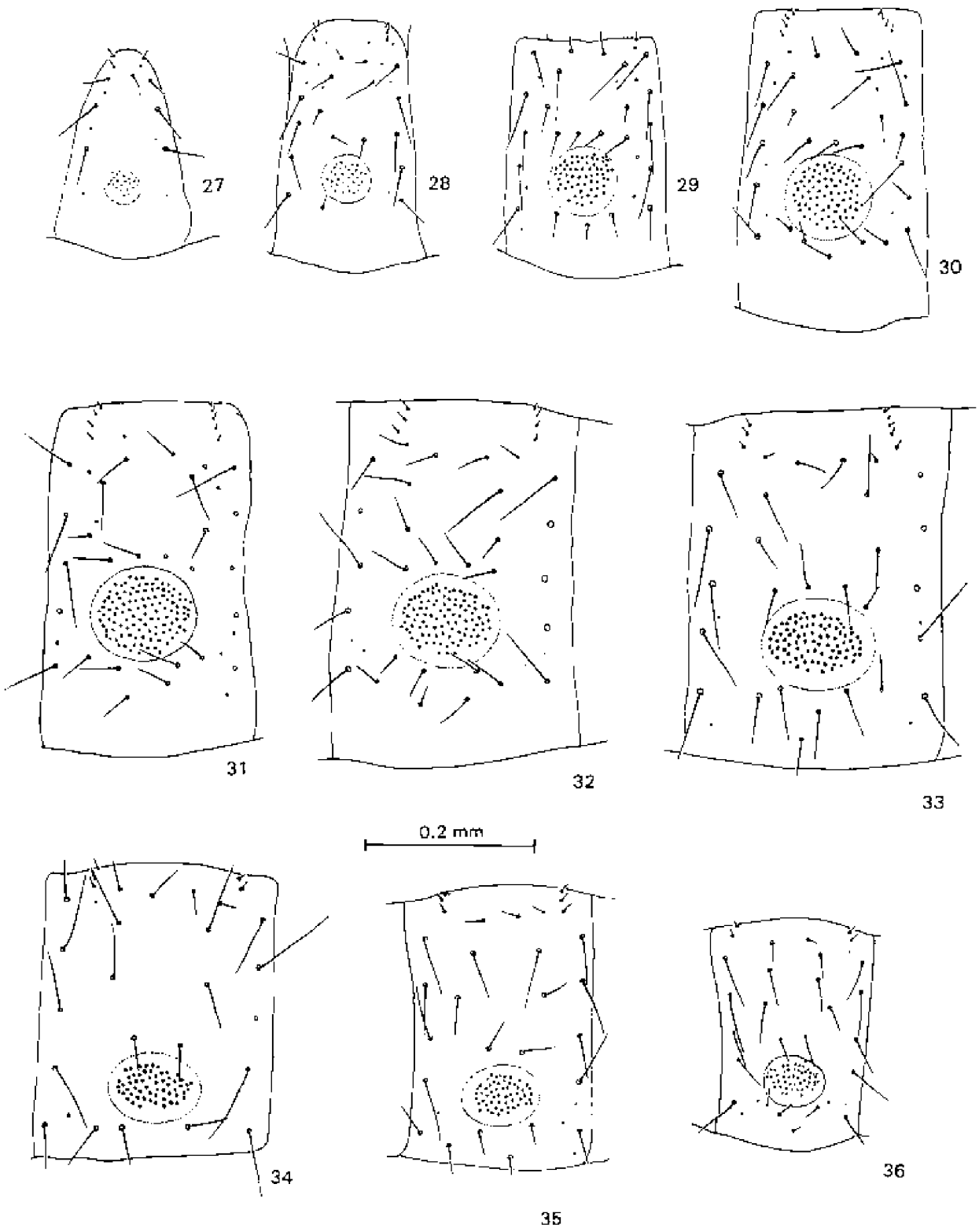
16: labrum; **17**: mandible; **18**: first and second maxillae, v.; **19**: r. first maxilla, d.;

20: claw of l. second maxilla, d.; **21**: detail of posterior external region of the l. second maxilla, v.;

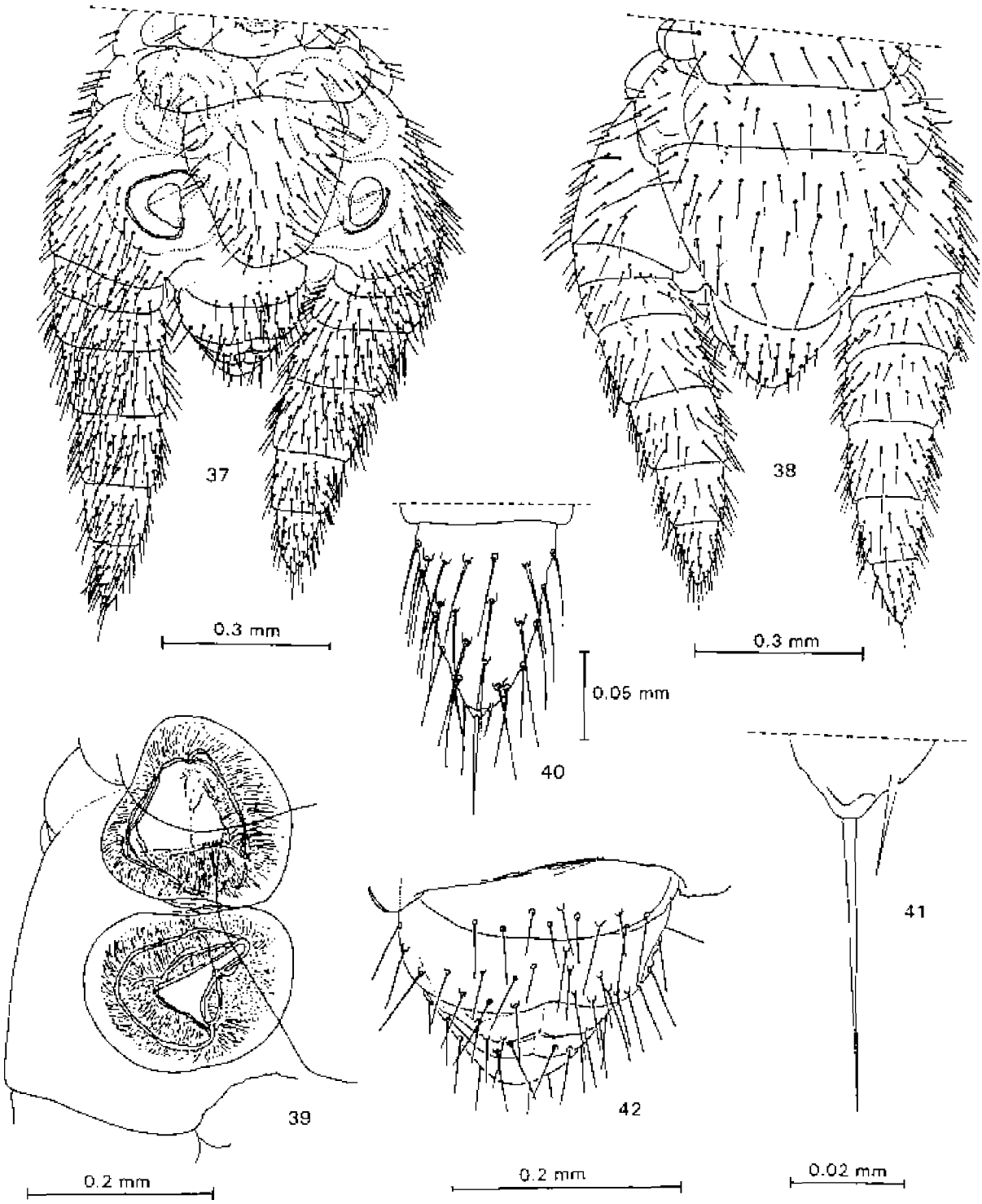
22: forcipular segment with poison claws, v.



Figs. 23-26:
Ityphilus demoraisi n.sp. ♀ holotype (Brazil: Amazonas; Reserva Fl. A. Ducke).
23: forcipular segment with poison claws, d.; **24**: detail of calyx of poison gland in r. poison claw, v.; **25**: l. leg III, v.; **26**: claw of l. leg XL, v.



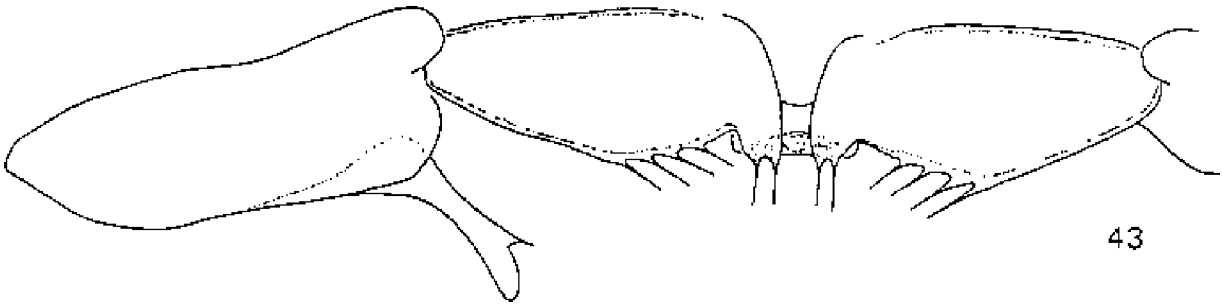
Figs. 27-36:
Ityphilus demoraisi n.sp. ♀ holotype (Brazil: Amazonas: Reserva Fl. A. Ducke).
Sterna I, II, IV, IX, XVIII, XXX, XXXVI, L, LXIII, LXVIII.

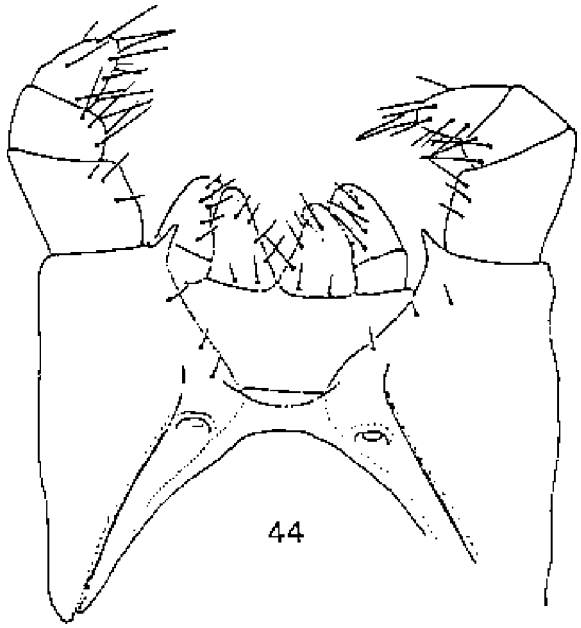


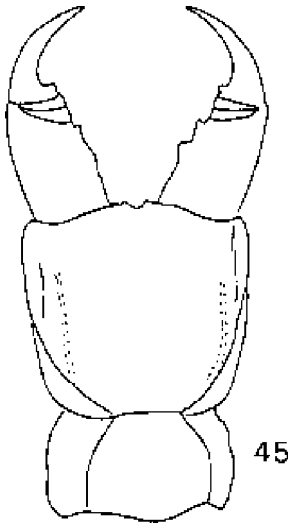
Figs. 37-42:

Ityphilus demoraisi n.sp. ♀ holotype (Brazil: Amazonas: Reserva Fl. A. Ducke).

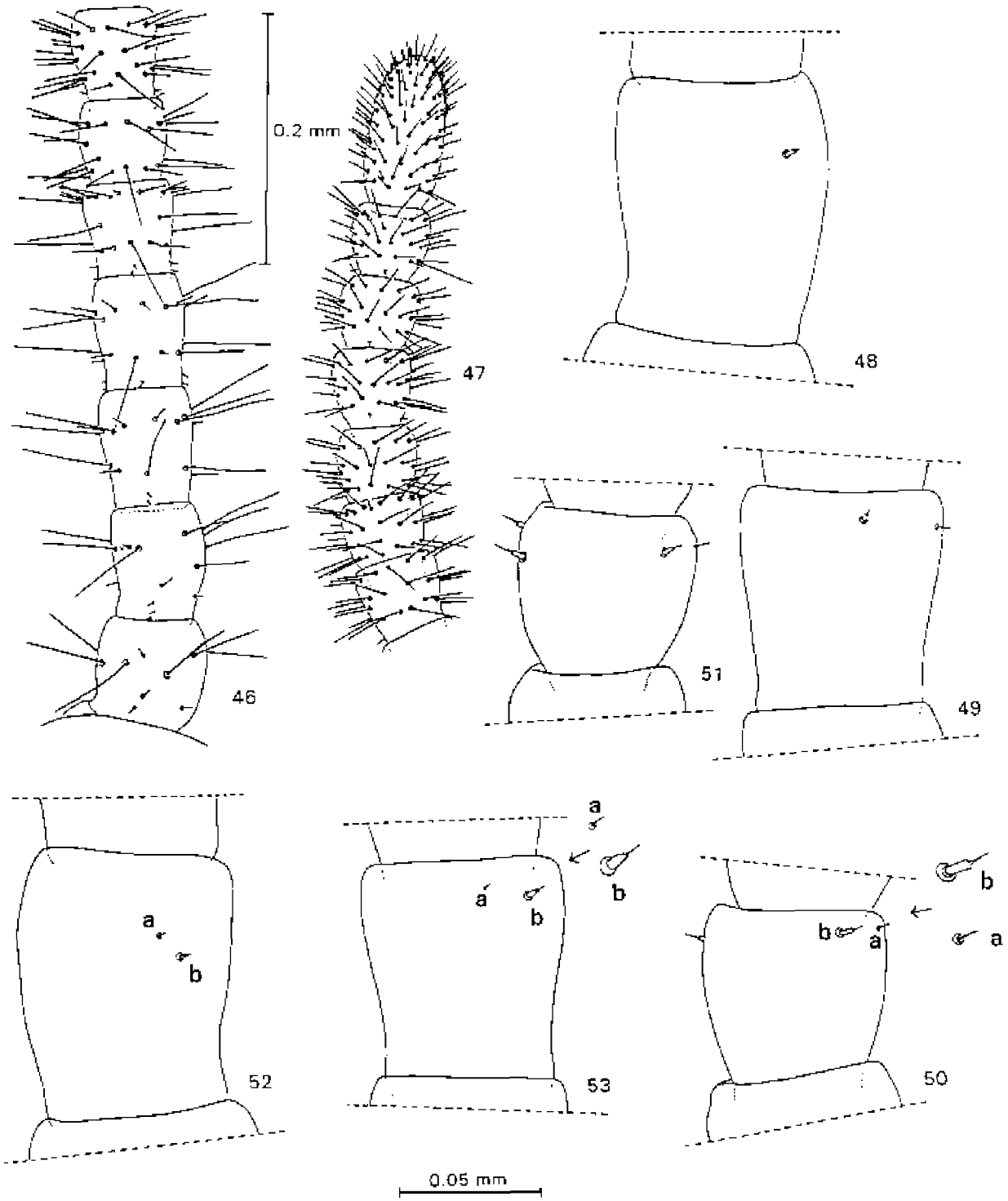
37: last leg-bearing segment and terminal segments, v.; **38**: the same, d.; **39**: detail of rigth coxal organs, v.; **40**: detail of distal end of last podomere of l. last leg, d.; **41**: detail of distal end of last podomere of l. last leg, d.; **42**: terminal segments, v.



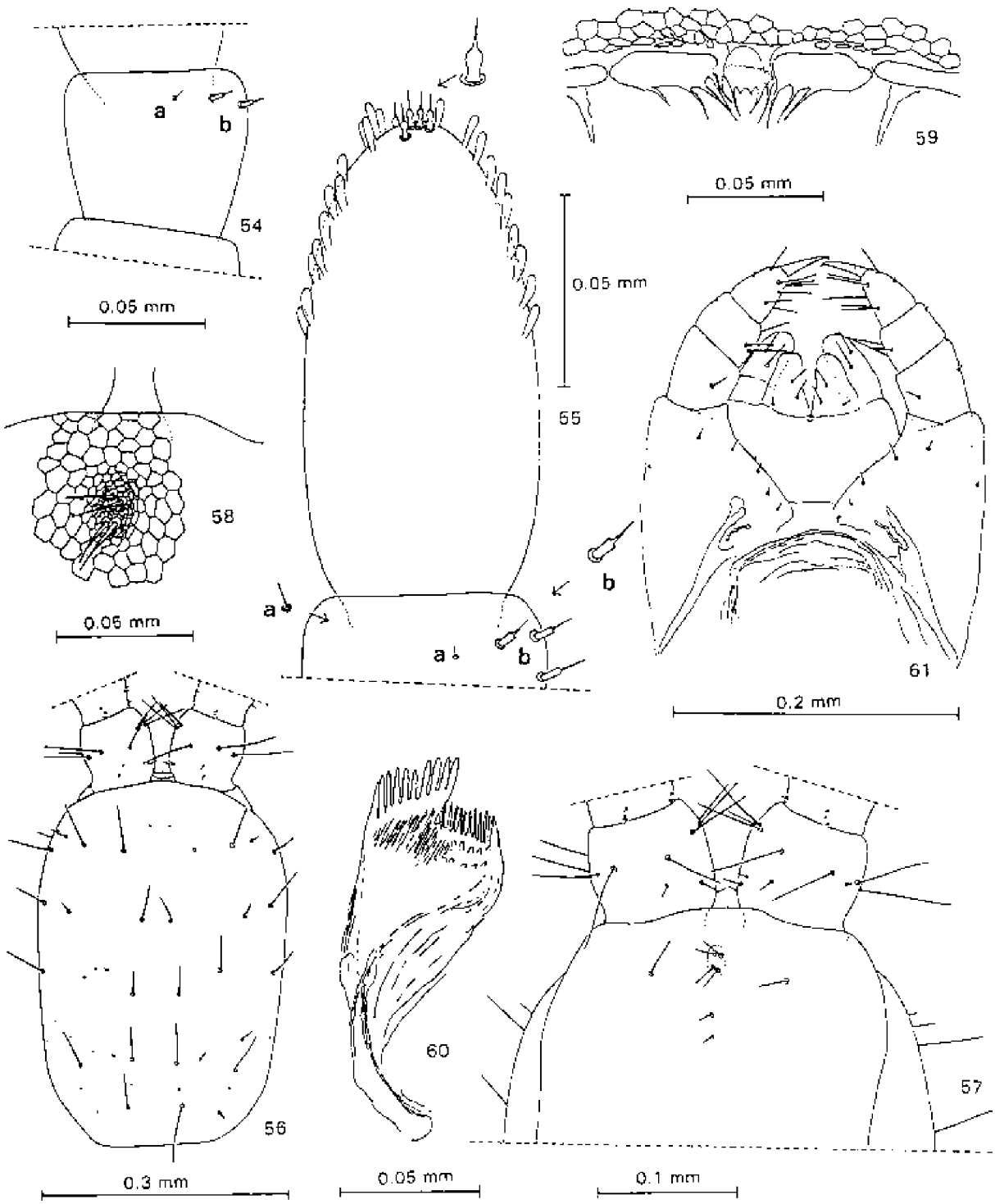




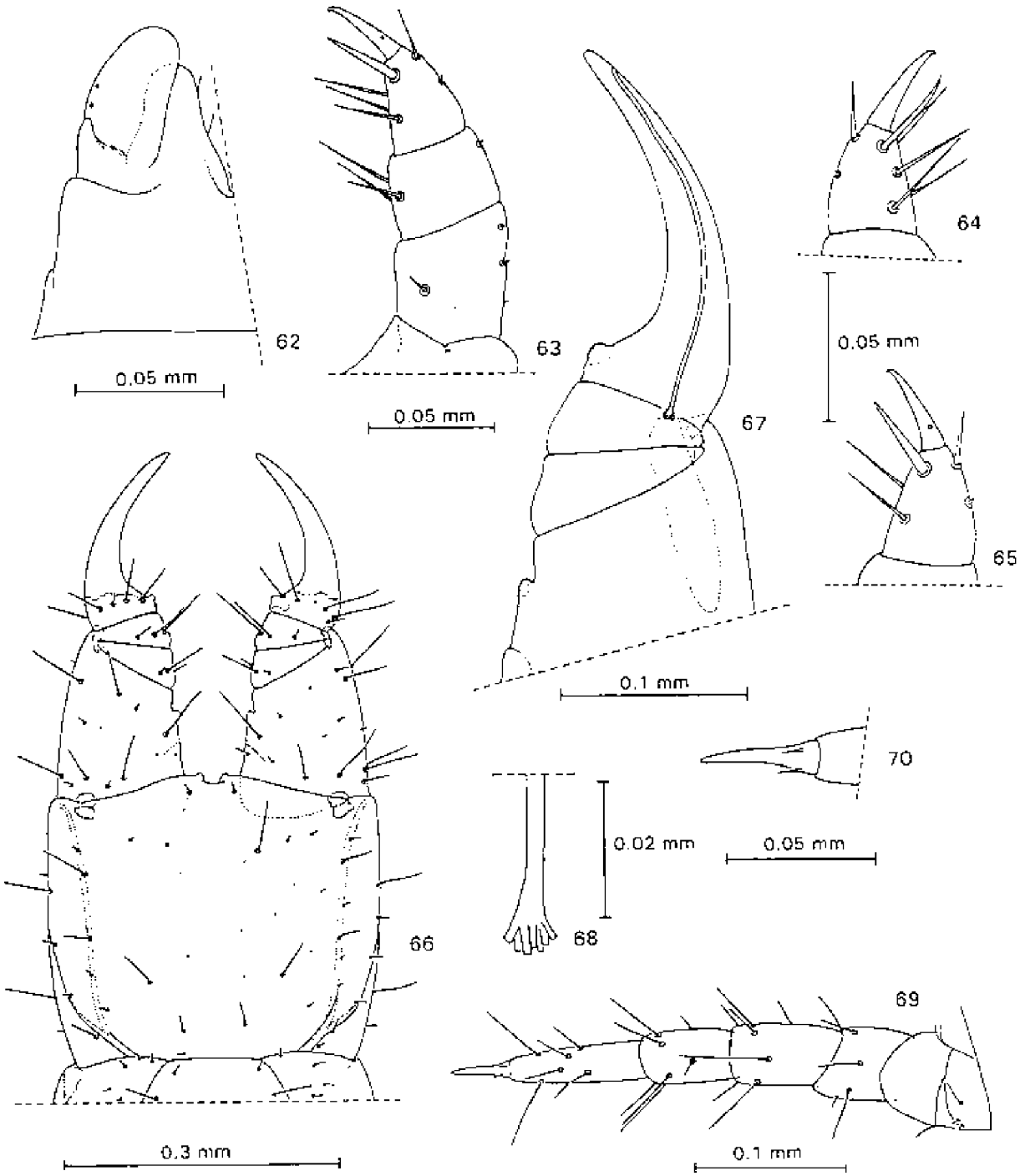
Figs. 43-45:
Ribautia (Ribautia) bouvieri BRÖLEMANN, 1909, ♂ holotype (Brazil: Haut-Carsévène).
43: labrum; **44**: first and second maxillae, v.; **45**: forcipular segment with poison claws, v.
(All figures from BRÖLEMANN, 1909).



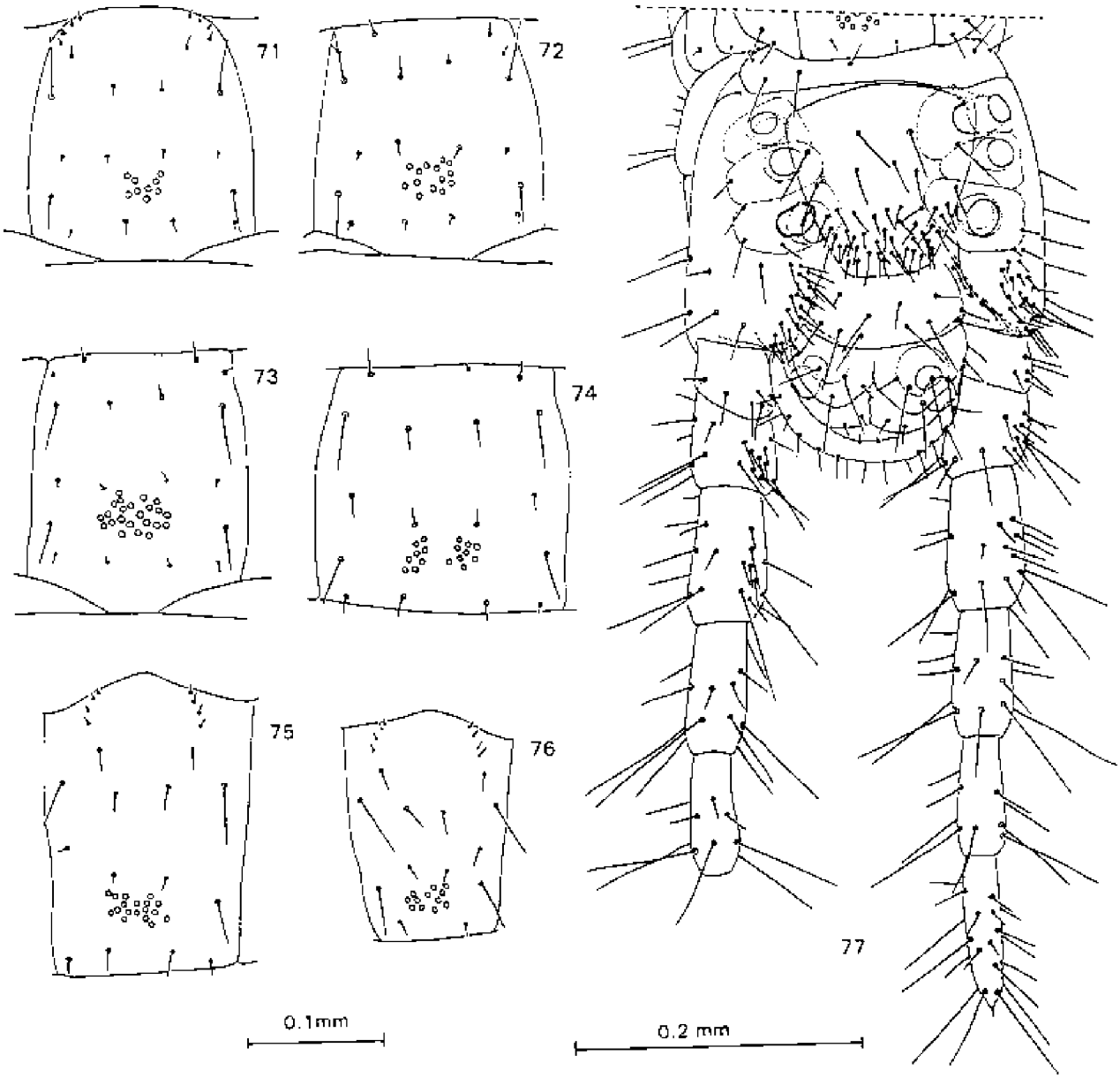
Figs. 46-53:
Ribautia (Ribautia) ducalis n.sp. ♀ holotype (Brazil: Amazonas: Reserva Fl. A. Ducke).
46: l. a.a. I-VII, d.; **47**: l. a.a. VIII-XIV, d.; **48**: r. a.a. II, v.; **49**: r. a.a. V, v.; **50**: r. a.a. IX, v.; **51**: r. a.a. XIII, v.; **52**: r. a.a. II, d.; **53**: r. a.a. V, d.



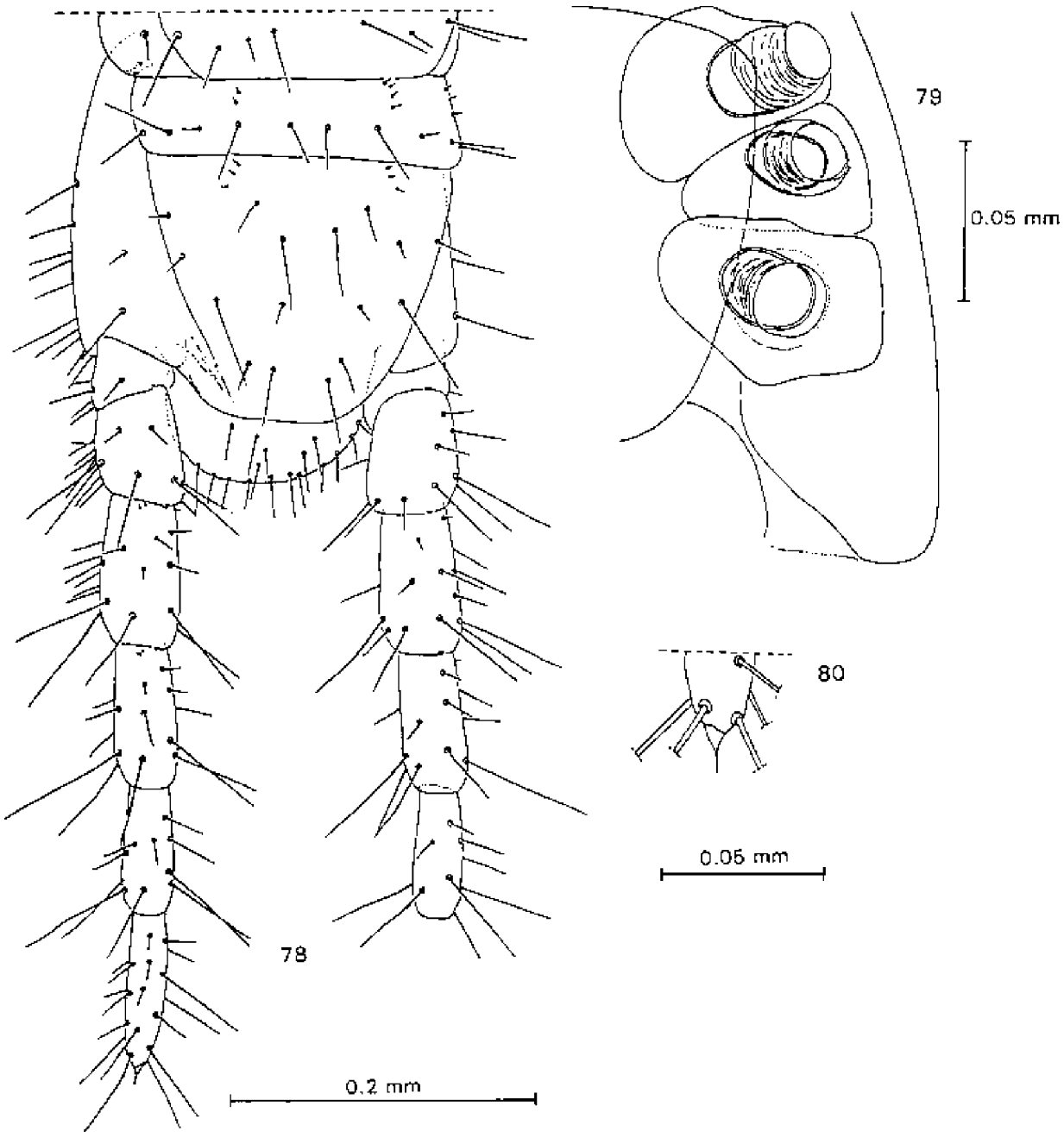
Figs. 54-61:
Ribautia (Ribautia) ducalis n.sp. ♀ holotype (Brazil: Amazonas: Reserva Fl. A. Ducke).
54: r. a.a. IX, d.; **55**: r. a.a. XIII and XIV, d.; **56**: cephalic shield; **57**: clypeus and bases of antennae; **58**: clypeal area; **59**: labrum; **60**: mandible; **61**: first and second maxillae, v.



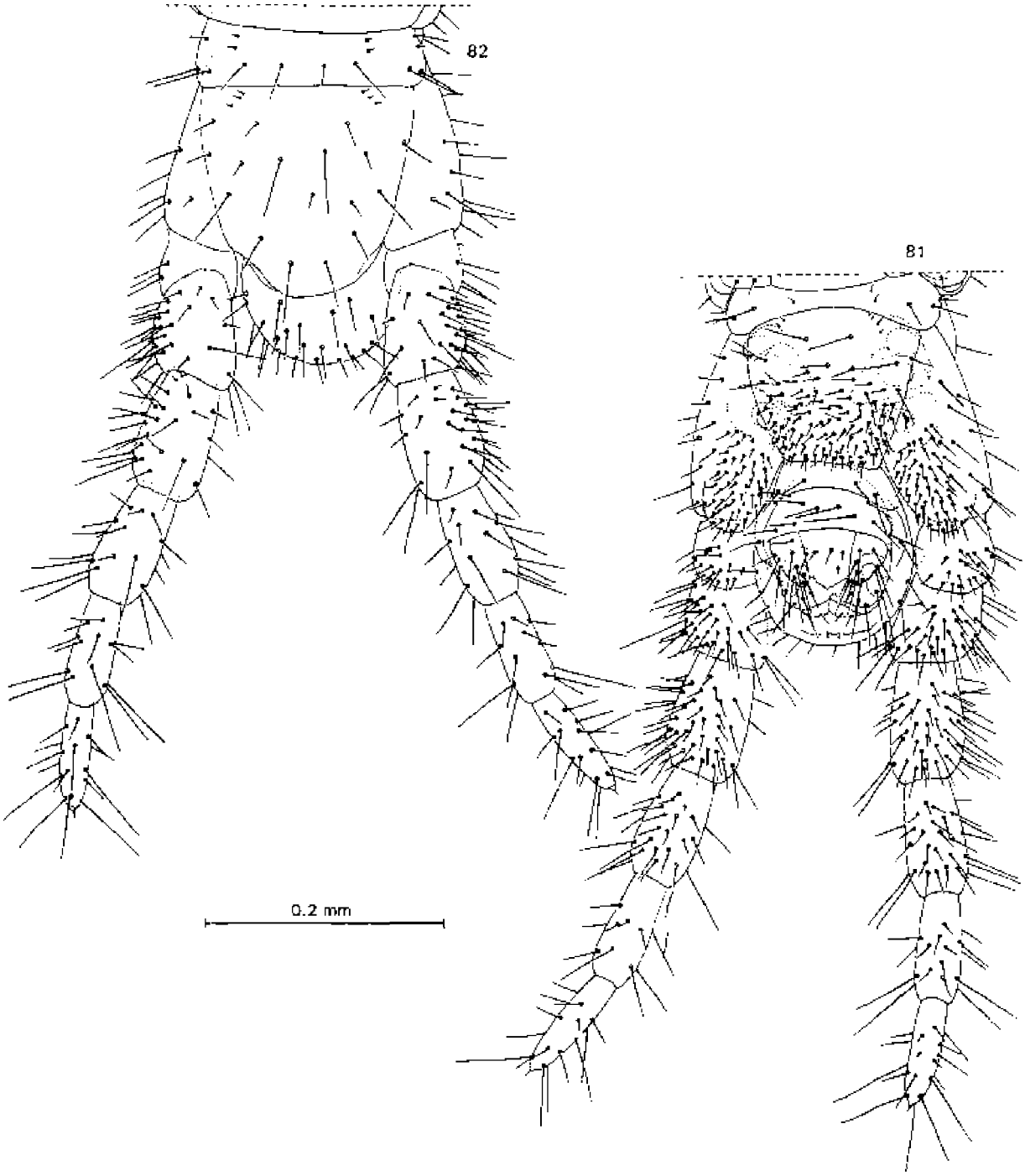
Figs. 62-70:
Ribautia (Ribautia) ducalis n.sp. ♀ holotype (Brazil: Amazonas: Reserva Fl. A. Ducke).
62: l. first maxilla, d.; **63**: telopodite of l. second maxilla, v.; **64**: detail of distal end of telopodite of l. second maxilla, d.; **65**: the same, v.; **66**: forcipular segment with poison claws, v.; **67**: detail of poison gland in l. poison claw, v.; **68**: detail of calyx of l. poison gland, v.; **69**: r. leg XVI, v.; **70**: claw of r. leg XVI, v.



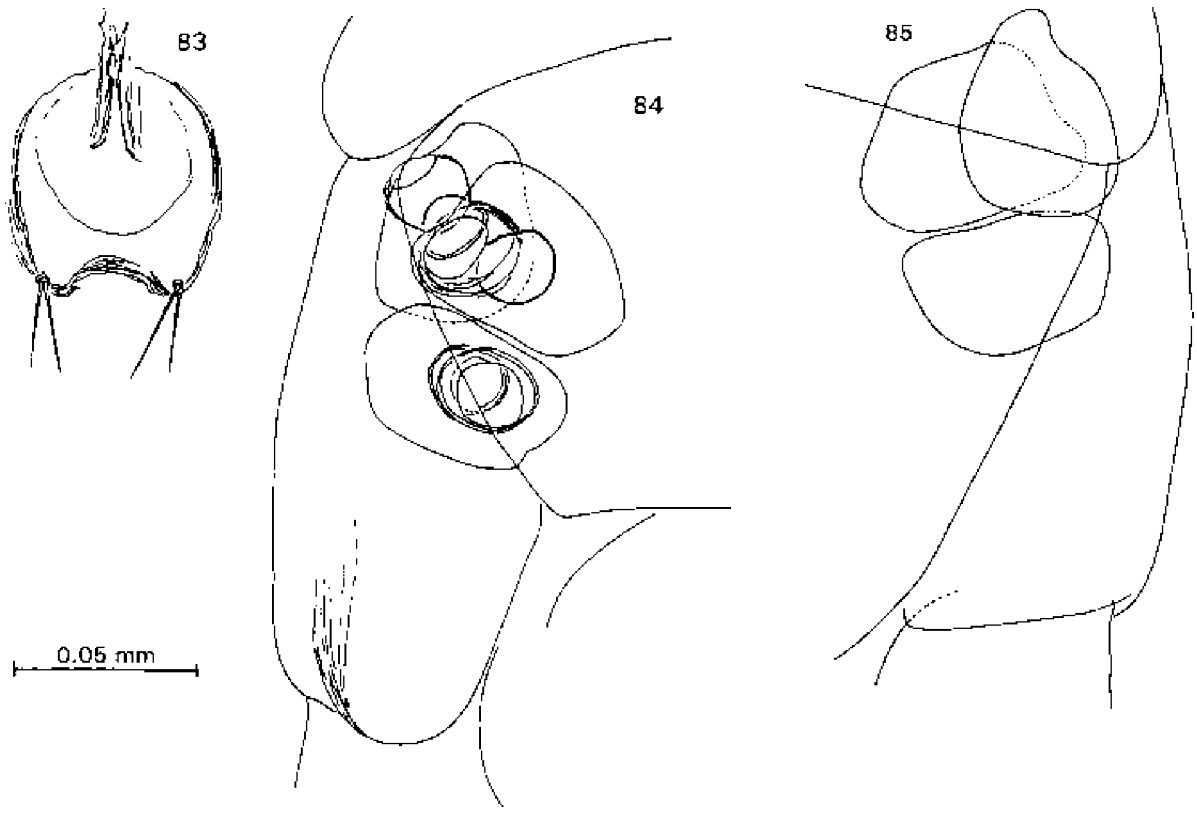
Figs. 71-77:
Ribautia (Ribautia) ducalis n.sp. ♀ holotype (Brazil: Amazonas: Reserva Fl. A. Ducke).
71-76: sterna II, III, VI, XIV, XXXVII, XL; **77**: last leg-bearing segment and terminal segments, v.



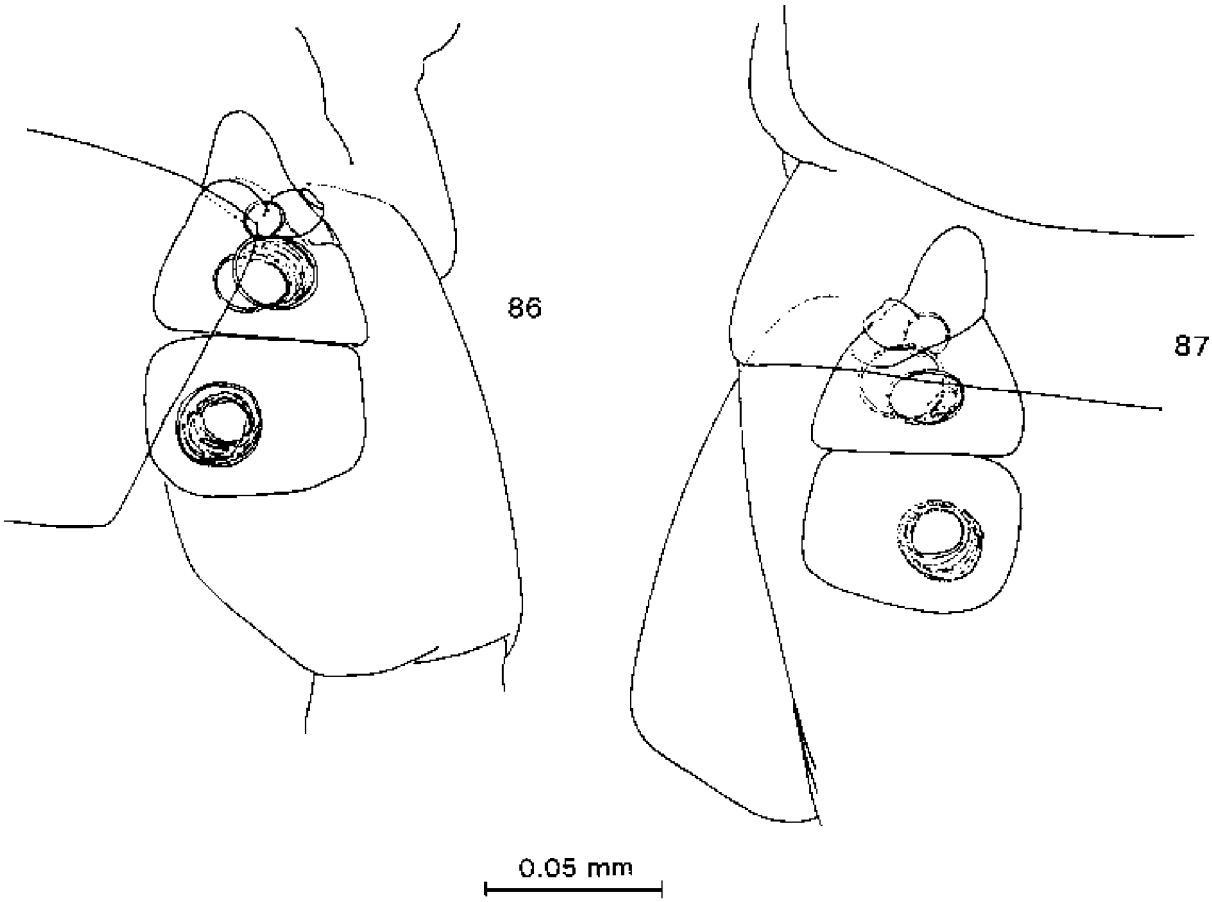
Figs. 78-80:
Ribautia (Ribautia) ducalis n.sp. ♀ holotype (Brazil: Amazonas: Reserva Fl. A. Ducke).
78: last leg-bearing segment and terminal segments, d.; **79**: detail of l. coxal organs, v.; **80**: detail of distal end of last podomere of l. last leg, v.



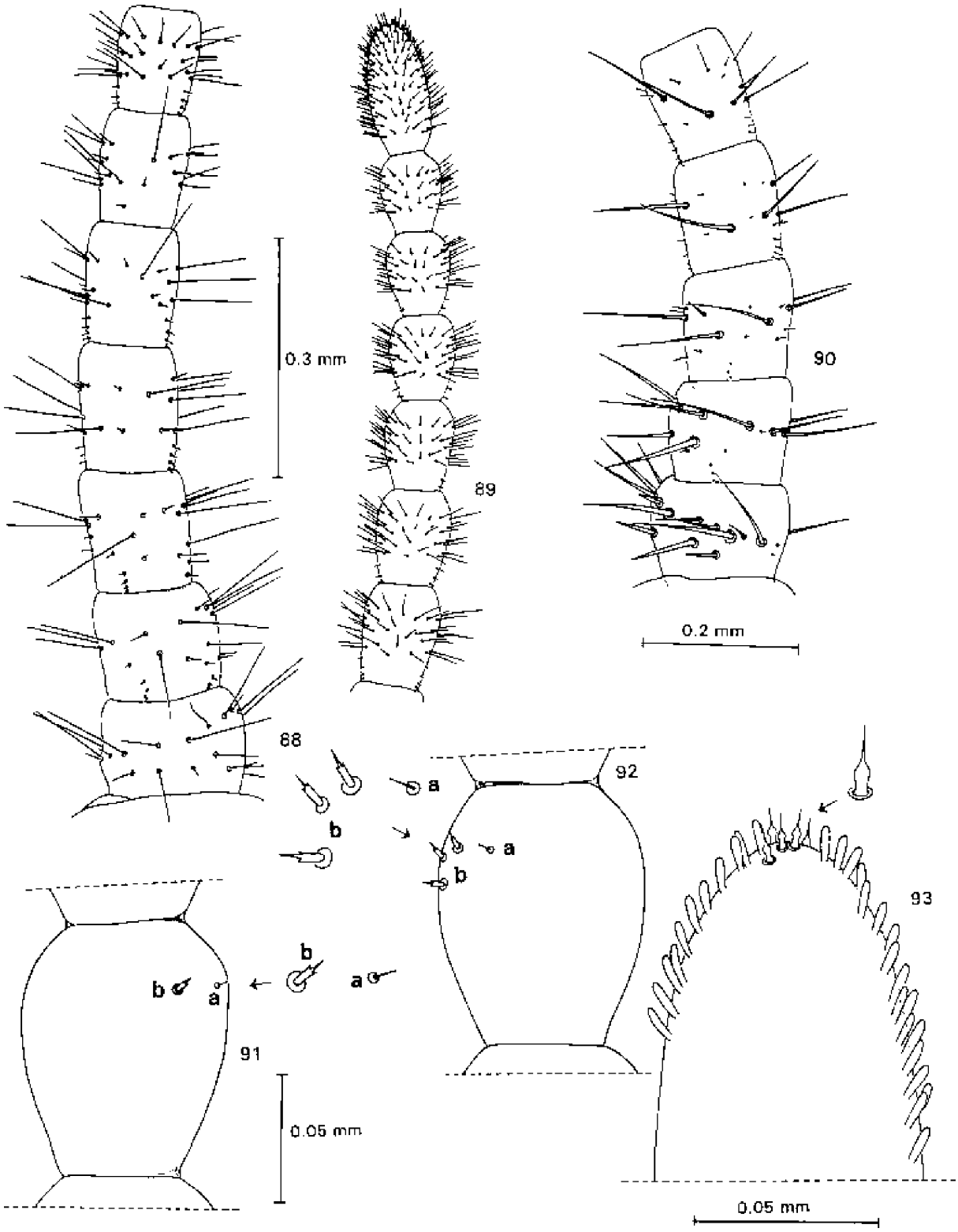
Figs. 81-82:
Ribautia (Ribautia) ducalis n.sp. ♂ allotype (Brazil: Amazonas: Reserva Fl. A. Ducke).
81: last leg-bearing segment and terminal segments, v.; **82**: the same, d.



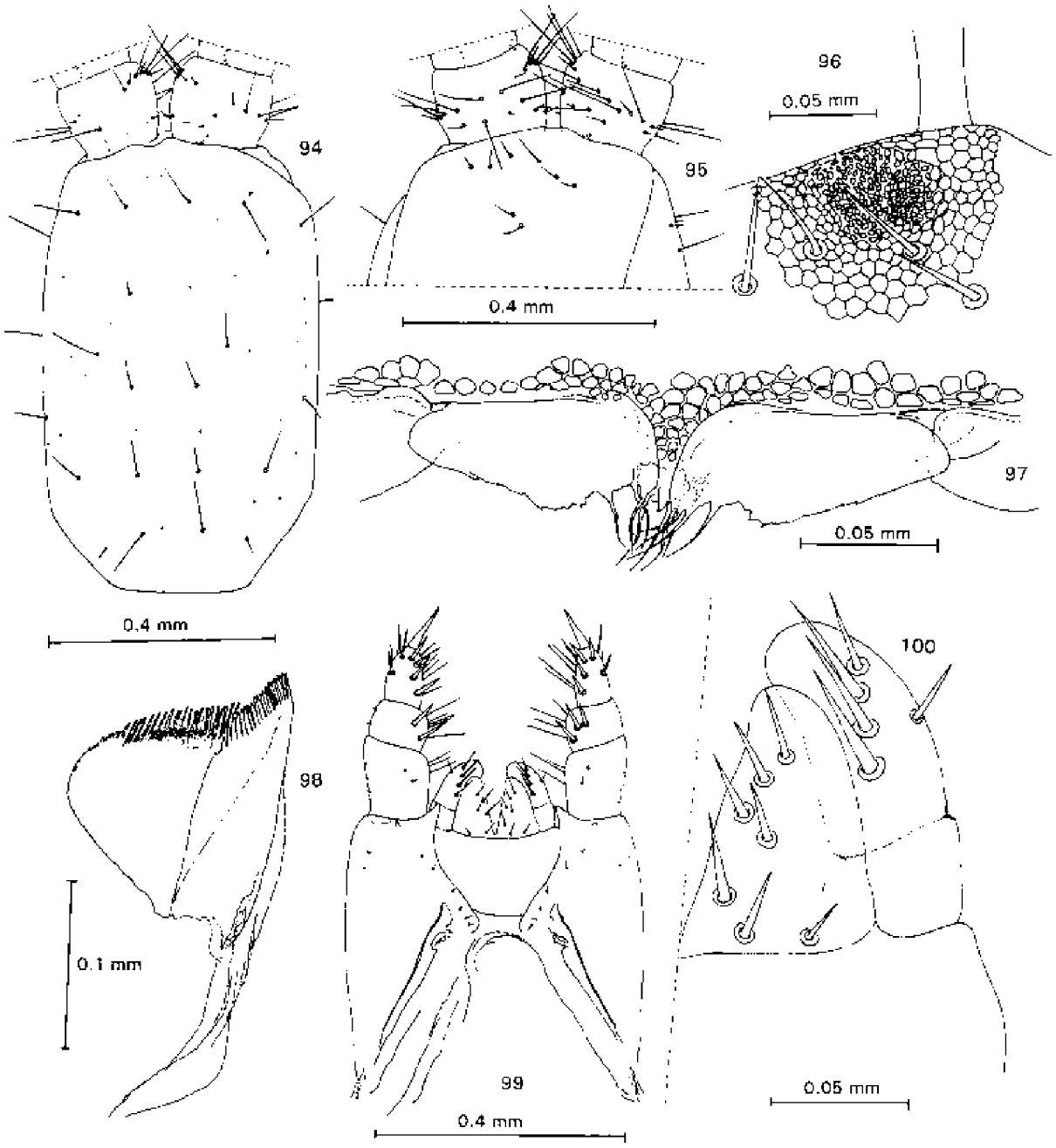
Figs. 83-85:
Ribautia (Ribautia) ducalis n.sp. ♂ allotype (Brazil: Amazonas: Reserva Fl. A. Ducke).
83: penis, d.; **84**: detail of r. coxal organs, v.; **85**: the same, d.



Figs. 86-87:
Ribautia (Ribautia) ducalis n.sp., ♂ paratype (*A*) (Brazil: Amazonas: Reserva Fl. A. Ducke).
86: detail of l. coxal organs, v.; **87**: the same, d.



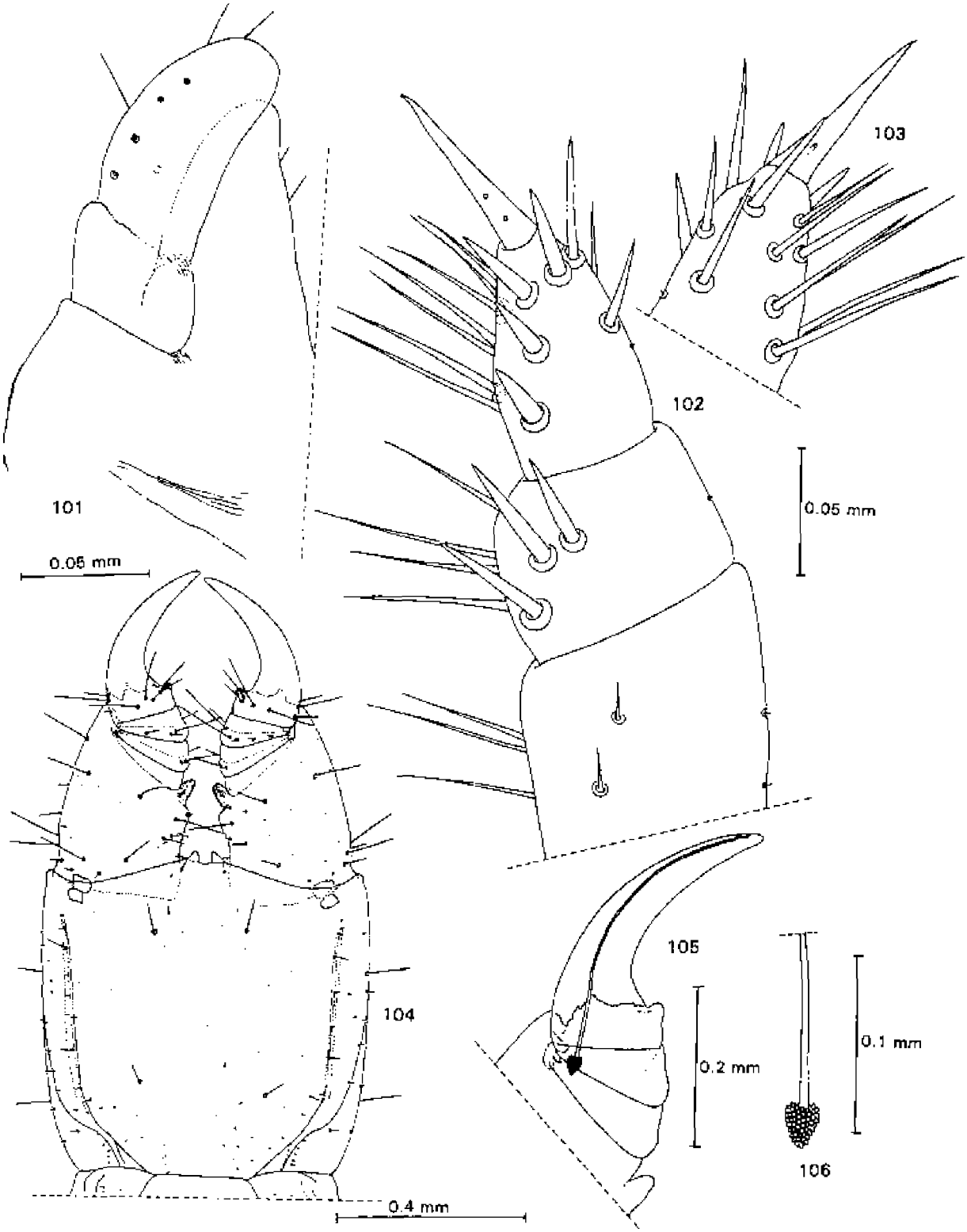
Figs. 88-93:
Ribautia (Ribautia) proxima n.sp. ♀ holotype (Brazil: Amazonas: Reserva F. A. Ducke).
88: r. aa. I-VII, v.; **89**: r. a.a. VIII-XIV, v.; **90**: l. a.a. I-V, v.; **91**: r. a.a. XIII, v.;
92: l. a.a. XIII, d.; **93**: r. a.a. XIV, d.



Figs. 94-100:

Ribautia (Ribautia) proxima n.sp. ♀ holotype (Brazil: Amazonas: Reserva Fl. A. Ducke).

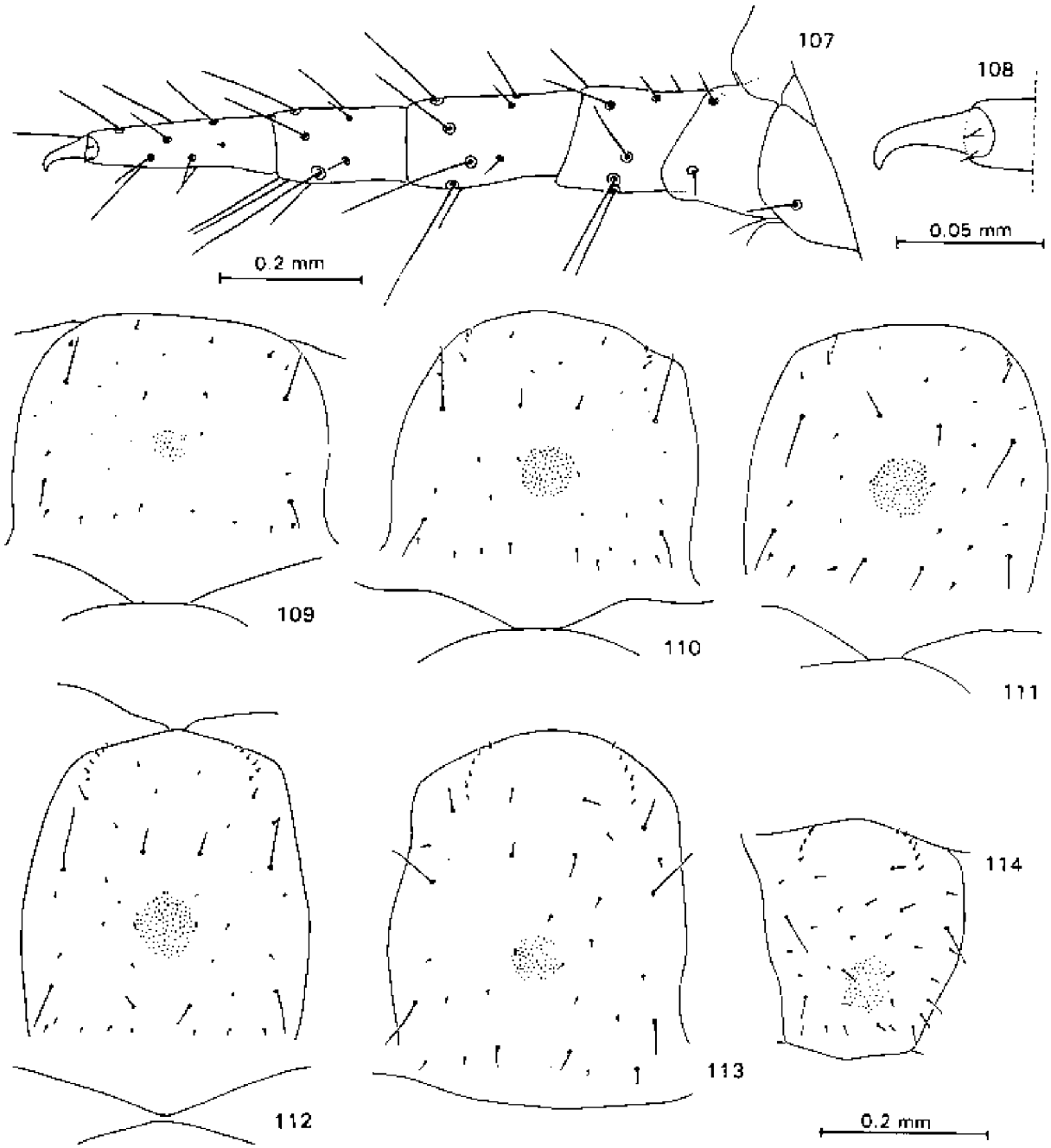
94: cephalic shield; **95**: clypeus and bases of antennae; **96**: clypeal area; **97**: labrum; **98**: r. mandible, d.; **99**: first and second maxillae, v.; **100**: l. first maxilla, v.



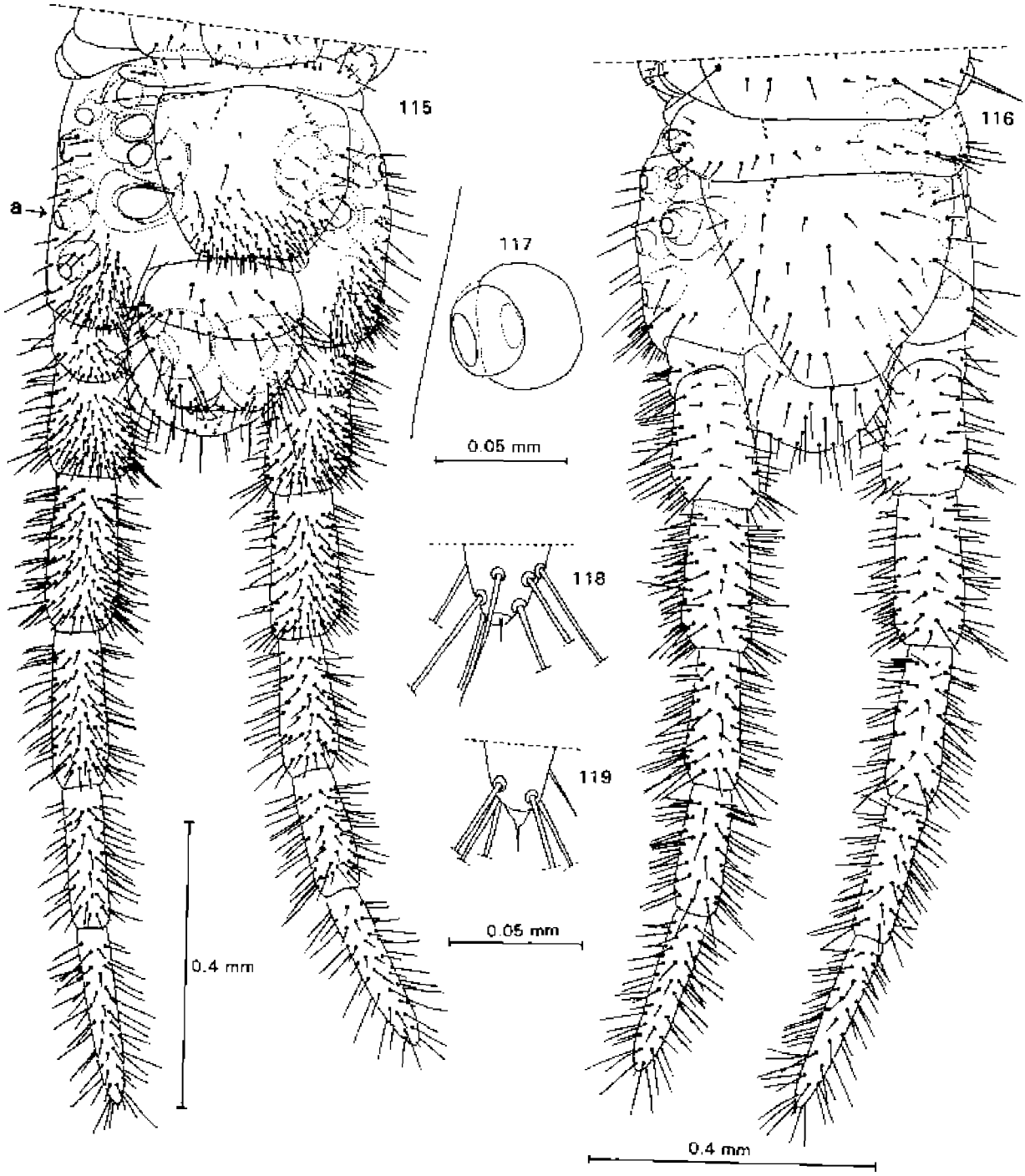
Figs. 101-106:

Ribautia (Ribautia) proxima n.sp. ♀ holotype (Brazil: Amazonas: Reserva Fl. A. Ducke).

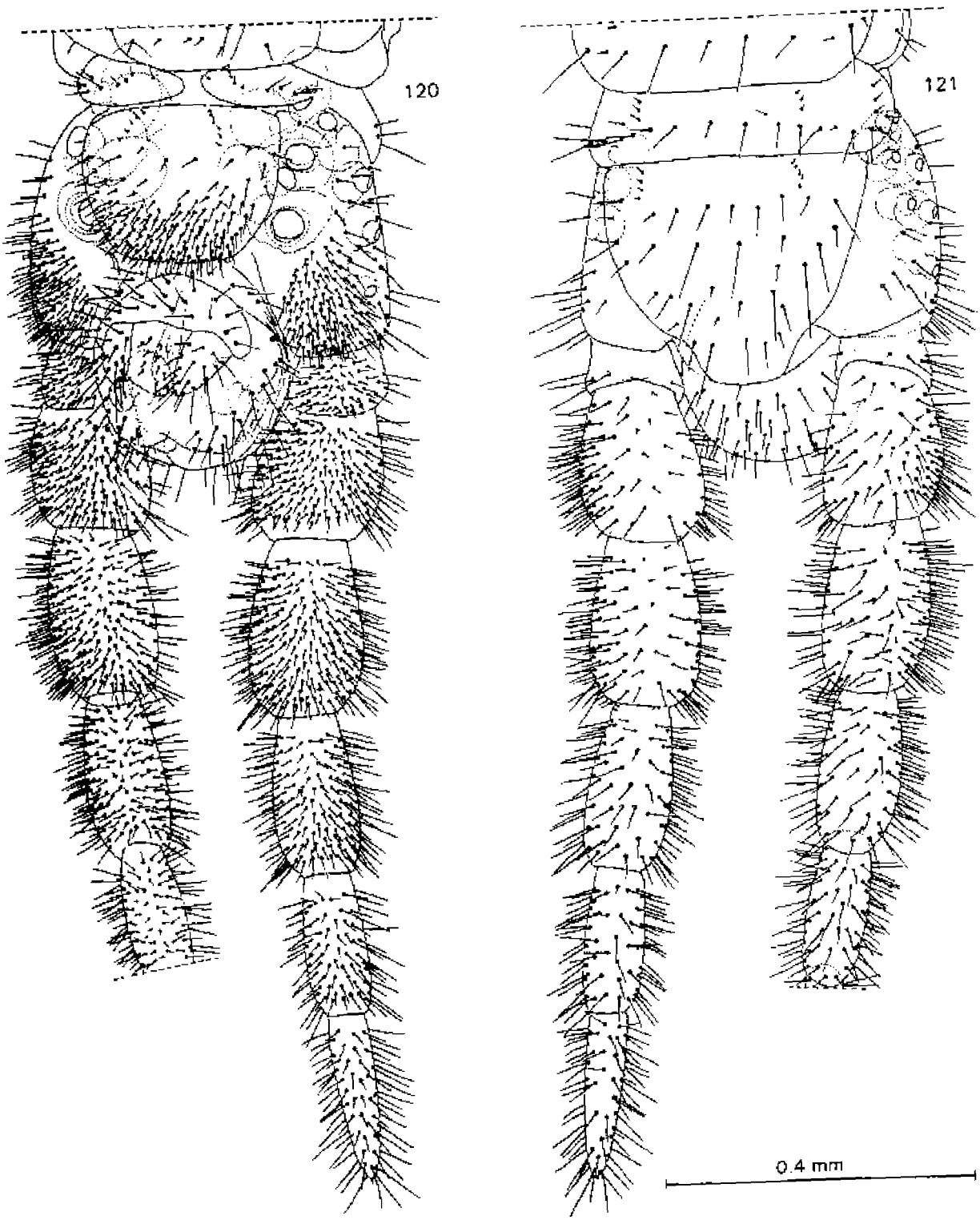
101: l. first maxilla, d.; **102**: telopodite of l. second maxilla, v.; **103**: detail of distal end of telopodite of l. second maxilla, d.; **104**: forcipular segment with poison claws, v.; **105**: detail of poison gland in r. poison claw, v.; **106**: detail of calyx of r. poison gland, v.



Figs. 107-114:
Ribautia (Ribautia) proxima n.sp. ♀ holotype (Brazil: Amazonas: Reserva Fl. A. Ducke).
107: r. leg XXVII, v.; **108**: claw of r. leg XXVII, antero-v.; **109-114**: sterna II, IV, VIII, XIX, XXXV, LXXIV.



Figs.115-119:
Ribautia (Ribautia) proxima n.sp. ♀ holotype (Brazil: Amazonas: Reserva Fl. A. Ducke).
115: last leg-bearing segment and terminal segments, v. (*a*, coxal organ); **116**: the same d.;
117: detail of coxal organ marked as "*a*" on Fig. 115; **118**: detail of distal end of last podomere of l. last leg, v.; **119**: detail of distal end of last podomere of r. last leg, d.



Figs. 120-121:
Ribautia (Ribautia) proxima n.sp. ♂ allotype (Brazil: Amazonas: Reserva Fl. A. Ducke).
120: last leg-bearing segment and terminal segments, v.; **121**: the same, d.

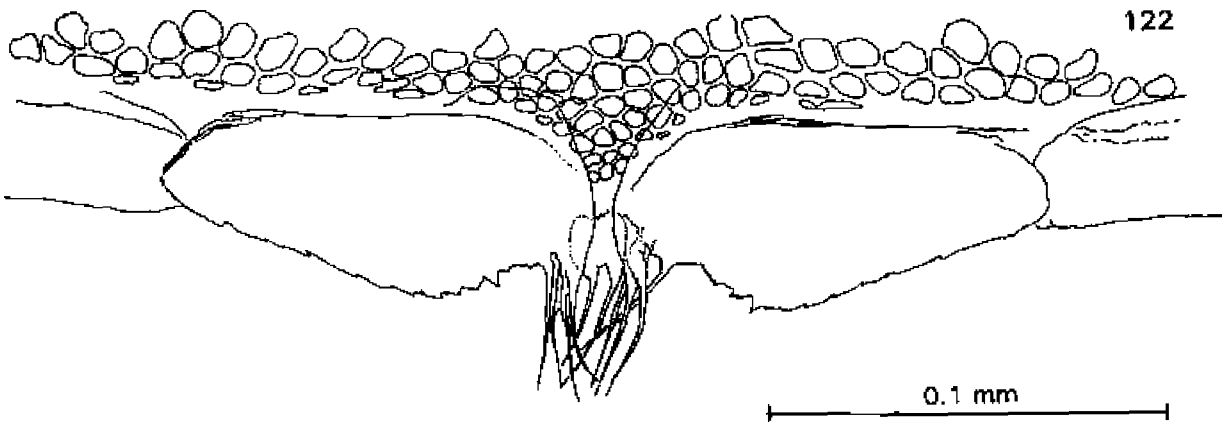
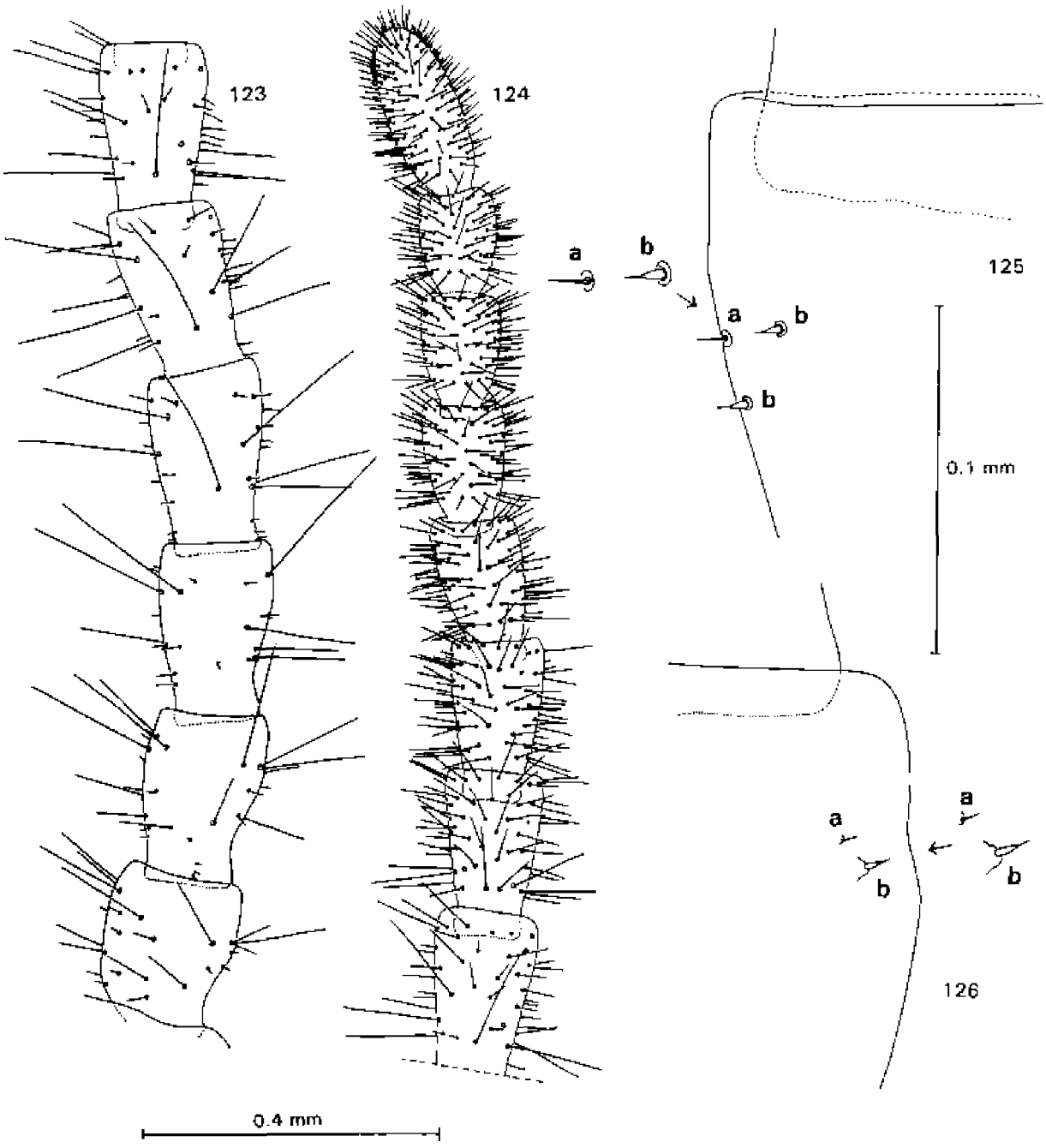
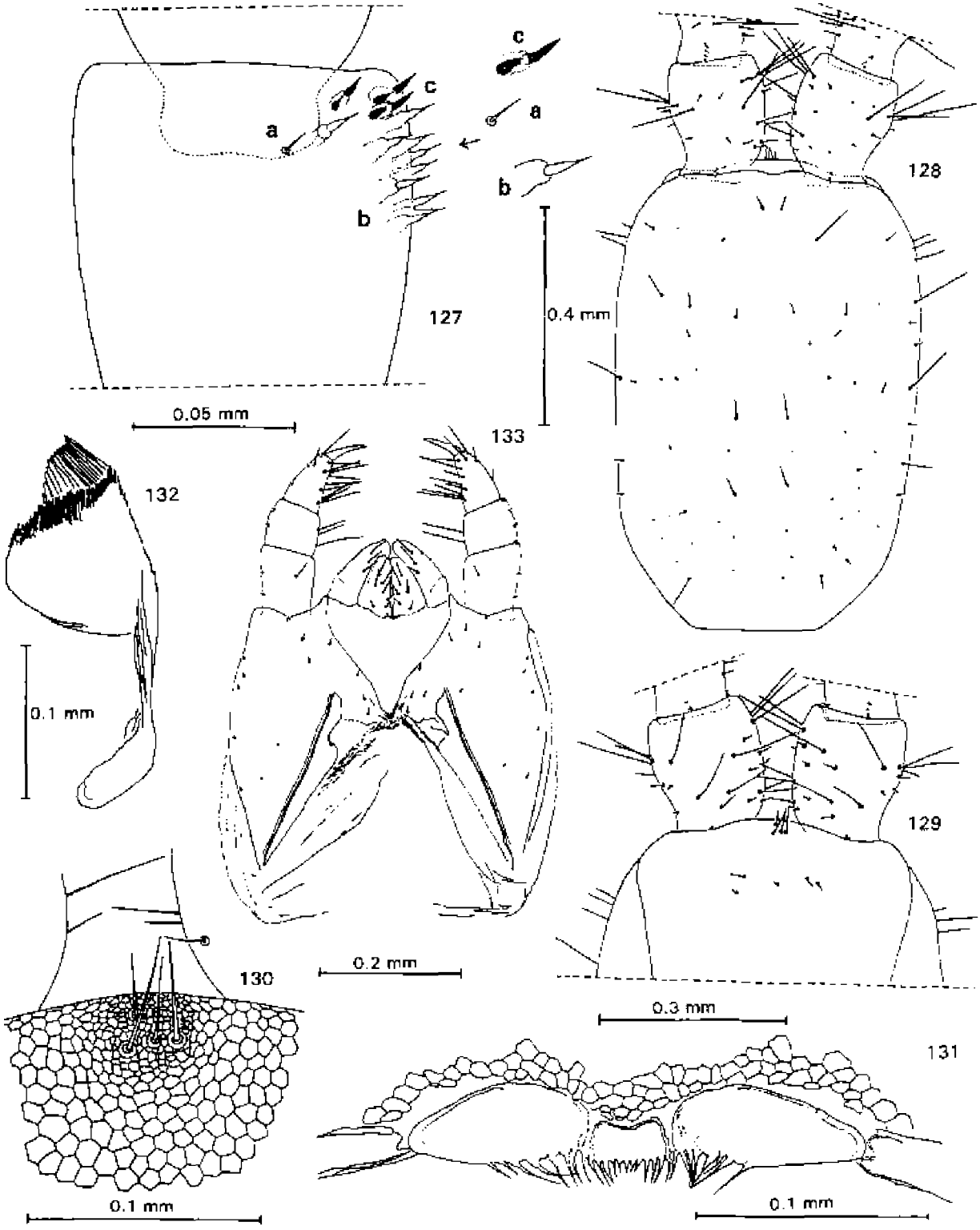


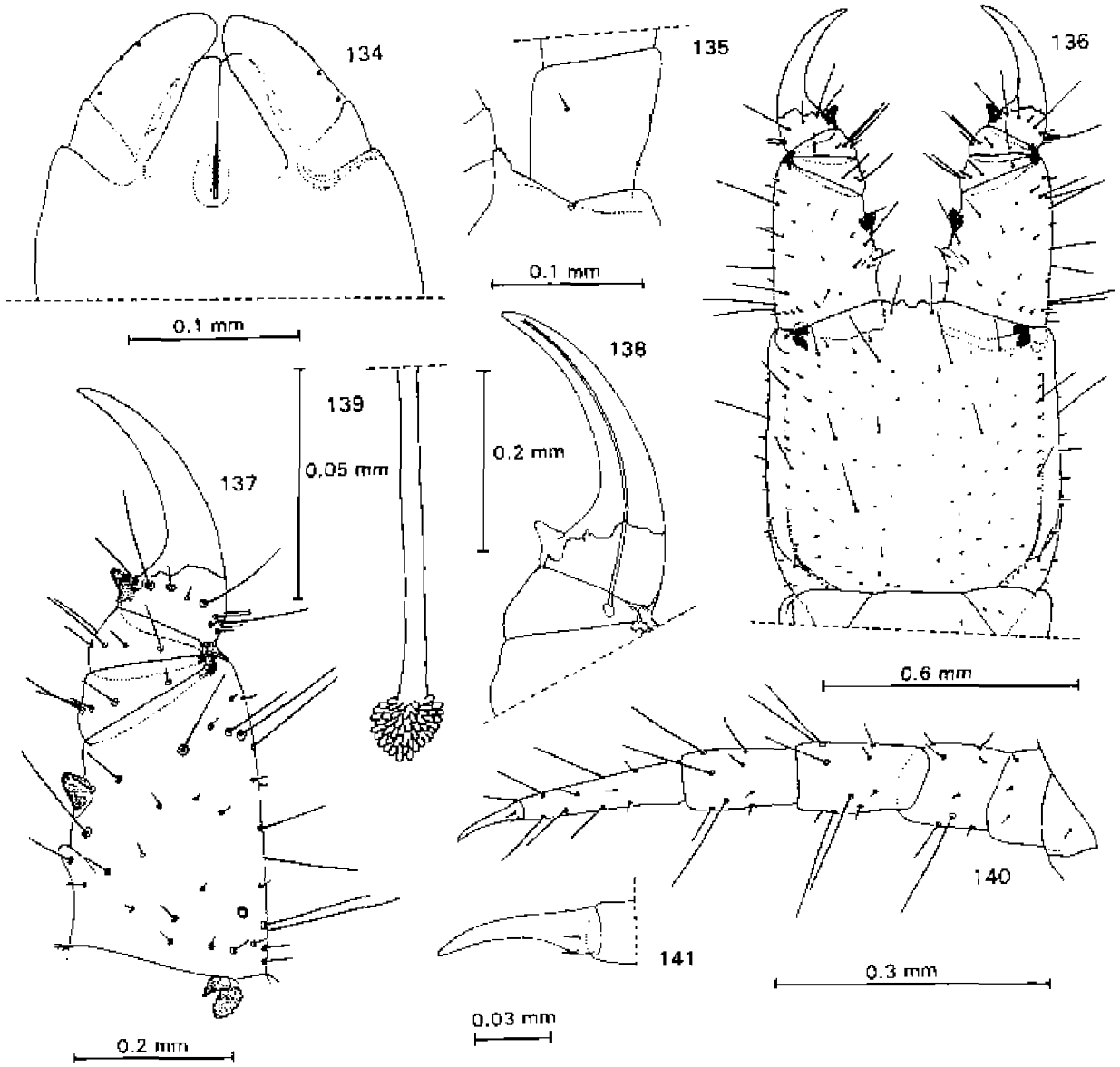
Fig. 122:
Ribautia (Ribautia) proxima n.sp. ♂ paratype (*A*) (Brazil: Amazonas: Reserva Fl. A. Ducke).
Labrum.



Figs. 123-126:
Ribautia (Schizoribautia) difficilis n.sp. ♂ holotype (Brazil: Amazonas: Lago Janauarí).
123: l. a.a. I-VI, v.; **124**: l. a.a. VII-XIV, v.; **125**: l. a.a. V, v.; **126**: r. a.a. II, d.



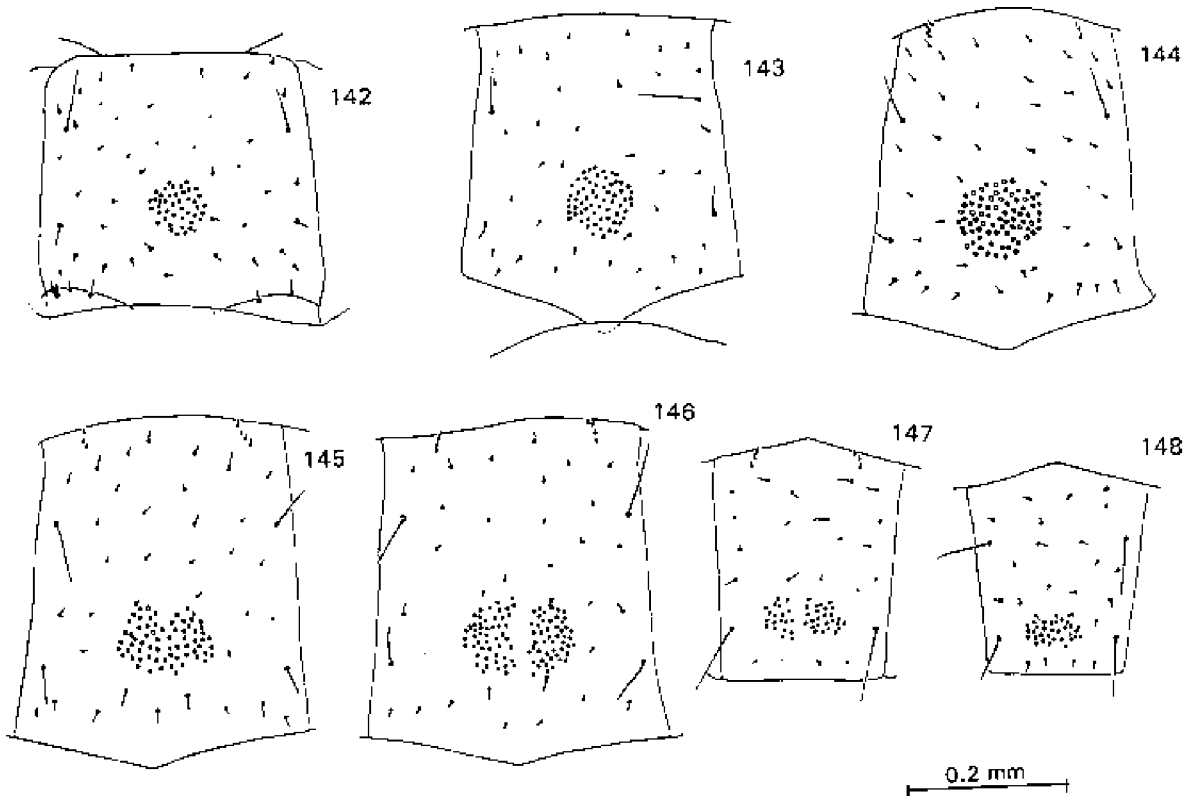
Figs. 127-133:
Ribautia (Schizoribautia) difficilis n.sp. ♂ holotype (Brazil: Amazonas: Lago Janauarí).
127: r. a.a. XIII, d.; **128**: cephalic shield; **129**: clypeus and bases of antennae; **130**: clypeal area; **131**: labrum; **132**: l. mandible; **133**: first and second maxillae.



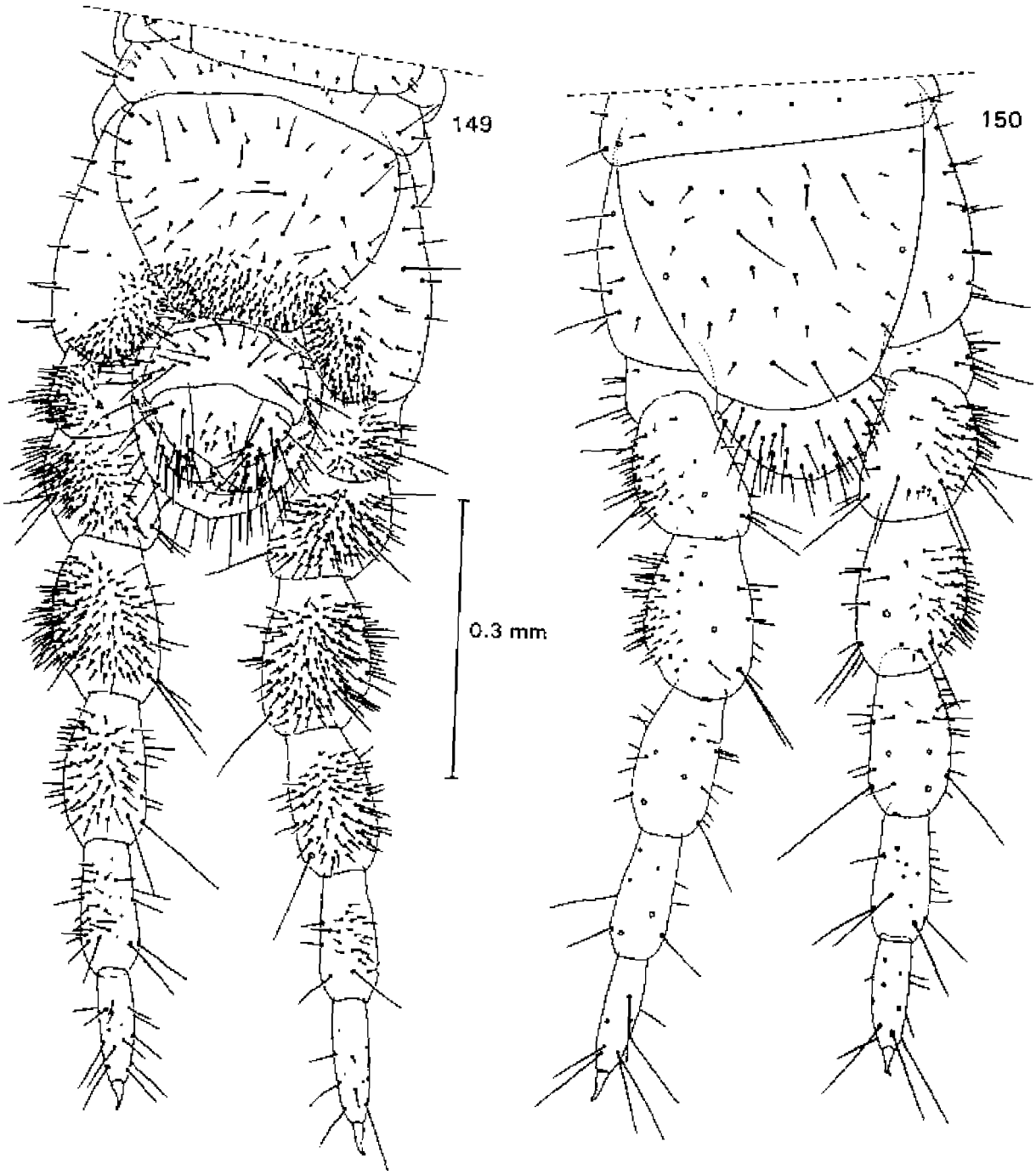
Figs. 134-141:

Ribautia (Schizoribautia) difficilis n.sp. ♂ holotype (Brazil: Amazonas: Lago Janauarí).

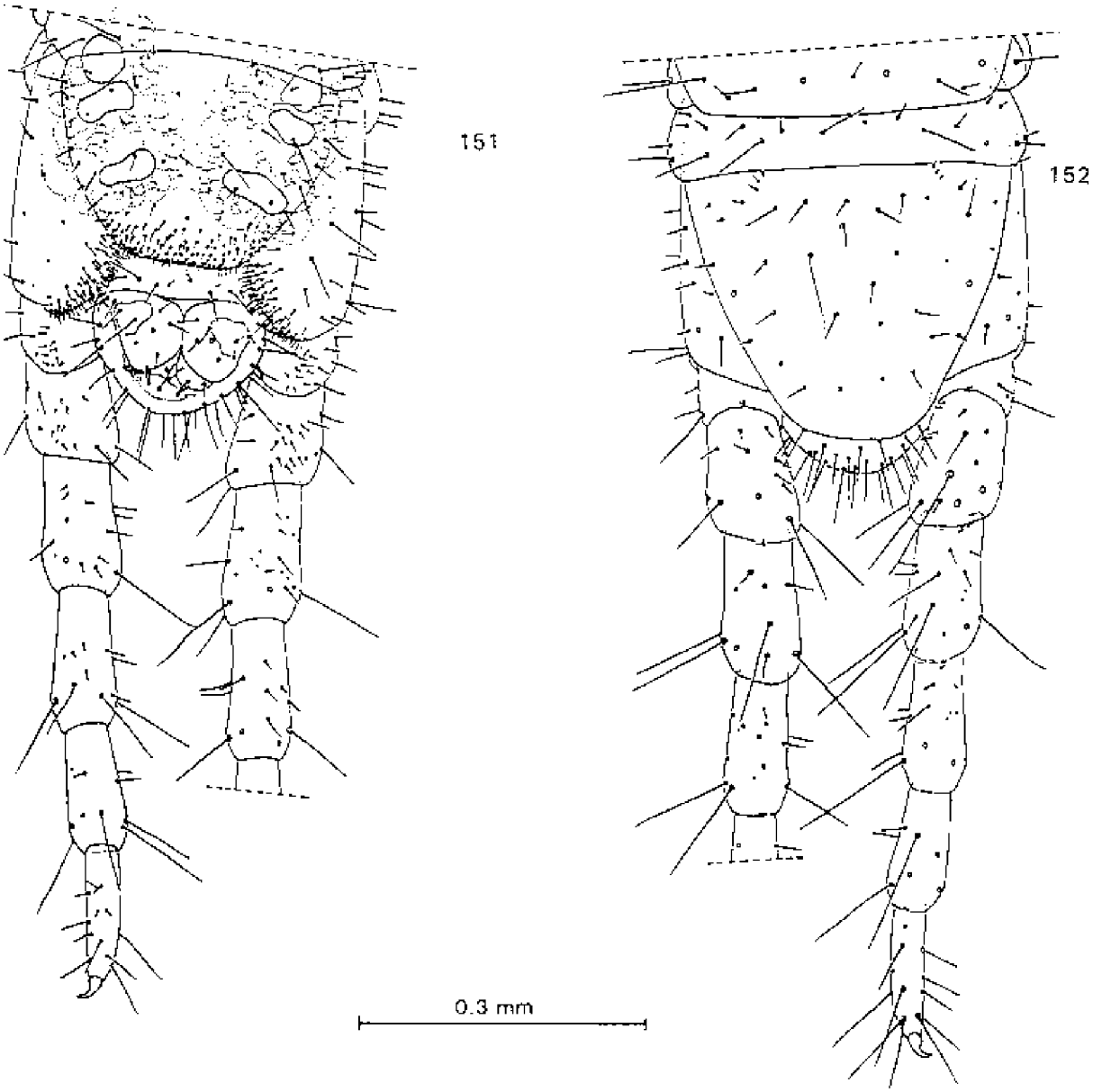
134: first maxillae; **135**: detail of process of antero-internal corner of coxosternum of l. second maxilla, v.; **136**: forcipular segment with poison claws, v.; **137**: l. forcipular telopodite, v.; **138**: detail of poison gland in l. poison claw, v.; **139**: detail of calyx of l. poison gland, v.; **140**: r. leg III, v.; **141**: claw of r. leg XXXVII, antero-v.



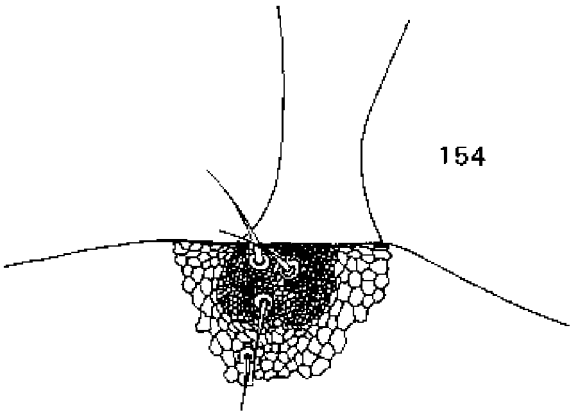
Figs. 142-148:
Ribautia (Schizoribautia) difficilis n.sp. ♂ holotype (Brazil: Amazonas: Lago Janauarí).
Sterna II, V, IX, XIV, XV, XLVII, XLVIII.



Figs. 149-150:
Ribautia (Schizoribautia) difficilis n.sp. ♂ holotype (Brazil: Amazonas: Lago Janauari).
149: last leg-bearing segment and terminal segments, v.; **150**: the same, d.



Figs. 151-152:
Ribautia (Schizoribautia) difficilis n.sp. ♀ allotype (Brazil: Amazonas: Lago Janauarí).
151: last leg-bearing segment and terminal segments, v.; **152**: the same, d.



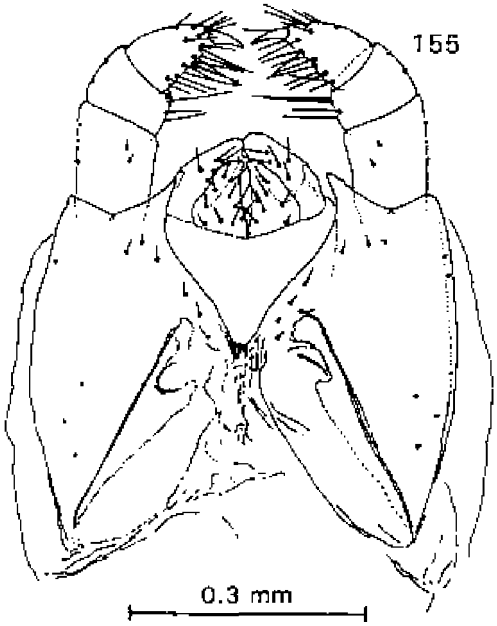
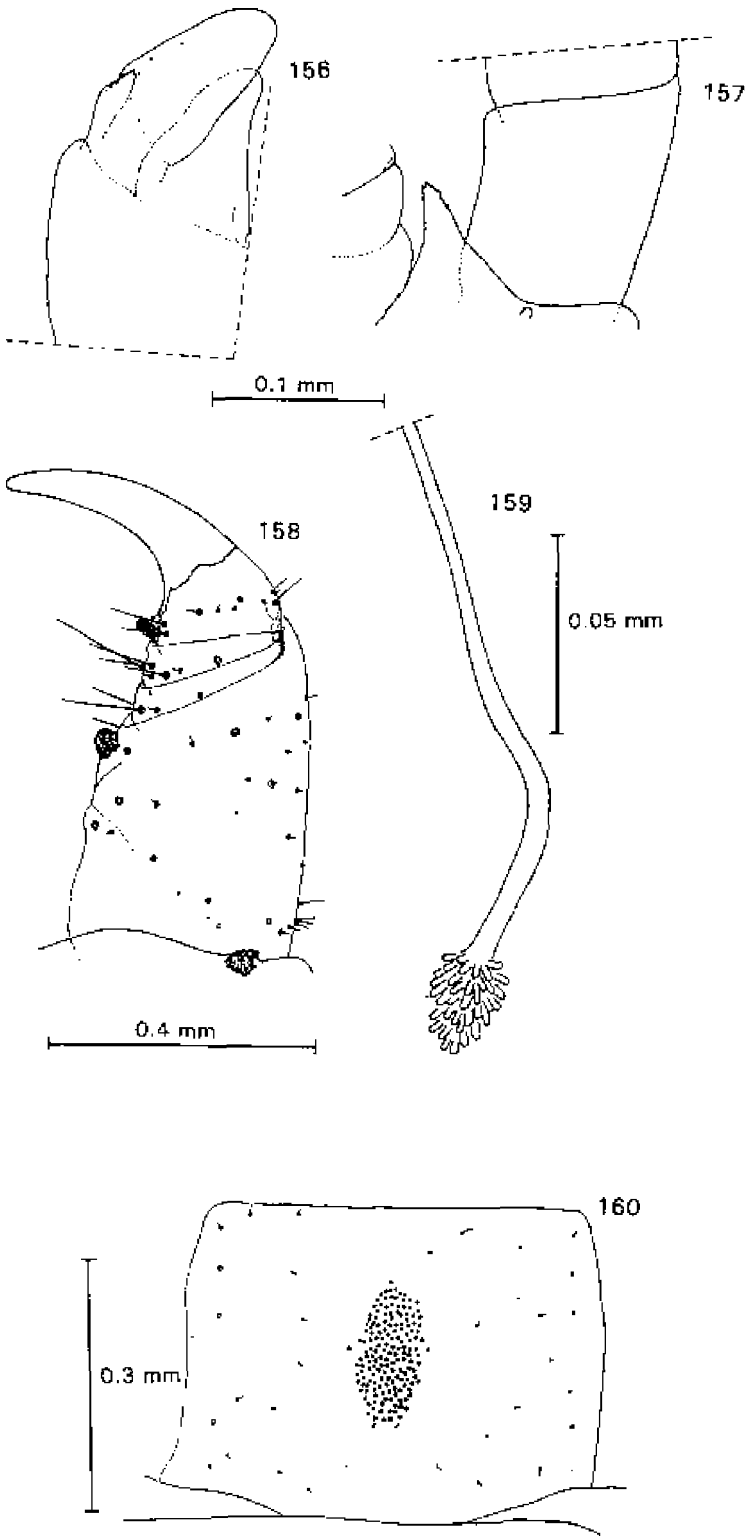


Fig. 153:
Ribautia (Schizoribautia) limaensis KRAUS, 1957, ♂ holotype (Peru: Lomas de Atocongo). Labrum (from KRAUS, 1957).

Figs. 154 & 155:
Ribautia (Schizoribautia) montana KRAUS, 1954, ♀ 'paratypoid' (Peru: Hacienda Taulis (6°50'S; 79°10'W). **154**: clypeal area; **155**: first and second maxillae, v.



Figs. 156-160:
Ribautia (Schizoribautia) montana KRAUS, 1954, ♀ 'paratypoid' (Peru: Hacienda Taulis (6°50'S; 79°10'W). **156**: l. first maxilla, d.; **157**: detail of process of antero-internal corner of coxosternum of l. second maxilla, v.; **158**: l. forcipular telopodite, v.; **159**: detail of calyx of l. poison gland, v.; **160**: sternum VII.

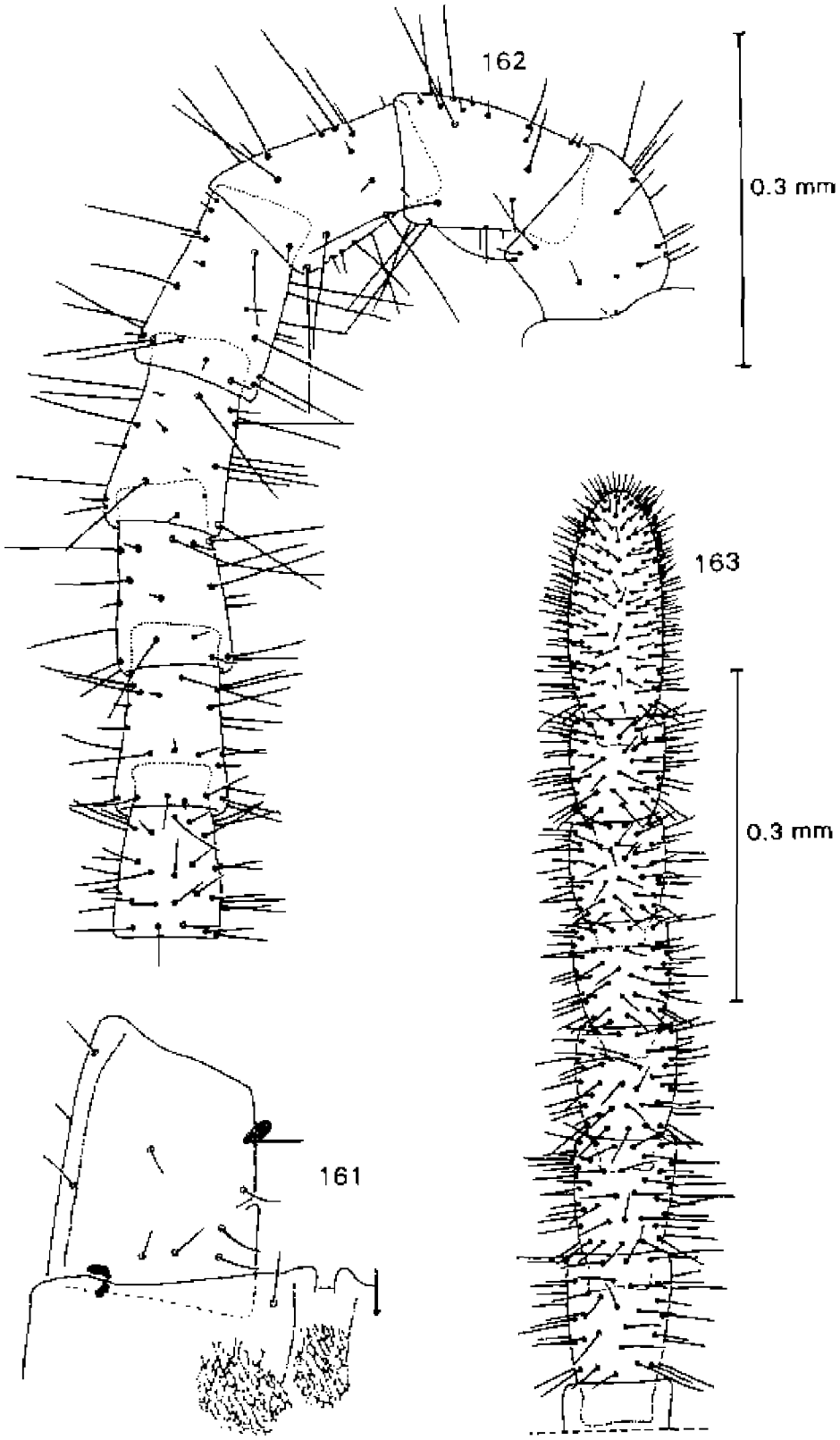
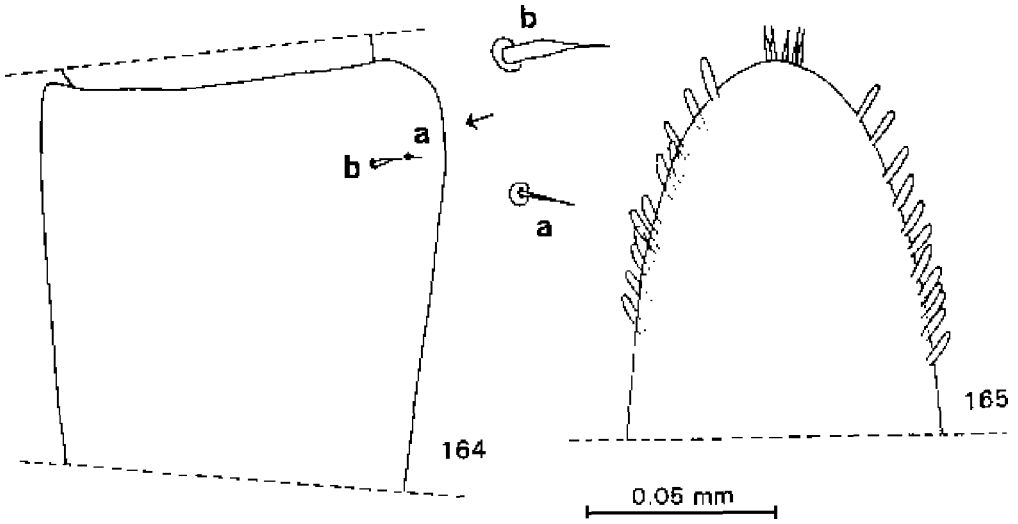
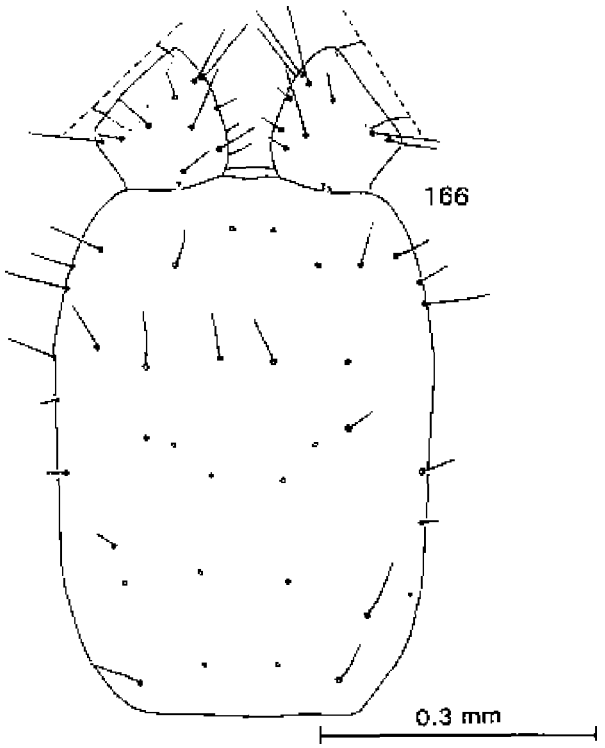


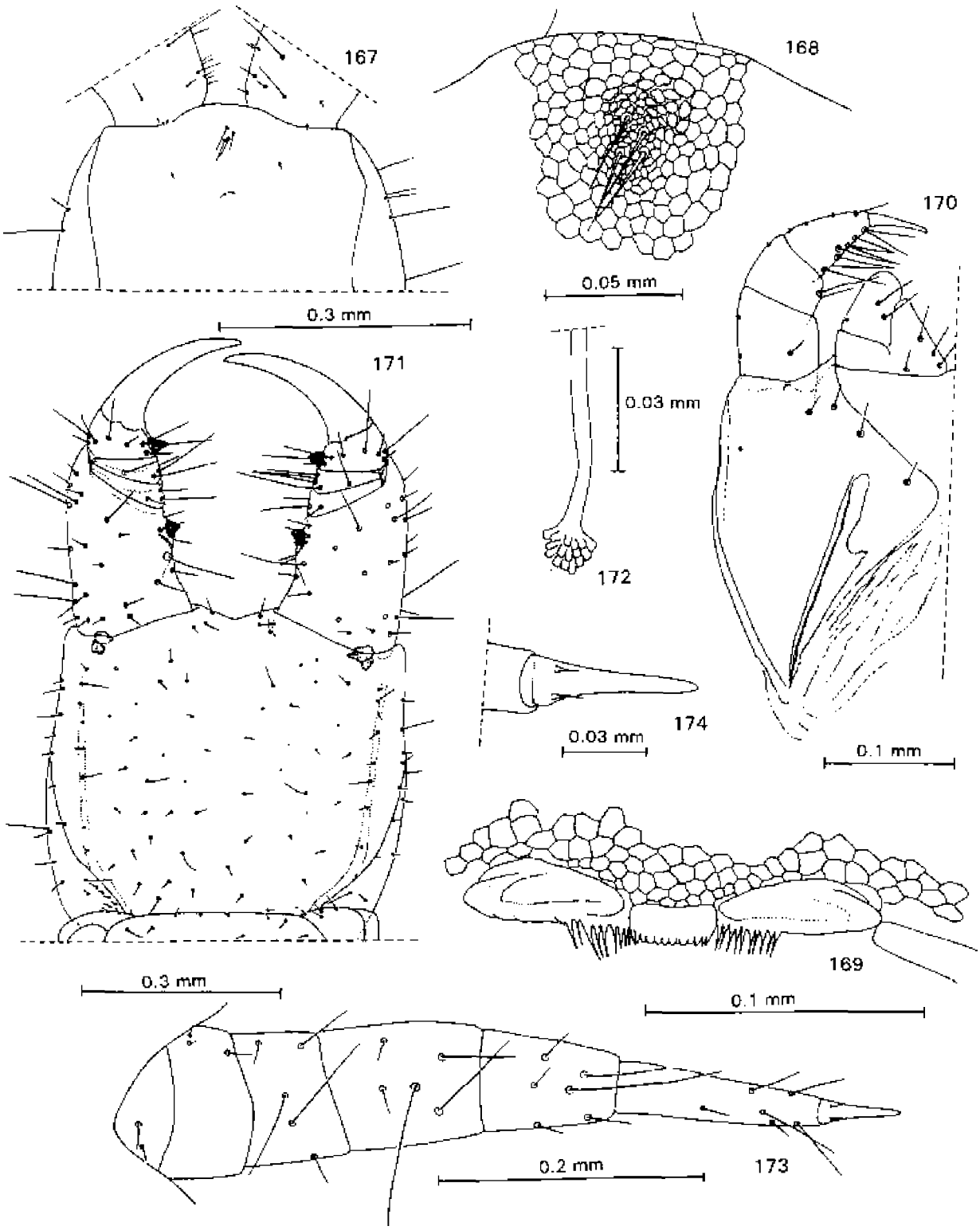
Fig. 161:
Ribautia (Schizoribautia) peruana VERHOEFF, 1941, ♀ (Peru: Sivia). Right forcipular trochantero-praefemur, v. (from VERHOEFF, 1941).

Figs. 162 & 163:
Ribautia (Schizoribautia) silvana KRAUS, 1954, ♂ holotype (Peru: Hacienda Monteseco (6°50'S; 79°10'W). **162**: r. a.a. I-VIII, v.; **163**: r. a.a. IX-XIV, v.

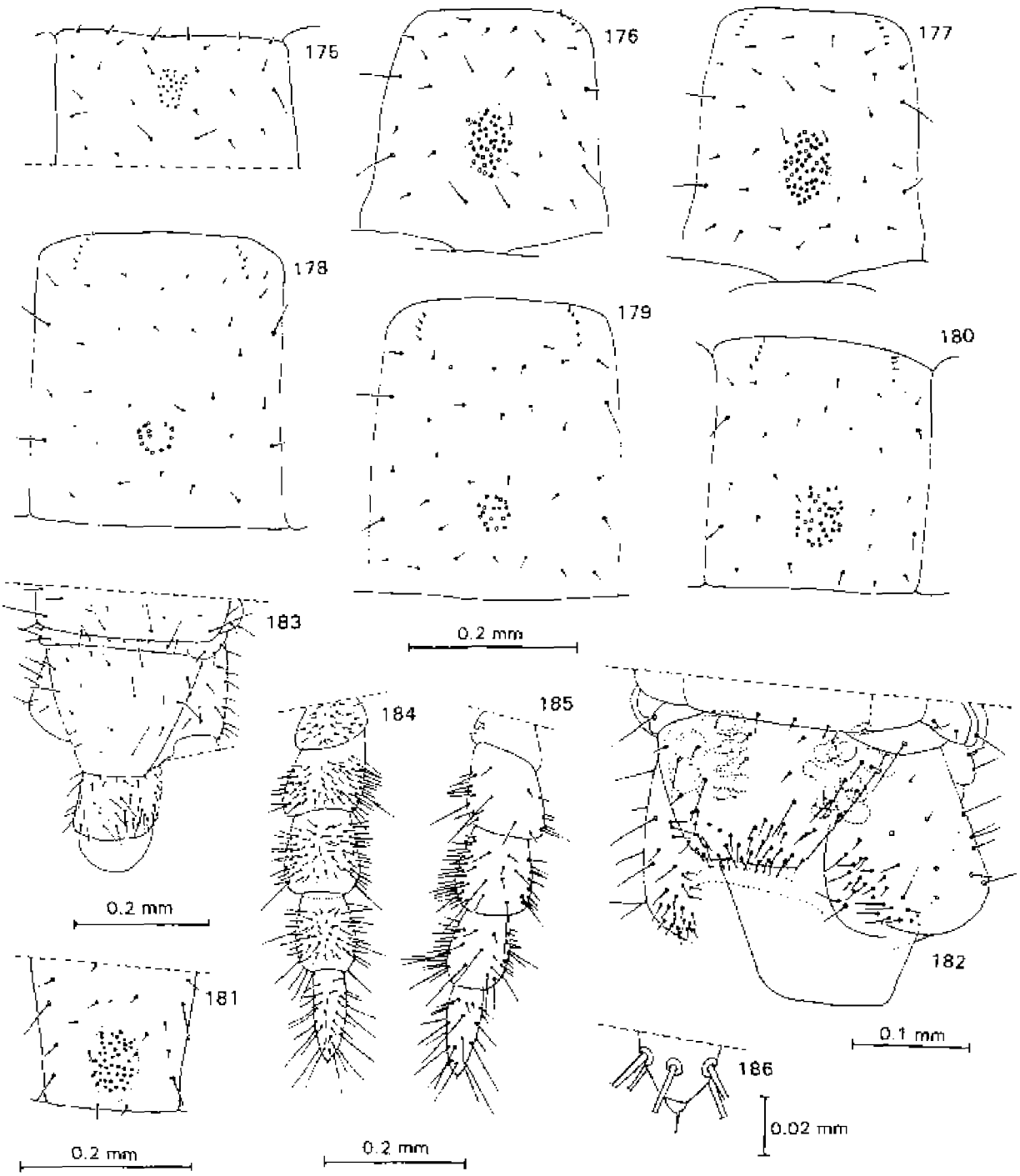




Figs. 164-166:
Ribautia (*Schizoribautia*) *silvana* KRAUS, 1954, ♂ holotype (Peru: Hacienda Monteseco (6°50'S; 79°10'W). **164**: r. a.a. V, v.; **165**: r. a.a. XIV, v.; **166**: cephalic shield.



Figs. 167-174:
Ribautia (Schizoribautia) silvana KRAUS, 1954, ♂ holotype (Peru: Hacienda Monteseco (6°50'S; 79°10'W). **167**: clypeus and bases of antennae; **168**: clypeal area; **169**: labrum; **170**: first and second maxillae, v.; **171**: forcipular segment with poison claws, v.; **172**: detail of calyx of l. poison gland, v.; **173**: l. leg V, v.; **174**: claw of l. leg V, v.



Figs. 175-186:
Ribautia (Schizoribautia) silvana KRAUS, 1954, ♂ holotype (Peru: Hacienda Monteseco (6°50'S; 79°10'W). **175-181**: sterna II, III, VI, XXXV, XXXVIII, XLIV, XLVIII; **182**: last leg-bearing segment, v.; **183**: last leg-bearing segment and terminal segments, d.; **184**: l. last leg, v.; **185**: the same, d.; **186**: detail of distal end of last podomere of l. last leg, d.

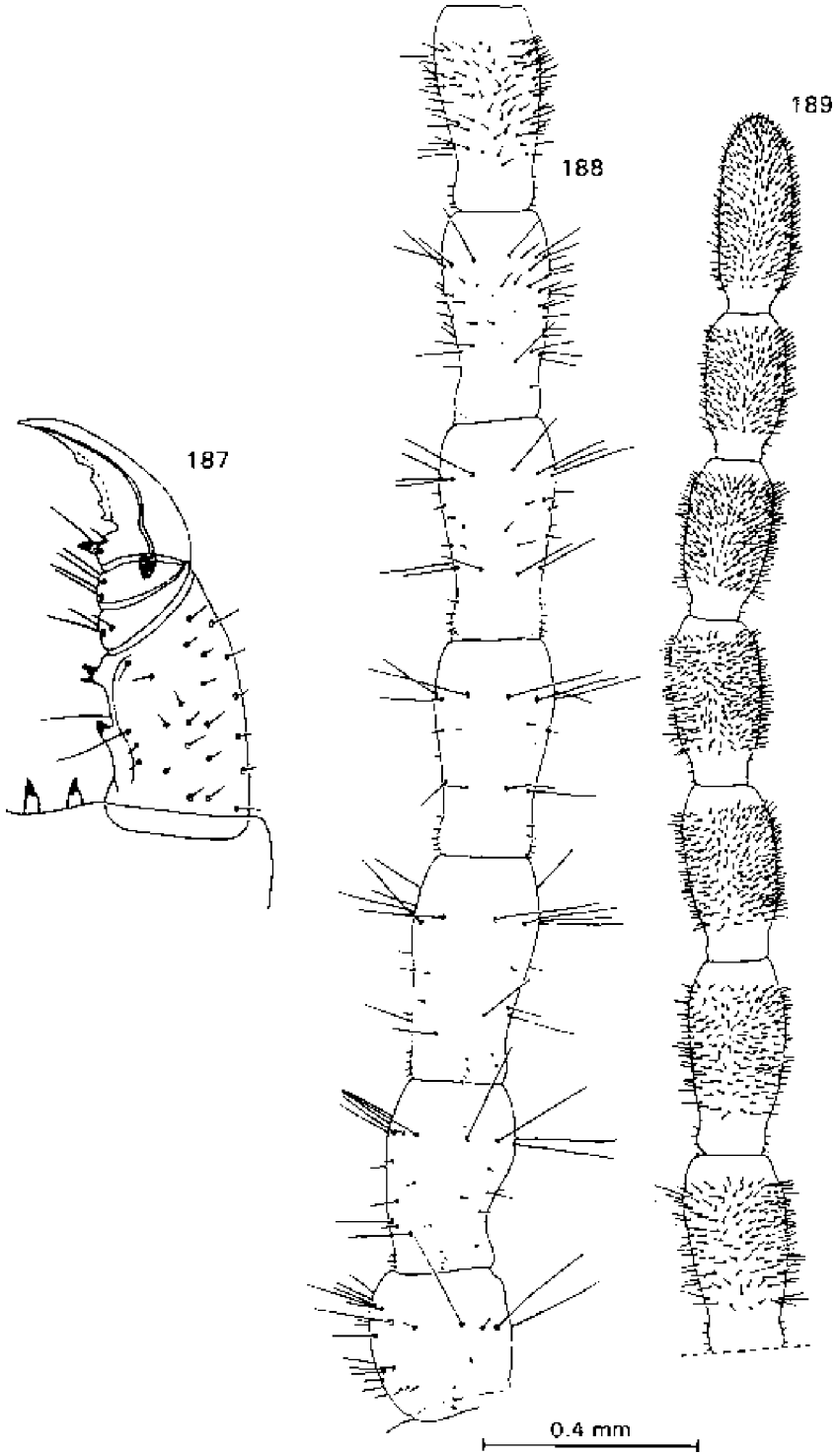
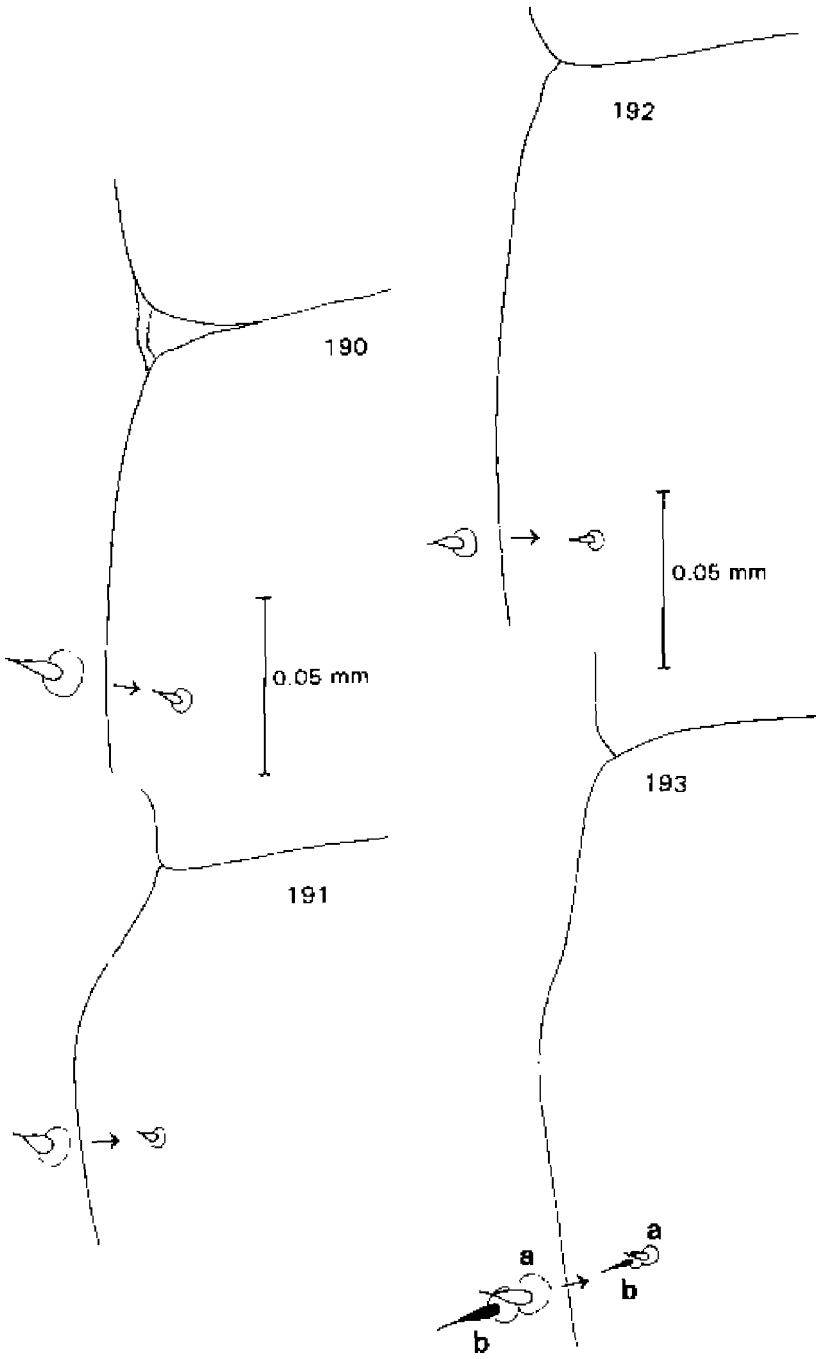
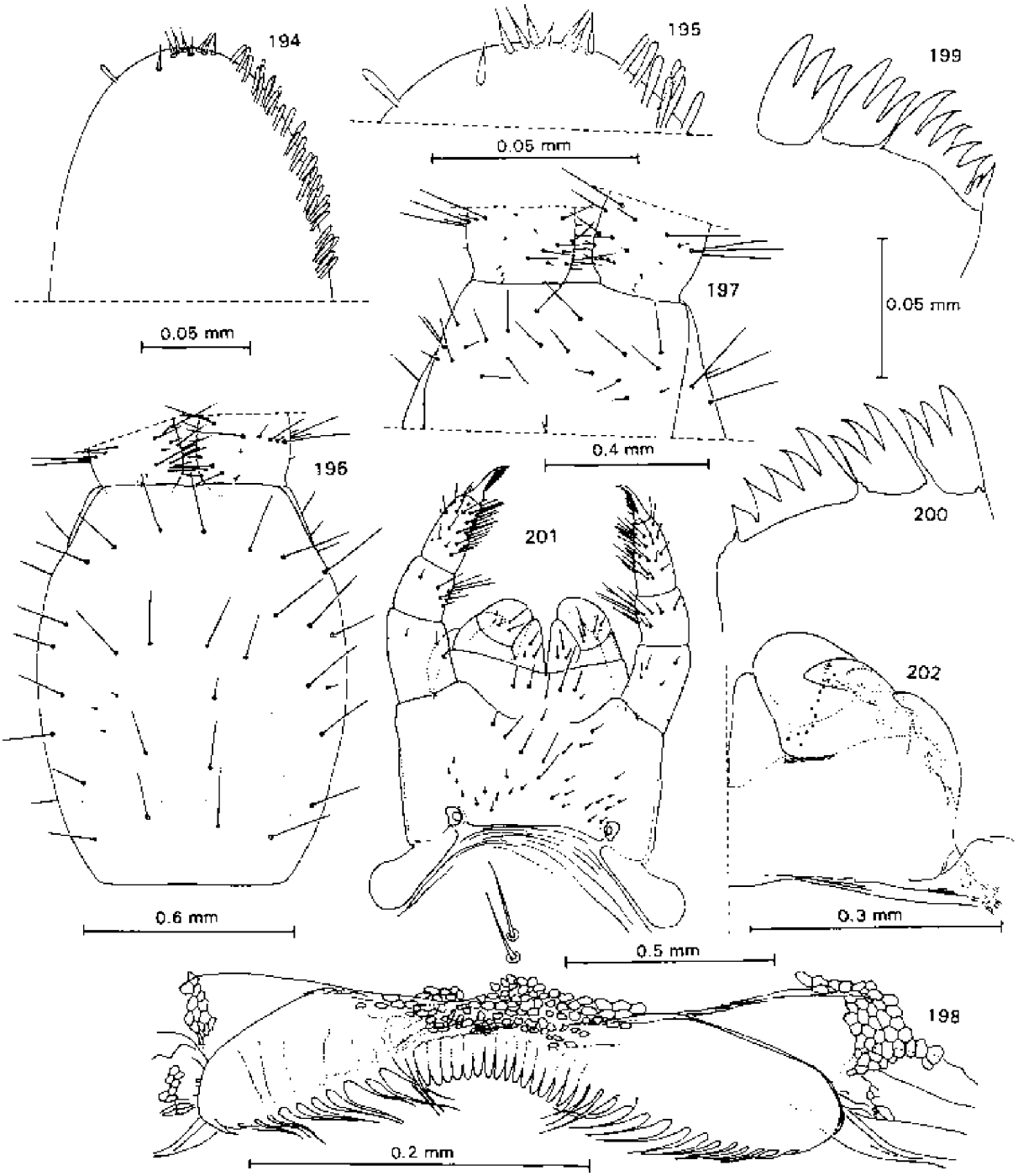


Fig. 187:
Ribautia (Schizoribautia) titicacae TURK, 1955 (Peru: Puno, in 3900 a.s.l.).
Left forcipular telopodite, v. (some artefacts ?) (from TURK, 1955).

Figs. 188 & 189:
Pectiniunguis ducalis n.sp. ♂ holotype (Brazil: Amazonas: Reserva Fl. A. Ducke).
188: l. a.a. I-VII, v.; **189**: l. a.a. VIII-XIV, v.



Figs. 190-193:
Pectiniunguis ducalis n.sp. ♂ holotype (Brazil: Amazonas: Reserva Fl. A. Ducke).
190: l. a.a. II, v.; **191**: l. a.a. XIII, v.; **192**: l. a.a. II, d.; **193**: l. a.a. IX, d.



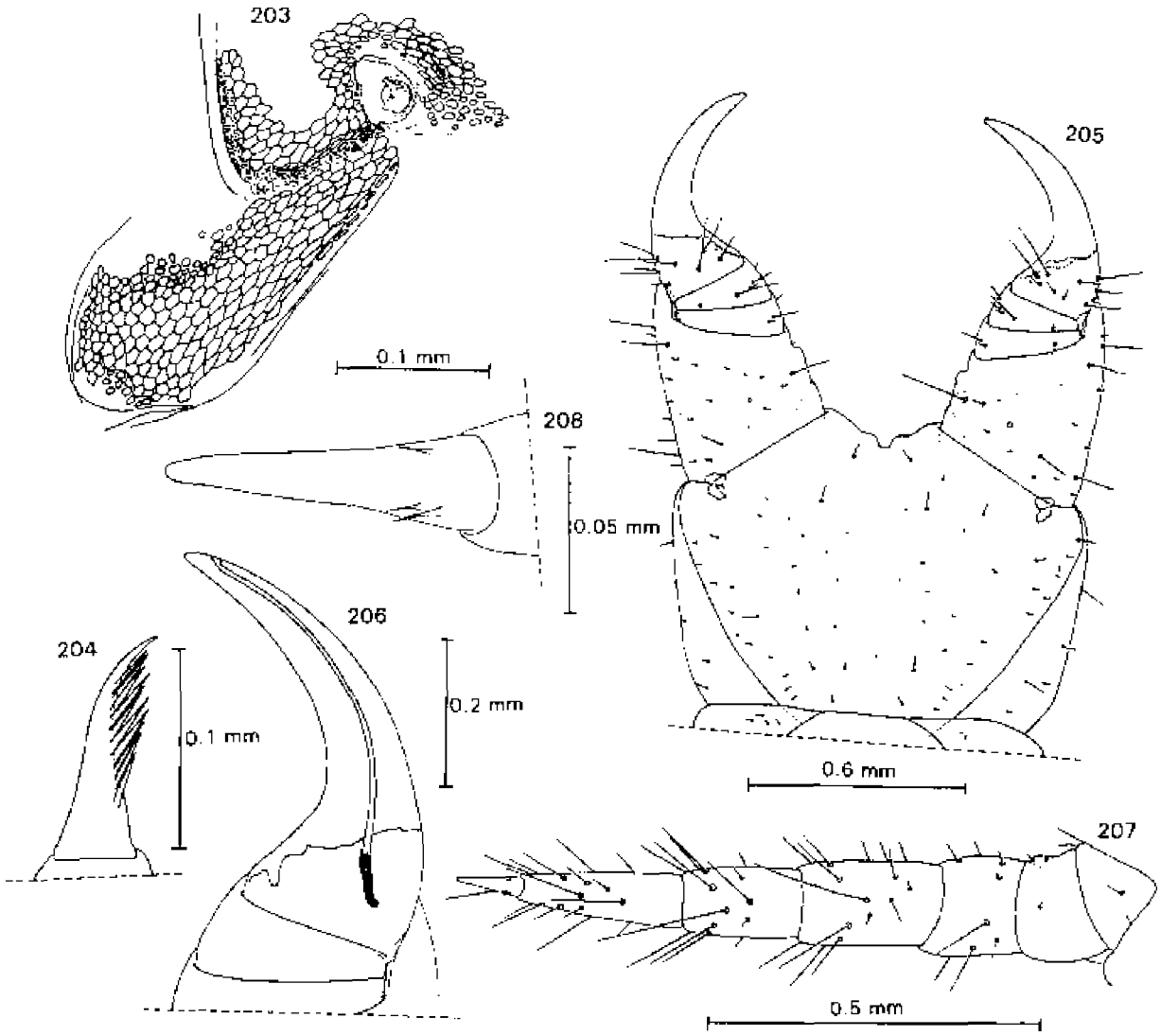
Figs. 194-202:

Pectiniunguis ducalis n.sp. ♂ holotype (Brazil: Amazonas: Reserva Fl. A. Ducke).

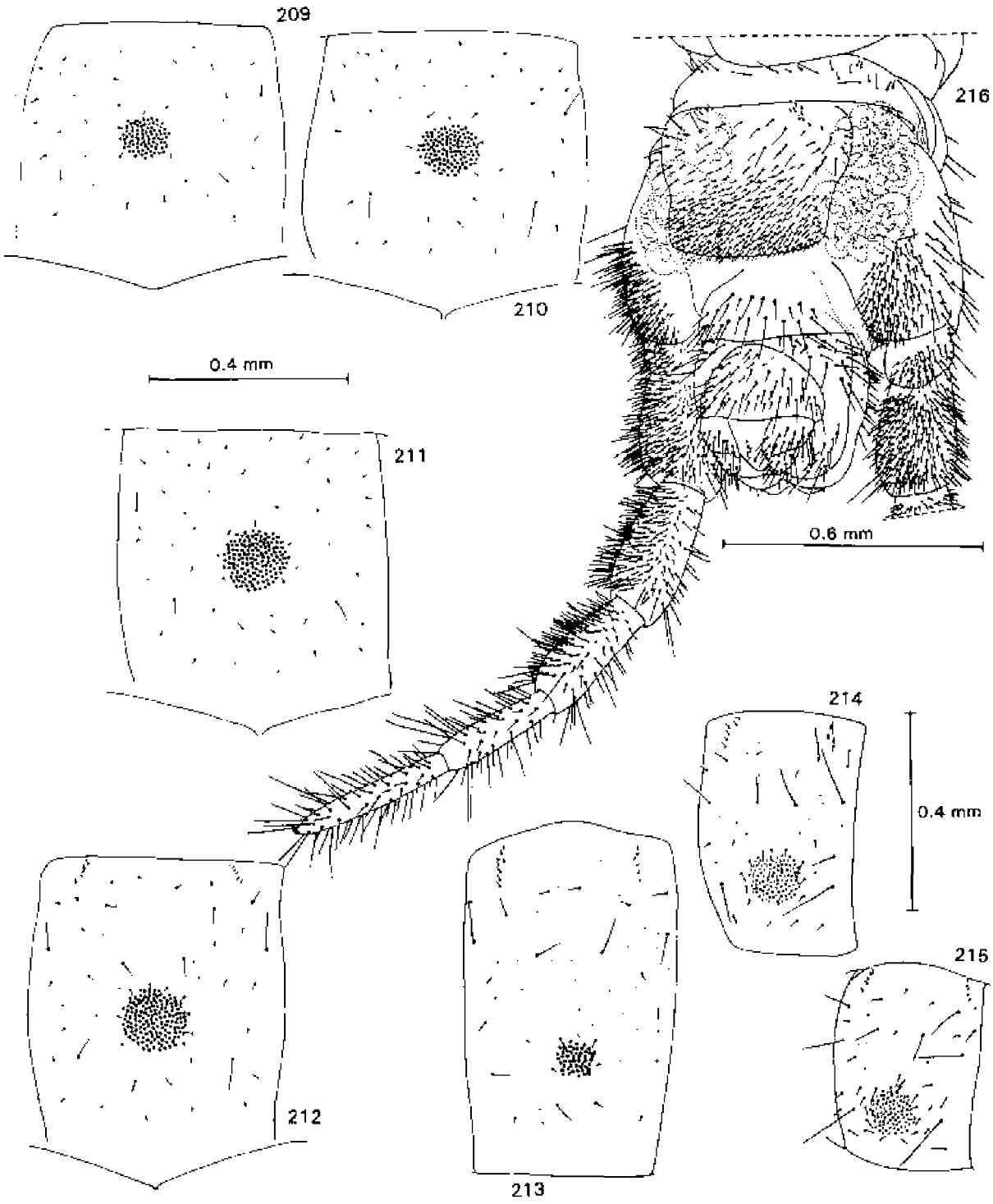
194: r. a.a. XIV, d.; **195**: detail of distal end of r. a.a. XIV, d.; **196**: cephalic shield;

197: clypeus and basis of antennae; **198**: labrum; **199-200**: dentate lamellae of mandibles;

201: first and second maxillae, v.; **202**: r. first maxilla, d.



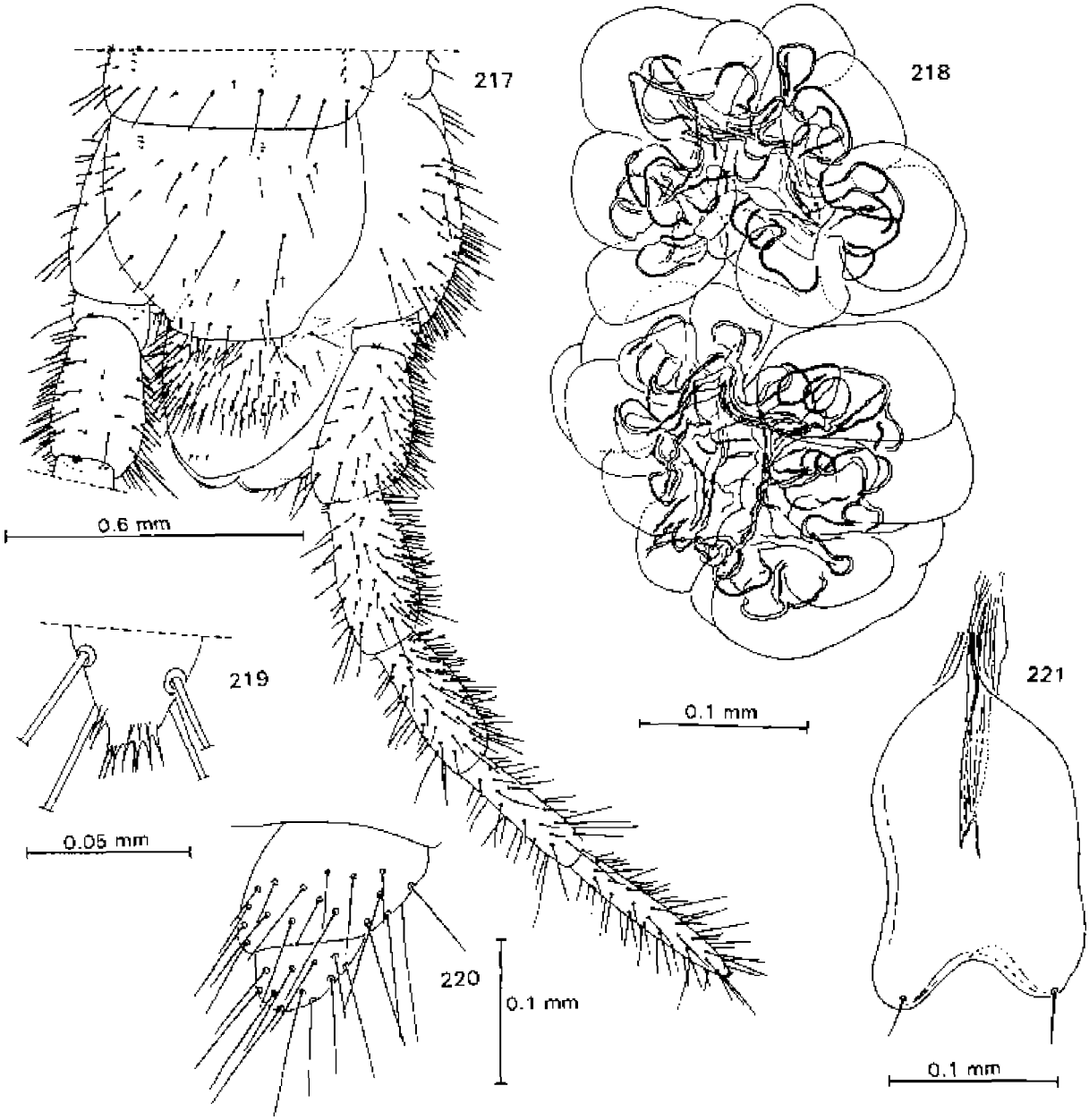
Figs. 203-208:
Pectiniunguis ducalis n.sp. ♂ holotype (Brazil: Amazonas: Reserva Fl. A. Ducke).
203: detail of posterior external region of the r. second maxilla, v.;
204: claw of r. second maxilla, v.; **205**: forcipular segment with poison claws, v.;
206: detail of poison gland in l. poison claw, v.; **207**: r. leg VI, v.;
208: claw of r. leg VI, v.



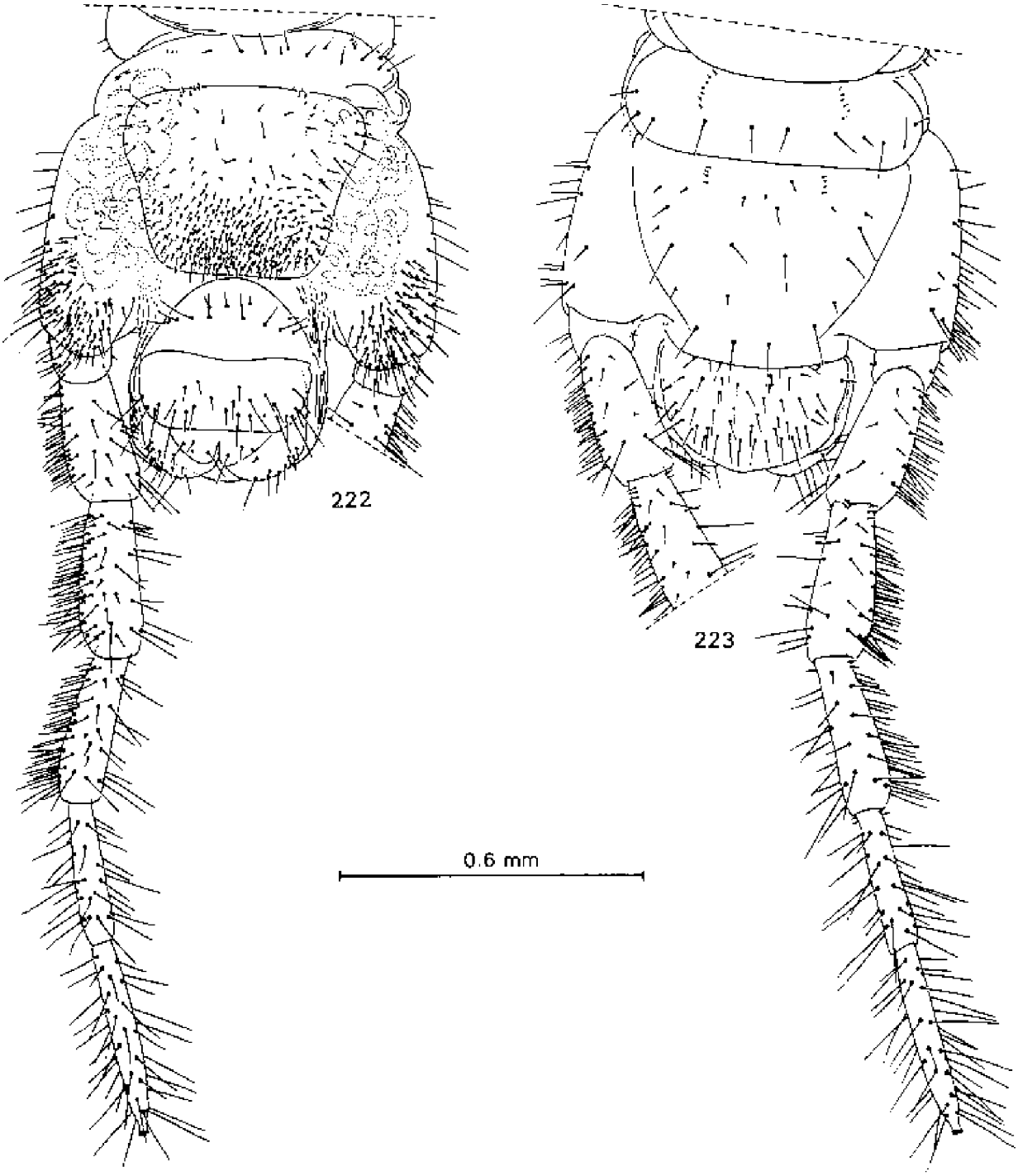
Figs. 209-216:

Pectiniunguis ducalis n.sp. ♂ holotype (Brazil: Amazonas: Reserva Fl. A. Ducke).

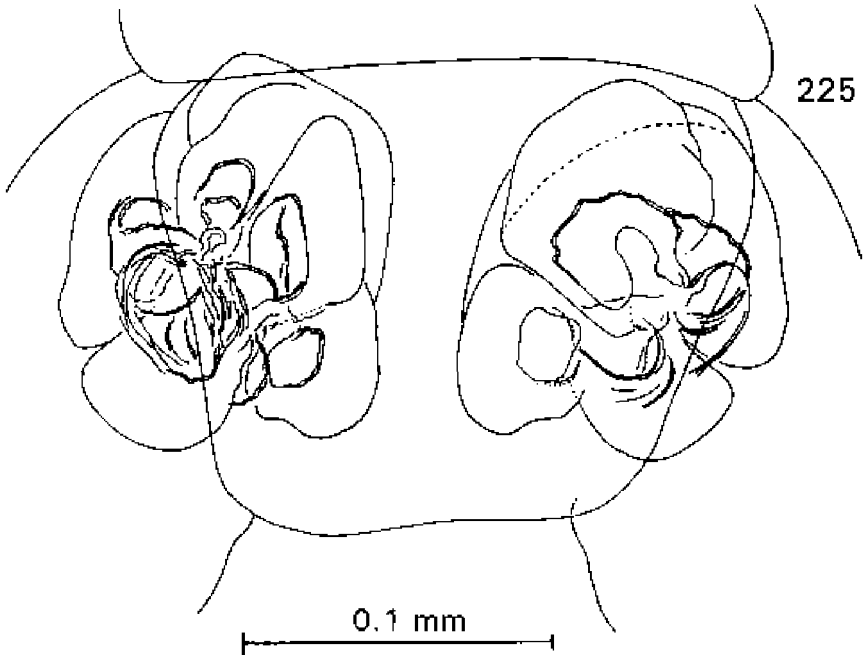
209-215: sterna II, VI, XIV, XXII, LIII, LXV, LXVI; **216**: last leg-bearing segment and terminal segments, v.

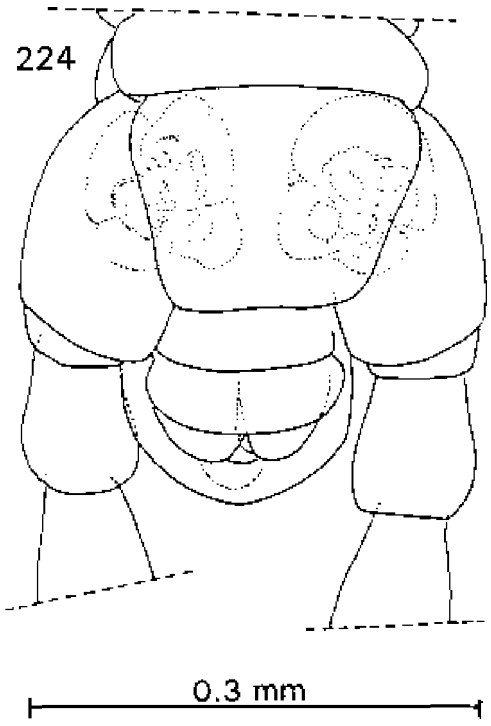


Figs. 217-221:
Pectiniunguis ducalis n.sp. ♂ holotype (Brazil: Amazonas: Reserva Fl. A. Ducke).
217: last leg-bearing segment and terminal segments, d.; **218**: l. coxal organs, v.; **219**: detail of distal end of last podomere of r. last leg, v.; **220**: l. gonopod, v.; **221**: penis, d.

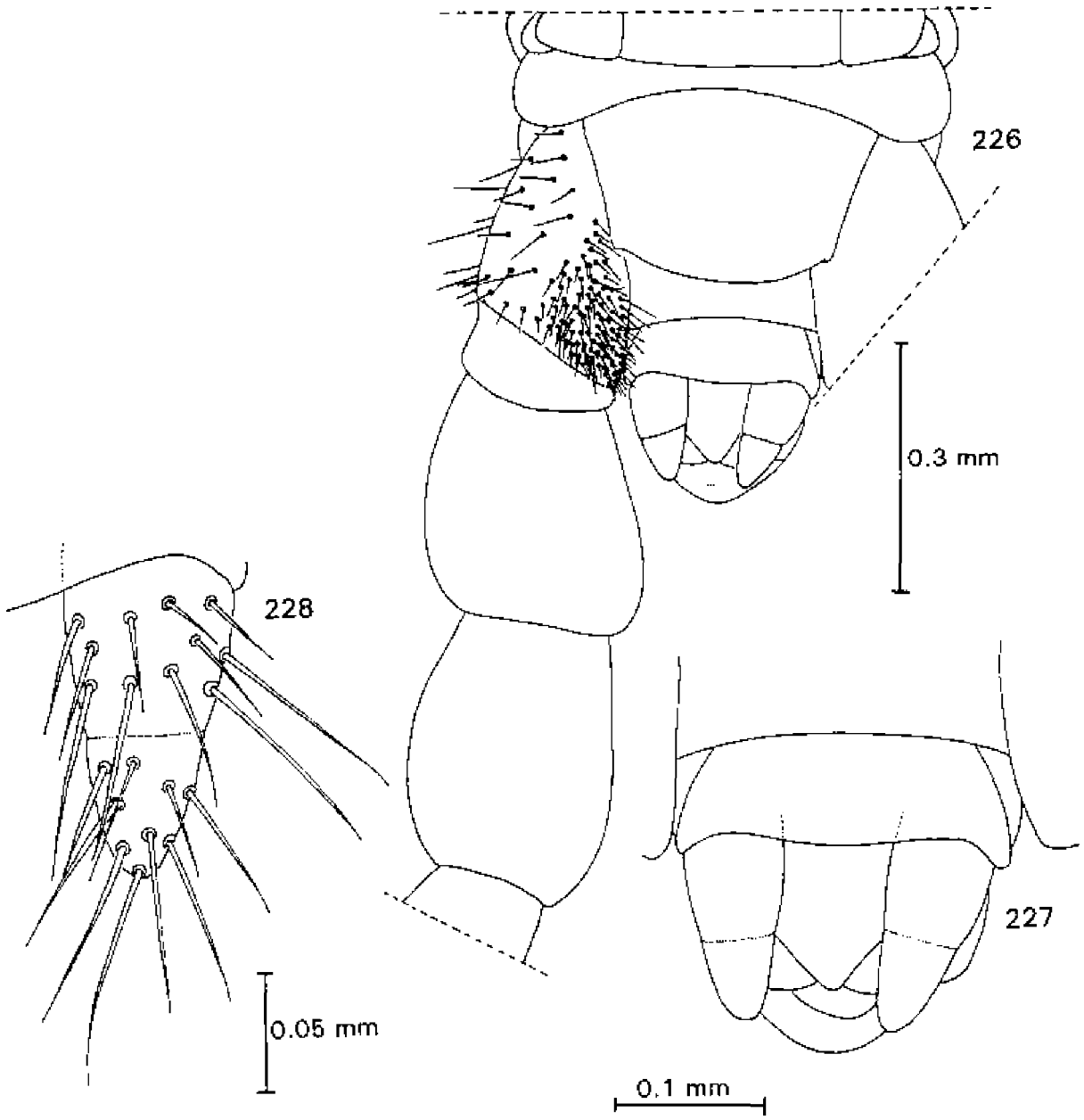


Figs. 222-223:
Pectiniunguis ducalis n.sp. ♀ allotype (Brazil: Amazonas: Reserva Fl. A. Ducke).
222: last leg-bearing segment and terminal segments, v.; **223**: the same, d.

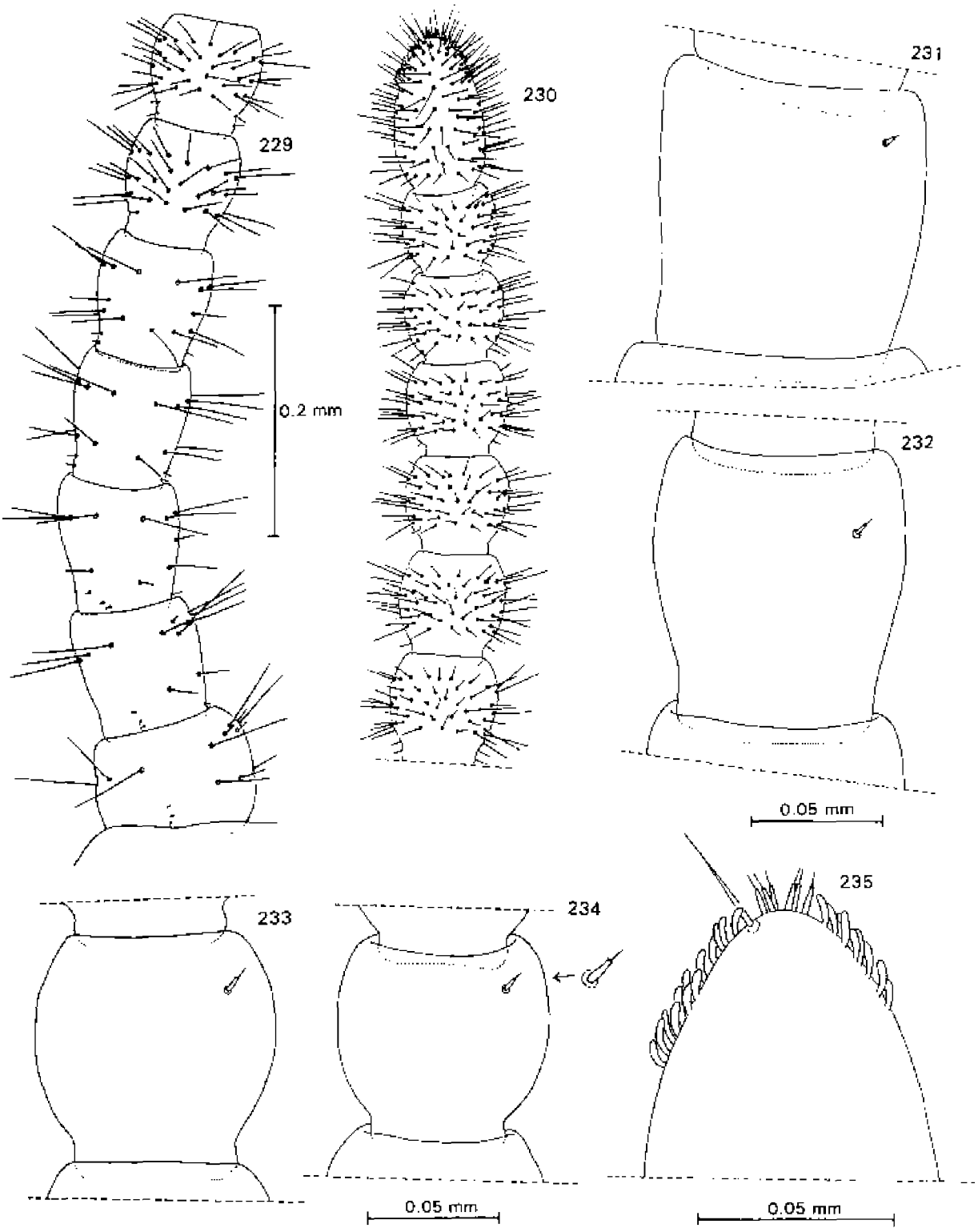




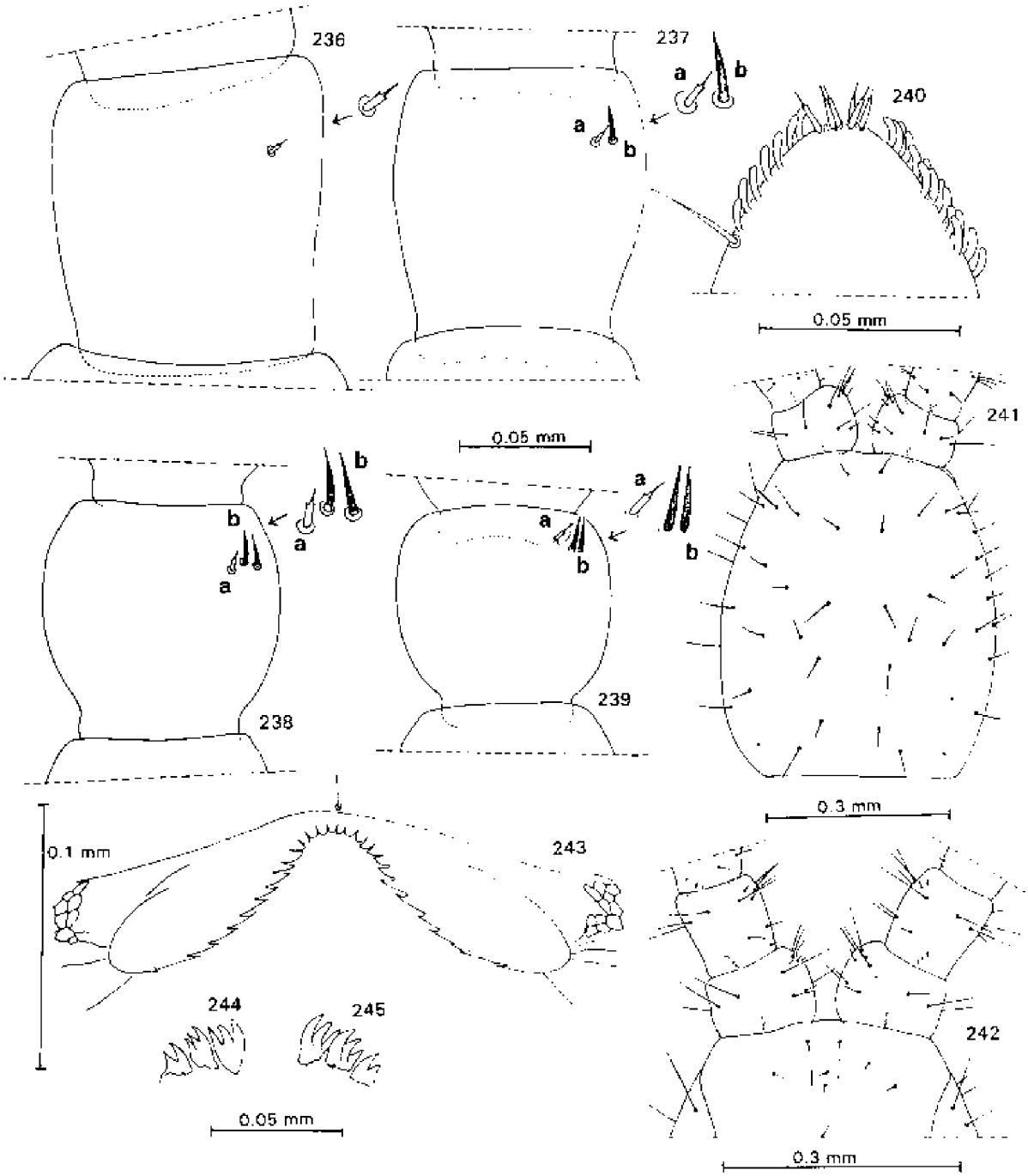
Figs. 224-225:
Pectiniunguis ducalis n. sp. ♀ juvenile (*A*) (Brazil: Amazonas: Reserva Fl. A. Ducke).
224: last leg-bearing segment and terminal segments, v.; **225**: coxal organs, v.



Figs. 226-228:
Schendylurus andesicola CHAMBERLIN, 1957, ♂ (specimen *A*) (Ecuador: Provincia de Pichincha: 15 Km E of Pifo). **226**: last leg-bearing segment and terminal segments, v.; **227**: genital region, v.; **228**: l. gonopod, v. (see figures from PEREIRA, 1985).



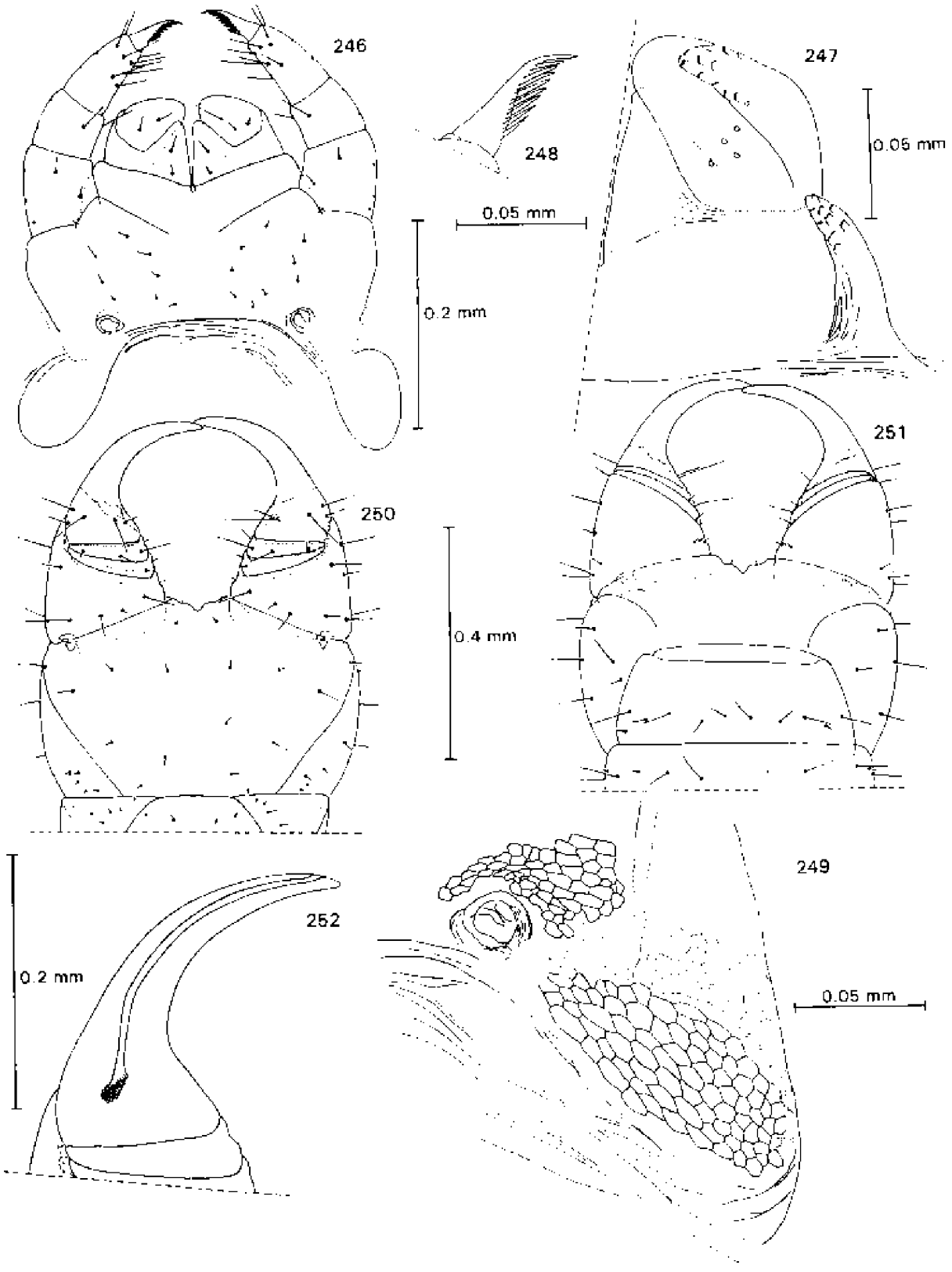
Figs. 229-235:
Schendylurus continuus n.sp. ♀ holotype (Brazil: Amazonas: Reserva Fl. A. Ducke).
229: r. a.a. I-VII, v.; **230**: r. a.a. VIII-XIV, v.; **231**: r. a.a. II, v.; **232**: r. a.a. V, v.; **233**: r. a.a. IX, v.; **234**: r. a.a. XIII, v.; **235**: r. a.a. XIV, v.



Figs. 236-245:

Schendylurus continuus n.sp. ♀ holotype (Brazil: Amazonas: Reserva Fl. A. Ducke).

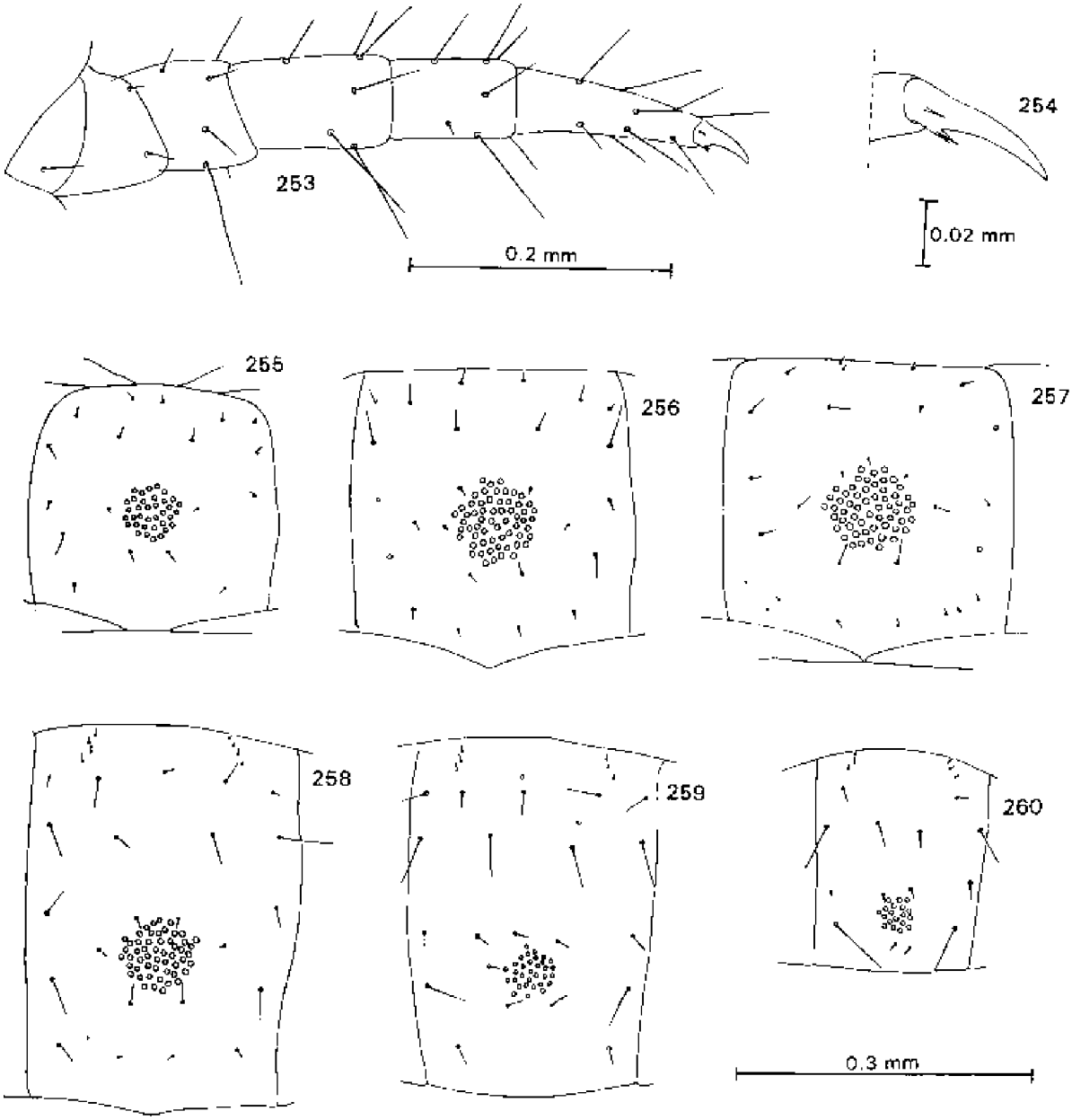
236: r. a.a. II, d.; **237**: r. a.a. V, d.; **238**: r. a.a. IX, d.; **239**: r. a.a. XIII, d.; **240**: r. a.a. XIV, d.; **241**: cephalic shield; **242**: clypeus and bases of antennae; **243**: labrum; **244-245**: dentate lamellae of mandibles.



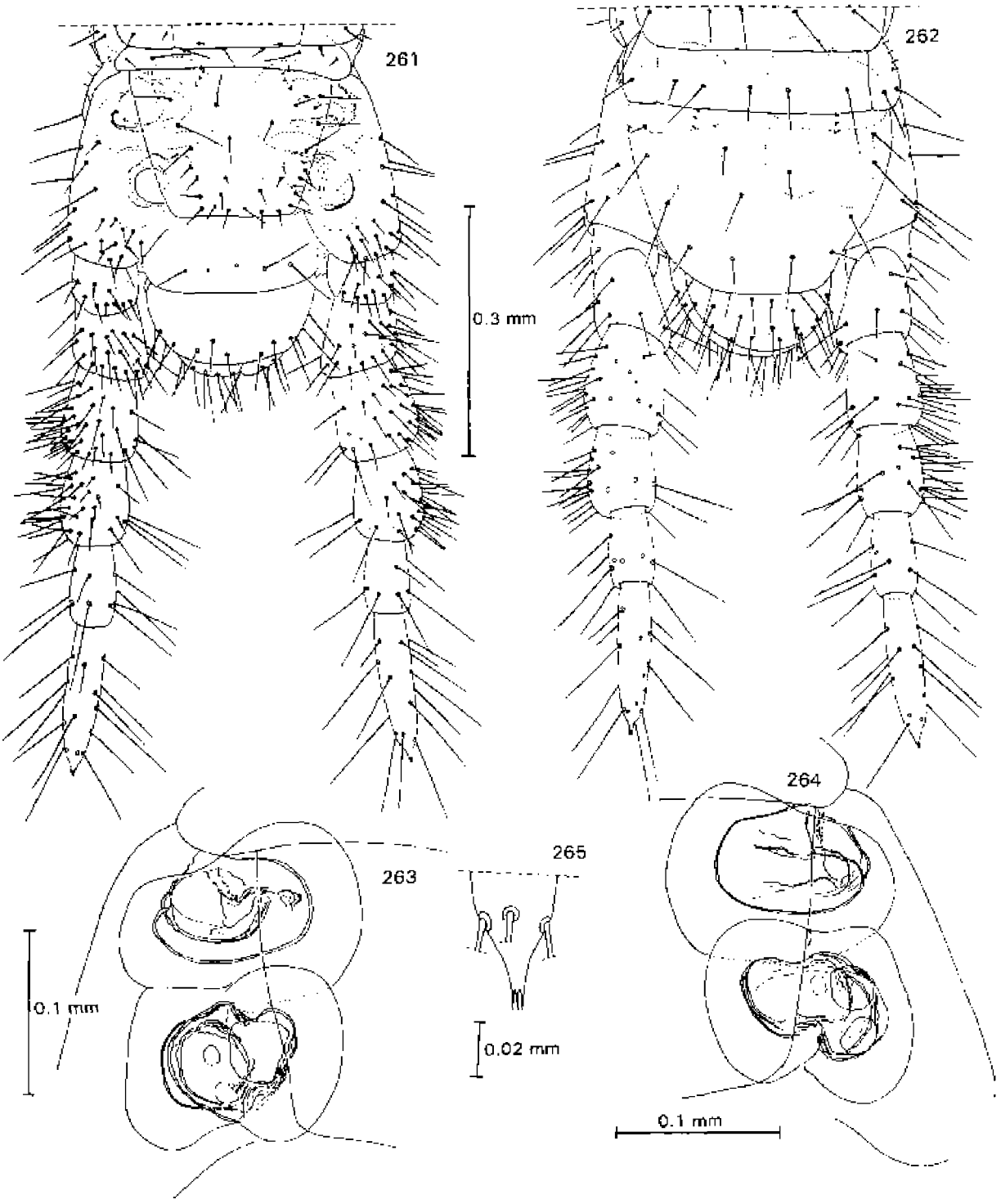
Figs. 246-252:

Schendylurus continuus n.sp. ♀ holotype (Brazil: Amazonas: Reserva Fl. A. Ducke).

246: first and second maxillae, v.; **247**: r. first maxilla, d.; **248**: claw of l. second maxilla, d.; **249**: detail of posterior external region of the l. second maxilla, v.; **250**: forcipular segment with poison claws, v.; **251**: the same, d.; **252**: detail of poison gland in r. poison claw, v.



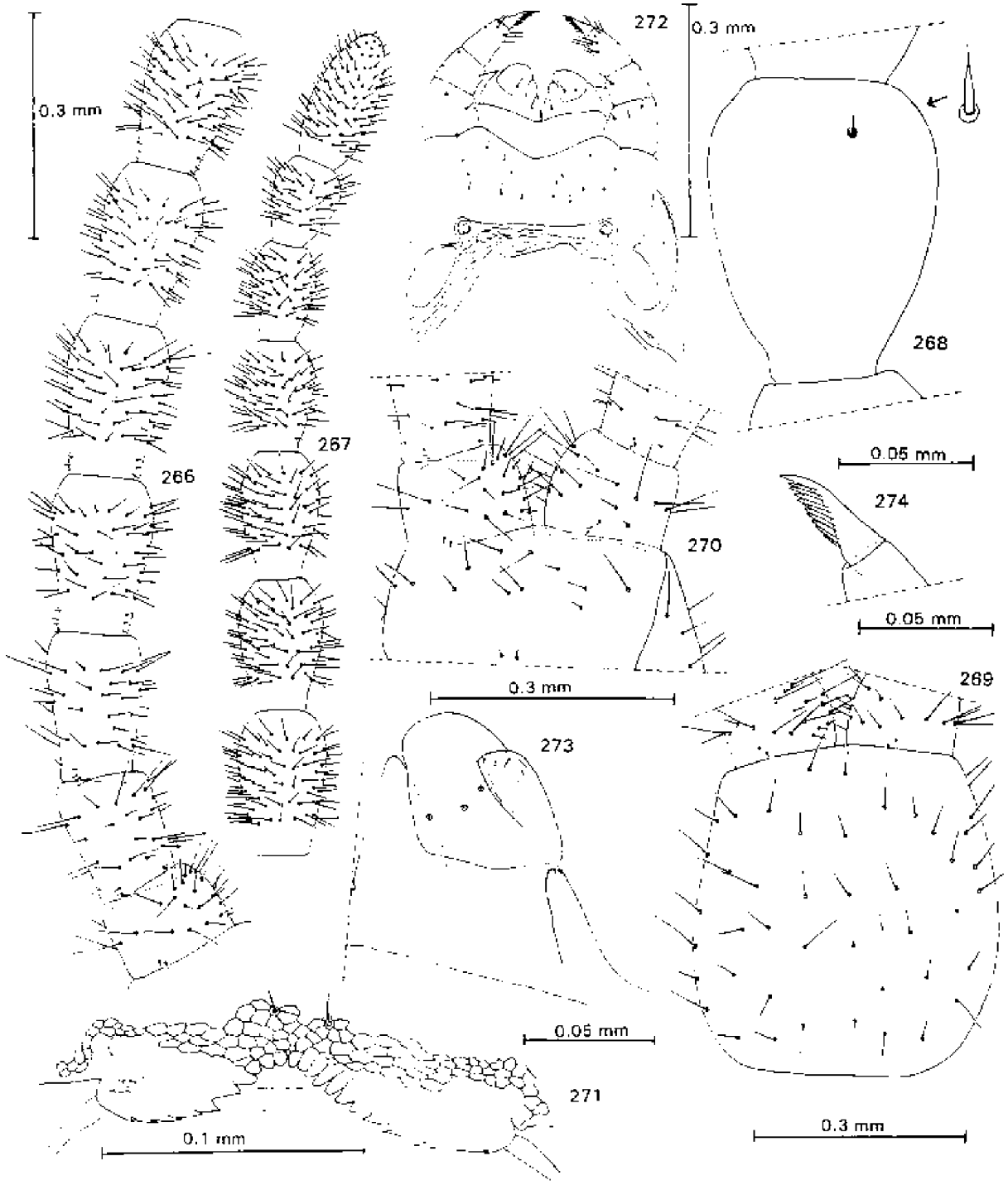
Figs. 253-260:
Schendylurus continuus n.sp. ♀ holotype (Brazil: Amazonas: Reserva Fl. A. Ducke).
253: l. leg XVIII, antero-v.; **254**: claw of l. leg II, antero-v.; **255-260**: sterna II, VII, XII, XX, XXXIII, XLII.



Figs. 261-265:

Schendylurus continuus n.sp. ♀ holotype (Brazil: Amazonas: Reserva Fl. A. Ducke).

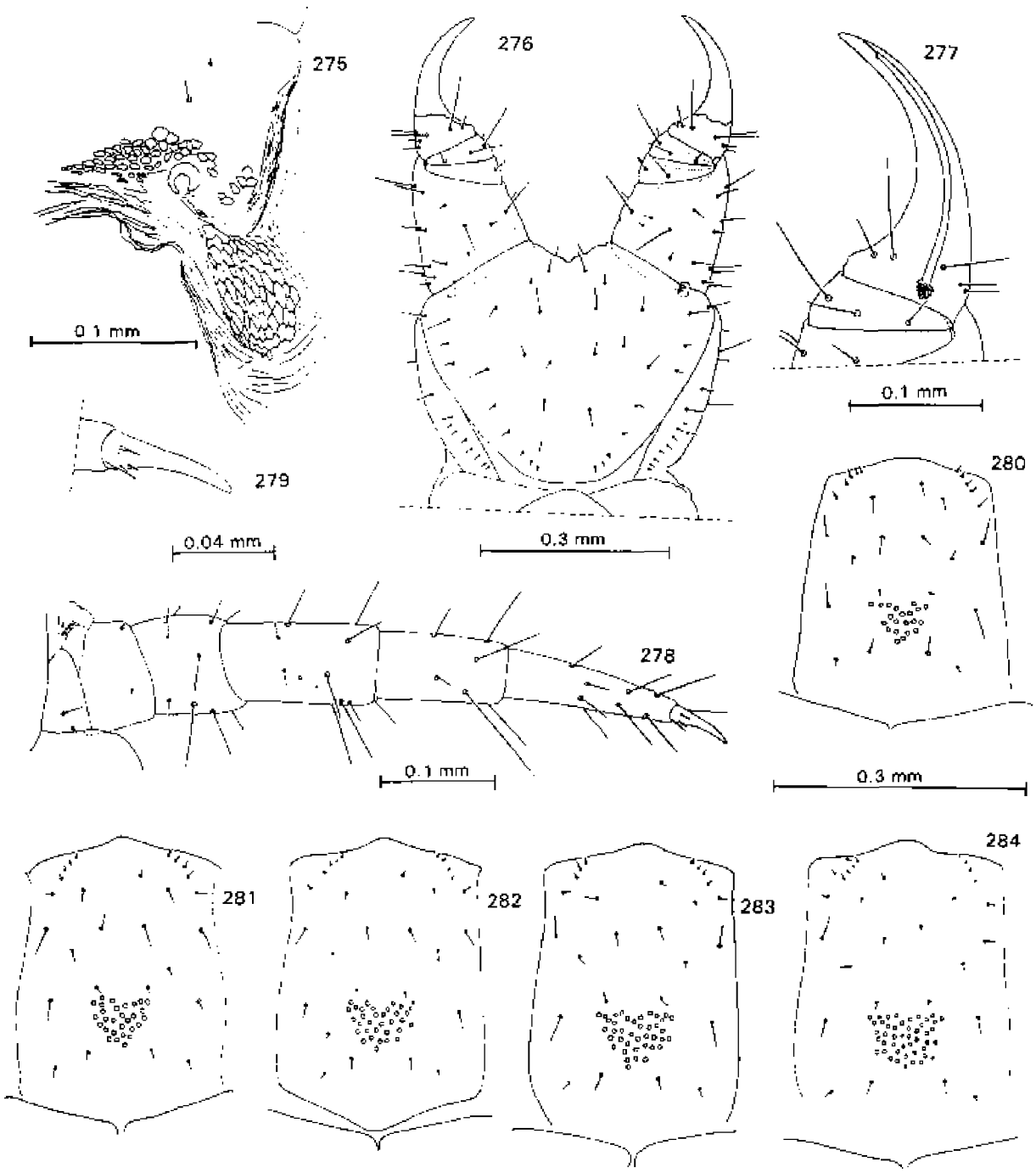
261: last leg-bearing segment and terminal segments, v.; **262**: the same, d.; **263**: detail of r. coxal organs, v.; **264**: detail of l. coxal organs, v.; **265**: detail of distal end of last podomere of l. last leg, v.



Figs. 266-274:

Schendylurus janauarius n.sp. ♂ holotype (Brazil: Amazonas: Lago Janauarí).

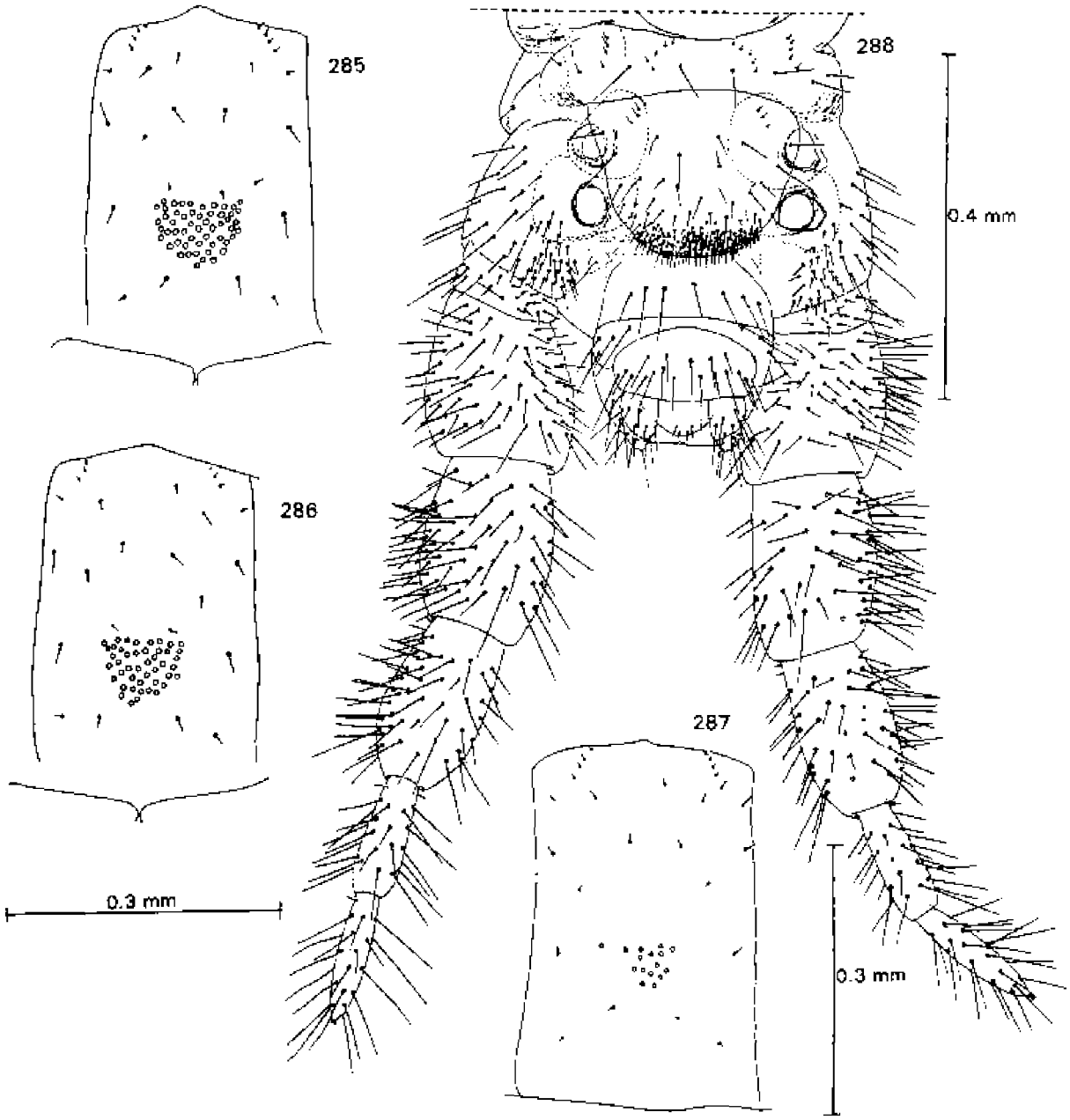
266: r. a.a. I-VII, v.; **267**: r. a.a. VIII-XIV, v.; **268**: r. a.a. XIII, v.; **269**: cephalic shield; **270**: clypeus and bases of antennae; **271**: labrum; **272**: first and second maxillae, v.; **273**: r. first maxilla, d.; **274**: claw of r. second maxilla, d.



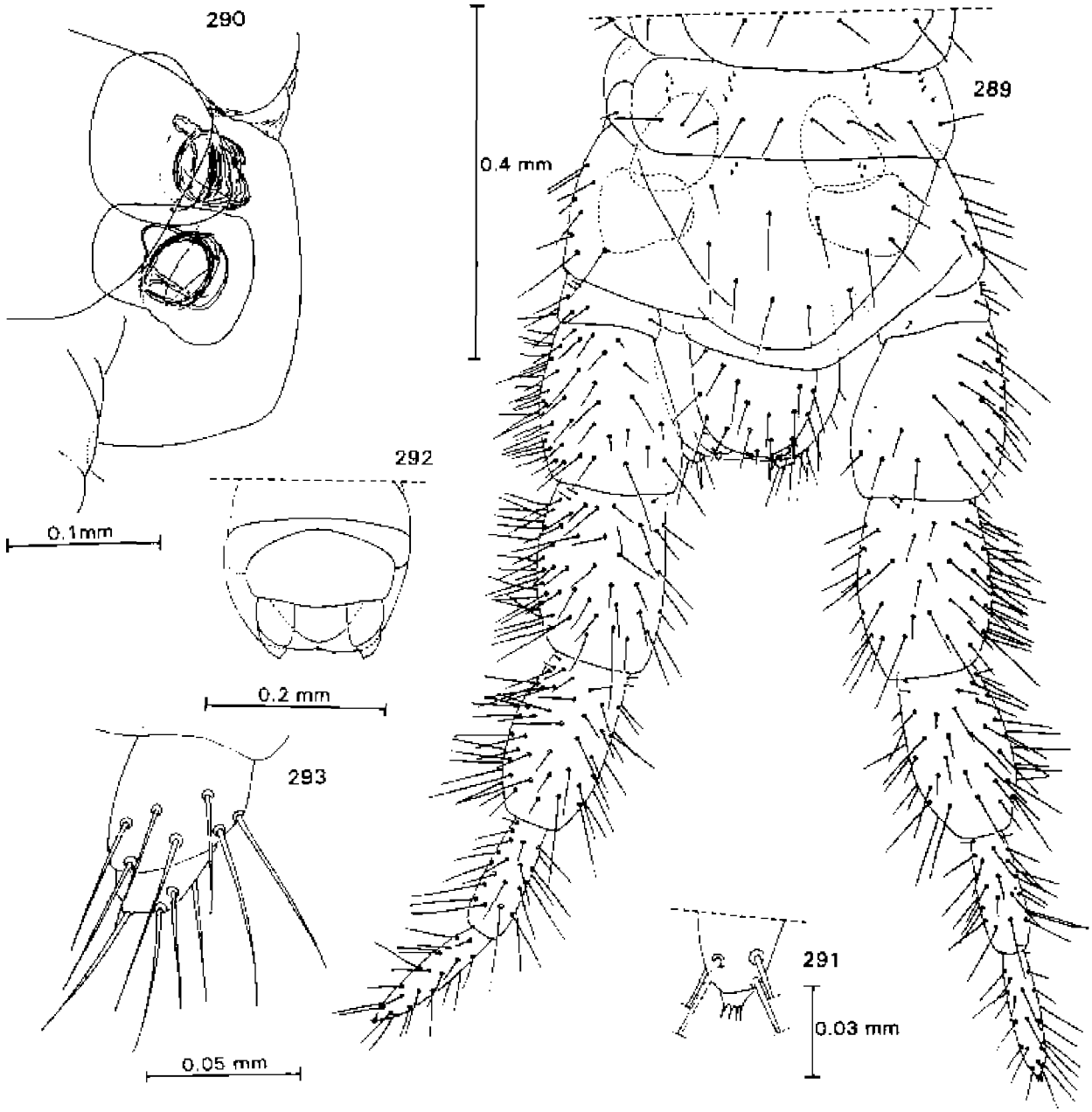
Figs. 275-284:

Schendylurus janauarius n.sp. ♂ holotype (Brazil: Amazonas: Lago Janauarí).

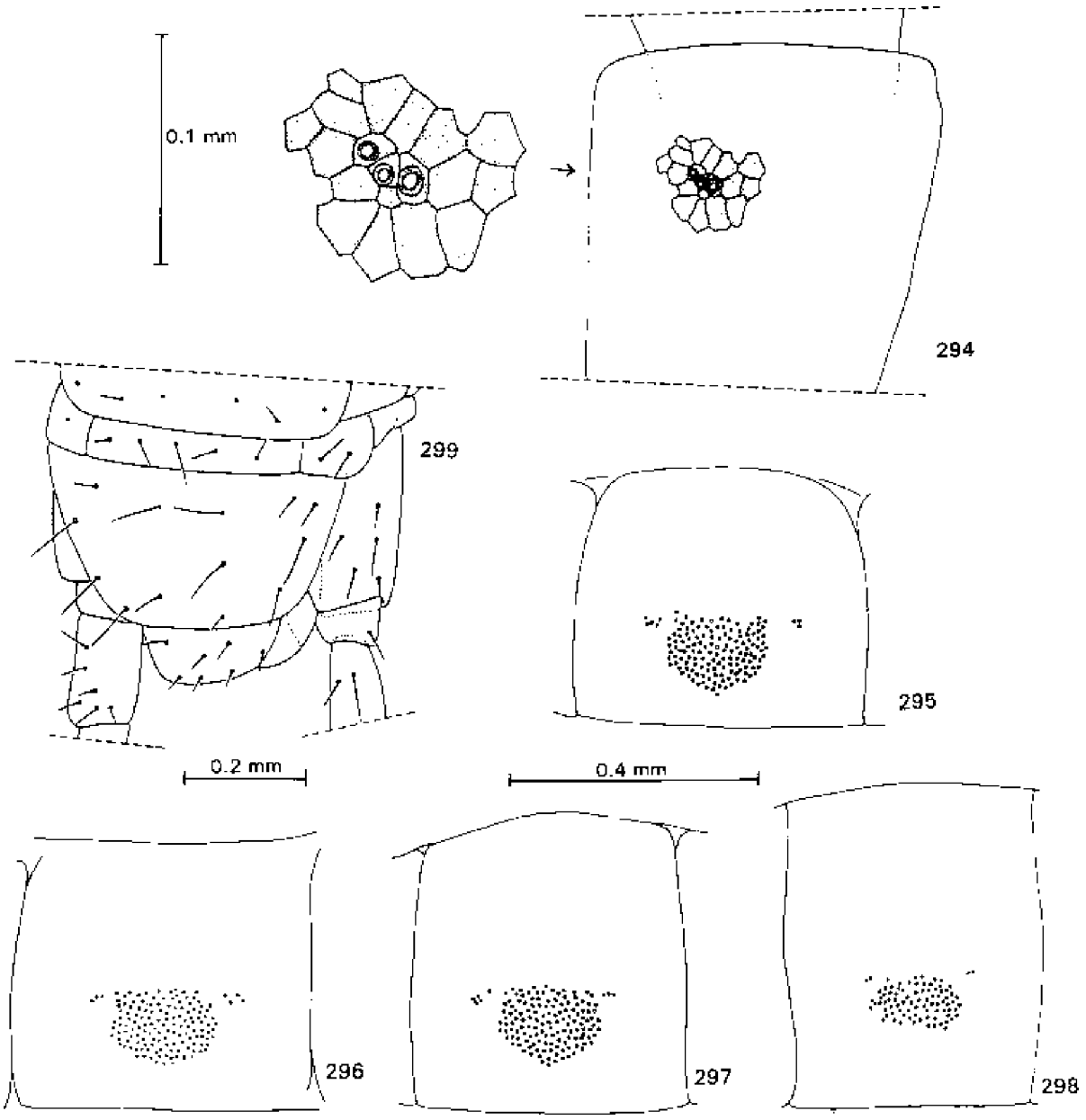
275: detail of posterior external region of the l. second maxilla, v.; **276**: forcipular segment with poison claws, v.; **277**: detail of poison gland in l. poison claw, v.; **278**: l. leg XI, v.; **279**: claw of l. leg XI, v.; **280-284**: sterna II, III, IV, V, VIII.



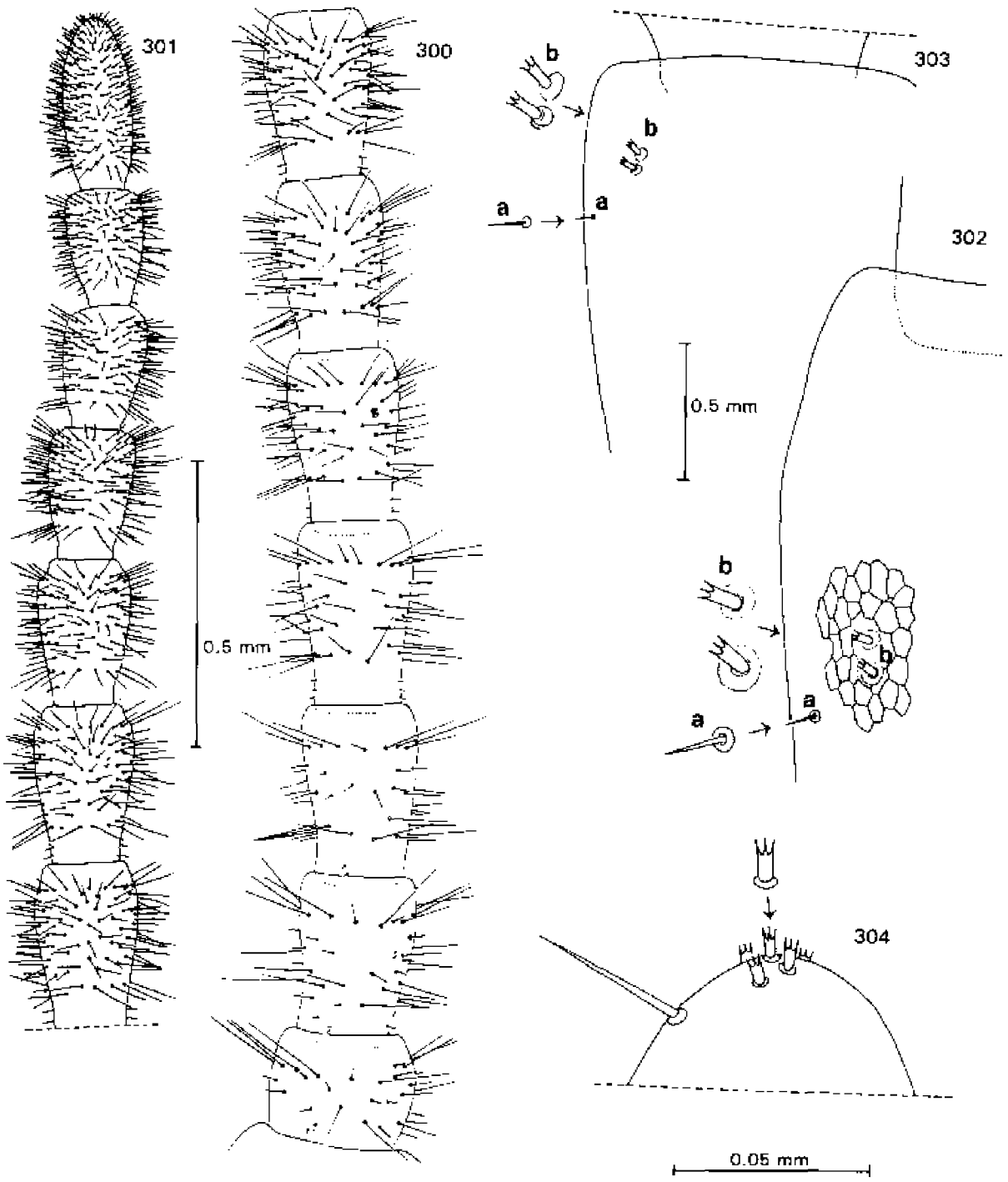
Figs. 285-288:
Schendylurus janauarius n.sp. ♂ holotype (Brazil: Amazonas: Lago Janauarí).
285-287: sterna X, XI, XV; **288**: last leg-bearing segment and terminal segments, v.



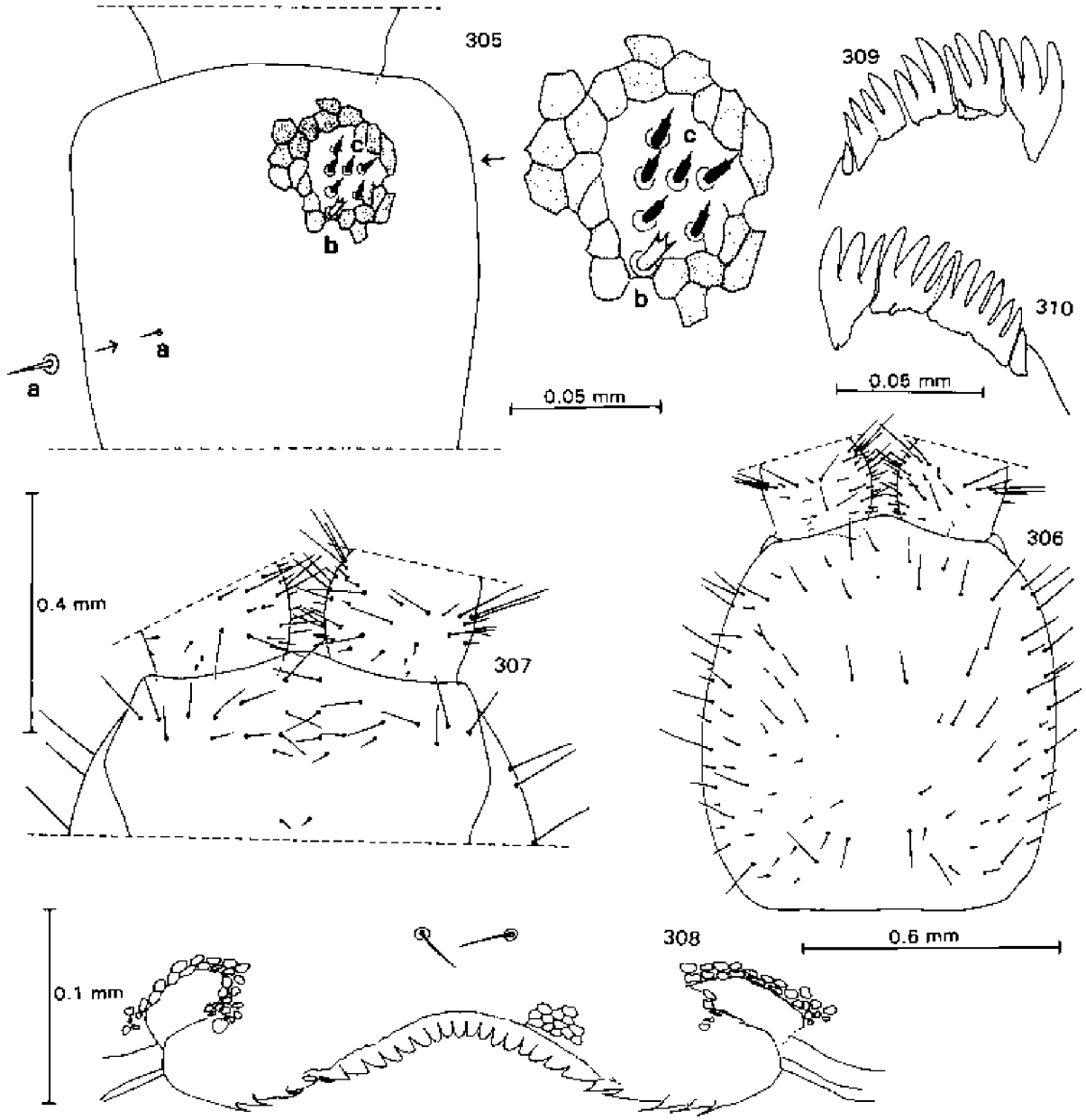
Figs. 289-293:
Schendylurus janauarius n.sp. ♂ holotype (Brazil: Amazonas: Lago Janauarí).
289: last leg-bearing segment and terminal segments, d.; **290**: detail of l. coxal organs, v.; **291**: detail of distal end of last podomere of r. last leg, v.; **292**: genital region, v.; **293**: l. gonopod, v.



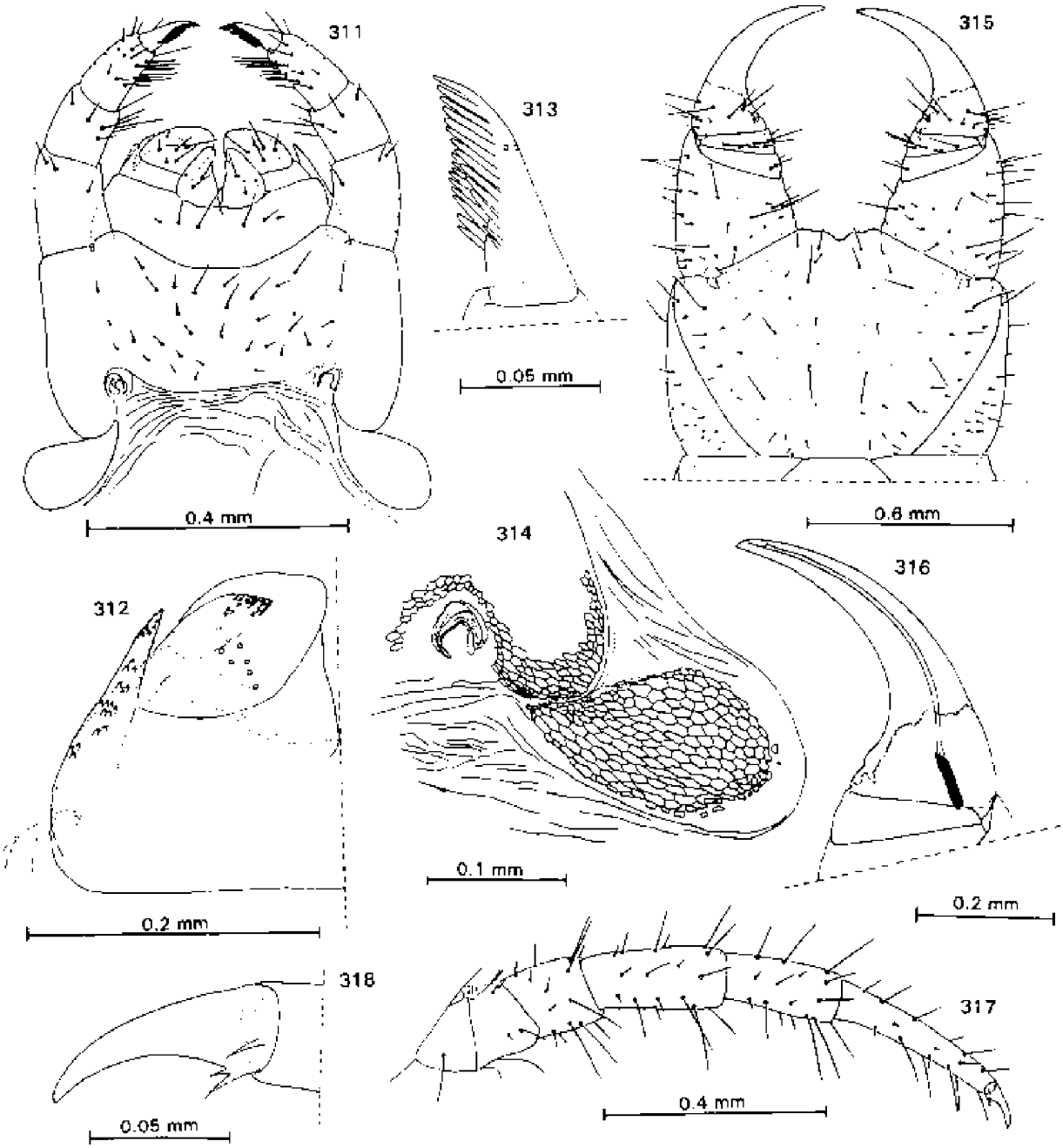
Figs. 294-299:
Schendylurus iguapensis VERHOEFF, 1938, ♀ holotype (Brazil: São Paulo: Iguape).
294: l. a.a. IX, d.; **295-298**: sterna V, VIII, XIII, XIX; **299**: last leg-bearing segment and terminal segments, d.



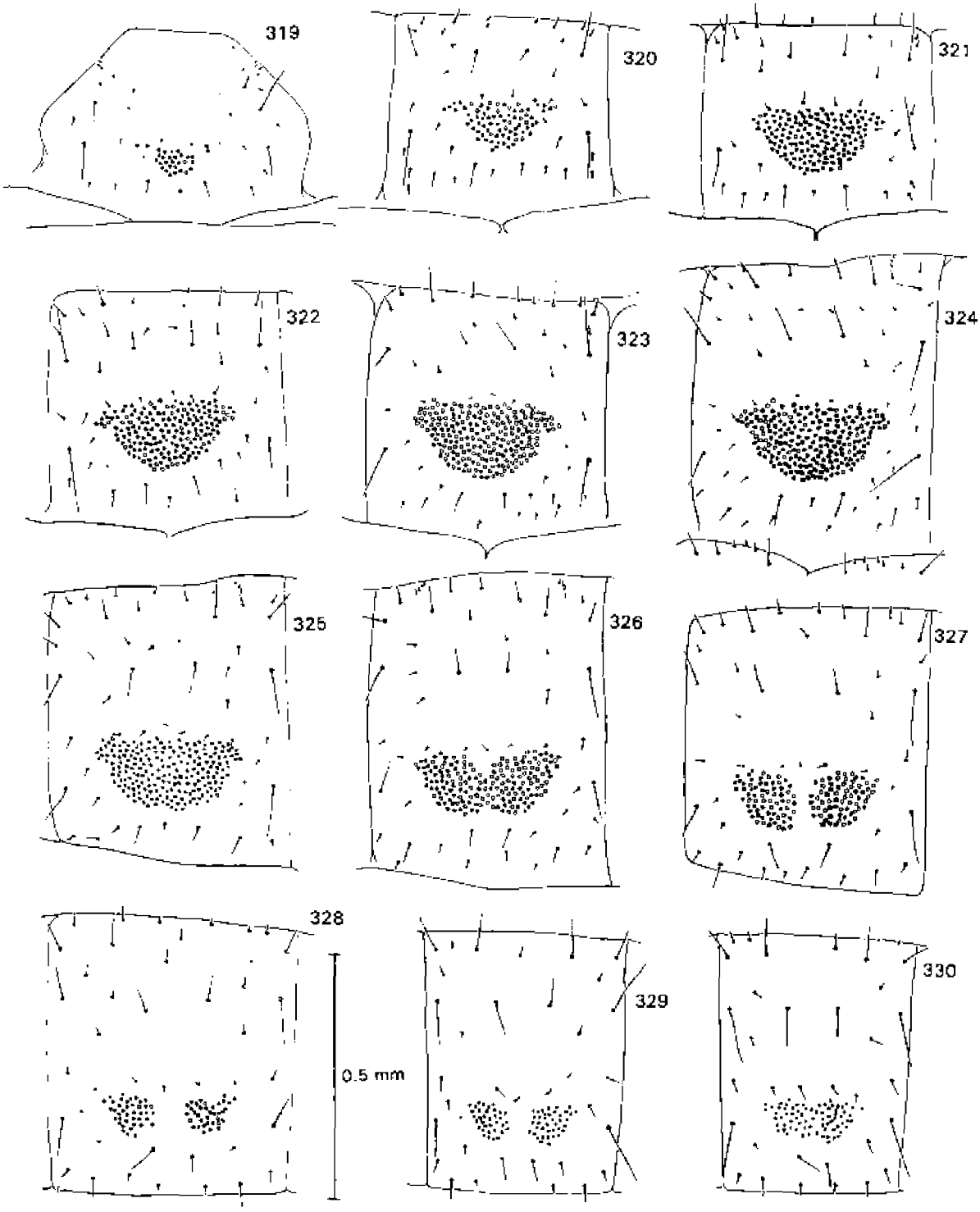
Figs. 300-304:
Schendylurus marchantariae n.sp. ♀ holotype (Brazil: Amazonas: Rio Solimões: Ilha de Marchantaria). **300**: r. a.a. I-VII, v.; **301**: r. a.a. VII]-X[V, v.; **302**: l. a.a. V, v.; **303**: l. a.a. XIII, v.; **304**: detail of distal end of l. a.a. XIV, v.



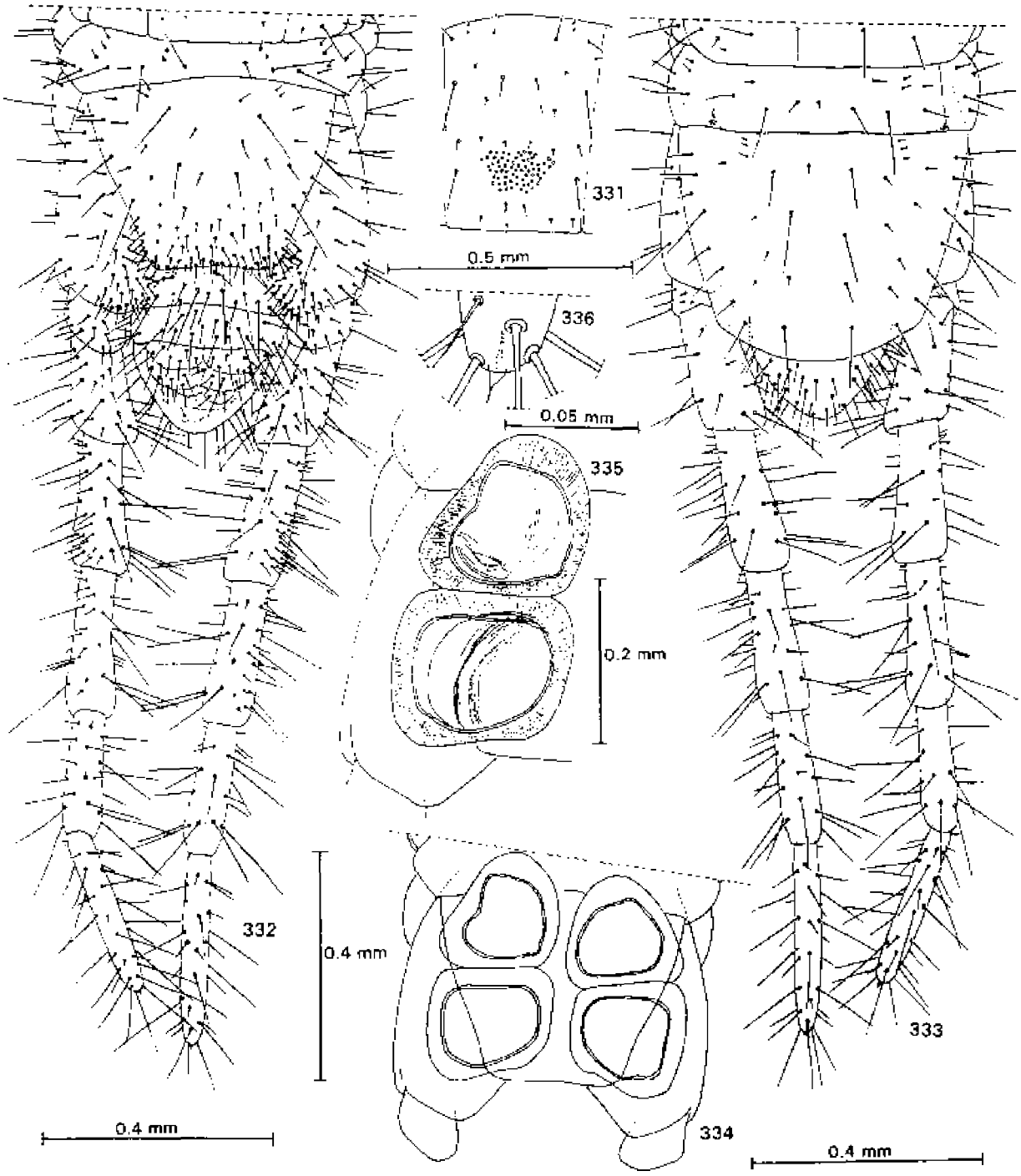
Figs. 305-310:
Schendylurus marchantariae n.sp. ♀ holotype (Brazil: Amazonas: Rio Solimões: Ilha de Marchantaria).
305: r. a.a. XIII, d.; **306**: cephalic shield; **307**: clypeus; **308**: labrum; **309**: dentate lamella of r. mandible; **310**: dentate lamella of l. mandible.



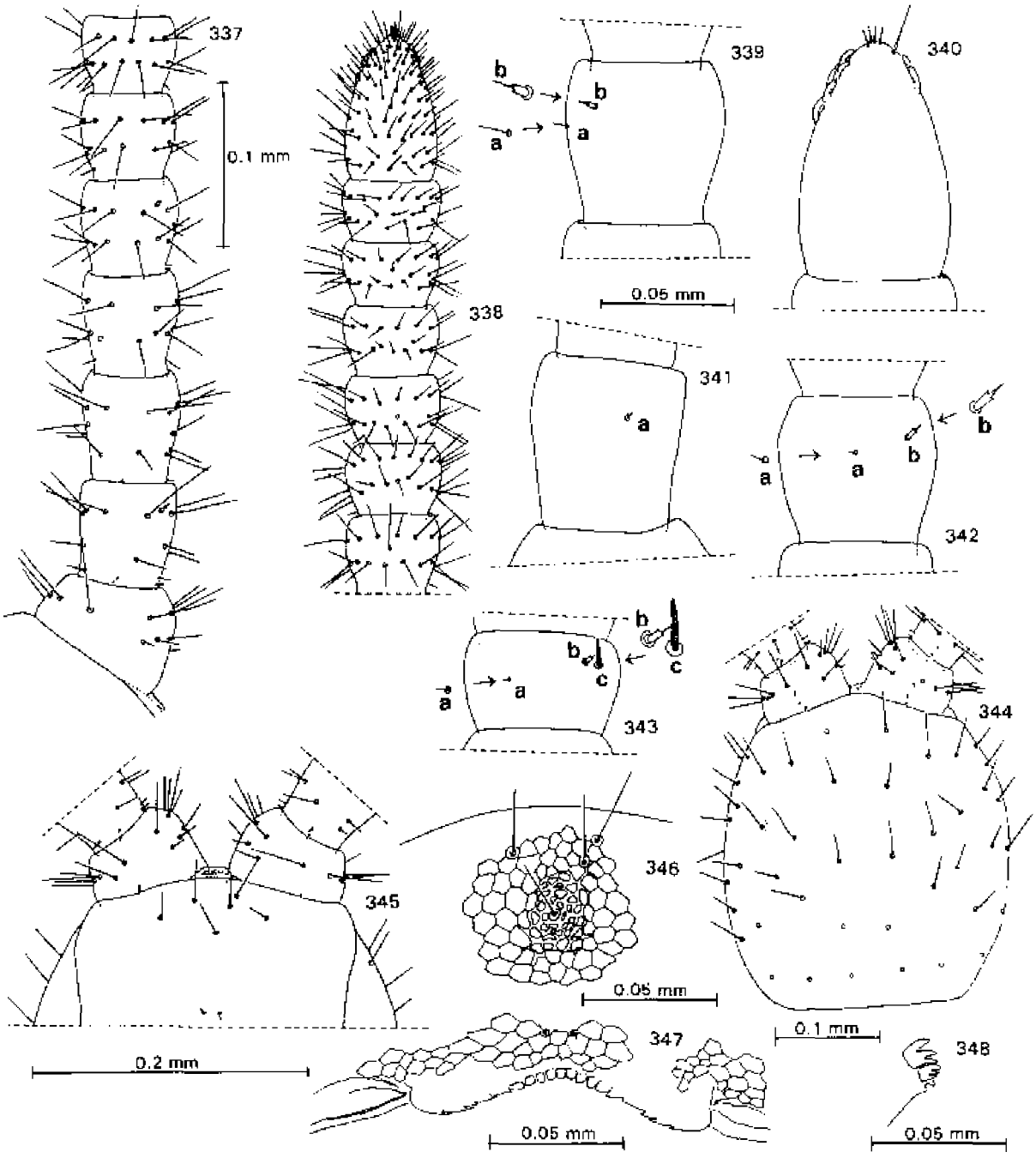
Figs. 311-318:
Schendylurus marchantariae n.sp. ♀ holotype (Brazil: Amazonas: Rio Solimões: Ilha de Marchantaria). **311**: first and second maxillae, v.; **312**: l. first maxilla, d.; **313**: claw of l. second maxilla, v.; **314**: detail of postero-external region of the l. second maxilla, v.; **315**: forcipular segment with poison claws, v.; **316**: detail of poison gland in l. poison claw, v.; **317**: l. leg XXII, v.; **318**: claw of r. leg XVI, antero-v.



Figs. 319-330:
Schendylurus marchantariae n.sp. ♀ holotype (Brazil: Amazonas: Rio Solimões: Ilha de Marchantaria). Sterna I, II, V, VIII, XII, XVII, XIX, XXII, XXIII, XXXII, XLVI, XLVII.



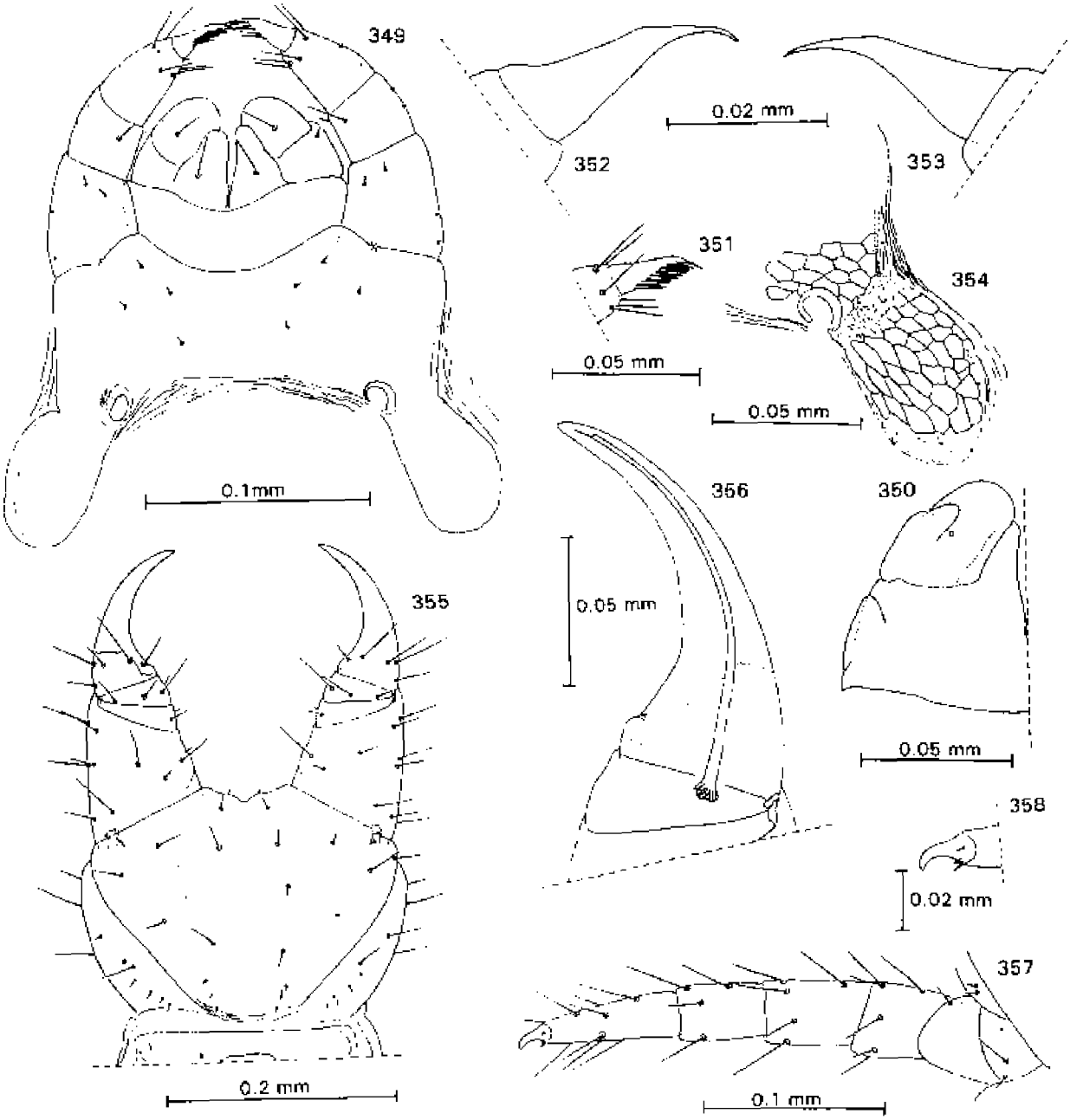
Figs. 331-336:
Schendylurus marchantariae n.sp. ♀ holotype (Brazil: Amazonas: Rio Solimões: Ilha de Marchantaria). **331**: sternum LI; **332**: last leg-bearing segment and terminal segments, v.; **333**: the same, d.; **334**: coxal organs, v.; **335**: detail of r. coxal organs, v.; **336**: detail of distal end of last podomere of r. last leg, d.



Figs. 337-348:

Schendylurus oligopus n.sp. ♀ holotype (Brazil: Amazonas: Reserva Fl. A. Ducke).

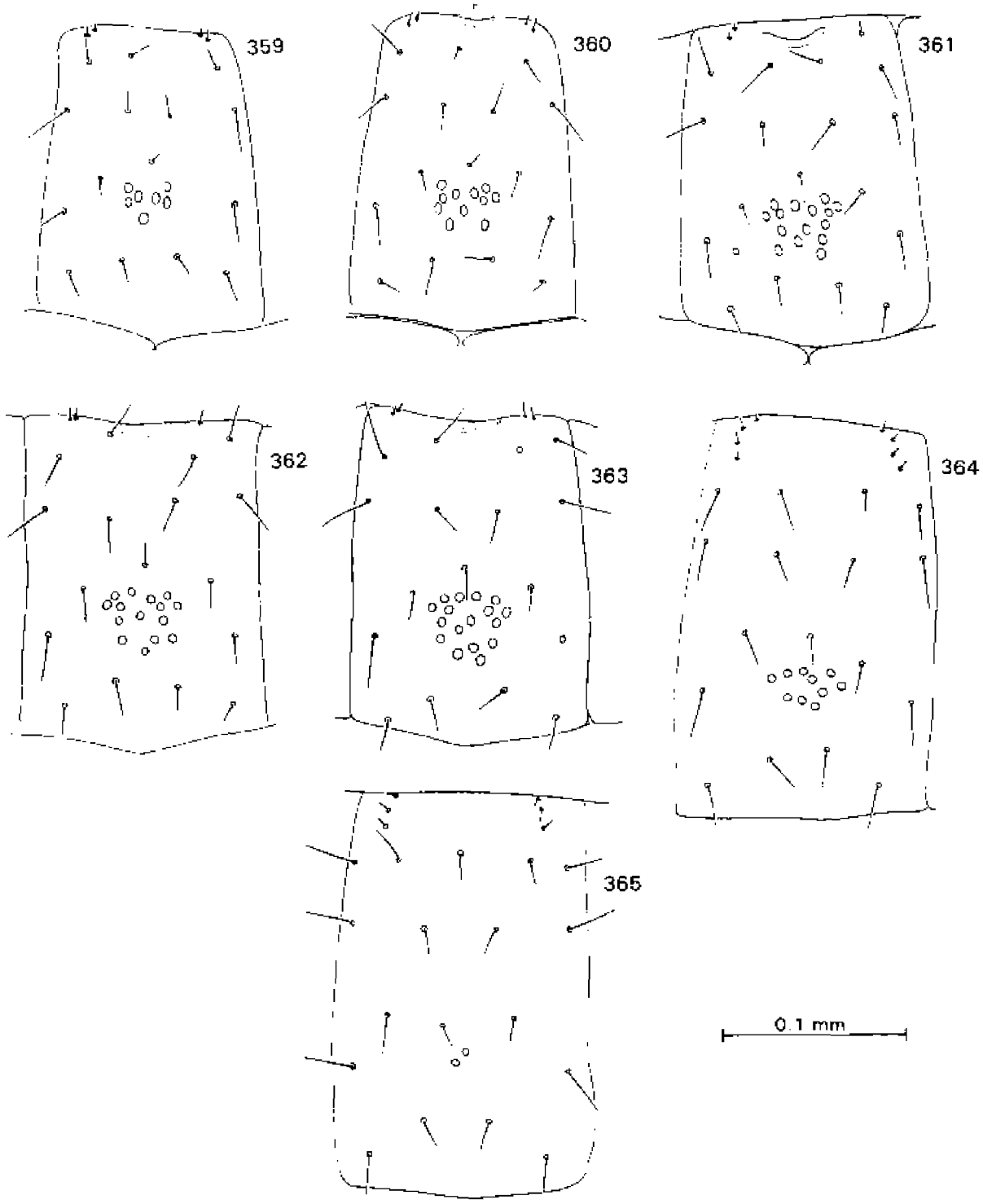
337: r. a.a. I-VII, v.; **338**: r. a.a. VIII-XIV, v.; **339**: l. a.a. V, v.; **340**: r. a.a. XIV, v.; **341**: r. a.a. II, d.; **342**: r. a.a. V, d.; **343**: r. a.a. XIII, d.; **344**: cephalic shield; **345**: clypeus and bases of antennae; **346**: clypeal area; **347**: labrum; **348**: dentate lamella of mandible.



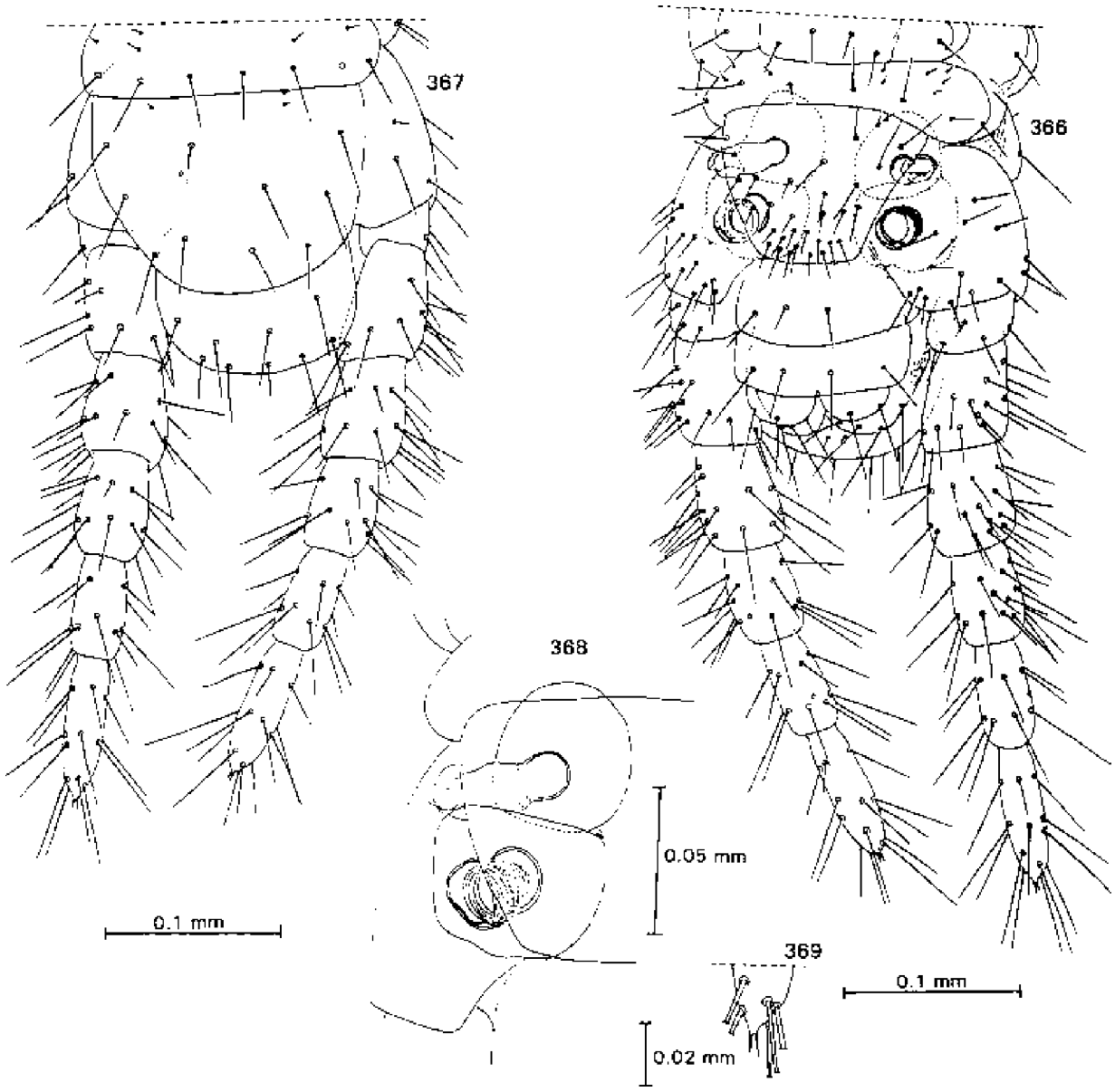
Figs. 349-358:

Schendylurus oligopus n.sp. ♀ holotype (Brazil: Amazonas: Reserva Fl. A. Ducke).

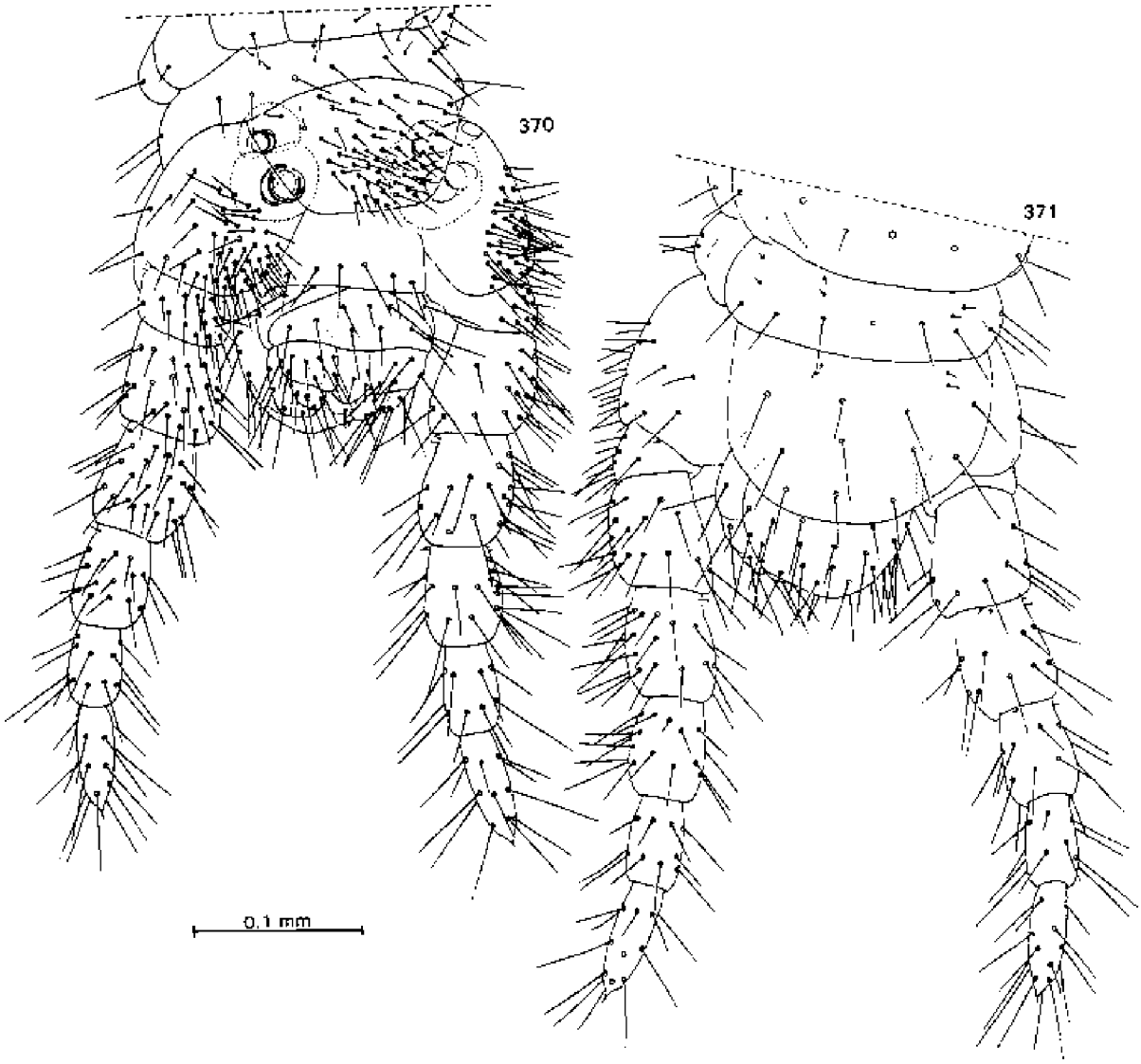
349: first and second maxillae, v.; **350**: l. first maxilla, d.; **351**: claw of l. second maxilla, d.; **352**: detail of claw of l. second maxilla, d. (teeth not drawn); **353**: the same, r. maxilla; **354**: detail of posterior external region of l. second maxilla, v.; **355**: forcipular segment with poison claws, v.; **356**: detail of poison gland in l. poison claw, v.; **357**: r. leg XI, v.; **358**: claw of r. leg XI, v.



Figs. 359-365:
Schendylurus oligopus n.sp. ♀ holotype (Brazil: Amazonas: Reserva Fl. A. Ducke).
Sterna II, III, V, VII, IX, XII, XIII.



Figs. 366-369:
Schendylurus oligopus n.sp. ♀ holotype (Brazil: Amazonas: Reserva Fl. A. Ducke).
366: last leg-bearing segment and terminal segments, v.; **367**: the same, d.; **368**: r. coxal organs, v.; **369**: detail of distal end of last podomere of l. last leg, v.



Figs. 370-371:
Schendylurus oligopus n.sp. ♀ allotype (Brazil: Amazonas: Reserva Fl. A. Ducke).
370: last leg-bearing segment and terminal segments, v.; **371**: the same, d.

Table 1: A matrix of diagnostic characters for some Neotropical species of *Ityphilus*, including *I. demoraisi* n. sp.

	I. calinus	*I. crabilli*	*I. guianensis*	*I. idanus*	*I. lilacinus*	*I. perrieri*	*I. savonus*	*I. demoraisi n.sp.*
body length	19 mm	21 mm	23 mm	female (holotype) 18 mm; male (paratype) 13 mm	28-45 mm	17 mm	16 mm	32 mm
pairs of legs	male:43	female: 53	male?: 49; female? 55	female: 59; male: 55	male: 71; sex?: 69-77	male: 61	sex?: 55	female: 69
head: length/width ratio	>1	<1	<1	<1	>1	1	?	1.1
antennae	'curved at middle but not truly geniculate, moderately clavate beyond the middle'	distally conspicuously clavate	'distally strongly clavate, geniculate'	distally clavate and geniculate	distally strongly clavate	'moderately clavate'	'somewhat geniculate, with the terminal portion greatly thickened'	distally conspicuously clavate
labrum: midpiece	?	without teeth	?	'with minute hair-like structures only'	without teeth	without teeth	?	without teeth
labrum: lateral pieces	?	5+5 very small teeth	?	1-2+1-2, poorly developed	3+3 small teeth	without teeth	?	5+5 very small teeth
teeth of dentate lamellae of mandibles	?	11	11	8	10, longer than wide	11	?	12
internal edge of forcipular tarsungulum	smooth?	serrate along the basal half	serrate along the basal third	smooth	smooth	serrate along the basal third	?	serrate along the basal half
calyx of poison gland	?	subcircular	?	short, subcylindrical	?	?	?	short, subcylindrical
pore field series	?	second to penultimate	'first to penultimate'	second to the fourth from rear end	second to antepenultimate	?	'second to fourth from rear end'	first to penultimate
pore fields	'circular'	subcircular-subovoidal	'circular'	'circular'	circular	'ovali-transversal'	'subcircular'	subcircular on anterior sterna to transversally subovoidal on posterior sterna
last leg-bearing segment, pleurites of the sides of praetergum	?	present	?	present	?	?	?	present
anterior vs posterior coxal organs	?	same size	smaller	same size	same size?	same size?	?	same size

Remarks. - Owing to the extremely poor descriptions provided by CHAMBERLIN for many species, this table is incomplete. Unchecked original data are given here in quotation marks. We have left out of the table another species of CHAMBERLIN's, i.e. *I. ceibanus* CHAMBERLIN, 1921, which was described on a single defective specimen without the posterior segments: it is even doubtful whether it really belongs to this genus. The characters of *I. perrieri* included in the table have been taken from the original description of BRÖLEMANN and additional data given in PEREIRA, MINELLI & BARBIERI, 1994: 166. The specimen from Peru referred by KRAUS (1957: 367) to this species certainly belongs to another species of this genus, probably a new one. COOK's (1899: 306-307) poor description of *Ityphilus lilacinus* has been completed on the basis of the redescription given by MATIC, NEGREA & FUNDORA MARTINEZ (1977: 285-286).

Table 2: A matrix of diagnostic characters for some Neotropical species of *Ribautia* (*Ribautia*), including *R.* (*R.*) *ducalis* n. sp.

	R. (R.) bouvieri	***R. (R.) proxima n. sp.***	***R. (R.) ducalis n. sp.***
body length	33 mm	43 mm	14 mm
pairs of legs	male: 73	male: 73, 75, 77 female: 75, 77, 79	male: 41 female: 41, 43
clypeal area	?	without setae (Fig. 96)	two pairs of setae (Fig. 58)
labrum	as in Fig. 43	as in Figs. 97, 122	as in Fig. 59
2nd maxillae: process at the anterointernal corners of the coxosternum	as in Fig. 44	as in Fig. 99	as in Fig. 61
apical teeth of forcipular trochanteropraefemur	as in Fig. 45	as in Fig. 104	as in Fig. 67
calyx of poison gland	?	as in Fig. 106	as in Fig. 68
pore fields	all undivided	all undivided	those of midbody divided in two areas
pore field on sternum I	present	absent	absent
number of coxal organs	ca. 8+8	ca. 10+10	3+3

Table 3: A matrix of diagnostic characters for some Neotropical species of *Ribautia* (*Schizoribautia*), including *R. (S.) difficilis* n. sp.

	R. (S.) seydi	*R. (S.) peruana*	*R. (S.) titicacae*	*R. (S.) montana*	*R. (S.) difficilis n.sp.*
body length	about 28 mm	34 mm	46 mm	24 mm	22 mm
pairs of legs	male?:53, 55, female?: 59	female:49	sex?: 63?	female: 55, (57?)	male: 47, 49; female: 49
clypeal area	present	"absent"	?	present	present
labrum, midpiece	large	large	small	large	large
1st maxillae: palps of the coxosternum	?	?	?	sizeable (Fig. 156)	rudimentary (Fig. 134)
2nd maxillae: process at the anterointernal corners of the coxosternum	?	?	?	as in Fig. 157	as in Fig. 135
chitinlines on forcipular coxosternum	?	short	?	long	almost complete
forcipular coxosternum: anterior process	small	small	very well developed	small	small
teeth of forcipular trochanteroprofemur	"praefemur with tooth at distal end and a nodule near the middle"	as in Fig. 161	as in Fig. 187	as in Fig. 158	as in Fig. 137
ventral pores	on anterior sterna only	along the whole trunk length	along the whole trunk length	along the whole trunk length	along the whole trunk length
posterior limit of ventral pore field series	ca. sternum XXVII	antepenultimate sternum	penultimate sternum?	antepenultimate sternum	penultimate sternum
undivided pore fields	subcircular to sagittally subovoidal	subcircular	transversally ovoidal	sagittally subovoidal	anterior sterna: subcircular, posterior: irregular
divided pore fields	_____	starting with sternum XVII	starting with sternum XIX	holotype: divided from sternum XIII to XLI (on sterna XLII, XLIV- XLV undivided)	holotype: divided on sterna XV to XLVII (on sternun XLVIII undivided)
number of clusters of coxal organs	2 (or 3?)	3	3?	3	3

Remarks. - Data for *R. (S.) seydi* RIBAUT are from CHAMBERLIN, (1955-1956: 17-18) and TURK (1955: 485-487), those for *R. (S.) titicacae* from TURK (1955: 487).

Table 4: A matrix of diagnostic characters for two species of *Ribautia* (*Schizoribautia*): *R.* (*S.*) *limaensis* and *R.* (*S.*) *silvana*.

	R. (S.) limaensis	***R. (S.) silvana***
body length	25 mm	14 mm
pairs of legs	male: 55	male: 49
labrum	as in Fig. 153	as in Fig. 169
forcipular trochanteropraefemur	without teeth	with a well developed tooth

Table 5: A matrix of characters differentiating *Schendylurus januarius* n. sp. from *S. andesicola* CHAMBERLIN.

	S. januarius n. sp.	***S. andesicola Chamberlin***
pairs of legs	male: 43	male: 45, 47, 49; female: 47, 49, 53
antennae of the male	on a.a. I-III, setae of different length few in number	a.a. I-V with setae of different length
a.a. IX and XIII: specialized setae on the dorsal surface	one type	two types
calyx of poison gland	subcircular	subcylindrical
forcipular trochanteropraefemur	completely unarmed	an unpigmented tooth on apical medial edge
ventral pores	grouped on a single area	two small accessory groups at the anterior sides of the main area
male gonopods	as in Fig. 293	as in Fig. 228
form of male coxopleuron	as in Fig. 288	as in Fig. 226

Table 6: A matrix of characters differentiating *Schendylurus marchantiae* n. sp. from *S. iguapensis* VERHOEFF.

	S. marchantiae n. sp.	***S. iguapensis***
ratio antennae to head length	ca. 4.2:1	ca. 3.2:1
proximal a.a. with few setae of differenth length	I-IV	I only
a.a. II, V, IX, XIII: surface with specialized setae	unreticulated, hyaline, unpigmented (Figs. 302, 305)	like the remaining surface of the a.a. (Fig. 294)
a.a. XIV: clavIform setae	ca. 20-25 on the external, ca. 11-15 on the internal border	ca. 9 on the external, ca. 5 on the internal border
1st maxillae: palps of the coxosternum	well developed (Fig. 312)	very short, not extending over the distal border of the first article of the telopodite
additional antero-lateral pores on the sternal areas	on sterna I-III (Figs. 319-326)	on sterna II-XIV (Figs. 295-298)
tergum of last leg-bearing segment: width to length ratio	1.2:1 (Fig. 333)	2.0:1 (Fig. 299)