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DIPLOPODA FROM RONDÔNIA, BRAZIL. II. THREE NEW GENERA IN THE FAMILY CHELODESMIDAE (POLYDESMIDA)

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ABSTRACT

New genera are defined to accommodate three disjunct new chelodesmids endemic in Rondônia: Rondonaria n. gen., for R. schubarti n. sp.; Lithobiodesmus n. gen., for L. xenoporus n. sp., and Rhicnostethus n. gen., for the type species R. rondoni n. sp., and R. coriaceus (Schubart, 1947) n. comb., described from Mato Grosso. The tribal position of these new taxa cannot be confidently established on the basis of existing knowledge of the family; each is distinguished by one or more unusual anatomical characters.

KEYWORDS: Diplopoda, Polydesmida, Chelodesmidae, Brazil, Rondônia.

INTRODUCTION

On several occasions during 1983 and 1984, extensive collections of Diplopoda were assembled by Dr. Paulo E. Vanzolini during a biological survey ("Museu de Zoologia – Polonoroeste") of areas designated for development in the state of Rondônia. This material was subsequently placed in my hands for study, and an initial report on two new spirostreptid genera has been published (Hoffman, 1988).

By far the majority of the specimens examined belong in the gigantic, multifarious family Chelodesmidae, the actual size and diversity of which is becoming apparent only after a century of investigation. Since the internal classification of the family is still in its earliest stages of development, the task of describing and organizing the ongoing flood of novelties is beset with numerous problems and doubts which impede a desirable rate of progress. Many of the Rondonian species (*all of which are undescribed*)

are referable to genera which belong in tribal groups currently under study in a broad perspective; such species will figure in eventual papers of revisionary scope. Several others, however, are disjunct enough to defy present placement, and can reasonably be placed on record simply to advertise their presence in Rondônia even though lines of affinity are not immediately obvious. I proceed in the second part of this series with a consideration of three such taxa, all of them new at both the specific and generic levels. Eventually other material will become available to shed some light on their proper position in the organization of the Chelodesmidae.

Most type material of the new forms is located in the Museu de Zoologia, Universidade de São Paulo, São Paulo, Brazil (MZUSP). Some paratypes have been retained at the Virginia Museum of Natural History, United States of America (VMNH), and one is in the collection of the United States National Museum, Washington, D.C. (USNM).

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Taxonomy

Family Chelodesmidae

Chelodesmidae Cook, 1895, Ann. New York Acad. Sci., v. 9, p. 4. – Hoffman, 1980, Classification of the Diplopoda, p. 151 (list of genera proposed up to 1978).

Leptodesmidae Attems, 1938, Das Tierreich, v. 69, p. 1. – Schubart, 1946, An. Acad. Brazil. Sci., v. 18, p. 165 (and many subsequent papers on Brazilian species).

The current division of this vast melange into two subfamilies on a geographic basis (Chelodesminae in South America, Prepodesminae in tropical Africa) is expedient but quite unrealistic – the Neotropical components alone may require distribution into several subfamilies and it is also likely that some eventual infrafamilial taxa will prove to be amphiatlantic.

Rondonaria n. gen.

Type species: *R. schubarti* n. sp.

Name: Derived from the Brazilian state in which the type species is endemic, therefore indirectly a patronym for the celebrated ethnologist Candido Mariano da Silva Rondon whose name is pervasively woven into the fabric of Brazilian natural history.

Diagnosis: A chelodesmine genus of uncertain tribal affinity, distinguished from all known genera by the unusually deep proximal extension of the cannular socket, almost to contact with the median sternal element. The large size, uniformly dark coloration, and large, nearly horizontal paranota set *Rondonaria* apart from other known regional genera on a superficial basis. The profuse bristly ventral setation of the podomeres may be diagnostic.

Gonopods large, extended anteriorly between legs of the 6th segment, median sternal element small but distinct. Tracheosternal apodeme relatively short, nearly straight. Coxae not produced laterad and without dorsal apophysis, setation represented only by one paracannular seta and one or two on dorsolateral side. Cannular socket remarkably large and deep, nearly in contact with sternum. Telopodite set against coxa at nearly a right angle, prefemoral region elongate, straight, with large, distally calyciform process from base on

dorsal side. Acropodite elements, smaller and shorter than prefemoral, consisting of a small, acute distal projection (*b* in Fig. 8) and a rounded apical lobe, the dorsomedial edge conducting the prostatic groove, set off as a separate element by a deep flexure on lateral side (*a* in Fig. 8a).

Cyphopods (Figs. 4, 5) partly exposed at opening of gonotheca, coxae acutely produced, with several distinct striations on posterior surface.

Species: Only the type species is known (*R. schubarti*).

Distribution: Known only from several localities in Rondônia and northern Mato Grosso.

Rondonaria schubarti n. sp.

Figures 1-8

Material (all from Edo. Rondônia): Male holotype (MZUSP) from Santa Cruz da Serra, 29 November 1983; male paratype (MZUSP) from 5 km SW of Santa Cruz da Serra, 4-10 November 1984; female paratype (MZUSP) from Nova Esperança, 6-9 December 1983; same locality, 1 male and 1 female paratypes (MZUSP), 12-14 November 1984; 2 male and 1 female paratypes (VMNH) from Nova Brazilia, 6-11 November 1984, all P.E. Vanzolini leg., also 1 male paratype (USNM) from Porto Velho de San Antonio, Rio Madeira, without date, Meade Bolton leg.

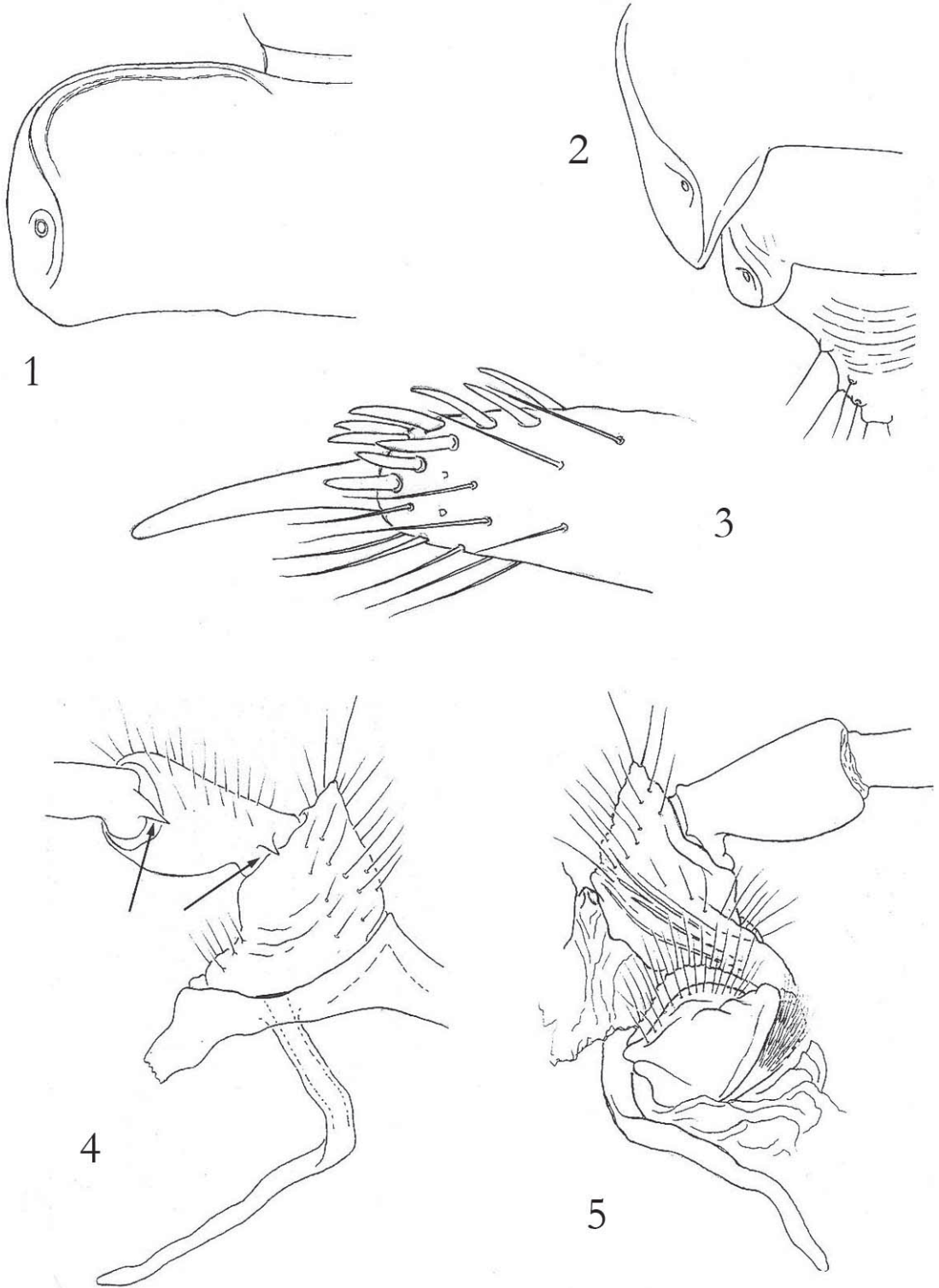
Name: A patronym honoring the contributions of Otto Schubart. Nestor of Brazilian Diplopodology.

Diagnosis: With the characteristic of the genus (vide supra).

Holotype: Adult male, ca. 77 mm long, widths of selected body segments as follows:

2 nd – 12.3 mm	12 th – 13.6 mm
4 th – 13.6	14 th – 13.7
6 th – 14.2	16 th – 12.8
10 th – 14.0	18 th – 8.8

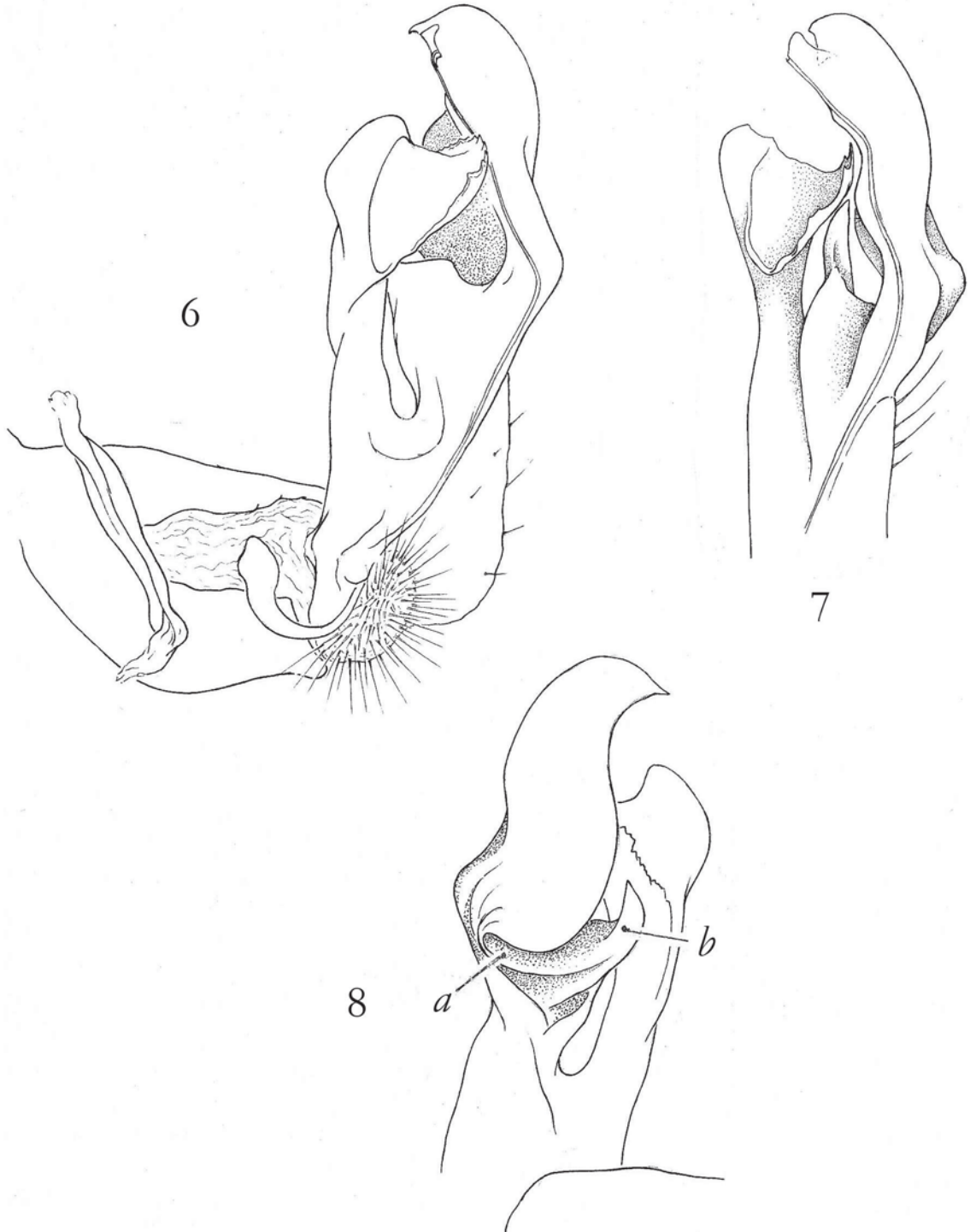
Body widest at segment 6 but appearing nearly parallel-sided over most of length, W/L ratio near mid-body, 19%. Color shortly after preservation uniformly dark maroon except for labrum and coxae (nearly cerise) and dorsum of prozona (light yellowish brown with darker brown median spot).



FIGURES 1-5. *Rondonaria schubarti* n. sp. 1. Left paranotum of 10th segment, dorsal aspect. 2. Left paranota of segments 18 and 19 and epiproct, dorsal aspect. 3. Apex of tarsus of midbody leg, enlarged to show modified apical setae. 4. Second pair of legs of female, sternum and basal podomeres, anterior aspect of left side, arrow indicates basal spine of prefemur. 5. The same leg, posterior aspect, showing coxal striation and cyphopod.

Face generally smooth, but notably and coarsely striate both above and below antennal socket; genae not margined but with distinct shallow impression, genal head width 6.5 mm, interantennal space narrow,

only 1.4 mm. About 25-25 labral marginal setae, 14-14 labroclypeal setae (which merge on each side into ca. 4 genal setae), 4-4 clypeal setae and 4-4 frontal and 1-1 interantennal. Antennae long (13.0 mm) and slender,



FIGURES 6-8. *Rondonaria schubarti* n. sp. 6. Left gonopod, mesal aspect. 7. Distal half of left telopodite, ventromesal aspect. 8. Distal half of left telopodite, lateral aspect. Abbreviations: a, basal flexure of tibiotarsal region; b, spiniform process of femoral region.

articles not notably clavate, 2nd-6th similar in size and shape, 5th and 6th distinctly more setose than others, each with transverse oval sensory organ on outer distal surface; four sensory cones in two diads, those of the dorsal pair distinctly larger and projecting further outward than those of the ventral pair. Entire surface of gnathochilarium, except lateral ends of mentum, invested in numerous short, dark, bristly hairs.

Dorsal surface of collum and all other terga densely granulo-coriarius vermiculate, with dispersed small granules in irregular transverse series. Collum with shallow but distinct postmarginal median transverse depression. Paranota large, nearly horizontal, those of anteriormost and posteriormost segments typically in contact; anterior corners broadly rounded with raised thin edges; peritremata large, flattened, merging evenly anteriad with edge of paranota but forming distinct offset at posterior end and not forming true posterior corner until segment 15. Metaterga of segments 5 to about 16 with vague, shallow, transverse impression. Stricture distinct around segments, anterior edge sharply defined ventrally, obsolete across dorsum.

Form of posteriormost paranota and epiproct as shown in Figure 2. Paraprocts and epiproct normal for the family, median lobe of latter unusually acute, paramedian tubercles minute.

Legs placed on elevated, glabrous podosterna about as wide as long (ca. 3.1 mm each way), sterna posterior to gonopods produced into distinct subcoxal spines, the smaller anterior placed on the condyle, the larger, darker, and more caudally declined posterior spine set some distance behind it. Sides of metazona uniformly granulate; anterior stigmata narrow vertical slits located in stricture anteriad to dorsal coxal condyle. Legs long (ca. 13 mm at midbody) and relatively slender, length order of podomeres 2>6>5>4=2, the femur by far the longest (5 mm) and equal to tibia and tarsus combined. Ventral side of all podomeres invested in numerous short bristly setae. Apicalmost tarsal setae modified: shorter than those more proximad and of a characteristic laminate form (Fig. 3). Tarsal claw nearly straight, without ridges or other modification.

Gonopore opening on oblique inner side of subconical gonapophysis. Legs of segment 4 nearly in contact, separated by small, bilobed median sternal projection. Sterna of segments 5 and 6 produced into prominent darkly pigmented subcoxal spines, those between legs of 4th pair nearly in contact, acutely conical, those between legs 5, 6, and 7 increasingly more separated to accommodate apices of gonopods. Anterior legs not modified, but somewhat more setose than those more posteriad.

Gonopod aperture moderate in size, transversely oval, caudal edge elevated beyond level of ventral coxal condyles of 8th legs; anterior edge flush with surface of stricture (on this segment with sharp anterior edge). Gonopods large, extending forward between legs of 6th segment, of the structure as described in the generic heading and shown in Figures 6 to 8.

Paratype (female from Nova Esperança): Length ca. 76 mm, maximum width 15 mm at segment 12, W/L ratio ca. 20%. Similar to male in coloration and external structure except that legs and antennae are more slender and paranota relatively narrower. Sternal spines smaller, those of the anterior pair obsolete except on posteriormost segments.

Form of 2nd pair of legs shown in Figures 4 and 5, coxae with prominent apical conical projections, posterior surface strongly sculptured by several long, deep oblique grooves (Fig. 5); prefemora and femora with small but distinct acutely spiniform (possibly articular?) processes at base on anterior side (s), adjacent to condyle of preceding podomeres, not observed in other chelodesmid genera and possibly an autapomorphy of *Rondonaria* (x in Fig. 4). Cyphopods small, without distinctive structure, concealed behind coxae in anterior aspect, consisting of the usual two valves, an operculum, and a small receptacle (Fig. 5).

Distribution: In addition to the specimens personally examined, I have seen gonopod drawings (S. Golovatch, del.) of a male from Aripuanã, Mato Grosso (9.10S, 60.40W), Christine Strüssmann leg. 26 October – 2 November 2004. This locality is about 350 km east of Porto Velho, and 280 km north of Nova Esperança, these three points thus defining a fairly extensive distribution for the species.

Remarks: There appears to be substantial variability in size in this, species. In several series (e.g., Nova Esperança, Nova Brazilia) some specimens (both male and female) are about 70-77 mm long, others (both sexes) roughly 10 mm shorter but otherwise apparently typical in every respect. Perhaps these two size classes came from several local demes having different developmental histories.

Lithobiodesmus n. gen.

Type species: *L. xenoporus* n. sp.

Name: Derived from the chilopod generic name *Lithobius*, in reference to the long slender legs of the

type species with enlarged, spur-like setae forming a distal whorl on each podomere.

6 – 3.5	16 – 3.0
8 – 3.5	18 – 2.0

Diagnosis: The type species is distinguished by the subcylindrical body (paranota small and set high on sides, dorsum almost flat); prominent oblique pleurosternal carinae; and long and very slender legs with a whorl of enlarged, spur-like setae at distal end of podomeres. Segments 18 and 19 without paranota, 17-19 also lacking ozopores. Gonopods with small, simple, falcate telopodite and large biramous prefemoral process, coxae laterally produced beyond base of telopodite and apically concave, forming a sort of false condyle against which base of telopodite is positioned (unique in the family). Gonopore opening flush on surface of a low distal convexity on coxae of 2nd male legs.

Distribution: Rondônia, Brazil.

Species: Only the type species is known (*L. xenoporus*).

Remarks: This genus is dissimilar to any others known to me owing to the progressive reduction in paranotal size, and the corresponding absence of ozopores on segments 17, 18 and 19, unique in the family and all polydesmidan taxa in which ozopores are normally present. The hypertrophied pleurosternal carinae are likewise noteworthy. Against these autapomorphic expressions, the gonopod structure strongly resembles that seen in *Brachyurodesmus*, with which other evidence of relationship may be sought.

Litobiodesmus xenoporus n. sp.

Figures 9-20

Material (all from Edo. Rondônia): Male holotype, male paratype, and female paratype from Nova Esperança, 6-9 December 1983; male and female paratype from Santa Cruz da Serra, 29 November 1983, all P.E. Vanzolini leg., in MZUSP.

Name: From the Greek elements *xenos* (strange) + *poros* (pore) in reference to the absence of ozopores from segments 17-19.

Holotype: Adult male, ca. 29 mm long (fragmented), widths of selected body segments as follows:

1 – 4.0 mm	10 – 3.4 mm
2 – 3.9	12 – 3.4
4 – 3.5	14 – 3.3

Body widest at anterior end, narrower but parallel-sided over segments 4-12, thereafter becoming attenuated posteriad by reduction in size of paranota which by segment 15 are not as wide as diameter of segment below them. W/L ratio near midbody ca. 13%. Specimen lacking original pigmentation, entirely pale testaceous.

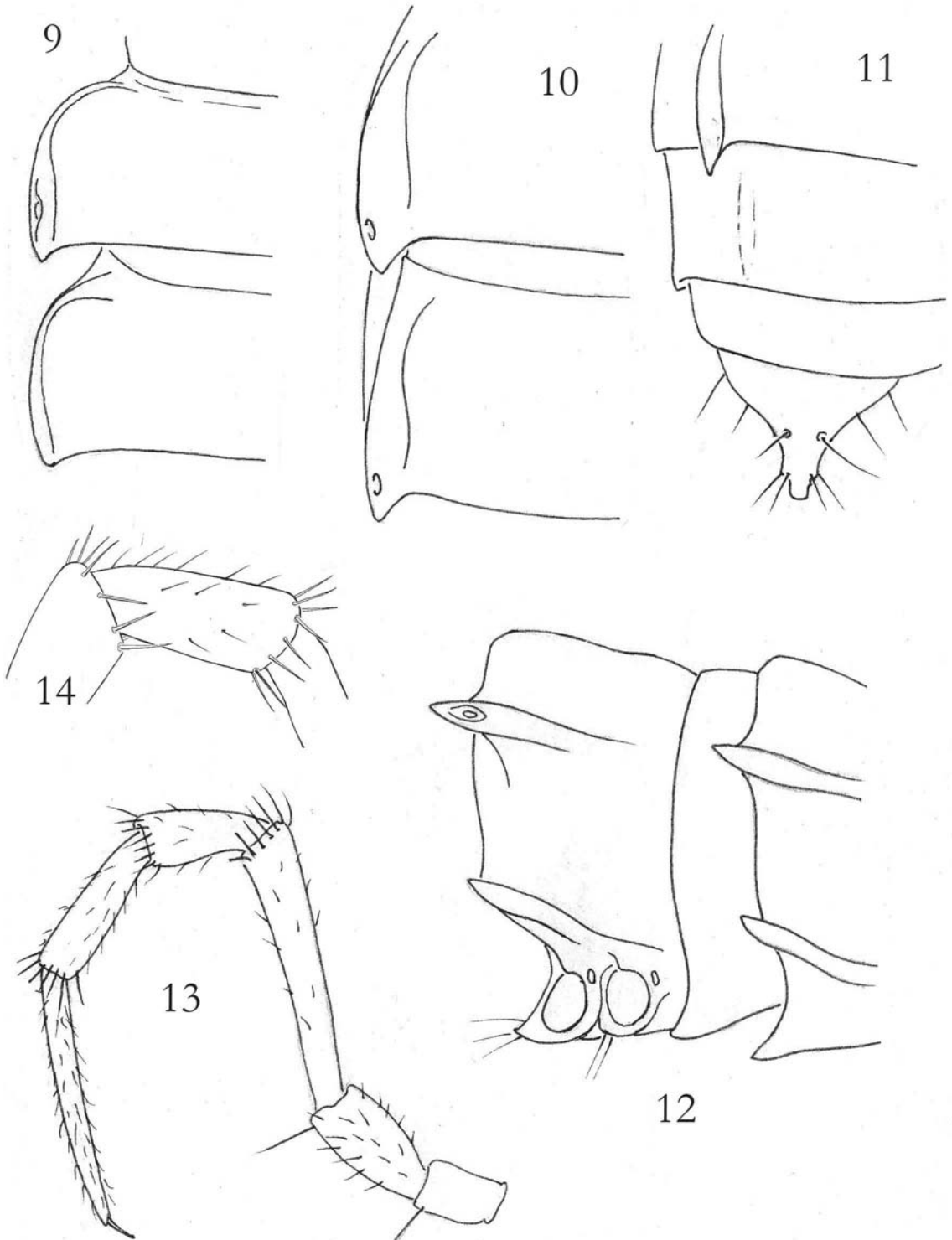
Head capsule smooth and polished, without surface texture; interantennal space 1.0 mm, antennae ca 6.0 mm long, articles in decreasing length order 2>3>6=5=4, basal articles nearly glabrous, 5th and 6th uniformly invested in fine declivent setae; 6th and 7th without evident sensory pits or fields.

Dorsal surface of collum and all body segments smooth and polished, without trace of tubercles or transverse sulci, laterally strong declivent. Stricture present entirely around body, the anterior edge sharply defined. Paranota of anteriormost segments (Fig. 9) large, nearly horizontal, anterior corners rounded, posterior acutely angular; from about 8th segment paranota becoming increasingly smaller (Fig. 10), ozopores tiny, located near posterior corner, on segments 5, 7, 9, 10, 12, 13, 15-16. Paranota of segment 17 only a fine thin ridge, segment 18 with minute vestige, and 19 without trace of paranota, ozopores absent from all three (Fig. 11). Epiproct subconical; paraprocts vertically striated; hypoproct triangular, the apex acute, paramedian tubercles obscure.

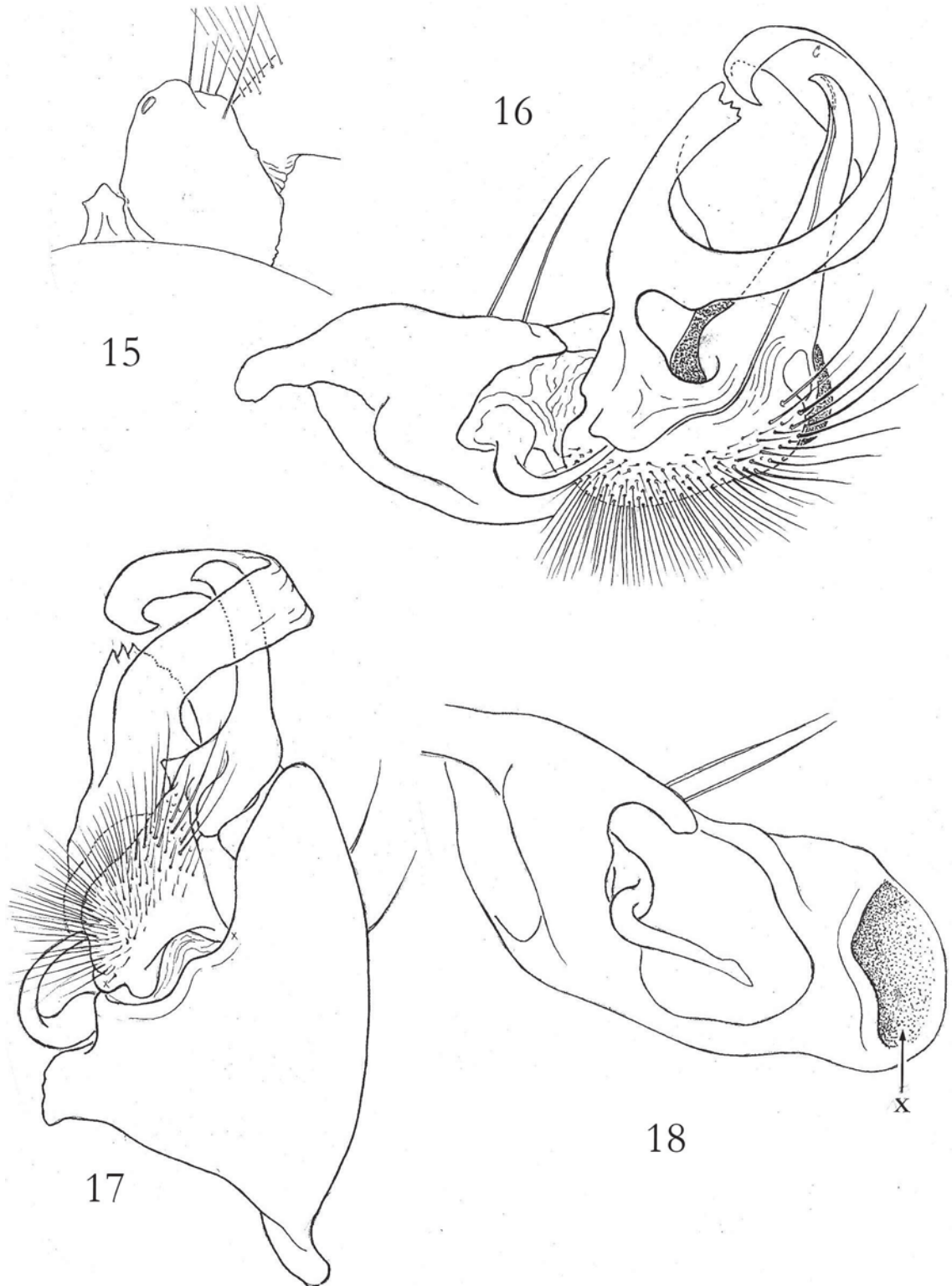
Metasterna slightly elevated, smooth and glabrous, subconically produced at base of posterior legpair. Sides of metazona smooth, pleurosternal carinae very strongly developed (Fig. 12) on segments 3-16, projecting beyond caudal edge of segments. Legs (Fig. 13) long and slender, longest on posterior segments, basal podomeres nearly glabrous, distal two or three with profuse short setae and an apical whorl of enlarged, almost spur-like setae (Fig. 14). Anterior legs and sterna unmodified except prefemora prominently convex dorsally, and ventral surface of basal three podomeres invested with slender pale setae as long as diameter of podomere. Shape of 2nd coxa and gonopore in Figure 15.

Gonopod aperture relatively large, transversely oval, extended anteriorly to reduce prozonum medially to a thin strip; edges not notably elevated except at lateral ends and immediately anteriorly to coxal sockets.

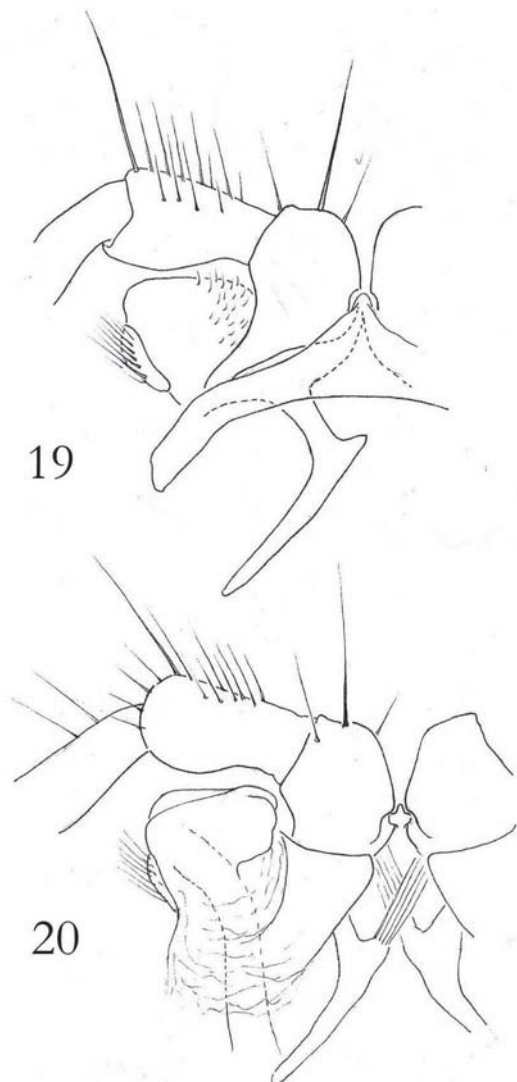
Gonopods joined by a small sclerotized median sternal remnant. Coxae produced laterally beyond base of telopodite, terminating in a shallow rounded ac-



FIGURES 9-14. *Litbobidesmus xenoporus* n. sp. **9.** Left paranota of segments 5 and 6, dorsal aspect. **10.** Left paranota of segments 12 and 13, dorsal aspect. **11.** Posterior end of body, showing reduction of paranota on segment 18 and absence from 19. **12.** Segments 9 and 10, lateral aspect, legs removed, showing prominent pleurosternal carinae and postcoxal sternal projection. **13.** Leg from midbody segment. **14.** Postfemur and adjacent ends of femur and tibia, enlarged to show apical whorls of setae.



FIGURES 15-18. *Lithobiodesmus xenoporus* n. sp. 15. Coxa of 2nd pair of legs of male, posterior aspect. 16. Left gonopod, mesal aspect. 17. Left gonopod, oblique posteroventral aspect, showing juxtaposition of telopodite against apical end of coxa. 18. coxa of left gonopod, telopodite removed, mesal aspect, to show apical coxal acetabulum (X).



FIGURES 19-20. *Lithobiodesmus xenoporus* n. sp. 19. Sternum and basalpodomeres of 2nd legs of female, left side, anterior aspect. 20. Basal podomeres of 2nd legs of female, right side, posterior aspect.

etabulum (\times in Fig. 18) against which a ventral lobe of the postfemoral region pivots, forming a sort of false articulation unknown elsewhere in the family or order.

Two coxal macrosetae on dorsal side, no paracannular setae. Prefemoral region of telopodite continuing long axis of coxa; acropodite set off at an obtuse angle (mesal aspect!) by basal flexure, relatively short, straight, simple, prostatic groove visible for its entire length. Prefemoral process large, bifurcated, one branch straight, broadly laminate with denticulate apex, the other long, recurved around end of acropodite, subdistally broadened, apically acute (Figs. 16, 17).

Prefemoral setae fine and dense proximally, much longer and more dispersed distally.

Male paratype (Santa Cruz da Serra): Substantially larger than holotype, ca 40 mm in length and 5.2 mm wide at midbody, but agreeing closely in gonopodal and peripheral structure except that segment 18 has a slightly more definite carina representing the paranota.

Female paratype (Santa Cruz da Serra): Length ca 29 mm (fragmented), width of segment 2, 4.9 mm, of segment 10, 4.0 mm. Similar to male except: broader sterna, with subcoxal cones greatly reduced; paranota smaller, present on segment 17 only as vague rudiments which do not extend beyond caudal edge of segment.

Base of 2nd legs and cyphopods (Figs. 19 and 20). Lateral extension of coxal podomere noteworthy. Receptacle partly sclerotized, but merging proximally into membrane; valves likewise not sharply defined and apparently merging with membrane of gonotheca. Condition of material not permitting more precise drawing and description.

Comments: Schubart (1947:16) has recorded from the Barra do Tapirapé in Mato Grosso a female chelodesmid which from the very brief description seems to have some resemblance to *L. xenopus*. A re-examination of this specimen as regards its ozopore characters would be desirable.

Rhiconstethus n. gen.

Type species: *E. rondoni*, by present designation. The genus also includes *Leptodesmus coriaceus* Schubart (1947) from Mato Grosso.

Name: A neologism composed of the Greek elements *rhiconos* (wrinkled) and *stethos* (chest, sternum), in reference to the singular appearance imparted by the dense longitudinal carination of the podosterna.

Diagnosis: This genus is distinguished by the combination of longitudinally wrinkled (striated) podosterna, microgranular tergal texture, prolonged male gonapophysis and course of the prostatic groove along the edge of a broad lobe of the acropodite.

Distribution: This taxon is known from the Brazilian states of Rondônia and Mato Grosso.

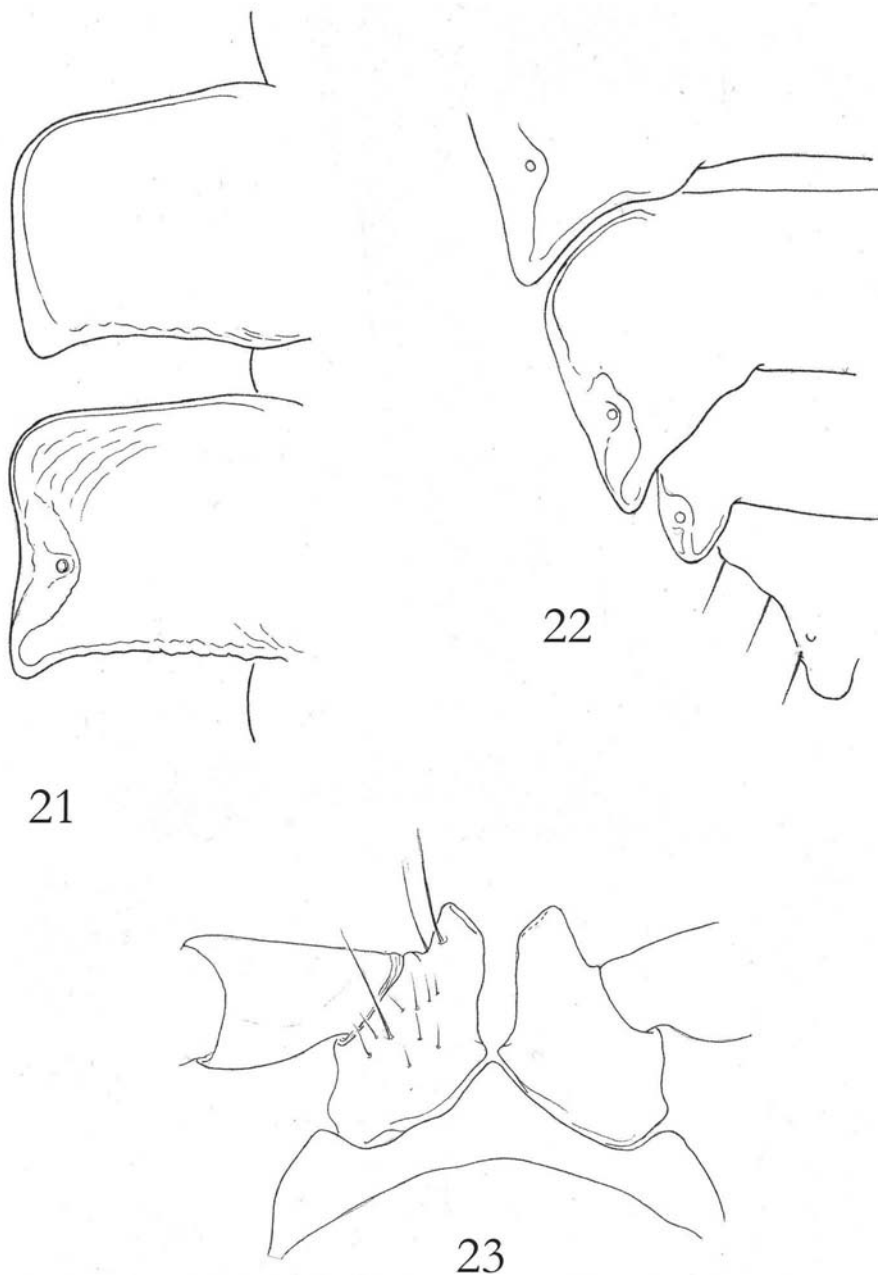
Species: Two species are so far known (*R. rondoni*, *R. coriaceus*).

Remarks: Several characters, such as small gonopod aperture, granulate dorsum, shape of peritreme, and size and placement of the gonocoxal apophysis suggest possible affinity with taxa in the tribe Chondrodesmini. The longitudinal striation of the sterna is possibly a generic apomorphy, although the condition in *R. coriaceus* (not mentioned, but possibly overlooked, by Schubart) requires examination.

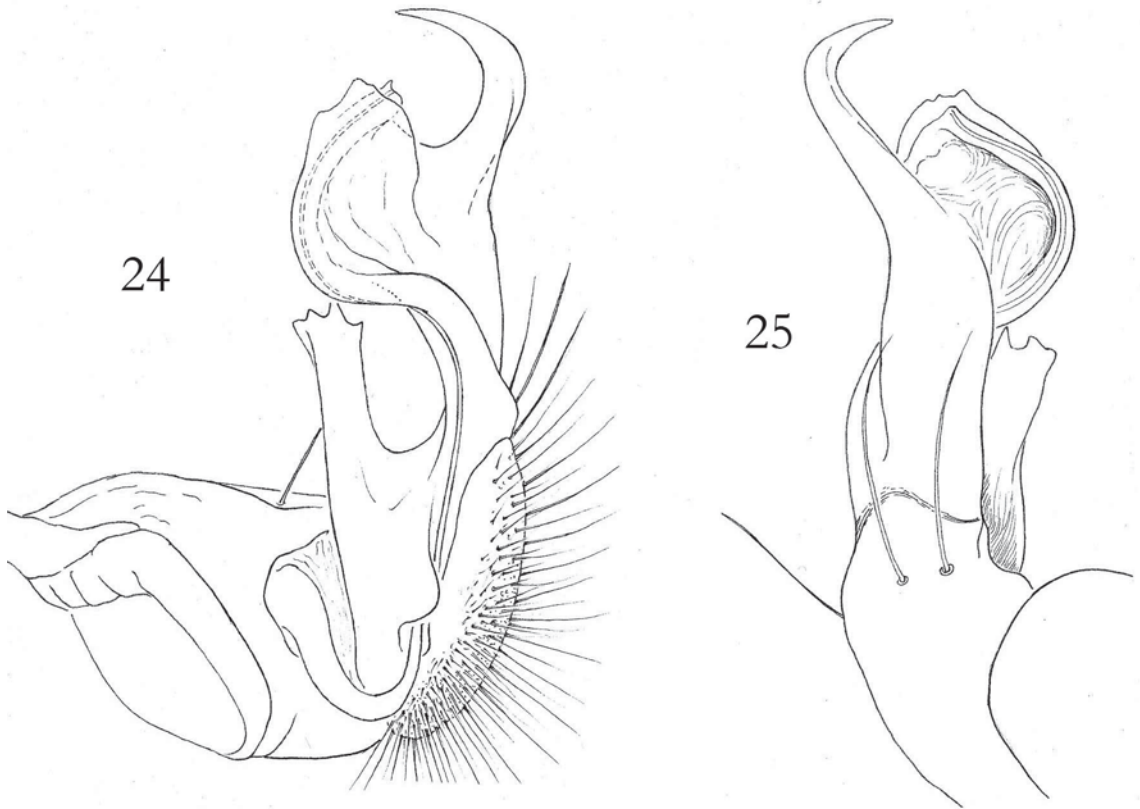
***Rbiconstethus rondoni* n. sp.**

(Figures 21-25)

Material: Male holotype and three male paratypes (MZUSP) from Nova Esperança (11.32S, 61.07W), Edo. Rondônia, Brazil, 6-8 December 1983, leg. P.E. Vanzolini (field number MZ-Polonoreste 83-1888). Male paratype (VMNH) from Nova Brasília, Rondônia,



FIGURES 21-23. *Rbiconstethus rondoni* n. sp. 21. Left paranota of segments 8 and 9, dorsal aspect. 22. Left paranota of segments 1-19 and epiproct, dorsal aspect. 23. Sternum and basal podomeres of 2nd legs of male, posterior aspect, showing coxal gonapophyses.



FIGURES 24-25. *Rhichnostethus rondoni* n. sp. **24.** Left gonopod, mesal aspect. **25.** Telopodite of left gonopod, lateral aspect, showing course of prostatic groove, drawings from holotype.

6-11 November 1984, Vanzolini (MZ-Polonoreste 84.0565).

16 – 8.2
18 – 5.7

Name: Commemorating the contributions to Brazilian natural history of C.M.S. Rondon.

Diagnosis: With the characters of the genus, distinguished from *R. coriaceus* in color, prozonal texture, absence of pleurosternal carinae, and longer prefemoral process of the gonopod.

Holotype: Adult male, ca. 47 mm in length, body widest near anterior end, thereafter gradually narrowed back to about 14th segment, W/L ratio at midbody, 18%; widths of selected segments:

Segment	
4 – 9.0 mm	
6 – 9.3	
10 – 8.8	
12 – 8.7	
14 – 8.5	

Original color in life unknown, faded specimen suggesting dark brown or maroon dorsum with entire upper surface of paranota, legs, and antennae yellow.

Head unmodified, epicranium and genae microvermiculose, frons and labrum smooth; width across genae 4.7 mm, interantennal space 1.1 mm. Epicranial setae 1-1, interantennal, 1-1, frontal 1-1, clypeal 5-5, labroclypeal about 8-8, continuous laterally with 5-5 marginal genal setae. Antennae 9.2 mm, articles 2-6 subequal in length and shape, 6th without distal sensory groove, but with a glabrous area beset with microsetae in its place; 7th without lateral sensory knob, apical cones divided into two diads.

Dorsal surface of all metaterga, except lateral third of paranota, densely microgranulose, individual granules round to suboval, closely spaced but not in contact. No trace of transverse sulcus or seriate tubercles. Prozona smooth, stricture prominent on all segments but with distinct anterior edge only on seg-

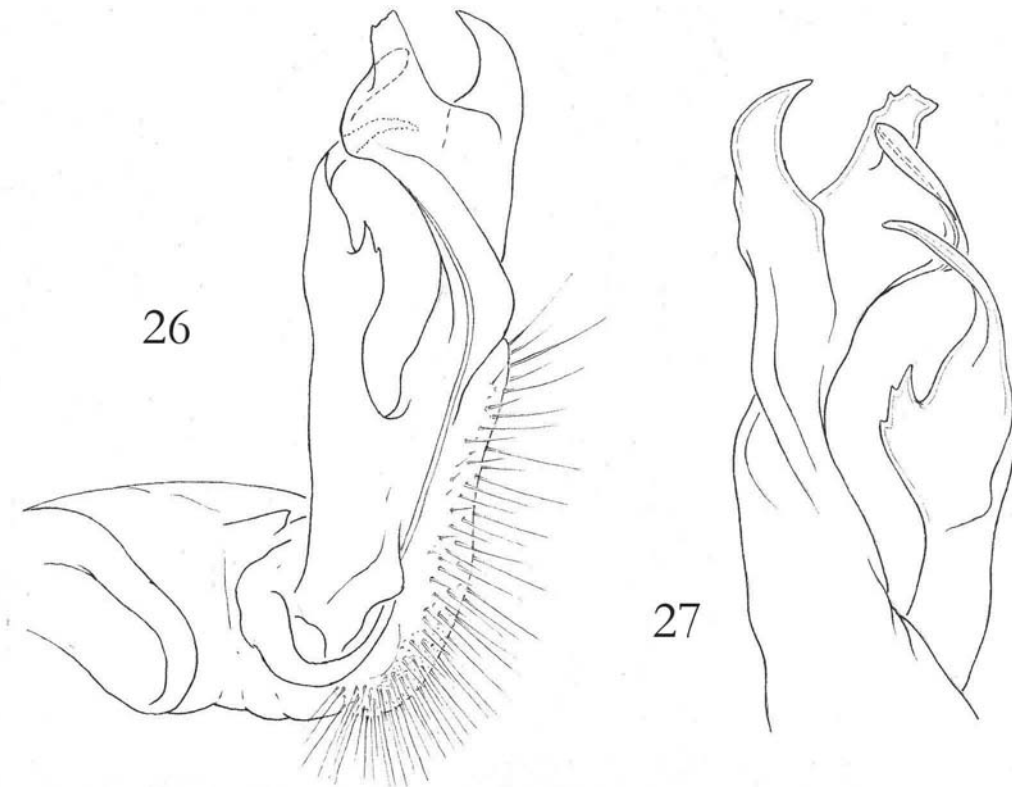
ments 2-4. Paranota of segments 1-3 declined ventrad, 4th and those following more nearly horizontal and set high, transverse to body axis, subrectangular on anterior segments, posterior corner produced from 4th onwards. Anterior edge of paranota with prominent high rim, caudal edge not elevated, slightly serrulate, paranotal shape as in Figs. 21-22. Ozopores in normal sequence, displaced inward from lateral edge with resultant subtriangular peritreme area. Paranota of segment 19 abruptly smaller, elongate oval; epiproct subconical, of typical polydesmoid shape. Paraprocts vertically striated; hypoproct transversely triangular, with acute median projection, paramedian tubercles obscure.

Sternal areas of metazona moderately elevated as podosterna, 1.7 mm wide at midbody, produced into a low conical projection just behind each coxal condyle, sternal surface prominently striate-ridged longitudinally. Sides of metazona evenly and uniformly microgranulate, without trace of pleurosternal carinae. Stigmata small, elongate-oval, each placed just anterior to dorsal coxal condyles.

Legs moderately long, ca 8.2 mm at midbody, of normal shape for the family, podomere lengths

$3 > 6 > 5 = 2 = 4 > 1$, basal podomeres nearly glabrous except small sparse ventral setae on femora, distal three with stiff brown setae on all surfaces. Anterior legs without enlarged podomeres or subtibial pads, but distinctly more setose than others. Gonopore opening on apex of an elongate conical projection from 2nd coxa (Fig. 23). Sternum of segment 4 reduced to two appressed laminae between 3rd legs; sternum of segment 5 with two pairs of conical projections, those between anterior legs the larger, posterior cones separated by a deep cleft; segment 6 with similar cones between anterior legs, but surface between posterior excavate, no cones formed.

Gonopod aperture moderate in size, transversely oval, contained entirely in metzonum and not displacing line of stricture midventrally. Lateral ends elevated. Gonopods small, not extended beyond front of 7th segment, median sternal element rudimentary and displaced, coxae in contact. Coxae short, subglobose, with small acute supracannular apophysis, one dorsal macroseta, no paracannular setae. Telopodite attached at right angle to coxa, nearly straight, prefemoral region half total length of telopodite, with short, distally tridentate prefemoral



FIGURES 26-27. *Rhicnostethus coriaceus* (Schubart). 26. Left gonopod, mesal aspect. 27. Telopodite of left gonopod, lateral aspect, drawings from topoparatype.

process on dorsal side; acropodite region set off only by indistinct suture line on lateral side, consisting of large concave lobe on dorsal side conducting prostatic groove along its edge and a slender falcate distal projection (Figs. 24 and 25).

***Rhichnostethus coriaceus* (Schubart) n. comb.**

(Figures 26-27)

Leptodesmus (*Leptodesmus*) *coriaceus* Schubart, 1947, Bol. Mus. Nac., NS, 82:11, fig. 11. Holotype male and male paratypes (Mus. Nac. Rio de Janeiro); male paratypes (MZUSP), from Aldeia dos Tapirapés, Rio Araguaia, Mato Grosso, Brazil.

Diagnosis: Differing from *rondoni* in color (posterior edge of metaterga with a yellow stripe), texture of prozona (longitudinally striated), posterior corner of paranota (not produced anterior to the 10th segment), and presence of pleurosternal carinae (visible back to 10th segment). Differences in gonopod structure most evident in longer prefemoral process and reduced size of the groove-bearing lobe of acropodite (Figs. 24-25 vs. 26-27).

RESUMO

São definidos três novos gêneros de Chelodesmidae, endêmicos de Rondônia, Brasil, com distribuições distintas: *Rondonaria* n. gen., para *R. schubarti* n. sp.; *Lithobiodesmus* n. gen. para *L. xenopus* n. sp.; e *Rhichnostethus* n. gen. para a espécie-tipo *R. rondoni* n. sp., e *R. coriaceus* (Schubart, 1947) n. comb., descrita para Mato Grosso, Brasil. Com base no conhecimento atual da família, a

posição em tribo não pode ser estabelecida com confiança; cada taxon é distinguido por um ou mais caracteres anatomicos incomuns.

PALAVRAS-CHAVE: Diplopoda, Polydesmida, Chelodesmidae, Brasil, Rondônia.

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