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THREE NEW SPECIES OF ORIBATID MITES (ACARI, ORIBATIDA) FROM ECUADOR

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ABSTRACT — Three new oribatid mite species – *Ampullobates ecuadoriensis* n. sp., *Plenotocepheus neotropicus* n. sp. and *Monoschelobates hemileiformis* n. sp. – are described from Ecuador. The three genera are also new for Ecuador. *Ampullobates ecuadoriensis* n. sp. is morphologically similar to *Ampullobates nigriclavatus* Grandjean, but differs from the latter by the morphology of the lamellar, exuvial and some epimeral setae, sensilli, the size of the interlamellar and exobothridial setae and the position of the genital setae. *Plenotocepheus neotropicus* n. sp. is morphologically similar to *Plenotocepheus mollicoma* Hammer, but differs by the length of interlamellar setae, morphology of sensilli, localization of lyrifissures *iad* and adanal setae *ad*₃ and structure of leg setae *u*. Finally, *Monoschelobates hemileiformis* n. sp. is morphologically similar to *Monoschelobates parvus* Balogh and Mahunka, but shows differences in body size, length of the interlamellar, notogastral and anogenital setae and the presence of aggenital setae.

KEYWORDS — oribatid mites; new species; *Ampullobates*; *Plenotocepheus*; *Monoschelobates*; Ecuador

INTRODUCTION

This paper is a part of our ongoing studies on the Ecuadorian oribatid mite fauna (Ermilov and Kalúz 2012a-e). It reports the description of three new species, one belonging to the genus *Ampullobates* Grandjean, 1962 (Hermannelliidae), one to the genus *Plenotocepheus* Hammer, 1966 (Tetracondylidae) and another to the genus *Monoschelobates* Balogh and Mahunka, 1969 (Scheloribatidae).

Ampullobates is a monotypic genus proposed by Grandjean (1962b) with *Ampullobates nigriclavatus* Grandjean, 1962 as type species. The single known species is distributed in the Neotropical region; this genus is herein recorded for the first time from Ecuador. The main generic characters of *Ampullo-*

bates are presented by Grandjean (1962b), and summarized by Balogh and Balogh (1988, 1992).

Plenotocepheus is a genus proposed by Hammer (1966) with *Plenotocepheus mollicoma* Hammer, 1966 as type species. It currently comprises ten species, distributed in the subtropics; this genus is herein recorded for the first time from Ecuador. The main generic characters of *Plenotocepheus* are presented by Hammer (1966), and summarized by Balogh and Balogh (1992) and Grobler (1995a). Known species of this genus were included in several keys (Grobler 1995a, b; Balogh and Balogh 2002).

Monoschelobates is a genus proposed by Balogh and Mahunka (1969) with *Monoschelobates parvus* Balogh and Mahunka, 1969 as type species. It

currently comprises two species, recorded from Brazil; this genus is herein recorded for the first time from Ecuador. The main generic characters of *Monoschelobates* are presented by Balogh and Mahunka (1969), and summarized by Balogh and Balogh (1992).

The purpose of this paper is to describe and illustrate three new species, *Ampullobates ecuadoriensis* n. sp., *Plenotocephalus neotropicus* n. sp. and *Monoschelobates hemileiformis* n. sp.

MATERIAL AND METHODS

Specimens were mounted in lactic acid on temporary cavity slides for measurement and illustration. All body measurements are presented in micrometers. Body length was measured in lateral view, from the tip of the rostrum to the posterior edge of the ventral plate, to avoid discrepancies caused by different degrees of notogastral distortion. Notogastral width refers to the maximum width in dorsal aspect. Lengths of body setae were measured in lateral aspect. Terminology used in this paper follows that of Grandjean (1962 *a, b*), Grobler (1995*a, b*), Norton and Behan-Pelletier (2009).

DESCRIPTIONS OF NEW SPECIES

Ampullobates ecuadoriensis n. sp. (Figures 1-2)

Diagnosis — Body size 664 – 713 x 431 – 481. Surface of prodorsum microtuberculate. Surface of notogaster and anogenital region foveolate. Interlamellar and exobothridial setae well developed. Sensilli long, with poorly developed, lanceolate head. Exuvial centrodorsal setae simple, thick. Notogastral setae h_1 , h_2 and p_1 dilated distally, and p_2 and p_3 simple. Epimeral setae $1a$, $2a$ and $3a$ bifurcate. One pair of genital setae inserted separately from others.

Measurements — Body length 697 (holotype), 664 – 713 (mean 693; four paratypes); notogaster width 448 (holotype), 431 – 481 (mean 452; four paratypes).

Integument — (Figures 1A, 2I). Body color yellowish to brown. Surface of prodorsum and ventral

side microtuberculate (diameter of tubercles up to 2). Surface of notogaster, anogenital region, genital and anal plates foveolate (diameter of foveolae up to 12).

Prodorsum — (Figures 1A, C, D; 2A). Rostrum widely rounded in dorsal view. Rostral (*ro*, 98 – 102) and lamellar (*le*, 123 – 127) setae setiform, smooth. Interlamellar (*in*, 57 – 65) and exobothridial (*ex*, 41 – 45) setae setiform, slightly barbed. Sensilli (*ss*, 143 – 147) thickened, with poorly developed, lanceolate, barbed head. Pedotecta I (Pt I) and II (Pt II) developed typically for genus.

Notogaster — (Figures 1A, C; 2B-D). Anterior margin convex. Notogaster covered by the thin exuvium, having three pairs of centrodorsal setae (d_1E , 65 – 73; e_1E , 49 – 53; f_1E , 36 – 41) and six pairs of setal alveoli. Exuvial setae simple, thick, straight, densely barbed. Notogastral setae c_1 , c_2 , cp , d_1 , d_2 , e_1, e_2 , f_1 and f_2 reduced. Only six pairs of notogastral setae well developed: p_1 , h_1 and h_2 (32 – 41) dilated distally, slightly serrate; p_2 and p_3 (28 – 32) thickened, setiform, straight, slightly barbed; c_3 (16) setiform, thin, smooth. Lyrifissures and opisthontal gland openings (*gla*) located typically for the family.

Gnathosoma — (Figures 2E-G). Typical for Hermannelliidae (Grandjean 1962b; Ermilov and Kalúz 2012a). Subcapitulum longer than wide: 164 – 172 x 123. Subcapitular setae setiform, straight, smooth; m (53 – 57) longer than h (41 – 45) and a (32 – 36). Adoral setae or_1 (20 – 24) fusiform, smooth; adoral setae or_2 (24 – 28) thickened, densely barbed. Palps (length 94) with setation 0-2-1-3-6(+1 ω). Solenidion not attached with eupathidium (*acm*). Chelicerae (length 164) with two setiform, barbed setae: *cha* (82) longer, than *chb* (36). Trägårdh's organ not evident.

Epimeral region — (Figures 1B; 2H). Epimeral setal formula: 3-1-2-3. Setae slightly barbed: $1a$, $2a$, $3a$ (all 32 – 36) bifurcate; others (all 41 – 45) setiform, straight. Discidia (*dis*) blunt-ended distally.

Anogenital region — (Figures 1B; 2I). Seven pairs of genital setae (anterior pair 32 – 36; others 16 – 20) setiform, smooth inserted in two parallel rows; seventh pair longest (41 – 45), inserted separately from others. One pair of aggenital (*ag*) and

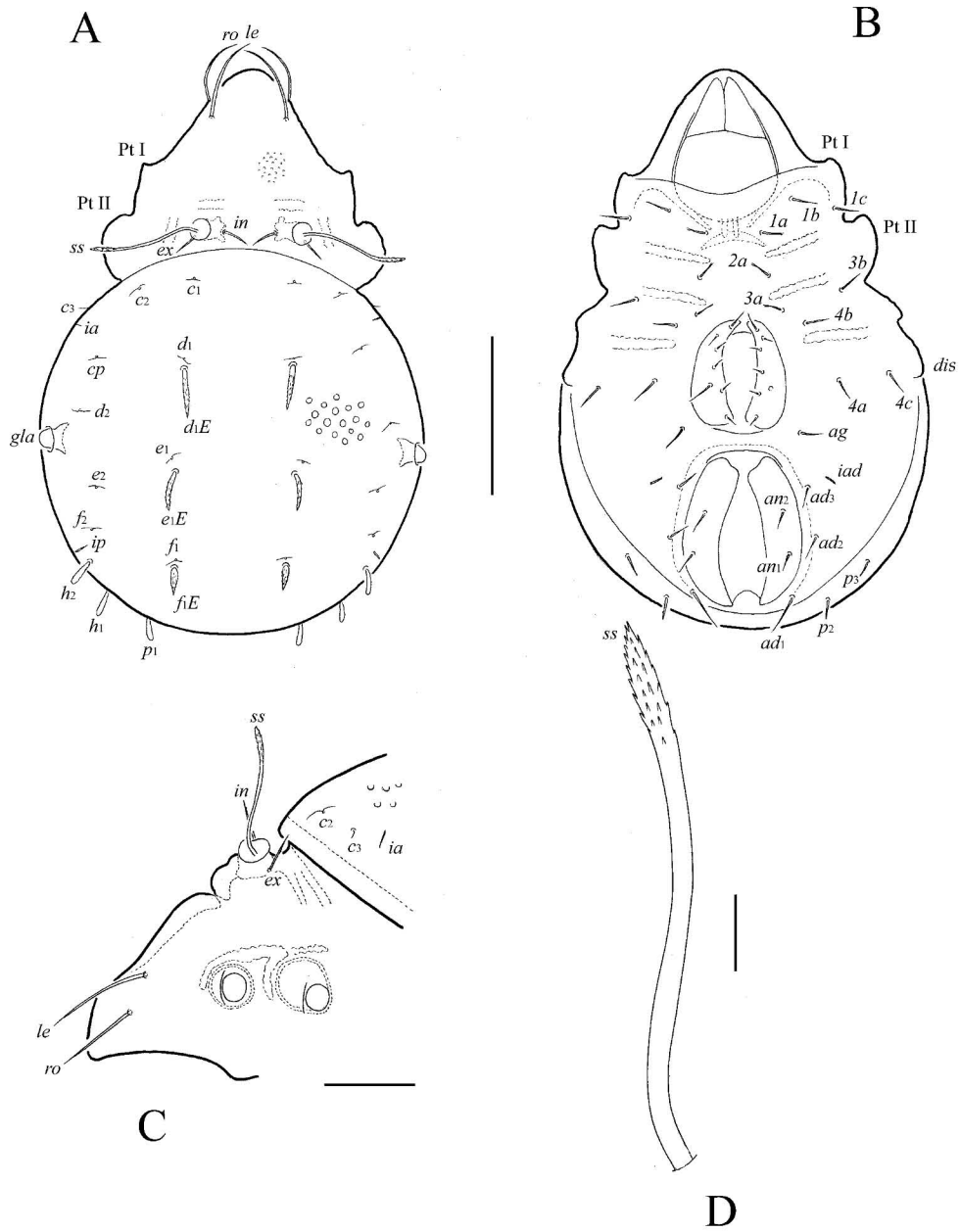


FIGURE 1: *Ampullobates ecuadoriensis* n. sp.: A – dorsal view; B – ventral view, legs, subcapitular setae and palps not shown; C – lateral view of prodorsum, legs and gnathosoma not shown; D – sensillus. Scale bar (A, B) 200 μ m, scale bar (C) 100 μ m, scale bar (D) 20 μ m.

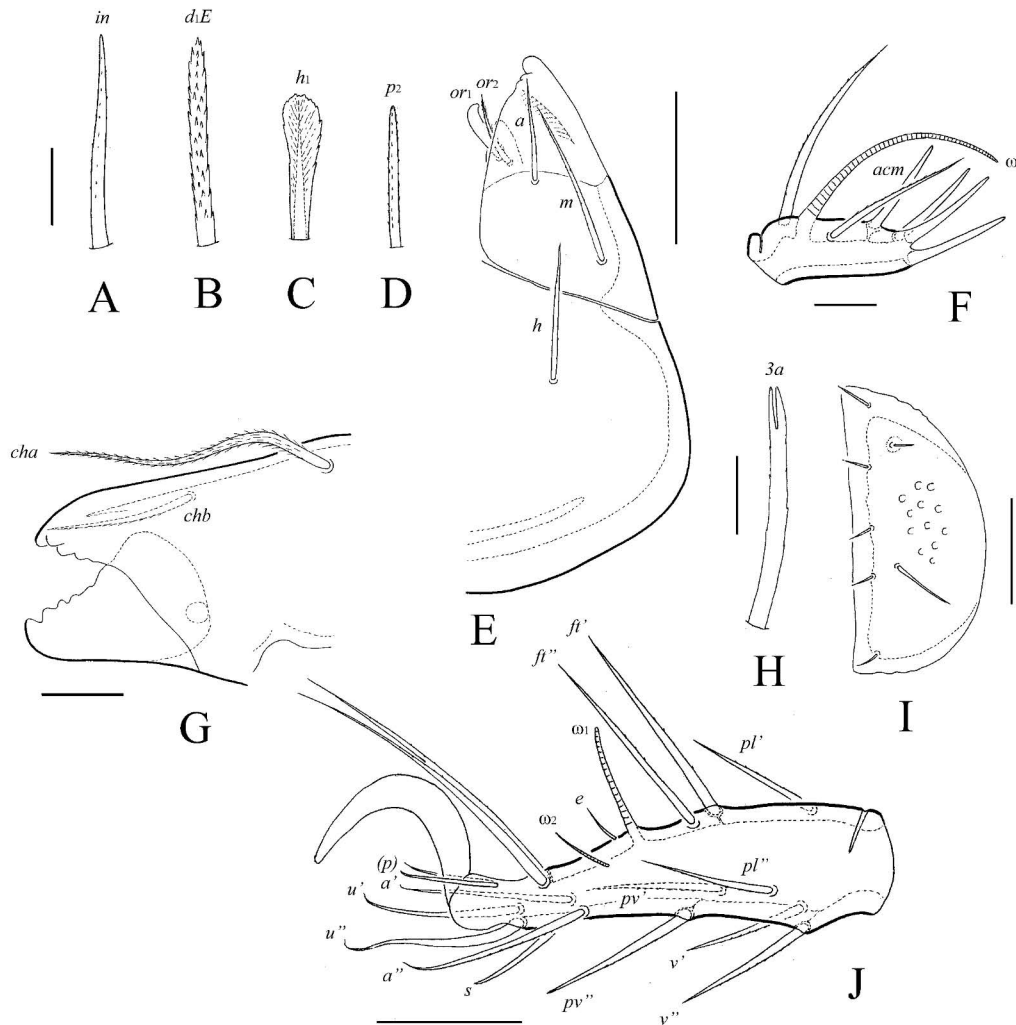


FIGURE 2: *Ampullobates ecuadoriensis* n. sp.: A – interlamellar seta; B – exuvial seta d_1E ; C – notogastral seta h_1 ; D – notogastral seta p_2 ; E – subcapitulum, left half; F – palptarsus; G – anterior part of chelicera; H – epimeral seta $3a$; I – genital plate, left; J – leg tarsus I, left, antiaxial view. Scale bar (A+D, G, I) 20 μm , scale bar (E, J) 50 μm , scale bar (F, H) 10 μm .

TABLE 1: Leg setation and solenidia of *Ampullobates ecuadoriensis* n. sp.

Leg	Trochanter	Femur	Genu	Tibia	Tarsus
I	v'	$d, (l), bv'', v''$	$(l), (v), \underline{d\sigma}$	$(l), (v), \underline{d\phi}_1, \phi_2$	$(ft), (tc), (p), (u), (a), s, (pv), (v), (pl), e, \omega_1, \omega_2$
II	v'	$d, (l), bv'', v''$	$(l), (v), \underline{d\sigma}$	$(l), (v), \underline{d\phi}$	$(ft), (tc), (p), (u), (a), s, (pv), (v), \omega_1, \omega_2$
III	l', v'	d, l', ev'	$l', v', \underline{d\sigma}$	$l', (v), \underline{d\phi}$	$ft'', (tc), (p), (u), (a), s, (pv), v''$
IV	v'	d, l', ev'	d, l', v'	$l', (v), \underline{d\phi}$	$ft'', (tc), (p), (u), (a), s, (pv), v''$

Roman letters refer to normal setae (e to famulus); Greek letters to solenidia; $\underline{d\phi}$ and $\underline{d\sigma}$ – solenidion and seta coupled. Single prime (') marks setae on anterior and double prime (") setae on posterior side of the given leg segment. Parentheses refer to a pair of setae.

two pairs of anal setae similar in length ($an_1, an_2, 36 - 41$), setiform, smooth. Three pairs of adanal setae ($ad_1, 45 - 49, ad_2, ad_3, 36 - 41$) setiform, slightly barbed. Lyrifissures iad in inverse apoanal position, located laterally to adanal setae ad_3 .

Legs — (Figure 2J). Typical for Hermanniellidae (Grandjean 1962a; Ermilov and Kalúz 2012a). Claw of each tarsus smooth. Homology of setae and solenidia is indicated in Table 1. Famulus (e) and solenidia setiform.

Material examined — Holotype (male) and four paratypes (two males, two females): Southern Ecuador, $3^\circ 58' S, 79^\circ 50' W$, Estacion Cientifica San Francisco, 2000 m. a.s.l., upper organic soil layer in mostly undisturbed rain forest, 01.04.2008, collected by F. Marian and D. Sandmann.

Type deposition — The holotype is deposited in the collection of the Zoological Institute of the Russian Academy of Sciences, St. Petersburg, Russia; two paratypes are deposited in the collection of the Siberian Zoological Museum, Novosibirsk, Russia; two paratypes are in the personal collection of the first author.

Etymology — The specific name "*ecuadoriensis*" refers to the country of origin, Ecuador.

Remarks — *Ampullobates ecuadoriensis* n. sp. can be distinguished from the type species *Ampullobates nigriclavatus* Grandjean, 1962 (see Grandjean 1962b) by the setiform, bent lamellar setae (versus thickened, straight in *A. nigriclavatus*), longer interlamellar and exobothridial setae (versus minute in *A. nigriclavatus*), poorly developed, lanceolate sensillar

head (versus well developed, rounded distally in *A. nigriclavatus*), thick, not dilated centrodorsal setae (versus clearly dilated in *A. nigriclavatus*), bifurcate epimeral setae $1a, 2a, 3a$ (versus setiform in *A. nigriclavatus*), and the position of one pair genital seta separated from the other six pairs (versus all genital setae inserted in two rows in *A. nigriclavatus*).

***Plenotocephus neotropicus* n. sp.**
(Figures 3-4)

Diagnosis — Body size $581 - 763 \times 249 - 332$. Notogaster and anogenital region foveolate. Interlamellar setae longer than rostral and lamellar setae. Sensilli with lanceolate, smooth head. All prodorsal and notogastral lateral condyles present, median notogastral condyles absent. Notogastral setae shorter than notogaster, setiform, slightly barbed. Lyrifissures iad in direct apoanal position. Leg setae u thorn-like.

Measurements — Body length 581 (holotype), 630 – 763 (mean 701; seven paratypes); notogaster width 249 (holotype), 249 – 332 (mean 284; seven paratypes).

Integument — (Figures 3A-C; 4F). Body color yellow-brownish. Surface of body densely microfoveolate (diameter of foveolae up to 1). Notogaster and anogenital region foveolate (diameter of foveolae up to 6). Lateral region nearly to pedotectae II with reticulate pattern. Genital plates with several longitudinal stria.

Prodorsum — (Figures 3A, C, D; 4A). Rostrum simple, broadly rounded in dorsal view. Rostral

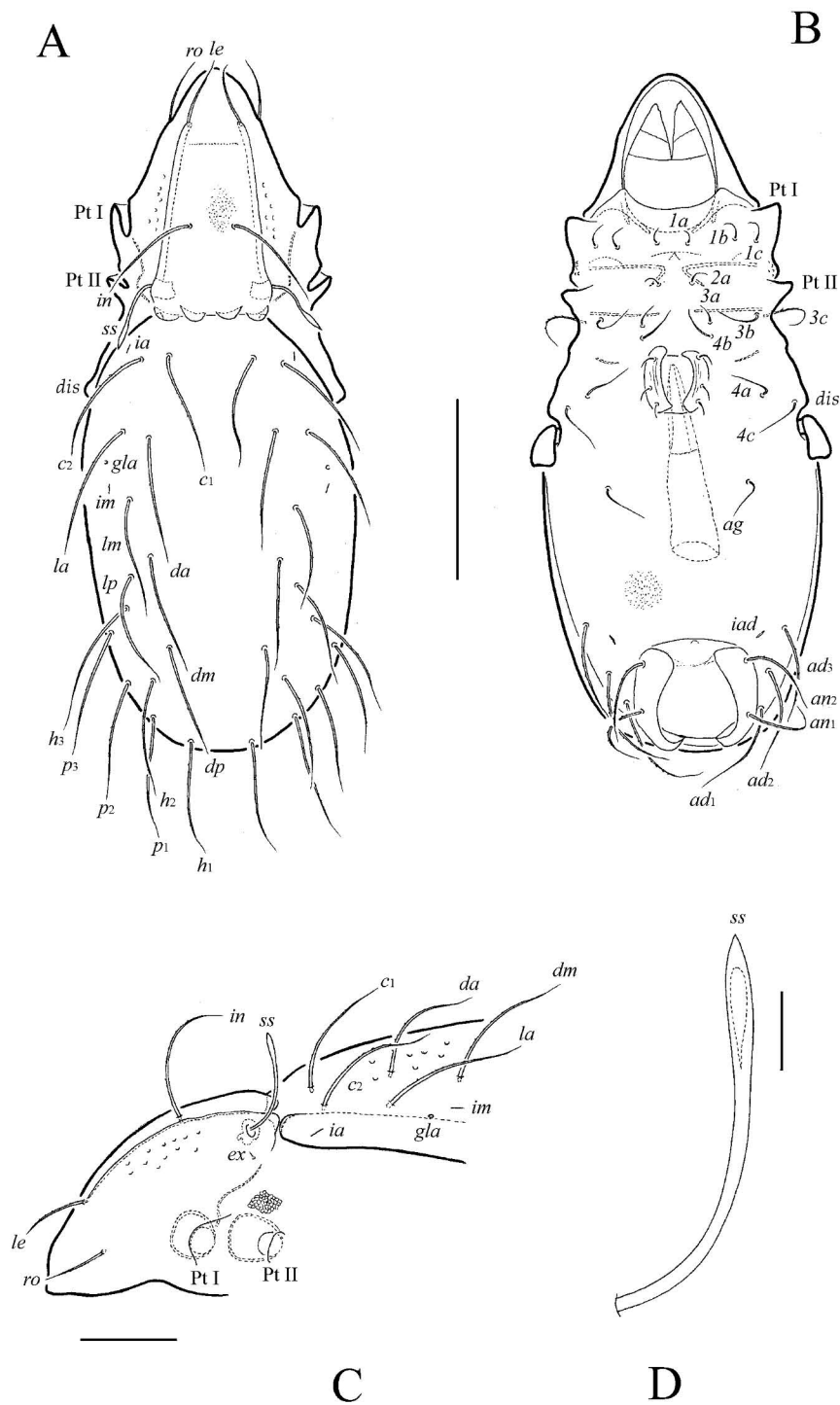


FIGURE 3: *Plenotocepheus neotropicus* n. sp.: A – dorsal view; B – ventral view, legs, subcapitular setae and palps not shown; C – lateral view of prodorsum, legs and gnathosoma not shown; D – sensillus. Scale bar (A, B) 200 μ m, scale bar (C) 100 μ m, scale bar (D) 20 μ m.

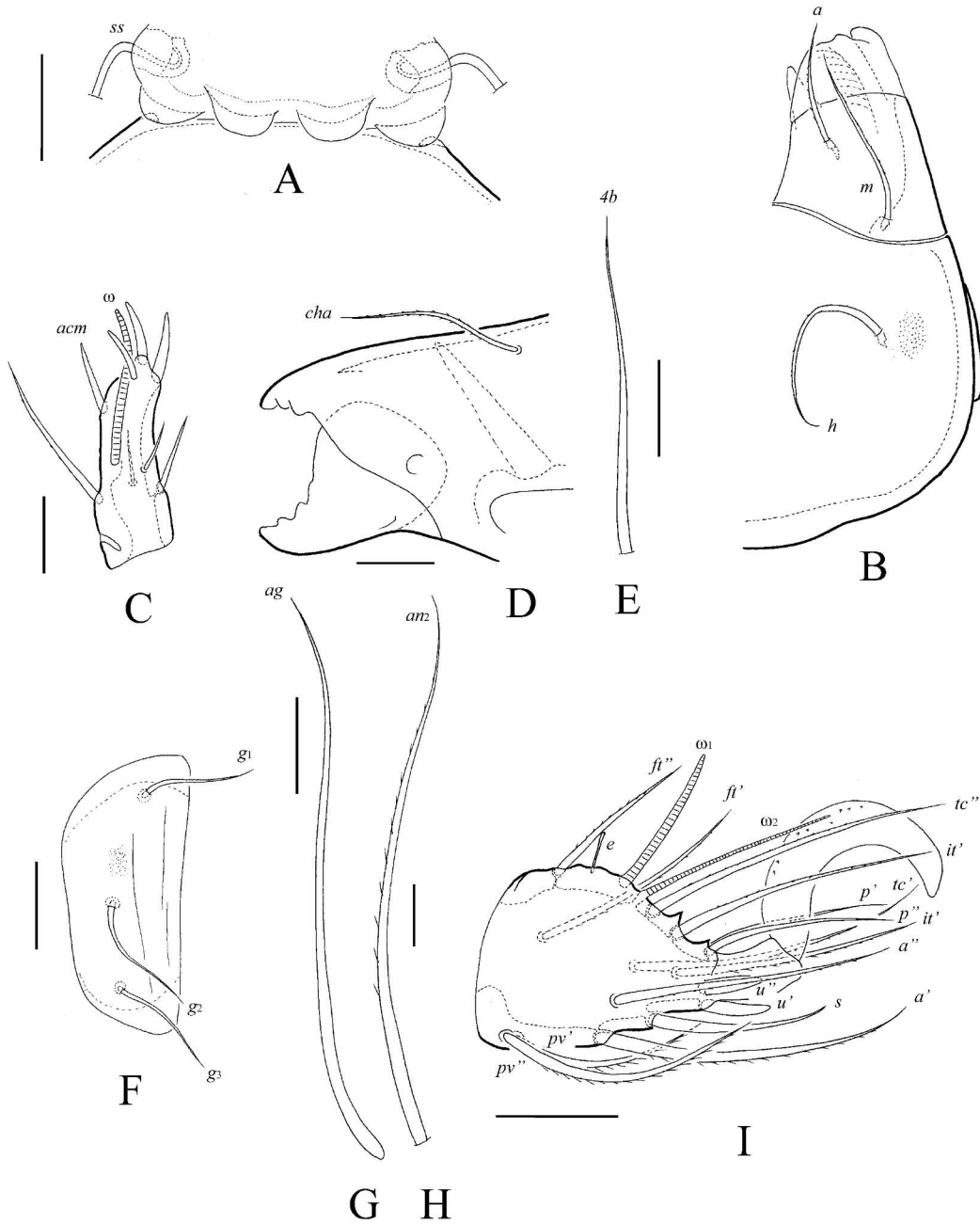


FIGURE 4: *Plenotocepeus neotropicus* n. sp.: A – Prodorsal and notogastral condyles; B – subcapitulum, left half; C – palptarsus; D – anterior part of chelicera; E – epimeral seta 4b; F – genital plate, right; G – aggenital seta; H – anal seta an_2 ; I – leg tarsus I, right, antiaxial view. Scale bar (A) 50 μ m, scale bar (B, D, E, I) 20 μ m, scale bar (C, E, G, H) 10 μ m.

TABLE 2: Leg setation and solenidia of *Plenotocepheus neotropicus* n. sp.

Leg	Trochanter	Femur	Genu	Tibia	Tarsus
I	<i>v'</i>	<i>d, (l), bv''</i>	<i>(l), v', σ</i>	<i>(l), (v), φ₁, φ₂</i>	<i>(ft), (tc), (it), (p), (u), (a), s, (pv), e, ω₁, ω₂</i>
II	<i>v'</i>	<i>d, (l), bv''</i>	<i>(l), v', σ</i>	<i>l', (v), φ</i>	<i>(ft), (tc), (it), (p), (u), (a), s, (pv), ω₁, ω₂</i>
III	<i>l', v'</i>	<i>d, l', ev'</i>	<i>l', σ</i>	<i>(v), φ</i>	<i>(ft), (tc), (it), (p), (u), (a), s, (pv)</i>
IV	<i>v'</i>	<i>d, ev'</i>	<i>d, l'</i>	<i>(v), φ</i>	<i>ft'', (tc), (p), (u), (a), s, (pv)</i>

Roman letters refer to normal setae (e to famulus); Greek letters to solenidia; $\underline{d}\sigma$ and $\underline{d}\sigma$ — solenidion and seta coupled. Single prime (') marks setae on anterior and double prime (") setae on posterior side of the given leg segment. Parentheses refer to a pair of setae.

(69 – 77), lamellar (73 – 77) and interlamellar (139 – 147) setae setiform, slightly barbed. Sensilli (106 – 118) lanceolate, smooth. Exobothridial setae (8) thin, smooth. All prodorsal condyles well developed, similar in sizes, rounded distally, located separately. Pedotecta I and II (Pt II) developed typically for genus.

Notogaster — (Figures 3A, C; 4A). Median condyles absent. Lateral condyles present, small, rounded distally. Notogaster with 14 pairs of notogastral setae, which are medium sized (127 – 164), setiform, slightly barbed. Lyrifissures and opisthonotal gland openings developed in the typical arrangement of the family.

Gnathosoma — (Figures 4B-D). Typical for Tetracondylidae (Grobler 1995a; Ermilov *et al.* 2010). Subcapitulum longer than wide: 143 – 151 × 110 – 114. Subcapitular setae setiform, slightly barbed; *h* and *m* (both 53 – 61) longer than *a* (32 – 36). Adoral setae and their alveoli absent. Palps (length 69 – 77) with setation 0-2-1-3-8 (+1 ω). Solenidion not attached with eupathidium. Chelicerae (length 155-164) with one cheliceral seta (*cha*, 53 – 57), *chb* absent. Trägårdh's organ distinct.

Epimeral region — (Figures 3B, 4E). Epimeral setal formula: 3-1-3-3; setae setiform, smooth (except barbed 3c). Lengths of setae: *1a, 2a, 3a* 28 – 32; *1b* 49 – 53; *1c, 4b* 32 – 36; *3b, 3c, 4a, 4c* 65 – 77. Discidia triangular, blunt-ended.

Anogenital region — (Figures 3B; 4F-H). Three pairs of genital (28 – 32) and one pair of aggenital (61 – 69) setae setiform, smooth. Three pairs of adanal (*ad₁, ad₂*, 131 – 135, *ad₃*, 98 – 102) and

two pairs of anal (*an₁, an₂*, 90 – 98) setae setiform, slightly barbed. Lyrifissures *iad* in direct apoanal position.

Legs — (Figure 4I). Typical for Tetracondylidae (Grobler 1995a; Ermilov *et al.* 2010). Claw of each tarsus with several small barbs in dorsal side. Homology of setae and solenidia indicated in Table 2. Tarsi I and II with one to two conical teeth on dorsal side. Leg setae *u* thorn-like on all tarsi. Famulus short, with small swelling distally. Solenidia simple.

Material examined — Holotype (male) and seven paratypes (four males, three females): Southern Ecuador, 3°58' – 4°70' S, 78°58' – 79°50' W, Bombuscaro, Podocarpus National Park and Estacion Cientifica San Francisco, 2000 – 3000 m. a.s.l., upper organic soil layer in mostly undisturbed rain forest, 01.04.2008, collected by F. Marian.

Type deposition — The holotype is deposited in the collection of the Zoological Institute of the Russian Academy of Sciences, St. Petersburg, Russia; three paratypes are deposited in the collection of the Siberian Zoological Museum, Novosibirsk, Russia; four paratypes are in the personal collection of the first author.

Etymology — The specific name "*neotropicus*" refers to the region of origin, the Neotropical region.

Remarks — *Plenotocepheus neotropicus* n. sp. is most similar to *Plenotocepheus mollicoma* Hammer, 1966 (see Hammer 1966) from New Zealand in the absence of medial notogastral condyles and shape of body setae. However, it is clearly distinguish-

able from the latter by the long interlamellar setae, which are longer than the rostral and lamellar setae (interlamellar setae considerably shorter than rostral and lamellar setae in *P. mollicoma*), sensillar heads weakly pointed distally, shorter than its stalk (sensillar heads with long, thin tip, longer than its stalk in *P. mollicoma*), lyrifissures *iad* in direct apoanal position (inverse apoanal in *P. mollicoma*), distance between adanal setae ad_3 - ad_3 longer than that between ad_2 - ad_2 (shorter in *P. mollicoma*), and thorn-like leg setae *u* on tarsi I (setiform in *P. mollicoma*).

***Monoschelobates hemileiformis* n. sp.**
(Figures 5-6)

Diagnosis — Body size 448 – 498 x 265 – 282. Sensilli clavate. Interlamellar setae longer than all prodorsal setae. Notogaster with 10 pairs of thin, smooth notogastral setae. Aggenital setae present.

Measurements — Body length 498 (holotype), 448 – 498 (mean 471; five paratypes); notogaster width 282 (holotype), 265 – 282 (mean 272; five paratypes).

Integument — (Figures 5A-C). Body color brown. Body surface smooth. Posterior part of notogaster and epimeral region with irregular muscle sigilla.

Prodorsum — (Figures 5A, C, D). Rostrum rounded in dorsal view. Lamellae located dorso-laterally, little longer than half of prodorsum (see in lateral view), without cusps. Translamella absent, but rudimentary parts present nearly to lamellae. Prolamellar and sublamellar lines present. Sublamellar porose areas (*Al*) round, small (6 – 8). Rostral (53 – 65), lamellar (90 – 102) and interlamellar (164 – 172) setae setiform, barbed. Lamellar setae inserted on the distal part of lamellae. Sensilli (77 – 82) clavate, its head slightly barbed. Exobothridial setae (2 – 4) minute, thin, smooth. Pedotecta I and II typical for genus.

Notogaster — (Figures 5A, C). Anterio-medial part straight or weakly convex. Ten pairs of short (24 – 36), smooth notogastral setae present. Four pairs of sacculi (*Sa*, *S1*, *S2*, *S3*) small. Lyrifissures and opisthonotal gland openings in typical arrangement of the family.

Gnathosoma — (Figures 6A-C). Typical for Scheloribatidae (Ermilov *et al.* 2011; Ermilov and Kalúz 2012e). Subcapitulum longer than wide: 94 – 102 x 65 – 69. Subcapitular setae setiform; *h* (24 – 28) and *a* (16 – 20) slightly barbed, thicker than *m* (16 – 20). Two pairs of adoral setae (10 – 12) setiform, barbed. Palps (length 61) with setation 0-2-1-3-9(+1 ω). Solenidion attached with eupathidium. Chelicerae (length 102) with two setiform, barbed setae; *cha* (49) longer than *chb* (20). Trägårdh's organ distinct.

Epimeral region — (Figures 5B; 6D). Epimeral setal formula: 3-1-3-3. Setae setiform, smooth. Lengths of setae: *1a*, *2a*, *3a* 8 – 10; others 16 – 20. Discidia triangular, blunt-ended.

Anogenital region — (Figures 5B; 6E, F). Four pairs of genital (g_1 , 20 – 24; g_2 - g_4 14 – 16), one pair of aggenital (12), two pairs of anal (12 – 16) and three pairs of adanal (20) setae setiform, smooth. Lyrifissures *iad* located in paranal position.

Legs — (Figure 6G). Typical for Scheloribatidae (Ermilov *et al.* 2011; Ermilov and Kalúz 2012e). Claw of each tarsus smooth. Homology of setae and solenidia indicated in Table 3. Famulus short, with small swelling distally. Solenidia simple.

Material examined — Holotype (male) and five paratypes (three males, two females): Southern Ecuador, 4°60' S, 78°58' – 79°10' W, Cajanuma, Podocarpus National Park, 3000 m. a.s.l., upper organic soil layer in mostly undisturbed rain forest, 01.04.2008, collected by D. Sandmann.

Type deposition — The holotype is deposited in the collection of the Zoological Institute of the Russian Academy of Sciences, St. Petersburg, Russia; two paratypes are deposited in the collection of the Siberian Zoological Museum, Novosibirsk, Russia; three paratypes are in the personal collection of the first author.

Etymology — The specific name "*hemileiformis*" refers to the similarity of the new species to representatives of the subgenus *Schelorbitates* (*Hemileius*) Berlese, 1916.

Remarks — *Monoschelobates hemileiformis* n. sp. can be distinguished from the type species, *M. parvus* Balogh and Mahunka, 1969 (see Balogh and

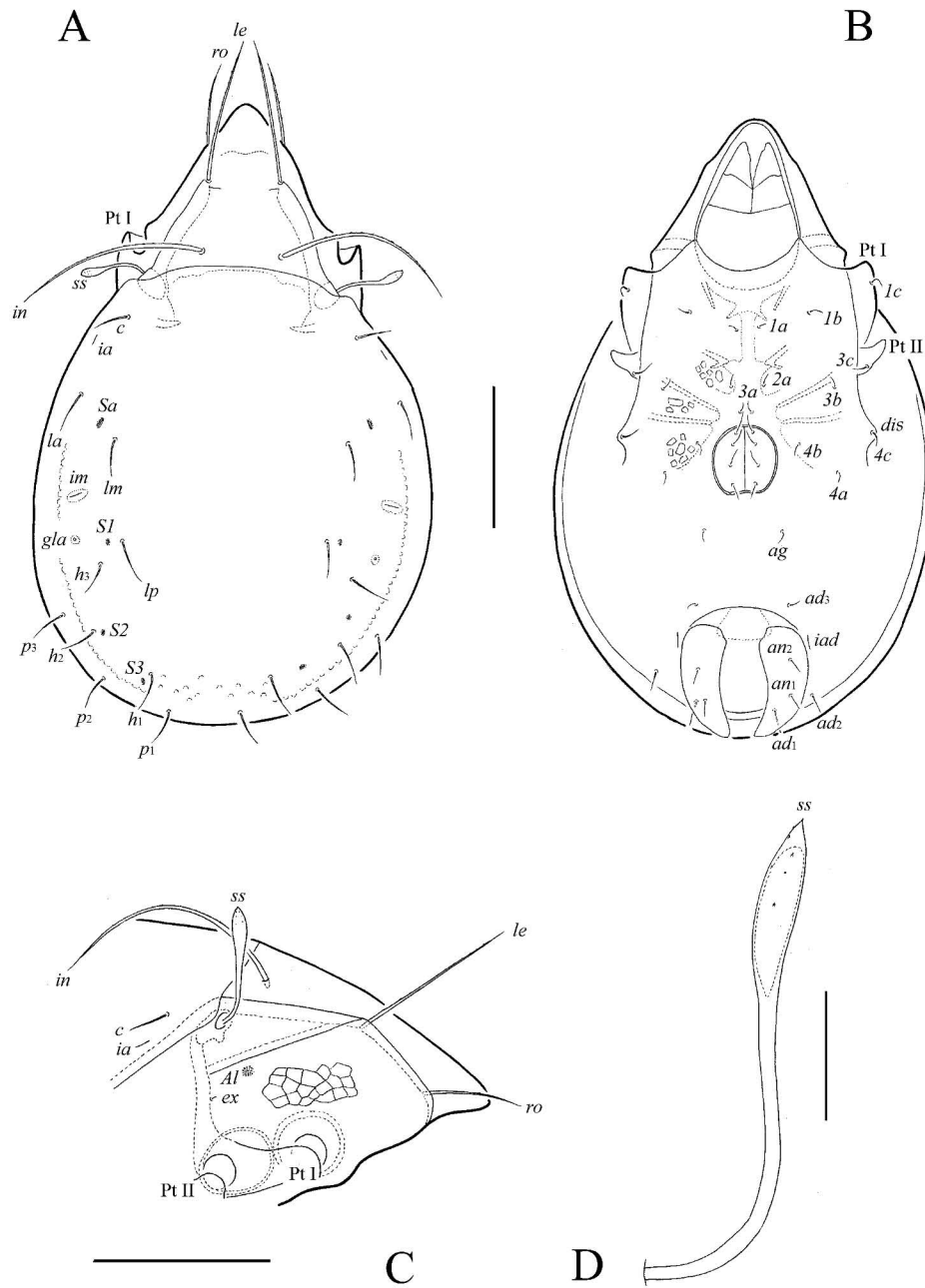


FIGURE 5: *Monoschelobates hemileiformis* n. sp.: A – dorsal view; B – ventral view, legs, subcapitular setae and palps not shown; C – lateral view of prodorsum, legs and gnathosoma not shown; D – sensillus. Scale bar (A+C) 100 μ m, scale bar (D) 20 μ m.

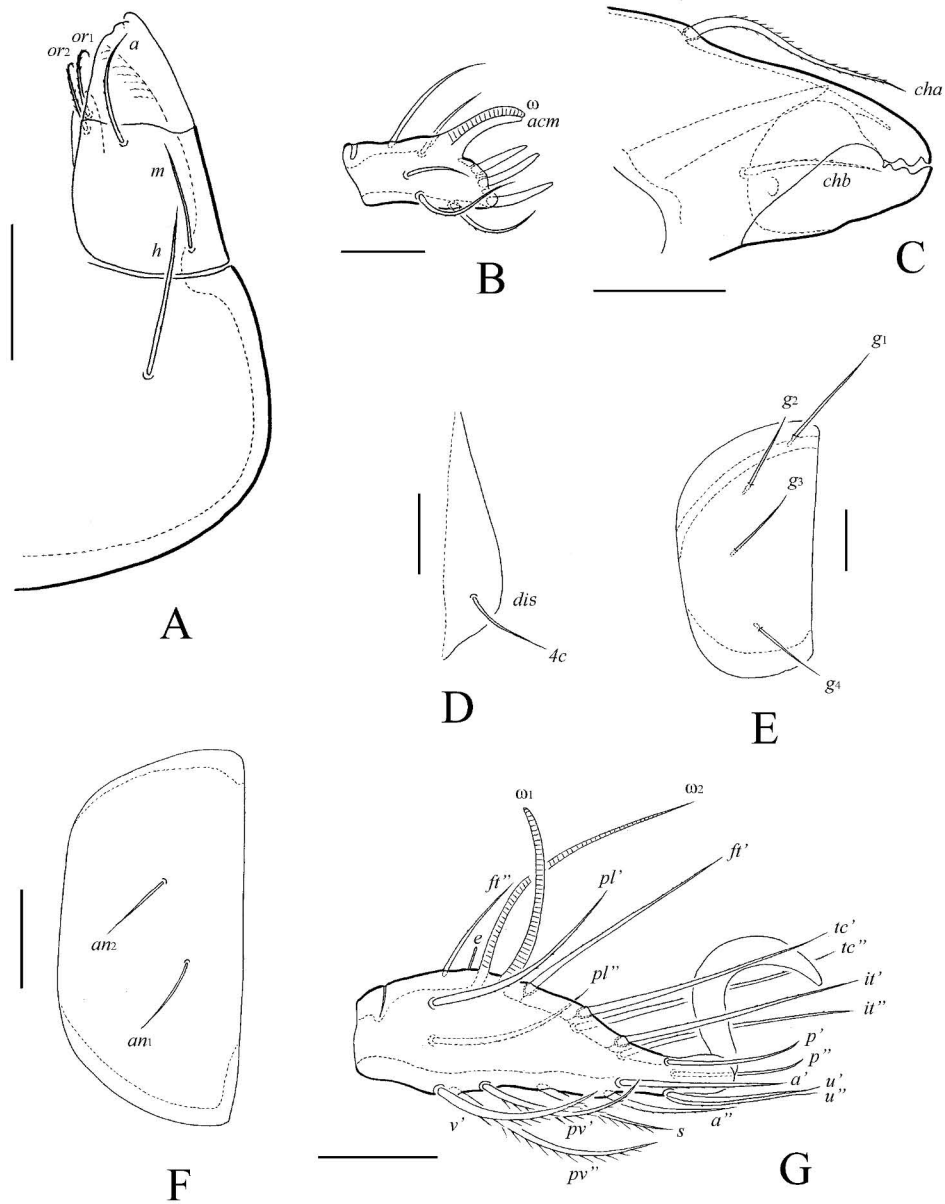


FIGURE 6: *Monoschelobates hemileiformis* n. sp.: A – subcapitulum, left half; B – palptarsus; C – anterior part of chelicera; D – tutorium and epimeral seta 4c; E – genital plate, right; F – anal plate, right; G – leg tarsus I, right, paraxial view. Scale bars (A, C, F, G) 20 μ m, scale bar (B, D, E) 10 μ m.

TABLE 3: Leg setation and solenidia of *Monoschelobates hemileiformis* n. sp.

Leg	Trochanter	Femur	Genu	Tibia	Tarsus
I	v'	d, (l), bv'', v''	(l), v', σ	(l), (v), φ ₁ , φ ₂	(ft), (tc), (it), (p), (u), (a), s, (pv), v', (pl), e, ω ₁ , ω ₂
II	v'	d, l' ₁ , l' ₂ , bv'', v''	(l), σ	(l), (v), φ	(ft), (tc), (it), (p), (u), (a), s, (pv), ω ₁ , ω ₂
III	l', v'	d, l', ev'	l', σ	l', (v), φ	(ft), (tc), (it), (p), (u), (a), s, (pv)
IV	v'	d, ev'	d, l'	l', (v), φ	ft'', (tc), (p), (u), (a), s, (pv)

Roman letters refer to normal setae (e to famulus); Greek letters to solenidia; $\underline{d\sigma}$ and $\underline{d\sigma}$ — solenidion and seta coupled. Single prime (') marks setae on anterior and double prime (") setae on posterior side of the given leg segment. Parentheses refer to a pair of setae.

Mahunka 1969) known from Brazil by the larger body size (448 – 498 x 265 – 282 versus 254 – 279 x 147 – 162 in *M. parvus*), long interlamellar setae, which are considerably longer than lamellar setae (interlamellar and lamellar setae similar in length in *M. parvus*), well developed notogastral and anogenital setae (minute in *M. parvus*), and presence of aggenital setae (absent in *M. parvus*).

Pérez-Íñigo and Baggio (1991) described the second species of the genus *Monoschelobates*, *M. translamellatus* Pérez-Íñigo and Baggio, 1991 from Brazil. However, this species clearly differs from the type and the present new species by the presence of well-developed pteromorphs (absent or very small – generic character in *Monoschelobates*). Hence, in our opinion, *Monoschelobates translamellatus* should be included in the genus *Perscheloribates* Hammer, 1973.

Due to the combination of generic characters (in particular, rudimentary pteromorphs, four pairs of sacculi, ten pairs of short notogastral setae, four pairs of genital setae), the species of the genus *Monoschelobates* are similar to species of the subgenus *Scheloribates* (*Hemileius*). Only a single main difference is monodactylous leg tarsi in *Monoschelobates* versus tridactylous in *Scheloribates* (*Hemileius*). Also, the type species of *Monoschelobates*, *M. parvus*, is without aggenital setae. Presence or absence of aggenital setae, and variation in numbers of leg claws are not apomorphic characters, therefore it can be used as subgeneric characters. Hence, possibly, *Monoschelobates parvus* and *M. hemileiformis* n. sp. should be included in the subgenus *Scheloribates*

(*Hemileius*). However, the classification of genera in the family Scheloribatidae is difficult, and the further research on the taxonomic status of *Monoschelobates* is needed.

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