



A new species of *Prometabelba* (Acari, Oribatida, Damaeidae) from Ethiopia

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ABSTRACT

One new species of the genus *Prometabelba* (Oribatida, Damaeidae)—*P. chilaloensis* **sp. nov.**— is described, based on adults collected from litter and green mosses of forest in the Arsi Mountains National Park, central Ethiopia. An identification key to species of Damaeidae from the Afrotropical region is provided.

KEYWORDS

Afrotropical region, damaeid mites, identification key, morphology, new species, taxonomy

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INTRODUCTION

The family Damaeidae (Acari, Oribatida) comprises about 300 species and 30 supraspecies taxa (see different classifications: e.g., Miko 2006; Subías 2022). Representatives of the family are most diverse in temperate to boreal regions of the Holarctic region and in the tropics.

At present, 13 species of Damaeidae are known in the Afrotropical region. Balogh (1958) described *Metabelba benoiti* Balogh, 1958 from Tanzania, *M. heteropoda* Balogh, 1958 from Congo, *M. horrida* Balogh, 1958 from Congo, and *M. tanganyikensis* Balogh, 1958 from Tanzania. All of them are *species incertae sedis*. Mahunka (1982) described *Metabelba (Pateribelba) glabriseta* Mahunka, 1982 from Ethiopia. Miko *et al.* (2014) described *Prometabelba centurion* (Miko, Mourek & Ermilov, 2014) from Ethiopia. Ermilov and Rybalov (2024) described *Metabelba (Pateribelba) ginchiensis* Ermilov, 2024 from Ethiopia, however, based on the presence of the well-developed notogastral seta c_3 and the location of the dorsal notogastral setae (in two comparatively closely, parallel rows), this species should be included in the genus *Prometabelba* Miko, 2024: *Prometabelba ginchiensis* (Ermilov, 2024) **comb. nov.** Ermilov *et al.* (2024a, b) described *Coronabelba adiscidialis* Ermilov & Kolesnikov, 2024 and *C. pustulata* Ermilov, 2024 from Ethiopia. Moreover, *Coronabelba platynota* Grandjean, 1954 and *Metabelba (Pateribelba) sphagni* Strenzke, 1950 were recorded from Ethiopia, *Metabelba (M.) papillipes* (Nicolet, 1855) from South Africa, and *Damaeus (Adamaeus) onustus* Koch, 1844 from Tanzania and Santa Helena Island (Wallwork 1977; Ermilov *et al.* 2021; Subías *et al.* 2021; Subías 2022).

Among the oribatid mite materials collected from the Arsi Mountains National Park, central Ethiopia, one new species of Damaeidae, belonging to *Prometabelba*, was found. This genus was proposed by Miko (see Miko *et al.* 2024), with *Metabelba (Pateribelba) centurion* Miko, Mourek & Ermilov, 2014 as type species. It comprises two species collectively distributed in Ethiopia (Miko *et al.* 2014; Ermilov and



Rybalov 2024). The main generic traits were presented by Miko *et al.* (2024). The main goals of the paper are: to describe one new species under the name *Prometabelba chilaloensis* **sp. nov.** and to present an identification key to Damaeidae species of the Afrotropical region.

METHODS

For measurement and illustration, specimens were mounted in lactic acid on temporary cavity slides. All body measurements are presented in micrometers (μm). Body length was measured in lateral view, from the tip of the rostrum to the posterior edge of the notogaster. Body width refers to the maximum width of the notogaster in dorsal view. Body setae were measured in lateral aspect. Formulas for leg setation are given in parentheses according to the sequence trochanter-femur-genu-tibia-tarsus (famulus of tarsus I included). Formulas for leg solenidia are given in square brackets, according to the sequence genu-tibia-tarsus. Paired structures are described in the singular, unless otherwise noted. Drawings were made with a camera lucida using a Leica DM 2500 light microscope.

Morphological terminology is mostly that of F. Grandjean (references in Trávě and Vachon (1975)). Fundamentals of leg setation were reviewed by Norton (1977).

The following morphological abbreviations are used: *Prodorsum*: *ro*, *le*, *in*, *bs*, *ex* = rostral, lamellar, interlamellar, bothridial, and exobothridial setae, respectively; *Da*, *Dp* = prodorsobasal tubercles; *Ba*, *Bp* = postbothridial tubercles. *Notogaster*: *c*₁–*c*₃, *la*, *lm*, *lp*, *h*₁–*h*₃, *p*₁–*p*₃ = setae; *ia*, *im*, *ip*, *ih*, *ips* = lyrifissures; *gla* = opisthonotal gland opening. *Gnathosoma*: *a*, *m*, *b* = subcapitular setae; *or* = adoral seta; *d*, *l*, *cm*, *acm*, *ul*, *su*, *lt*, *vt*, *sup*, *inf* = palp setae; ω = palp solenidium; *cha*, *chb* = cheliceral setae; *Tg* = Trägårdh's organ. *Epimeral and lateral podosomal regions*: *1a*, *1b*, *1c*, *2a*, *2b*, *3a*, *3b*, *3c*, *4a*, *4b*, *4c*, *4d* = setae; *Sa*, *Sp* = parastigmatic tubercles; *dis* = discidium. *Anogenital region*: *g*, *ag*, *an*, *ad* = genital, aggenital, anal, and adanal setae, respectively; *iad* = adanal lyrifissure; *po* = preanal organ. *Legs*: *pa* = porose area; ω , φ , σ = solenidia; *e* = famulus; *d*, *l*, *v*, *bv*, *ev*, *ft*, *tc*, *it*, *p*, *u*, *a*, *s*, *pv*, *pl* = setae.

RESULTS

TAXONOMY

Family Damaeidae

Genus *Prometabelba* Miko, 2024

Type species: *Metabelba* (*Pateribelba*) *centurion* Miko, Mourek & Ermilov, 2014

Prometabelba chilaloensis **sp. nov.** (Figs 1–10)

<http://zoobank.org/urn:lsid:zoobank.org:act:EA279CCC-A977-42AB-945F-C9CC6C29D392>

Type material

Holotype (female) and 15 paratypes (four males and 11 females): central Ethiopia, Oromia Region, Arsi Zone, Arsi Mountains National Park, 07° 56' 07" N, 39° 11' 37" E, 3080 m a.s.l., Mount Chilalo, forest with *Schefflera abyssinica* and *Hypericum revolutum*, litter and green mosses on the soil, dry season, 24.10.2022 (collected by L.B. Rybalov).

Type deposition

The holotype is deposited in the collection of the Senckenberg Museum of Natural History, Görlitz, Germany; four paratypes are deposited in the collection of the University of Tyumen, Museum of Zoology, Tyumen, Russia; 11 paratypes are in the personal collection of the first author. All specimens are preserved in 70% solution of ethanol with a drop of glycerol.

Diagnosis

Body length 615–705. Body covered by cerotegument including spherical to capitate-columnar excrescences. Prodorsobasal tubercles *Da* and *Dp* simple. Postbothridial tubercle *Ba* simple, *Bp* as strong

transverse ridge. Interlamellar and bothridial setae rod-like, barbed, *in* shorter than *bs*. Setae c_1 , c_2 , *la*, *lm*, *lp*, b_1 – b_3 long, thorn-like, barbed. Seta c_3 medium-sized, setiform, barbed. Setae p_1 – p_3 short, setiform, nearly smooth. Ventral enantiophyses *E2*, *V*, and *M* absent. Parastigmatic tubercles simple to triangular. Epimere II with two pairs of setae. Discidium narrowly triangular. Leg IV longer than body length, other legs shorter than body length. Setal formulas of leg segments (I–IV): femur 10-10-9-8; genu 4-4-4-4; tibia 4-5-5-4; tarsus 20-17-17-14.

Description

Measurements – Body length 660 (holotype), 615–705 (paratypes); body width 420 (holotype), 390–435 (paratypes). No difference between males and females in body size.

Integument – Color medium brown in preserved mature adults. Body, legs, and setae mostly covered by thin, tight layer of colorless cerotegument including densely spaced spherical to capitate-columnar excrescences. Cuticle densely and conspicuously microtuberculate.

Prodorsum – Rostrum broadly rounded. Body wall anterior to acetabula I and II about 60° from sagittal plane. Propodolateral apophysis absent. Prodorsobasal enantiophysis *D* represented by small, simple (rounded distally) tubercles *Da* and *Dp*. Postbothridial enantiophysis *B* represented consistently only by medium-sized, simply (rounded distally) tubercle *Ba*; opposing cuticle across sejugal groove well projecting, with stronger contour giving impression of strong transverse ridge (*Bp*) in dorsal view. Laterosejugal enantiophysis *L* absent. Sigillar patches of cheliceral and subcapitular muscles conspicuous in transmitted light. Rostral (82–90) and lamellar (97–101) setae slightly thickened, attenuate, barbed, arched anteromediad. Interlamellar (90–97) and bothridial (180–187) setae rod-like, barbed, *in* directed posterolaterad. Bothridium displaced laterally. Exobothridial seta (49–52) setiform, barbed. Alveolar vestige of second exobothridial seta not observed.

Notogaster – Without exuvial stack or adherent debris. In dorsal aspect, notogaster nearly circular, slightly longer than broad. In lateral aspect, notogaster uniformly hemispherical, with maximum height in the middle. Dorsal setae c_1 , c_2 , b_1 – b_3 (94–105), *la* (112–135), *lm* (106–131), *lp* (101–123) thorn-like, barbed, directed in two well distanced from each other parallel rows (not inserted in uniformly curving, semicircular rows). Seta c_3 (90–97) setiform, barbed, with mediolateral part directed posterolaterad. Setae p_1 – p_3 (56–67) setiform, nearly smooth, arched laterad. Opisthonotal gland opening and all lyrifissures distinct in transmitted light.

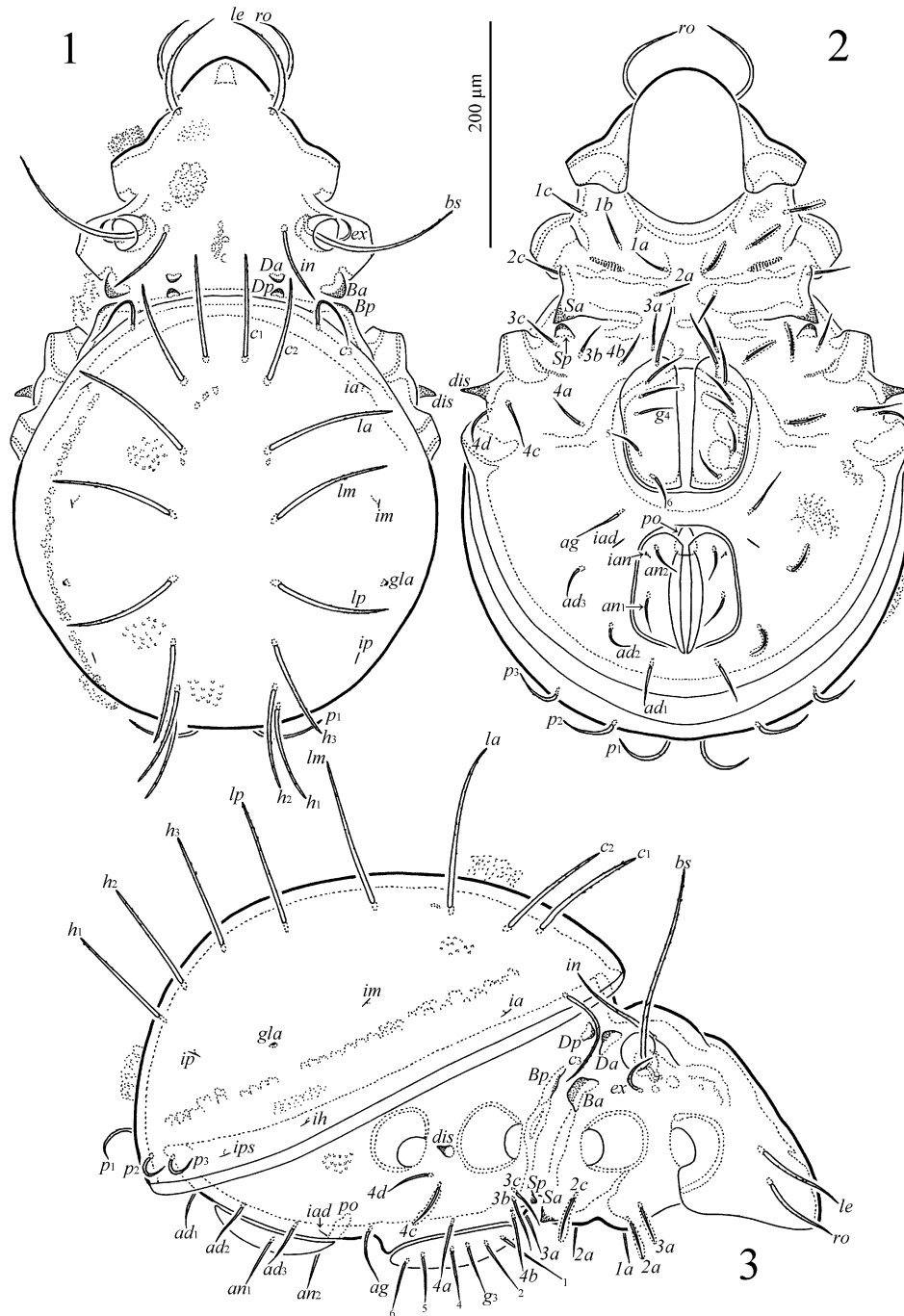
Gnathosoma – Subcapitulum size 135–142 × 97–105. Three pairs of subcapitular setae (*a* 32–41; *m* 49–56; *b* 36–45) setiform, roughened. Two pairs of adoral setae (*or*₁ 17–19; *or*₂ 19–22) setiform, smooth. Palp length 116–120. Palp setal formula 0-2-1-3-9(+ω). Palp solenidion about half of tarsus, appressed to surface. Postpalpal seta (7) spiniform. Chelicera length 123–131. Cheliceral seta *cha* (45–49) setiform, barbed, *chb* (32–34) unilaterally barbed.

Epimeral and lateral podosomal regions – Epimeral enantiophysis *E2*, ventrosejugal enantiophysis *V*, and mediosejugal enantiophysis *M* absent. Parastigmatic tubercle *Sa* large, *Sp* clearly smaller, both simple (rounded distally) to triangular (pointed distally), not visible in dorsal view. Epimeral setal formula 3-2-3-4. Setae (41–49) setiform, nearly smooth. Discidium narrowly triangular in ventral view, directed laterad.

Anogenital region – Anogenital setal formula 6-1-2-3. Six pairs of genital (g_1 64–67; others 41–49), one pair of aggenital (64–67), two pairs of anal (41–49), and three pairs of adanal (41–49) setae setiform, nearly smooth. Adanal lyrifissure oblique, distinct.

Legs – Leg IV longer than body length, legs I, II, IV shorter than body length. Approximate length of leg segments shown in Table 1. Claw of each tarsus smooth. Porose area on femora I–IV and on trochanters III and IV distinctly visible. Formulas of leg setation and solenidia: I (1-10-4-4-20) [1-2-2]; II (1-10-4-5-17) [1-1-2]; III (4-9-4-5-17) [1-1-0]; IV (3-8-4-4-14) [0-1-0]. Homology of setae and solenidia

indicated in Table 2. Famulus emergent.

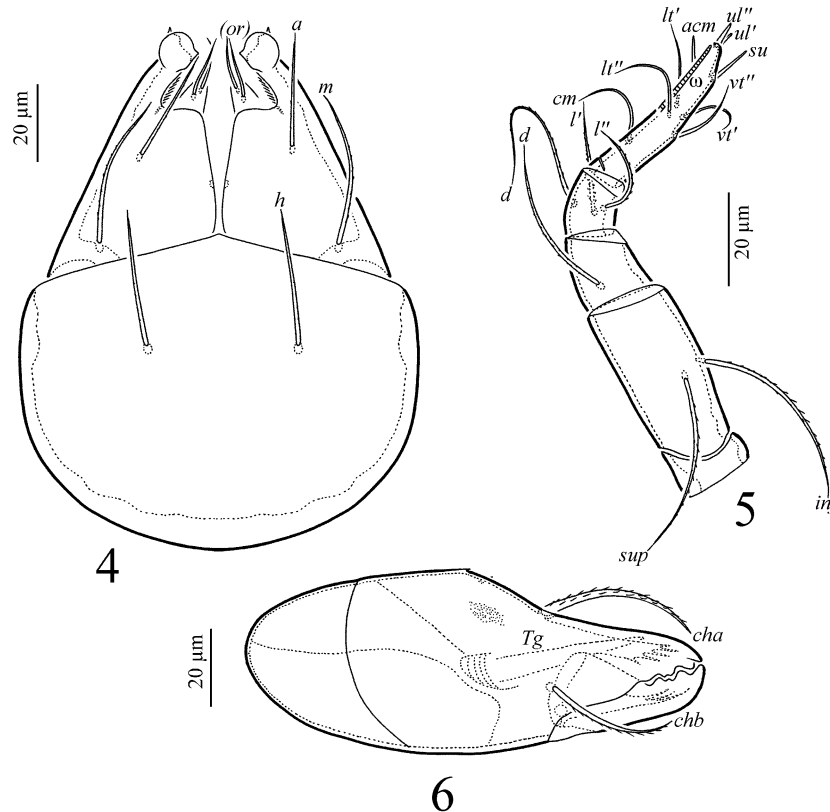


Figures 1–3. *Prometabelba chilaloensis* sp. nov. (adult; gnathosoma and legs omitted) – 1. Dorsal view; 2. Ventral view; 3. Right lateral view.

Table 1. Leg mean lengths (micrometers) and their ratio to body mean length of one paratype (with length 630) *Prometabelba chilaloensis* sp. nov.

Leg	Tr	Fe	Ge	Ti	Ta	All	Leg÷/body length
I	15	191	56	97	199	558	0.88
II	15	154	41	90	165	465	0.73
III	105	116	41	105	176	543	0.86
IV	165	139	67	131	229	731	1.16

Note: Tr, Fe, Ge, Ti, Ta = trochanter, femur, genu, tibia, and tarsus, respectively. Not includes portion inserted in more proximal segment.



Figures 4–6. *Prometabelba chilaloensis* sp. nov. (adult) – 4. Subcapitulum, ventral view; 5. Palp, right, antiaxial view; 6. Chelicera, right, antiaxial view.

Table 2. Development of leg setation of adult *Prometabelba chilaloensis* sp. nov.

Leg	<i>Tr</i>	<i>Fe</i>	<i>Ge</i>	<i>Ti</i>	<i>Ta</i>
I	<i>v'</i>	<i>d</i> , (<i>h</i> ₁), (<i>h</i> ₂), <i>bv''</i> , (<i>v</i> ₁), (<i>v</i> ₂)	(<i>l</i>), <i>v'</i> , <i>dσ</i>	(<i>l</i>), (<i>v</i>), φ ₁ , φ ₂	(<i>ft</i>), (<i>tc</i>), (<i>it</i>), (<i>p</i>), (<i>u</i>), (<i>a</i>), <i>s</i> , (<i>pv</i>), (<i>pl</i>), (<i>v</i>), <i>e</i> ,
II	<i>v'</i>	<i>d</i> , (<i>h</i> ₁), (<i>h</i> ₂), <i>bv''</i> , (<i>v</i> ₁), (<i>v</i> ₂)	(<i>l</i>), <i>v'</i> , <i>dσ</i>	(<i>l</i>), (<i>v</i>), <i>dφ</i>	(<i>ft</i>), (<i>tc</i>), (<i>it</i>), (<i>p</i>), (<i>u</i>), (<i>a</i>), <i>s</i> , (<i>pv</i>), (<i>v</i>), ω ₁ , ω ₂
III	<i>d</i> , <i>l'</i> , (<i>v</i>)	<i>d</i> , (<i>h</i> ₁), <i>h</i> _{2'} , <i>ev'</i> , (<i>v</i> ₁), (<i>v</i> ₂)	<i>l'</i> , (<i>v</i>), <i>dσ</i>	(<i>l</i>), (<i>v</i>), <i>dφ</i>	(<i>ft</i>), (<i>tc</i>), (<i>it</i>), (<i>p</i>), (<i>u</i>), (<i>a</i>), <i>s</i> , (<i>pv</i>), (<i>v</i>)
IV	<i>d</i> , <i>l'</i> , <i>v'</i>	<i>d</i> , (<i>h</i> ₁), <i>h</i> _{2'} , <i>ev'</i> , (<i>v</i> ₁), <i>v</i> _{2''}	<i>d</i> , <i>l'</i> , (<i>v</i>)	(<i>l</i>), (<i>v</i>), φ	<i>ft''</i> , (<i>tc</i>), (<i>p</i>), (<i>u</i>), (<i>a</i>), <i>s</i> , (<i>pv</i>), (<i>v</i>)

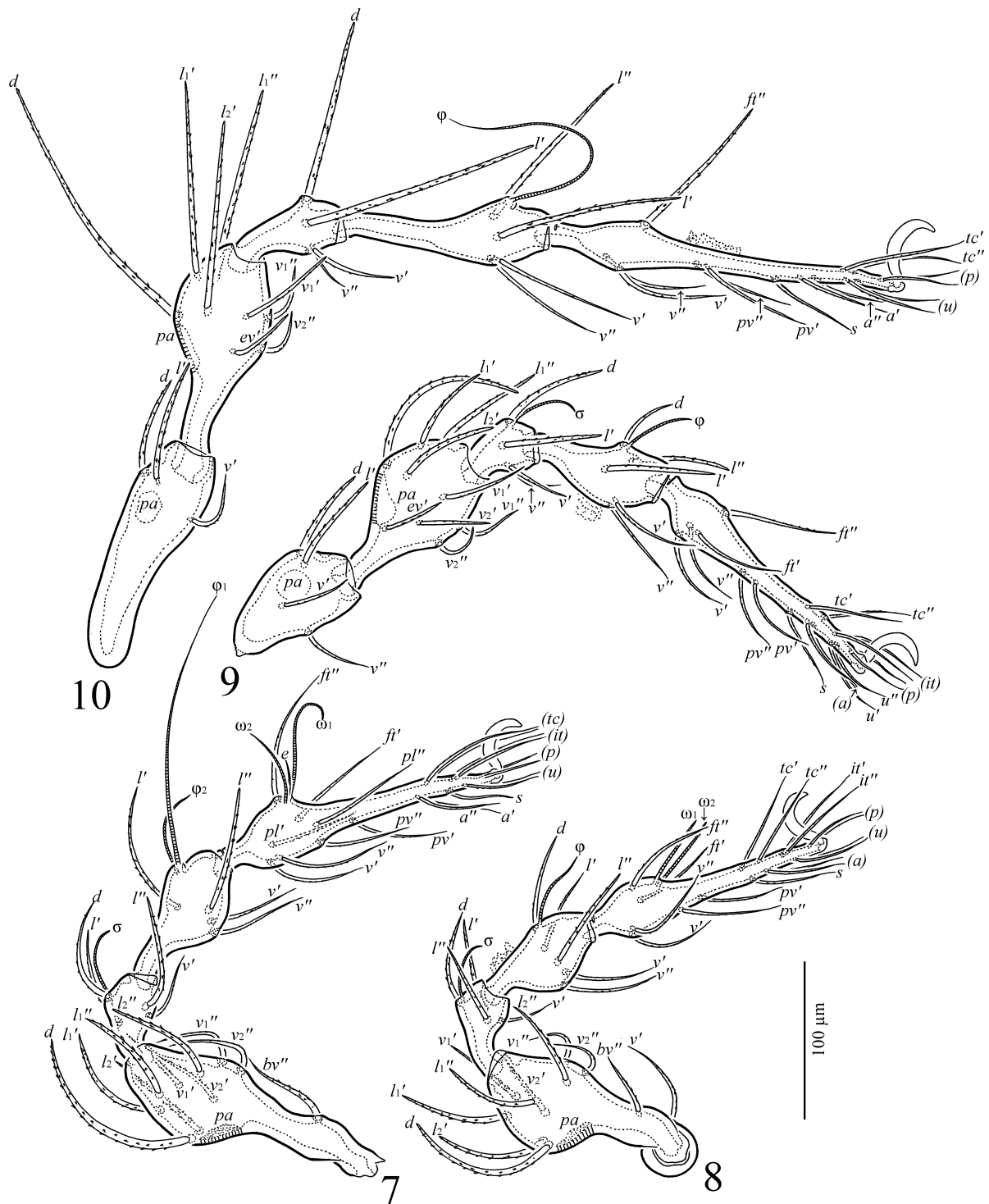
Note: Roman letters refer to normal setae, Greek letters to solenidia. Single prime (') marks setae on the anterior and double prime (") setae on the posterior side of a given leg segment. Parentheses refer to a pair of setae.

Remarks

Prometabelba chilaloensis sp. nov. differs from *P. ginchiensis* by smaller body size (615–705 versus 780–840), the length and morphology of the bothridial seta (rod-like, longer than interlamellar seta versus lanceolate, shorter than interlamellar seta), the morphology of the parastigmatic tubercles (simple to triangular versus *Sa* broadly rounded, *Sp* quadrangular), and the number of setae on the epimere II (two pairs versus one pairs). *Prometabelba chilaloensis* sp. nov. differs from *P. centurion* by the location of two parallel rows with dorsal notogastral setae (comparatively well distanced versus very close to each other), the absence (versus presence) of the exuvial scalps on the notogaster, and the number of setae on the epimere II (two pairs versus one pairs).

Etymology

The species name *chilaloensis* refers to the place of origin, Mount Chilalo.



Figures 7–10. *Prometabelba chilaloensis* sp. nov. (adult) – 7. Leg I (trochanter omitted), right, antiaxial view; 8. Leg II, right, antiaxial view; 9. Leg III, left, antiaxial view; 10. Leg IV, left, antiaxial view.

Key to Damaeidae of the Afrotropical region

Metabelba benoiti, *M. heteropoda*, *M. horrida*, and *M. tanganyikensis* are excluded from the key because these species have been poorly described (Balogh 1958).

1. One pair of spinae adnatae well developed. Prodorsobasal lateral tubercle (*La*) present. Leg setal formula of femora (I to IV) 8-7-4/5-5. Leg tibiae II, III and genua I–III with free solenidion (not coupled with dorsal seta). Body length 1300–1659 *Damaeus* (*Adamaeus*) *onustus* Koch, 1844 (see also Miko 2006, 2015; Seniczak & Seniczak 2011)

Distribution: Palearctic and Afrotropical regions

- Spinae adnatae not developed. Prodorsobasal lateral tubercle (*La*) absent. Leg setal formula of femora (I to IV) 9/10-9/10/11-7/8/9-7/8/9. Leg tibiae II, III and genua I–III with solenidion coupled with dorsal seta. Body length smaller than 1000 2
- 2. Dorsal notogastral setae short, spiniform 3
- Dorsal notogastral setae long, thorn-like 5
- 3. Bothridial seta rod-like. Interlamellar seta truncate. Body length 570–645
..... *Coronabelba adiscidialis* Ermilov & Kolesnikov, 2024 (in Ermilov *et al.* 2024a)
Distribution: Ethiopia
- Bothridial seta setiform, with attenuate tip, or flagelliform. Interlamellar seta pointed 4
- 4. Centrodorsal notogastral region without tubercles. Bothridial seta medium-sized, setiform. Parastigmatic tubercle *Sa* prominent, elongate triangular, clearly visible in dorsal aspect. Discidium present. Body length 368–415 *Coronabelba platynota* (Grandjean, 1954)
Distribution: southern Europe, Ethiopia
- Centrodorsal notogastral region with dense tubercles. Bothridial seta long, flagelliform. Parastigmatic tubercle *Sa* tubercle-like, not visible in dorsal aspect. Discidium absent. Body length 495–555
..... *Coronabelba pustulata* Ermilov, 2024 (in Ermilov *et al.* 2024b).
Distribution: Ethiopia
- 5. Propodolateral apophysis present. Body length 410–520..... *Metabelba (M.) papillipes* (Nicolet, 1855)
(see also Hammen and Strenzke 1953; Bulanova-Zachvatkina 1965; Miko 2006)
- Propodolateral apophysis absent 6
- 6. Prodorsobasal tubercle *Ba* absent. Notogastral seta ϵ_3 absent 7
- Prodorsobasal tubercle *Ba* present. Notogastral seta ϵ_3 present 8
- 7. Posterior ventrosejugal tubercle (*Vp*) present. Body length over 650 μm , length 673–697
..... *Metabelba (Pateribelba) glabriseta* Mahunka, 1982 (see also Miko *et al.* 2014)
Distribution: Ethiopia
- Posterior ventrosejugal tubercle (*Vp*) absent. Body length under 550 μm , length 416–510
..... *Metabelba (Pateribelba) sphagni* Strenzke, 1950 (see also Miko 2006; Mourek *et al.* 2011)
Distribution: Euroatlantic region, Ethiopia
- 8. Bothridial seta lanceolate, shorter than interlamellar seta. Body length 780–840
..... *Prometabelba ginchiensis* (Ermilov, 2024) (in Ermilov & Rybalov 2024)
Distribution: Ethiopia
- Bothridial seta rod-like, longer than interlamellar seta 9
- 9. Dorsal notogastral setae in two very closely spaced parallel rows. Exuvial scalps on notogaster present. Epimere II with one pair of setae. Body length 615–620
..... *Prometabelba centurion* (Miko, Mourek & Ermilov, 2014)
Distribution: Ethiopia
- Parastigmatic tubercles *Sa* and *Sp* simple or triangular. Exuvial scalps on notogaster absent. Epimere II with two pairs of setae. Body length 615–705 *Prometabelba chilaloensis* **sp. nov.**
Distribution: Ethiopia

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Data availability: Data are available upon request from the author.

Ethics approval: This study only included arthropod material, and all required ethical guidelines for the treatment and use of animals were strictly adhered to in accordance with international, national, and institutional regulations. No human participants

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REFERENCES

- Balogh, J. (1958) Oribatides nouvelles de l'Afrique tropicale. *Revue de Zoologie et de Botanique Africaines*, 58: 1–34.
- Bulanova-Zachvatkina, E.M. (1965) On the diagnostics of species of the genus *Metabelba* Grandjean, 1936 (Oribatei, Belbidae). *Zoologicheskoy Zhurnal*, 44: 1333–1344.
- Ermilov, S.G., Hugo-Coetzee, E.A., Khaustov, A.A. & Khaustov, V.A. (2021) New faunistic and taxonomic data on oribatid mites (Acari, Oribatida) inhabiting soil and termite nests in the Golden Gate Highlands National Park (eastern South Africa). *International Journal of Acarology*, 47: 152–158. <https://doi.org/10.1080/01647954.2021.1879262>
- Ermilov, S.G., Kolesnikov, V.B. & Rybalov, L.B. (2024a) New Damaeidae (Acari, Oribatida) from Ethiopia. *Systematic and Applied Acarology*, 29: 1174–1189. <https://doi.org/10.11158/saa.29.8.9>
- Ermilov, S.G. & Rybalov, L.B. (2024) Faunistic and taxonomic data on oribatid mites (Acari, Oribatida) from central Ethiopia. *Acarina*, 32: 3–11. <https://doi.org/10.21684/0132-8077-2024-32-1-3-11>
- Ermilov, S.G., Rybalov, L.B. & Kuzmicheva, E.A. (2024b) New species and record of oribatid mites (Acari, Oribatida) from highlands bamboo location in Ethiopia. *Systematic and Applied Acarology*, 29: 1297–1309. <https://doi.org/10.11158/saa.29.9.7>
- Grandjean, F. (1936) Les Oribates de Jean Frédéric Hermann et de son père (Arachn. Acar.). *Annales de la Société Entomologique de France*, 105: 27–110.
- Grandjean, F. (1954) Observations sur les Oribates (29^e série). *Bulletin du Museum nationale d'Histoire naturelle* (2), 26: 334–341.
- Hammen, L. van der & Strenzke, K. (1953) A partial revision of the genus *Metabelba* Grandjean (Oribatei, Acari). *Zoologische Mededelingen*, 32: 141–154.
- Koch, C.L. (1844) *Deutschlands Crustaceen, Myriapoden und Arachniden*. Heft 38. F. Pustet, Regensburg, 1 pp.
- Mahunka, S. (1982) Oribatids from the Eastern Part of the Ethiopian Region (Acari) I. *Acta Zoologica Academiae Scientiarum Hungaricae*, 28: 293–336.
- Miko, L. (2006) Damaeidae. In: Weigmann, G. (Ed.), *Hornmilben (Oribatida)*. Die Tierwelt Deutschlands begründet 1925 von Friedrich Dahl. Teil 76. Goecke & Evers, Keltern, pp. 179–207.
- Miko, L. (2015) Taxonomy of European Damaeidae VIII. Contribution to classification of genus *Damaeus* C. L. Koch, 1835, with a review of *Adamaeus* Norton, 1978 and *Paradamaeus* Bulanova-Zachvatkina, 1957 and redescription of three species. *Zootaxa*, 3980: 151–188. <http://dx.doi.org/10.11646/zootaxa.3980.2.1>
- Miko, L., Kolesnikov, V.B. & Murvanidze, M. (2024) Taxonomy of European Damaeidae (Acari: Oribatida) XII. *Trimetabelba* Miko gen. nov. with redescription of *T. propexa* (Kulczynski, 1902) comb. nov. description of two new species and proposal of *Prometabelba* Miko gen. nov. *International Journal of Acarology*, 50: 668–686. <https://doi.org/10.1080/01647954.2024.2394244>
- Miko, L., Mourek, J. & Ermilov, S.G. (2014) Taxonomy of African Damaeidae I. *Metabelba (Pateribelba) centurion* sp. nov. from Ethiopia and redescription of *Metabelba (Pateribelba) glabriseta*. *International Journal of Acarology*, 40: 519–534. <https://doi.org/10.1080/01647954.2014.951686>
- Mourek, J., Miko, L. & Bernini, F. (2011) Taxonomy of European Damaeidae (Acari: Oribatida) IV. Partial revision of *Metabelba* Grandjean, 1936 with proposal of one new subgenus, one new species and redescription of two known species. *Zootaxa*, 3099: 1–42. <https://doi.org/10.11646/zootaxa.3099.1.1>
- Nicolet, H. (1855) Histoire naturelle des Acariens qui se trouvent aux environs de Paris. *Archives du Muséum d'Histoire naturelle*, 7: 381–482.
- Norton, R.A. (1977) A review of F. Grandjean's system of leg chaetotaxy in the Oribatei (Acari) and its application to the family Damaeidae. In: Dindal, D.L. (Ed.), *Biology of oribatid mites*. SUNY College of Environmental Science and Forestry, Syracuse, pp. 33–61.
- Seniczak, S. & Seniczak, A. (2011) Differentiation of external morphology of Damaeidae (Acari: Oribatida) in light of the ontogeny of three species. *Zootaxa*, 2775: 1–36. <https://doi.org/10.11646/zootaxa.2775.1.1>
- Strenzke, K. (1950) Die Belbiden Holsteins (Acarina: Oribatei). *Schriften des Naturwissenschaftlichen Vereins für Schleswig-Holstein*, 24: 63–65.
- Subías, L.S. (2022) Listado sistemático, sinonímico y biogeográfico de los ácaros oribátidos (Acariformes, Oribatida) del mundo (excepto fósiles). *Monografías Electrónicas Sociedad Entomológica Aragonesa*, 12: 1–539.

- Subías, L.S., Ermilov, S.G., Shtanchaeva, U.Ya. & Rybalov L.B. (2021) Additions to the oribatid mite fauna (Acari, Oribatida) of Ethiopia, with remarks on some species of Galumnidae. *Acarina*, 29: 11–16. <https://doi.org/10.21684/0132-8077-2021-29-1-11-16>
- Travé, J. & Vachon, M. (1975) François Grandjean. 1882–1975 (Notice biographique et bibliographique). *Acarologia*, 17: 1–19.
- Wallwork, J.A. (1977) 4. *Acarina*. 4.1. *Cryptostigmata*. In: La faune terrestre de L'île de Sainte-Hélène (4ème partie), *Musee Royal de L'Afrique Centrale, Tervuren, Belgique Annales, Serie 8, Sciences Zoologiques*, 220, pp. 189–257.

گونه جدیدی از *Prometabelba* (Acari, Oribatida, Damaeidae) از اتیوپی

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چکیده

گونه جدیدی از جنس *Prometabelba* (Oribatida, Damaeidae) - *P. chilaloensis* sp. nov. - بر اساس بالغ‌های جمع‌آوری شده از زباله‌ها و خزه‌های سبز جنگل در پارک ملی کوه‌های آرسی، مرکز اتیوپی، توصیف شده است. کلید شناسایی برای گونه‌های Damaeidae از ناحیه افروتروپیکال ارائه شده است.

واژگان کلیدی: ناحیه افروتروپیکال، هرناهای دم‌ناید، کلید شناسایی، ریخت‌شناسی، گونه جدید، آرایه‌شناسی

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