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New Mochlozetidae (Acari, Oribatida) from the Merida State, Western Venezuela

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Original research

ABSTRACT

Two new species of Mochlozetidae (Oribatida)—*Dynatozetes asetosus* n. sp. and *Uracrobates (Uracrobates) paramasneri* n. sp.—are described, based on materials collected from sweep sample in cloud forest in Venezuela. *Dynatozetes asetosus* n. sp. differs from all representatives of the genus in the presence of the prolamella and the morphology of the bothridial seta; *Uracrobates (Uracrobates) paramasneri* n. sp. differs from all representatives of the genus by the morphology of the notogastral porose area *Aa*. The genus *Uracrobates* is recorded in the Venezuelan fauna for the first time. Identification keys, distribution and habitat to the known species of *Dynatozetes* and *Uracrobates* are provided. The generic diagnosis of *Dynatozetes* is partially revised.

Keywords mochlozetid mites; *Dynatozetes*; *Uracrobates*; taxonomy; morphology; identification key; habitat; Neotropical region

Zoobank <http://zoobank.org/10DF1694-46A4-4C91-ADFE-386F8FB9263D>

Introduction

Among the oribatid mite (Acari, Oribatida) materials collected from the Merida State, Western Venezuela, I found two new species of the family Mochlozetidae, one species belonging to the genus *Dynatozetes* Grandjean, 1960, the other to *Uracrobates* Balogh and Mahunka, 1967. The main goal of the paper is to describe the two new species.


Dynatozetes was proposed by Grandjean (1960), with *Dynatozetes amplus* Grandjean, 1960 as type species. The genus comprises four species distributed in the Nearctic and Neotropical regions (Subías 2022, online version 2024). The generic diagnosis and an identification key to the known species were provided by Ermilov and Friedrich (2017a).

Uracrobates was proposed by Balogh and Mahunka (1967), with *Uracrobates magniporosus* Balogh and Mahunka, 1967 as type species. The genus comprises two subgenera (nominate and *Parauracrobates* Ermilov and Martens, 2015) and eight species distributed in tropics (Subías 2022, online version 2024). The generic and subgeneric diagnoses as well as an identification key to the known species were provided by Ermilov and Martens (2015) and revised by Ermilov and Mary (2019).

Additional goal of the paper is to update identification keys and to summarize data on distribution and habitat to representatives of *Dynatozetes* and *Uracrobates*.

Prior to this study, two identified species of *Dynatozetes* have been registered in the Venezuelan fauna, *D. amplus* Grandjean, 1960 (see Călugăr 1990; Behan-Pelletier *et al.* 1993) and *D. obesus* Grandjean, 1960 (see Grandjean 1960; Ermilov 2016). *Uracrobates* has not yet been registered in Venezuela.

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Methods

Observation and documentation — 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 at pteromorph level in dorsal aspect and to the maximum width at ventral plate level in ventral view; the lengths of 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 included); formulas for leg solenidia are given in square brackets, according to the sequence genu-tibia-tarsus. Drawings were made with a camera lucida using a Leica DM 2500 light microscope.

Terminology — Morphological terminology used in this paper mostly follows that of papers on Mochlozetidae (e.g., Grandjean 1959, 1960; Norton 1983, 1984; Ermilov and Yurtaev 2023); Norton (1977) for leg setal nomenclature and Norton and Behan-Pelletier (2009) for overview.

Abbreviations — Prodorsum: *lam* = lamella; *tlam* = translamella; *plam* = prolamella; *slam* = sublamella; *Al* = sublamellar porose area; *tu* = tutorium; *ro*, *le*, *in*, *bs*, *ex* = rostral, lamellar, interlamellar, bothridial, and exobothridial setae, respectively; *Ad* = dorsosejugal porose area; *D* = dorsophragma; *P* = pleurophragma. Notogaster: *c*, *la*, *lm*, *lp*, *h*, *p* = notogastral setae; *Aa*, *A1*, *A2*, *A3*, *A1–A4* = porose areas; *im*, *ip*, *ih*, *ips* = lyrifissures; *gla* = opisthonotal gland opening. Gnathosoma: *a*, *m*, *h* = subcapitular setae; *or* = adoral seta; *d*, *l*, *cm*, *acm*, *ul*, *su*, *lt*, *vt*, *inf*, *sup* = palp setae; ω = palp solenidium; *ep* = postpalpal seta; *cha*, *chb* = cheliceral setae; *Tg* = Trägårdh's organ. Epimeral and lateral podosomal regions: *1a*, *1b*, *1c*, *2a*, *3a*, *3b*, *3c*, *4a*, *4b*, *4c* = epimeral setae; *Am*, *Ah* = humeral porose areas; *PdI*, *PdII* = pedotecta I and II, respectively; *cus* = custodium; *dis* = discidium; *cir* = circumpedal carina; *z* = aperture of supracoxal gland. Anogenital region: *g*, *ag*, *an*, *ad* = genital, aggenital, anal, and adanal setae, respectively; *iad* = adanal lyrifissure; *Amar* = marginal porose area; *po* = preanal organ. Legs: *Tr*, *Fe*, *Ge*, *Ti*, *Ta* = trochanter, femur, genu, tibia, and tarsus, respectively; *trp* = trochanter process; *pa* = porose area; ω , σ , ϕ = solenidia; ε = famulus; *d*, *l*, *v*, *ev*, *bv*, *ft*, *tc*, *it*, *p*, *u*, *a*, *s*, *pv*, *pl* = setae.

Taxonomy

Family Mochlozetidae Grandjean, 1960

Genus *Dynatozetes* Grandjean, 1960

Type species: *Dynatozetes amplus* Grandjean, 1960

Dynatozetes aetosus n. sp.

Zoobank: 14A566E5-E4C6-4447-A2C0-22B6200C39E9

(Figures 1, 2)

Material examined — Holotype (female) and two paratypes (two females): Western Venezuela, Merida State, 2300 m a.s.l., 10 km E Tabay, sweeping in cloud forest, 28.IV.1981 (L. Masner and Marsh).

Type deposition — The holotype is deposited in the collection of the Canadian National Collection, Ottawa, Canada; two paratypes are in the collection of the Tyumen State University Museum of Zoology, Tyumen, Russia. All specimens are preserved in 70% solution of ethanol with a drop of glycerol.

Diagnosis — Body length: 855–930. Rostrum with small, semi-oval protruding. Prolamella present. Rostral, lamellar and bothridial setae long, setiform, barbed; *ro* and *le* longer than *bs*; interlamellar seta represented by alveolus. Notogaster and anogenital region foveolate. Six pairs of notogastral porose areas, of these, four pairs in posteroperipheral position; *Aa* oval, others rounded. Epimeral, genital and aggenital setae setiform, thin, slightly barbed; anal and

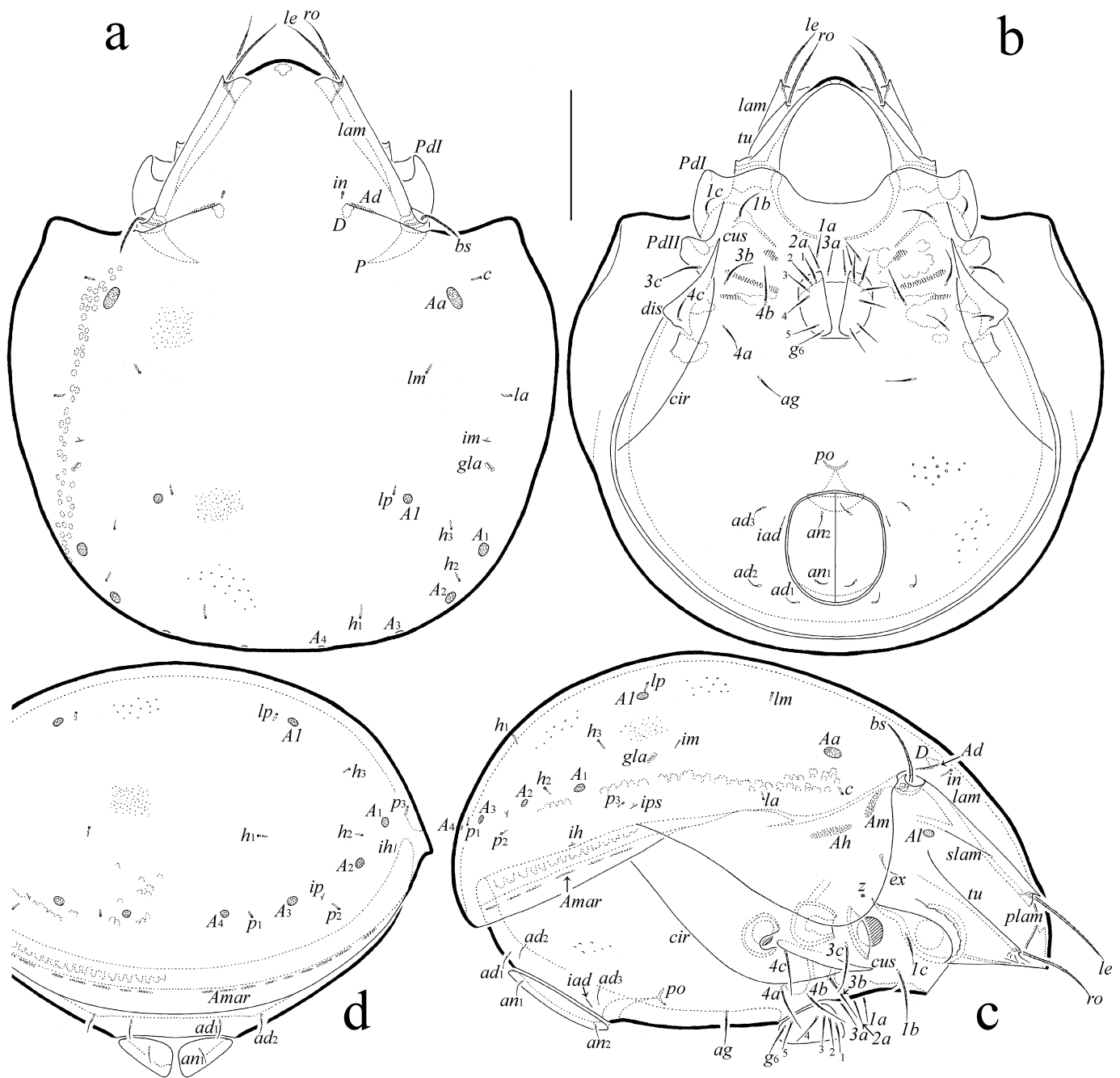


Figure 1 *Dynatozetes asetosus* n. sp., adult (gnathosoma and legs omitted): a – dorsal view; b – ventral view; c – right lateral view; d – posterior view. Scale bar 200 μ m.

adanal setae short, setiform, thin, roughened. Leg trochanter IV with anterodorsal process. Dorsal porose area on tarsi I, II not observable.

Description of adult — Measurements – Body length: 930 (holotype), 855, 915 (female paratypes); notogaster width (level of pteromorphs): 840 (holotype), 825 (female paratypes); ventral plate width: 750 (holotype), 705 (female paratypes).

Integument – Body color brown. Surface with dense microgranules (visible under high

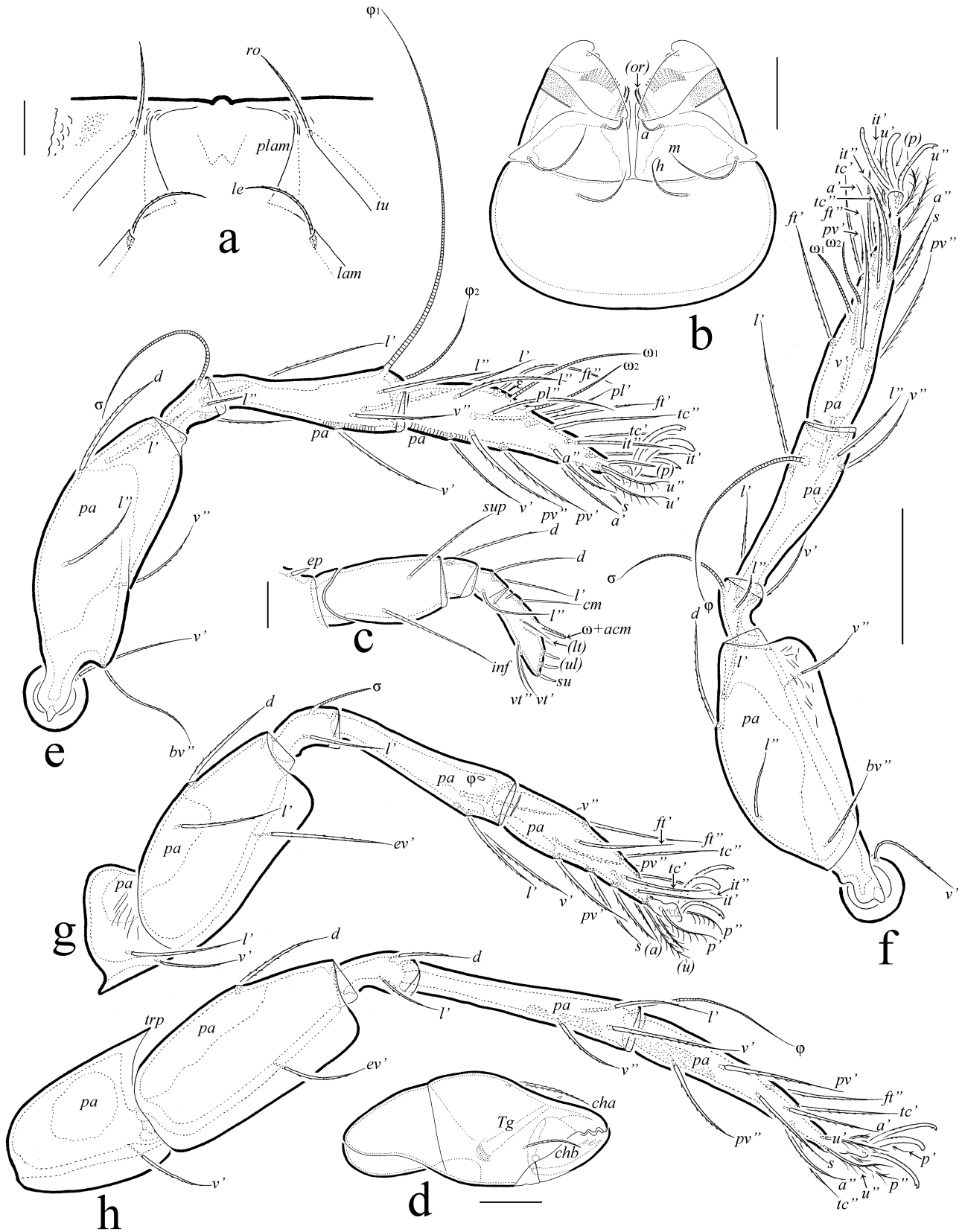


Figure 2 *Dynatozetes asetosus* n. sp., adult: a – anterior part of prodorsum, anterior view; b – subcapitulum, dissected, ventral view; c – palp, right, antiaxial view; d – chelicera, right, antiaxial view; e – leg I, right, antiaxial view; f – leg II, right, antiaxial view; g – leg III, left, antiaxial view; h – leg IV, left, antiaxial view. Scale bars 100 μ m (e–h), 50 μ m (a, b, d), 25 μ m (c).

magnification, 10 × 100); notogaster and anogenital region with small poorly observable foveolae; lateral side of body partially with dense microgranulate cerotegument.

Prodorsum (Figs 1a, 1c, 2a) – Rostrum with small, semi-oval protruding (visible in anterior view). Lamella (including cusp) about 2/3 length of prodorsum, with short cusp having strong lateral tooth; translamella absent; prolamella lineate, located medial to insertions of rostral and lamellar setae; tutorium ridge-like, with small tooth distally. Sublamellar porose area oval (26–30 × 19–22). Rostral (112–131), lamellar (112–131) and bothridial (101–106) setae setiform, barbed; interlamellar seta represented by alveolus; exobothridial seta (45–49) setiform, thin, slightly barbed. Dorsosejugal porose area diffuse, located posterolateral to interlamellar seta.

Notogaster (Figs 1a, 1c, 1d) – Dorsosejugal suture interrupted medially. Pteromorph broadly rounded laterally. Six pairs of porose areas, with four pairs in posteroperipheral position; *Aa* oval (41–52 × 19–26), others (15–26) rounded; *A1* anteromedial to *A1*. All notogastral setae represented by alveoli. Opisthotal gland opening and all lyrifissures (except *ia*) distinct.

Gnathosoma (Figs 2b–2d) – Subcapitulum size: 195–202 × 172–184; subcapitular seta *a* (22–26) setiform, brushed distally; subcapitular setae *m* (75–86) and *h* (52–60) and both adoral setae (26) setiform, barbed. Palp length: 157–165; setation: 0–2–1–3–9(+ω); postpalpal seta (7–9) spiniform, smooth. Chelicera length: 206–225; setae (*cha*: 71–75; *chb*: 56–60) setiform, barbed.

Epimeral and lateral podosomal regions (Figs 1b, 1c) – Epimeral setal formula: 3–1–3–3; all setae (*1a*, *1c*, *2a*, *3a*: 45–49; others: 71–90) setiform, thin, slightly barbed. Humeral porose areas *Am* and *Ah* elongate oval, poorly observable. Custodium long, thorn-like. Discidium triangular. Circumpedal carina long, distally fused to custodium.

Anogenital region (Figs 1b–1d) – Anogenital setal formula: 6–1–2–3; genital and aggenital setae (45–49) setiform, thin, slightly barbed; anal and adanal setae (19) setiform, thin, roughened. Adanal lyrifissure located close and slightly oblique to anterior half of anal plate. Marginal porose area represented by numerous oval and elongate oval parts.

Legs (Figs 2e–2h) – Median claw distinctly thicker than lateral ones, all slightly barbed dorsally; each lateral claw with small tooth ventrodistally. Trochanter IV with strong anterodorsal process. Dorsoparaxial porose area on femora I–IV, trochanters III, IV, ventrodistal porose area on tibia I–IV and proximoventral porose area on tarsi I–IV well visible; dorsal porose area on tarsi I, II not observable. Formulas of leg setation and solenidia: I (1–5–3–4–20) [1–2–2], II (1–5–3–4–15) [1–1–2], III (2–3–1–3–15) [1–1–0], IV (1–2–2–3–12) [0–1–0]; homology of setae and solenidia indicated in Table 1.

Remarks — The new species differs from all species of the genus in the presence of the prolamella (versus prolamella absent) and the setiform bothridial seta (versus bothridial seta with well-developed head). Distinctive characters between species within of the genus *Dynatozetes* can be found in the identification key below.

Etymology — The species name *asetosus* refers to the absence of interlamellar setae.

Table 1 Table 1. Leg setation and solenidia of adult *Dynatozetes asetosus* n. sp. and *Uracrobates (Uracrobates) paramasneri* n. sp.

Leg	Tr	Fe	Ge	Ti	Ta
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), l'', ε, ω ₁ , ω ₂
II	v'	d, (l), bv'', v''	(l), v', 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)

Note: Roman letters refer to normal setae (except ε = famulus); Greek letters refer to solenidia; single quotation mark (') marks seta on the anterior and double quotation mark (") seta on the posterior side of a given leg segment; parentheses refer to a pair of setae.

Key to the known species of *Dynatozetes*

1. Bothridial seta setiform; body length: 855–930 *D. aetosus* n. sp.
— Bothridial seta with well-developed head 2
2. Interlamellar seta well-developed; notogastral porose area *Aa* distinctly elongate oval; body length: 763–863 *D. hexaporosus* Ermilov, 2017 (in Ermilov and Friedrich 2017a)
— Interlamellar seta represented by alveolus; notogastral porose area *Aa* rounded/oval 3
3. Dorsal porose area on leg tarsi I and II absent; lamellar seta as long as distance *le-le*; body length: 934–964 *D. magnus* (Banks, 1895) (see also Norton 1984)
— Dorsal porose area on leg tarsi I and II present; lamellar seta shorter than distance *le-le* ... 4
4. Five or six pairs of posteroperipheral notogastral porose areas present; leg trochanter III with one seta (*v'* absent); body length: 770–870 *D. amplus* Grandjean, 1960
— Four pairs of posteroperipheral notogastral porose areas present; leg trochanter III with two setae (*v'* present); body length: 800–930 *D. obesus* Grandjean, 1960

Genus *Uracrobates* Balogh and Mahunka, 1967

Subgenus *Uracrobates* (*Uracrobates*) Balogh and Mahunka, 1967

Type species: *Uracrobates magniporosus* Balogh and Mahunka, 1967

Uracrobates (*Uracrobates*) *paramasneri* n. sp.

Zoobank: [24D88AE8-C0F5-4B16-A5DC-210E345D57F8](https://doi.org/10.24349/00w4-a8ja)

(Figures 3, 4)

Material examined — Holotype (female) and four paratypes (two females): Western Venezuela, Merida State, 2300 m a.s.l., 10 km E Tabay, sweeping in cloud forest, 28.IV.1981 (L. Masner and Marsh).

Type deposition — The holotype is deposited in the collection of the Canadian National Collection, Ottawa, Canada; four paratypes are in the collection of the Tyumen State University Museum of Zoology, Tyumen, Russia. All specimens are preserved in 70% solution of ethanol with a drop of glycerol.

Diagnosis — Body length: 930–1020. Body without foveolae. Rostrum pointed. Lamellar cusp with strong lateral tooth. Rostral, lamellar and interlamellar setae long, setiform, barbed; *ro* shortest, *in* longest; bothridial seta medium-sized, clavate, barbed. Notogastral porose areas *Aa*, *A2* and *A3* strongly elongate oval (nearly band-like), *A1* rounded. Epimeral, genital and aggenital setae setiform, thin, slightly barbed; anal and adanal setae short, setiform, thin, roughened. Leg dorsal porose area on tarsi I, II present.

Description of adult — Measurements – Body length: 930 (holotype), 945–1020 (female paratypes); notogaster width (level of pteromorphs): 720 (holotype), 720–765 (female paratypes); ventral plate width: 615 (holotype), 630–705 (female paratypes).

Integument – Body color brown. Surface with dense microgranules (visible under high magnification, 10 × 100); pedotectum I partially striate; lateral side of body partially with dense microgranulate cerotegument.

Prodorsum (Figs 3a, 3c, 4a) – Rostrum pointed. Lamella (including cusp) about 1/2 length of prodorsum, with long cusp having strong lateral tooth; translamella well-developed, indistinctly convex medially; tutorium ridge-like, with small tooth distally. Sublamellar porose area nearly rounded (15–17). Rostral (131–139), lamellar (180–187) and interlamellar (236–240) setae setiform, barbed; bothridial seta (79–82) clavate, barbed, stalk and head similar in length or stalk slightly longer; exobothridial seta (60–67) setiform, thin, slightly barbed. Dorsosejugal porose area diffuse, located posterolateral to interlamellar seta.

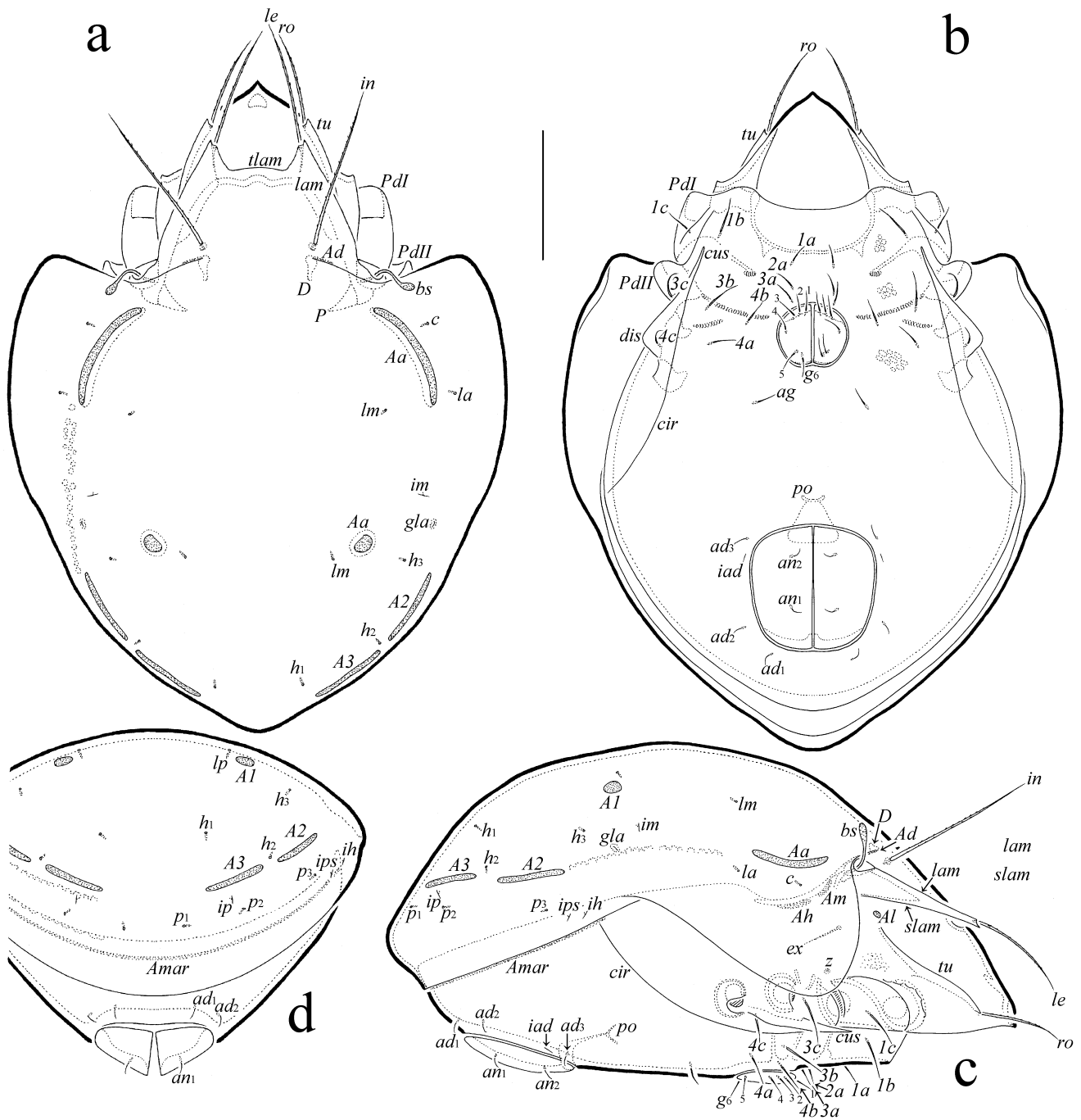


Figure 3 *Uracrobates (Uracrobates) paramasneri* n. sp., adult (gnathosoma and legs omitted): a – dorsal view; b – ventral view; c – right lateral view; d – posterior view. Scale bar 200 μ m.

Notogaster (Figs 3a, 3c, 3d) – Dorsosejugal suture interrupted medially. Posterior margin distinctly narrowed in dorsal and ventral aspects. Pteromorph broadly rounded laterally. Four pairs of porose areas; A1 rounded (26–37), others strongly elongate oval, nearly band-like (Aa: 161–176 \times 7–19; A2, A3: 90–146 \times 7–19). All notogastral setae represented by alveoli. Opisthontal gland opening and all lyrifissures (except ia) distinct.

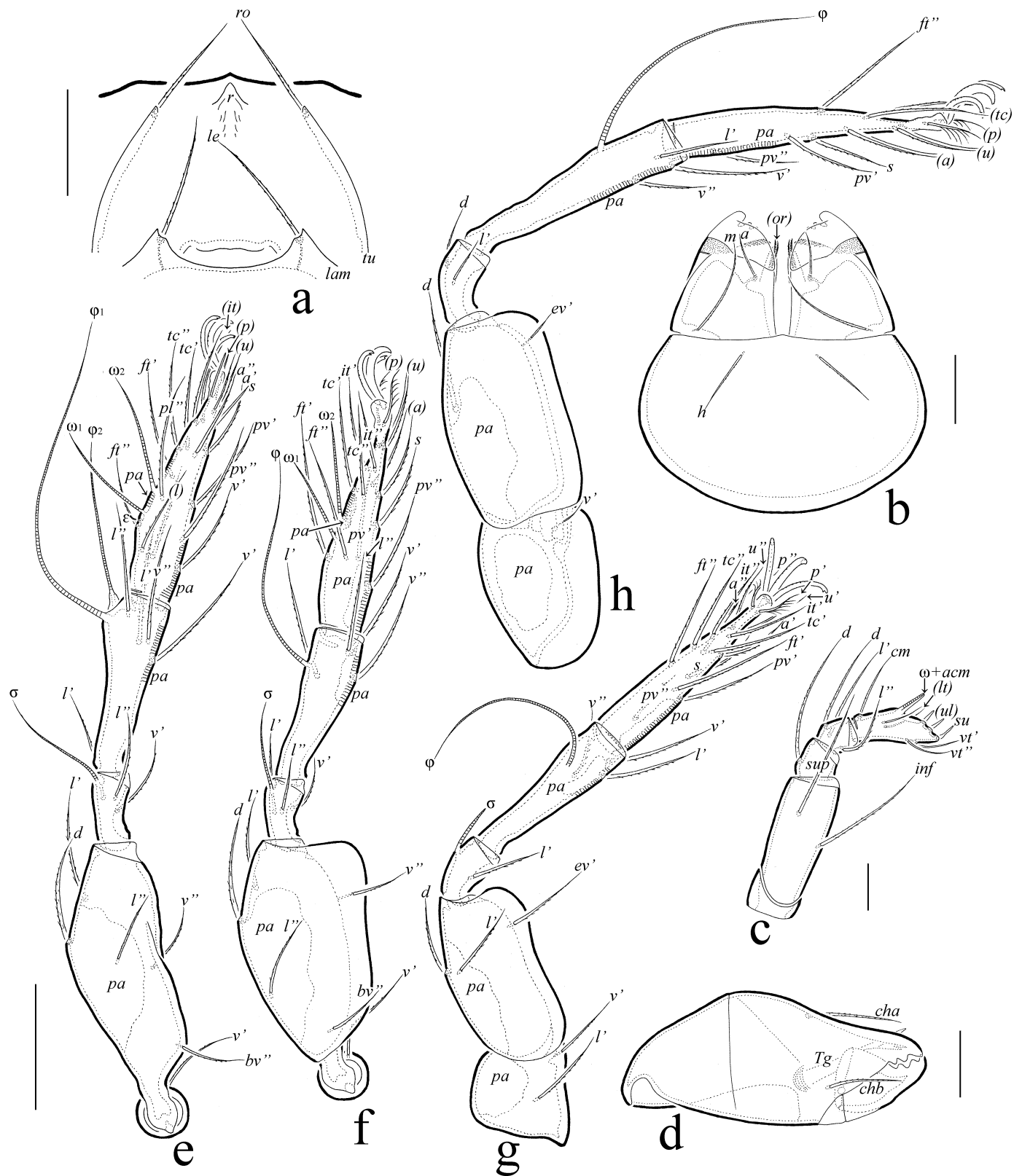


Figure 4 *Uracrobates (Uracrobates) paramasneri* n. sp., adult: a – anterior part of prodorsum, anterior view; b – subcapitulum, dissected, ventral view; c – palp, right, antiaxial view; d – chelicera, right, antiaxial view; e – leg I, right, an

Gnathosoma (Figs 4b–4d) – Subcapitulum size: 206–229 × 187–206; subcapitular setae (*a*: 37–41; *m*: 64–71; *h*: 56–60) and adoral (19) setae setiform, barbed. Palp length: 169–180; setation: 0–2–1–3–9(+ω); postpalpal seta (7) spiniform, smooth. Chelicera length: 225–236; setae (*cha*: 71–75; *chb*: 56–60) setiform, barbed.

Epimeral and lateral podosomal regions (Figs 3b, 3c) – Epimeral setal formula: 3–1–3–3; all setae (*1a*, *2a*, *3a*, *4c*: 34–37; *1c*, *4a*, *4b*: 45–49; *1b*, *3b*, *3c*: 67–71) setiform, thin, slightly barbed. Humeral porose areas *Am* and *Ah* elongate oval, poorly observable. Custodium long, thorn-like. Discidium triangular. Circumpedial carina long, distally fused to custodium.

Anogenital region (Figs 3b–3d) – Anogenital setal formula: 6–1–2–3; genital and aggenital setae (34–37) setiform, thin, slightly barbed; anal and adanal setae (19) setiform, thin, roughened. Adanal lyrifissure located close and slightly oblique to anterior half of anal plate. Marginal porose area complete, band-like.

Legs (Figs 4e–4h) – Median claw distinctly thicker than lateral ones, all slightly barbed dorsally; each lateral claw with small tooth ventrodistally. Dorsoparaxial porose area on femora I–IV, trochanters III, IV, ventrodistal porose area on tibia I–IV, proximoventral porose area on tarsi I–IV, and dorsal porose area on tarsi I, II well visible. Formulas of leg setation and solenidia: I (1–5–3–4–20) [1–2–2], II (1–5–3–4–15) [1–1–2], III (2–3–1–3–15) [1–1–0], IV (1–2–2–3–12) [0–1–0]; homology of setae and solenidia indicated in Table 1.

Remarks — The new species differs from all species of the genus in the presence of the strongly elongate oval (nearly band-like) notogastral porose area *Aa* (versus *Aa* rounded/oval). Distinctive characters between species within of the genus *Uracrobates* can be found in the identification key below.

Etymology — The species name *paramasneri* refers to the similarity of the new species and *U. (U.) masneri* Ermilov, 2019.

Key to the known species of *Uracrobates*

1. Notogaster truncated posteriorly (trapezoid form); notogastral porose area *A3* located in corners of the posterior notogastral margin 2. Subgenus *Uracrobates* (*Parauracrobates*) Ermilov and Martens, 2015
— Notogaster narrowed posteriorly (triangular form); notogastral porose area *A3* located dorsally on the notogaster 3. Subgenus *Uracrobates* (*Uracrobates*) Balogh and Mahunka, 1967
2. Lamellar cusp truncated; notogaster and anogenital region foveolate; anal and adanal setae medium-sized; body length: 664–680 *U. (P.) newtaipeiensis* Ermilov and Liao, 2017
— Lamellar cusp with strong lateral tooth, notogaster and anogenital region not foveolate; anal and adanal setae short; body length: 680–780 ... *U. (P.) truncatus* Ermilov and Martens, 2015
3. Rostrum pointed; notogastral porose areas *A2* and *A3* strongly elongate oval 4
— Rostrum rounded or bidentate; notogastral porose areas *A2* and *A3* rounded 5
4. Notogastral porose area *Aa* strongly elongate oval; body length: 930–1020 *U. (U.) paramasneri* n. sp.
— Notogastral porose area *Aa* rounded; body length: 730–879 *U. (U.) masneri* Ermilov, 2019
5. Rostrum rounded; lamellar cusp with minute lateral and medial teeth; body length: 730–796 *U. (U.) mayottensis* Ermilov and Mary, 2019
— Rostrum bidentate; lamellar cusp with strong lateral tooth, medial tooth absent 6
6. Adanal setae *ad*₁ and *ad*₂ medium-sized, longer than short *ad*₃; adanal lyrifissure inverse apoanal; body length: 620 *U. (U.) pygiseta* (Hammer, 1973)

- All adanal setae short, similar in length; adanal lyrifissure paraanal 7
- 7. Notogaster smooth; body length: 480–500
 *U. (U.) africanus* Mahunka, 1988 (see also Mahunka 2001)
- Notogaster foveolate 8
- 8. Posterior triangular part of notogaster extended; body length: 676–687
 *U. (U.) magniporosus* Balogh and Mahunka, 1967 (see also Mahunka 1988)
- Posterior triangular part of notogaster not extended; body length: 548–675
 *U. (U.) indicus* Ramani and Haq, 1990

General remarks

Ermilov and Friedrich (2017a) proposed a detailed generic diagnosis of the genus *Dynatozetes*. Their data were based only on morphology of four species. In light of the description of the new (fifth) species, some generic traits need to be adjusted.

The generic diagnosis indicated, e.g.: integument without ornamentation; prolamella absent; bothridial seta clavate to lanceolate (Ermilov and Friedrich 2017a). However, specimens of the new species have: foveolate notogaster and anogenital region; lineate prolamella; setiform

Table 2 Distribution and habitats of *Dynatozetes* species.

Species	Habitat	Country	Selective references
<i>D. asetosus</i>	Sweep sample in cloud forest	Venezuela	Data of this paper
<i>D. amplus</i>	Bark and fruits of trees	? Brazil (unconfirmed)	Oliveira <i>et al.</i> 2005
	–	Costa Rica	Saporito <i>et al.</i> 2007
	Sweep sample in forest	Ecuador	Ermilov 2019
	Lowland rain forest	Guatemala	Mahunka 1983
	Soil and litter in low flooded rainforest	? Mexico (unconfirmed identification)	e.g., Vázquez 1999
	On trees in humid forest; tropical moist forest; montane rain forest; tropical wet forest	Panama	Grandjean 1960; Subías <i>et al.</i> 2004; Schatz 2006; Saporito <i>et al.</i> 2007
	Upper soil and leaf litter in a primary evergreen lowland rainforest	Peru	Ermilov and Friedrich 2017b
<i>D. hexaporosus</i>	Soil in tropical forest	Venezuela	Călugăr 1990; Behan-Pelletier <i>et al.</i> 1993
	Upper soil and leaf litter in a primary evergreen lowland rainforest	Peru	Ermilov and Friedrich 2017a
<i>D. magnus</i>	Soil beneath moss mat on rock	Canada	Norton 1984
	Sweep sample in forest	Ecuador	Ermilov 2019
	Damp litter in cloud forest; rainforest litter	Guatemala	Ermilov 2024
<i>D. obesus</i>	Leaf litter along intermittent stream	U.S.A.	Norton 1984
	Quarry, banks of the river	Brazil	Pérez-Iñigo and Baggio 1994
	Leaf-sheaths of herbaceous plants	Caribbean (Antigua, Bahamas, Saba)	Ermilov and Smit 2017
	Soil, leaves, litter	Colombia	Ermilov 2017
	On trees in forest; soil, leaves, litter	Venezuela	Grandjean 1960; Ermilov 2016

Table 3 Table 3. Distribution and habitats of *Uracrobates* species.

Species	Habitat	Country	Selective references
<i>U. (U.) africanus</i>	Leaf litter and soil of medium sub evergreen forest, lowland forest, mangrove and halophyte vegetation	Mexico	Vázquez <i>et al.</i> 2016
	–	Kenya	Mahunka 2001
	Litter	Tanzania	Mahunka 1988
<i>U. (U.) indicus</i>	Leaves on tree	India	e.g., Ramani and Haq 1988, 1990
<i>U. (U.) magniporosus</i>	Soil, plant	India	Sheela and Haq 1991
	Soil-litter in forest	Taiwan	Chu and Aoki 1997
	Soil, litter, moss in tropical forests	Vietnam	e.g., Balogh and Mahunka 1967; Corpuz-Raros and Ermilov 2020
<i>U. (U.) masneri</i>	Sweep sample	Ecuador	Ermilov 2019
<i>U. (U.) mayottensis</i>	Stream	Comoro Islands	Ermilov and Mary 2019
<i>U. (U.) pygiseta</i>	Dry leaves of deciduous tree; leaf litter in rainforest	Pacific Islands (Tonga, Fiji)	Hammer 1973; Mahunka 2006
<i>U. (P.) newtaipeiensis</i>	Leaves of tree	Taiwan	Ermilov and Liao 2017
<i>U. (P.) truncatus</i>	Soil in secondary mixed broad-leaved forest	Nepal	Ermilov and Martens 2015

bothridial seta. Hence, the generic diagnosis should include these morphological additions.

Distribution and habitat of *Dynatozetes* and *Uracrobates*

Species of *Dynatozetes* are known from the Nearctic and Neotropical region; species of *Uracrobates* are known from the Oriental, Afrotropical, Neotropical, and Australasian regions. According to the summarized data (Tables 2, 3), they inhabit mainly soil/litter in the tropical forests but some species are probably arboricolous.

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