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New species and records of mites of the family Stigmaeidae (Acari: Prostigmata) collected from mosses in Southern Chile

Alexander A. KHAUSTOV

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Tyumen State University, Tyumen, Semakova 10, 625003 Russia. alex1973khaustov@gmail.com

ABSTRACT — Five new species of the family Stigmaeidae (Acari: Prostigmata), *Stigmaeus palustris* n. sp., *Stigmaeus flexisetus* n. sp., *Stigmaeus patagoniensis* n. sp., *Pseudostigmaeus magellani* n. sp. and *Eryngiopus techuelche* n. sp. are described from mosses in Southern Chile (Patagonia). *Eustigmaeus ovatus* (Chaudhri, 1965) is recorded from Chile for the first time and redescribed; *Eustigmaeus chilensis* (Chaudhri, 1965) is recorded from Tierra del Fuego for the first time and also redescribed.

KEYWORDS — Acari; Prostigmata; Raphignathoidea; systematics; predatory mites; mosses; Patagonia

INTRODUCTION

The predatory mite family Stigmaeidae (Acari: Prostigmata) is the largest in the superfamily Raphignathoidea and includes more than 500 species in 32 valid genera (Zhang *et al.* 2011; Doğan *et al.* 2015). Members of the family have been collected in a large range of habitats. Many stigmaeid mites from the genera *Mediolata* Canestrini, 1889, *Agistemus* Summers, 1960, *Eryngiopus* Summers, 1964 and some others are free-living predators of other microarthropods on plant leaves (Fan and Zhang 2005); Most species of the largest genus *Stigmaeus* Koch, 1836 inhabit soil, forest litter, lichens and mosses (Doğan *et al.* 2015a). Many species of the genera *Eustigmaeus* Berlese, 1910 and *Ledermuelleriopsis* Willmann, 1953 inhabit mosses and some feed on mosses (Gerson 1972). The adult females of some *Eustigmaeus* and *Stigmaeus* species have been found attached to and apparently feeding on adult

phlebotomine sandflies (Diptera: Psychodidae) in several regions of the world (Swift 1987; Zhang and Gerson 1995). Some species of *Eryngiopus* considered predators of crawlers of some Hemiptera (Doğan *et al.* 2015b).

The stigmaeid mites of Chile are poorly studied. At present only five species have been recorded from Chile: *Eustigmaeus chilensis* (Chaudhri, 1965), *E. microsegnis* (Chaudhri, 1965), *Zetzellia mapuchina* Gonzalez-Rodriguez, 1965, *Agistemus fleschneri* Summers, 1960 and *A. longisetus* Gonzalez-Rodriguez, 1963 (Chaudhri 1965; Gonzalez-Rodriguez 1965).

During a study of stigmaeid mites inhabiting mosses in Patagonia (Southern Chile) five new species were revealed: *Stigmaeus palustris* n. sp., *Stigmaeus flexisetus* n. sp., *Stigmaeus patagoniensis* n. sp., *Pseudostigmaeus magellanicus* n. sp. and *Eryngiopus techuelche* n. sp. These new species are de-

scribed in this paper. *Eustigmaeus ovatus* (Chaudhri, 1965) is recorded from Chile for the first time and redescribed; *Eustigmaeus chilensis* (Chaudhri, 1965) is recorded from Tierra del Fuego for the first time and also redescribed.

MATERIALS AND METHODS

Mites were collected from mosses using Berlese funnels and mounted in Hoyer's medium. All samples were taken in southern part of Chilean Patagonia in vicinities of Punta Arenas and Tierra del Fuego Archipelago. Mosses were collected mainly on swamps surrounded by *Nothofagus* forests. In the description below, the palpal, idiosomal and the leg setations follow those of Grandjean (1939, 1944, 1946). Prodorsal nomenclature follows that of Kethley (1990). All measurements are given in micrometers (μm) for the holotype and available paratypes (in parenthesis). In descriptions of leg setation the number of solenidia is given in parentheses. The type material is deposited in the mite collection of the Tyumen State University Museum of Zoology, Tyumen, Russia. The type material is not shared with museums in country of its origin (Chile) because of limited number of type specimens and lack of specialist on raphignathoid mites. Photographs were taken with a digital camera AxioCam ICc5 via the compound microscope Carl Zeiss AxioImager.A2 with phase-contrast and DIC illumination.

RESULTS

SYSTEMATICS

Family Stigmaeidae Oudemans, 1931

Genus *Eustigmaeus* Berlese, 1910

Type species: *Stigmaeus kermesinus* Koch, 1841, by original designation.

Eustigmaeus ovatus (Chaudhri, 1965) (Figures 1-6)

Ledermuelleria ovata Chaudhri, 1965, p. 480, figs. 18-20, 32.

Redescription

Female (Figures 1-5) — Idiosoma oval in outline. Length of idiosoma 475, width 385.

Idiosomal dorsum (Figures 1A, 5A) — Idiosoma completely covered by 2 large and well sclerotized plates. Plates with large dimples (Figures 1A, 5A) and distinct subcuticular reticulation. Dorsal setae subequal, slightly widened distally, smooth or with few minute barbs, with weak hyaline sheaths (Figure 5A). Setae h_1 and h_2 situated ventrally near posterior margin of hysterosoma. Setae h_2 more distinctly barbed than other dorsal setae. Lengths of dorsal setae: vi 55, ve 60, sci 48, sce 52, c_1 48, c_2 54, d_1 48, d_2 47, e_1 50, e_2 52, f_1 67, h_1 60, h_2 56.

Idiosomal venter (Figures 1B, 5D) — Callosities absent. Suranal plate situated mainly ventrally, but posterior edge visible on dorsal side. Endopodal plates separated medially, distinctly reticulated (Figure 5D). Humeral plate subtriangular, with distinct large dimples. Most of ventral setae weakly barbed; with 3 pairs of simple subequal aggenital, and 3 pairs of simple pseudanal setae; setae ps_1 distinctly thicker and more strongly barbed than other pseudanal setae. Lengths of ventral setae: $1a$ 36, $1b$ 38, $1c$ 36, $2b$ 39, $2c$ 32, $3a$ 46, $3b$ 35, $3c$ 33, $4a$ 37, $4b$ 37, $4c$ 37, ag_1 29, ag_2 29, ag_3 33, ps_1 35, ps_2 27, ps_3 27.

Gnathosoma (Figures 2, 5B, C) — Tibial claw well-developed. Setae d of palpal femur blunt-ended and barbed; other palpal setae of femur, genu and tibia (except $l'Ti$) pointed and barbed; seta l' of tibia distinctly thickened, blunt-ended and with median protuberance; seta va of palptarsus weakly barbed; other setae of palptarsus smooth. Number of setae on palpal segments: Tr 0, Fe 3 (d , l' , v''), Ge 2 (d , l''), Ti 3 (d , l' , l''), Ta 8(1) (fused eupathidia ul' , ul'' , sul , eupathidion acm , ba , bp , lp , 1 solenidion ω). Palpal femur and genu with subcuticular reticulation. Palpal supracoxal setae (ep) spine-like. Rostrum of subcapitulum short and wide. Adoral setae smooth, curved, or_2 blunt-ended; other subcapitular setae (m , n) weakly barbed, pointed. Basal part of subcapitulum with weak subcuticular reticulation (Figure 5C). Lengths of subcapitular setae: m 36, n 30, or_1 18, or_2 24. Chelicerae dorsally with numerous small dimples (Figure 5B).

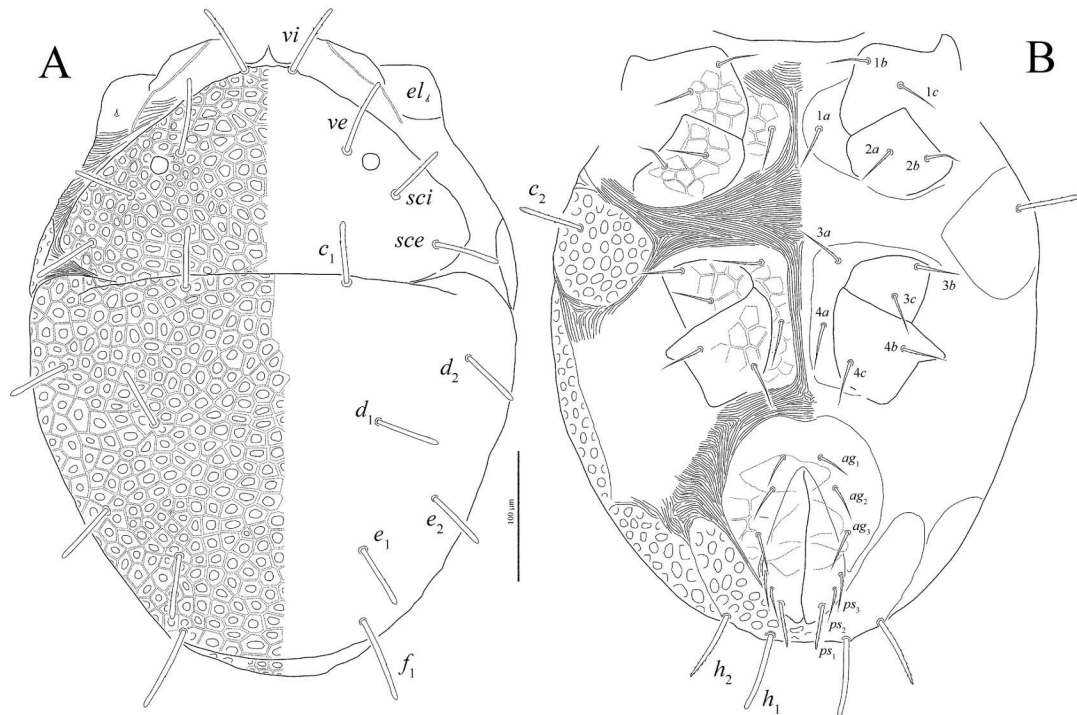


FIGURE 1: *Eustigmaeus ovatus* (Chaudhri, 1965), female: A – idiosomal dorsum, B – idiosomal venter.

Legs (Figures 3, 4) — Empodial raylets weakly capitate. Leg I (Figure 3A). Leg segments with reticulation. Coxae I posterodorsally with spine-like leg supracoxal setae (*el*). Leg setation: Tr 1 (*v'*), Fe 6 (*d*, *l'*, *l''*, *v'*, *v''*, *bv''*), Ge 4 (*d*, *l'*, *l''*, *k*), Ti 5(2) (*d*, *l'*, *l''*, *v'*, *v''*, φ , φp), Ta 13(1) (*p'*, *p''*, *tc'*, *tc''*, *ft'*, *ft''*, *u'*, *u''*, *a'*, *a''*, *pl'*, *pl''*, *vs*, ω). Setae (*p*), (*tc*) and (*ft*) of tarsus and *d* of tibia are eupathidia. Setae *d* of genu and *d* of femur slightly widened distally, with hyaline sheaths. Seta *k* 34 long, smooth, more than half of length of seta *d* of genu I. Solenidion ω 23, finger-shaped; solenidion φ 16 baculiform, solenidion φp 36 attenuate. Setae (*ft*), (*pl*), (*a*) and *vs* of tarsus weakly barbed; (*u*) smooth. Leg II (Figure 3B). Leg setation: Tr 1 (*v'*), Fe 5 (*d*, *l'*, *l''*, *v'*, *bv''*), Ge 4 (*d*, *l'*, *l''*, *k*), Ti 5(1) (*d*, *l'*, *l''*, *v'*, *v''*, φ), Ta 9(1) (*p'*, *tc'*, *tc''*, *u'*, *u''*, *a'*, *a''*, *pl'*, *vs*, ω). Setae *p'*, *tc'* of tarsus and *d* of tibia represented by eupathidia. Setae *d* of femur with rounded tip. Solenidion ω 22 finger-shaped; solenidion φp 28 attenuate. Seta *k* 10 needle-like. Setae *tc''*, (*a*), *pl'* and *vs* of tarsus weakly barbed; (*u*) smooth. Leg III (Fig-

ure 4A). Leg setation: Tr 2 (*v'*, *l'*), Fe 3 (*d*, *l'*, *ev'*), Ge 1 (*d*), Ti 5(1) (*d*, *l'*, *l''*, *v'*, *v''*, φ), Ta 7(1) (*tc'*, *tc''*, *u'*, *u''*, *a'*, *a''*, *vs*, ω). Solenidion ω 10 baculiform; solenidion φp 28 attenuate. Setae *d* of tibia, genu and femur with rounded tips. Setae (*u*) of tarsus smooth, other tarsal setae weakly barbed. Leg IV (Figure 4B). Leg setation: Tr 1 (*v'*), Fe 2 (*d*, *ev'*), Ge 1 (*d*), Ti 5(1) (*d*, *l'*, *l''*, *v'*, *v''*, φ), Ta 7(1) (*tc'*, *tc''*, *u'*, *u''*, *a'*, *a''*, *vs*, ω). Solenidion ω 7 baculiform; solenidion φp 29 attenuate. Setae *d* of tibia, genu and femur with rounded tips. Setae (*u*) of tarsus smooth, other tarsal setae weakly barbed.

Male and immatures unknown.

Material examined — One female, Chile, Patagonia, vicinity of Puerto Natales, *Sphagnum magellanicum* Brid. in the swamp, 51°56'552"S, 72°23'248"W, 17 November 2014, coll. V.A. Stolbov.

Distribution — This species is known from U.S.A. (California) (Chaudhri 1965). It is a first record for the fauna of South America.

Remarks — A specimen from Chile fits well into

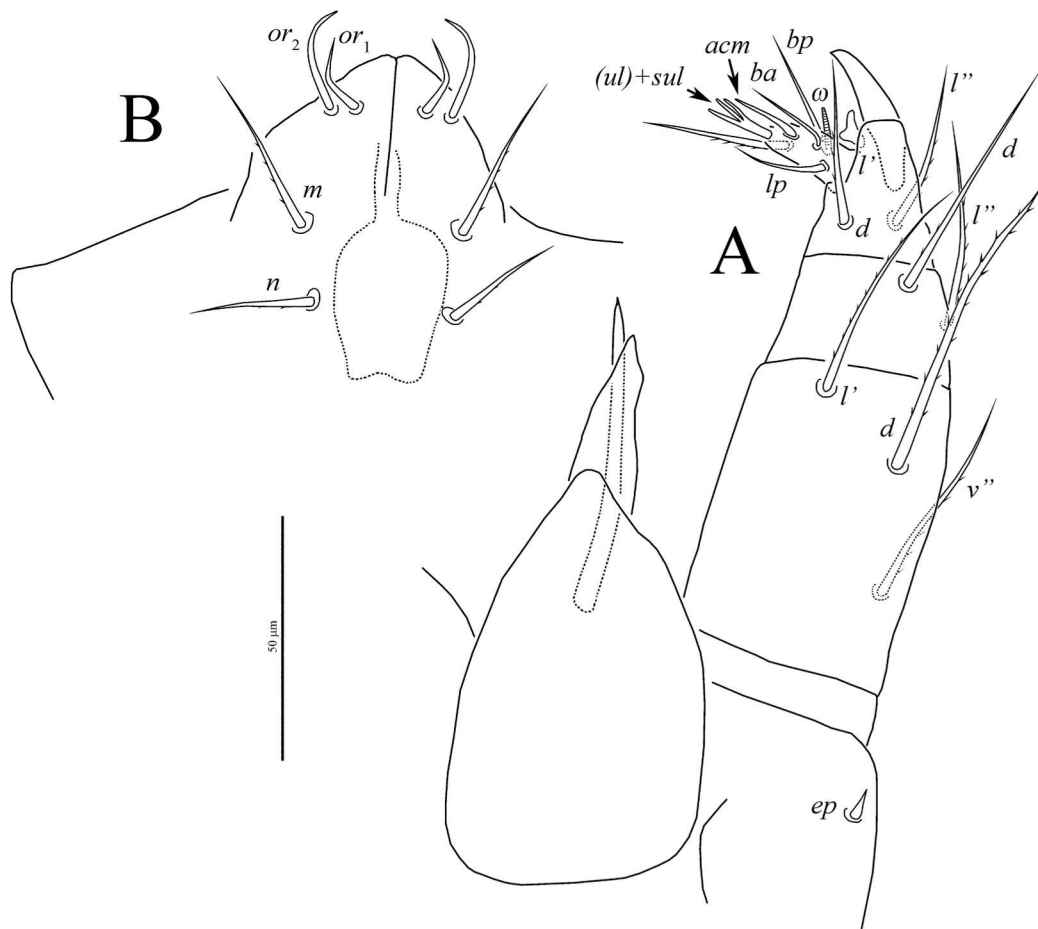


FIGURE 2: *Eustigmaeus ovatus* (Chaudhri, 1965), female: A – gnathosoma dorsally, B – subcapitulum.

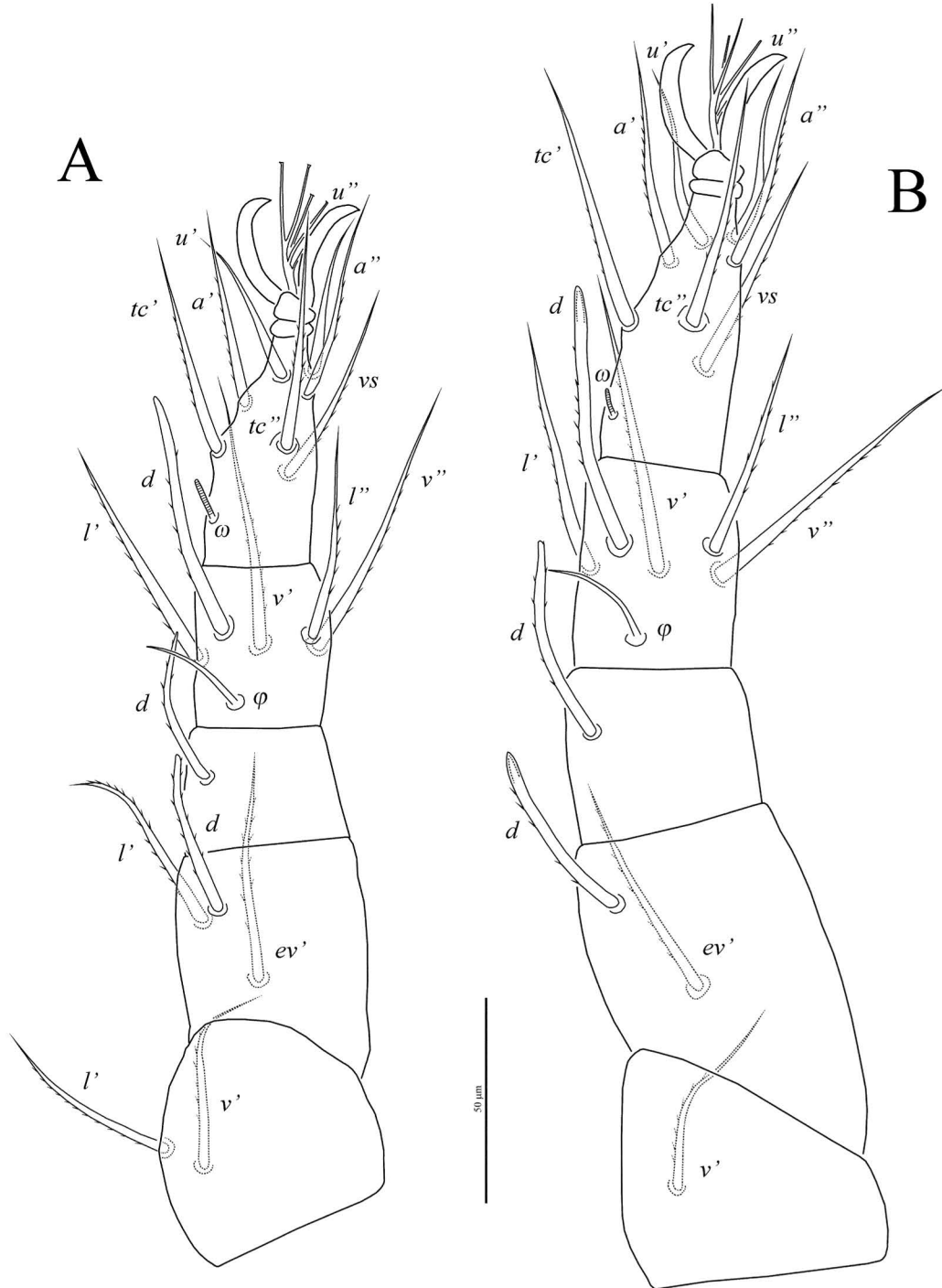


FIGURE 4: *Eustigmaeus ovatus* (Chaudhri, 1965), female: A – leg III, B – leg IV.

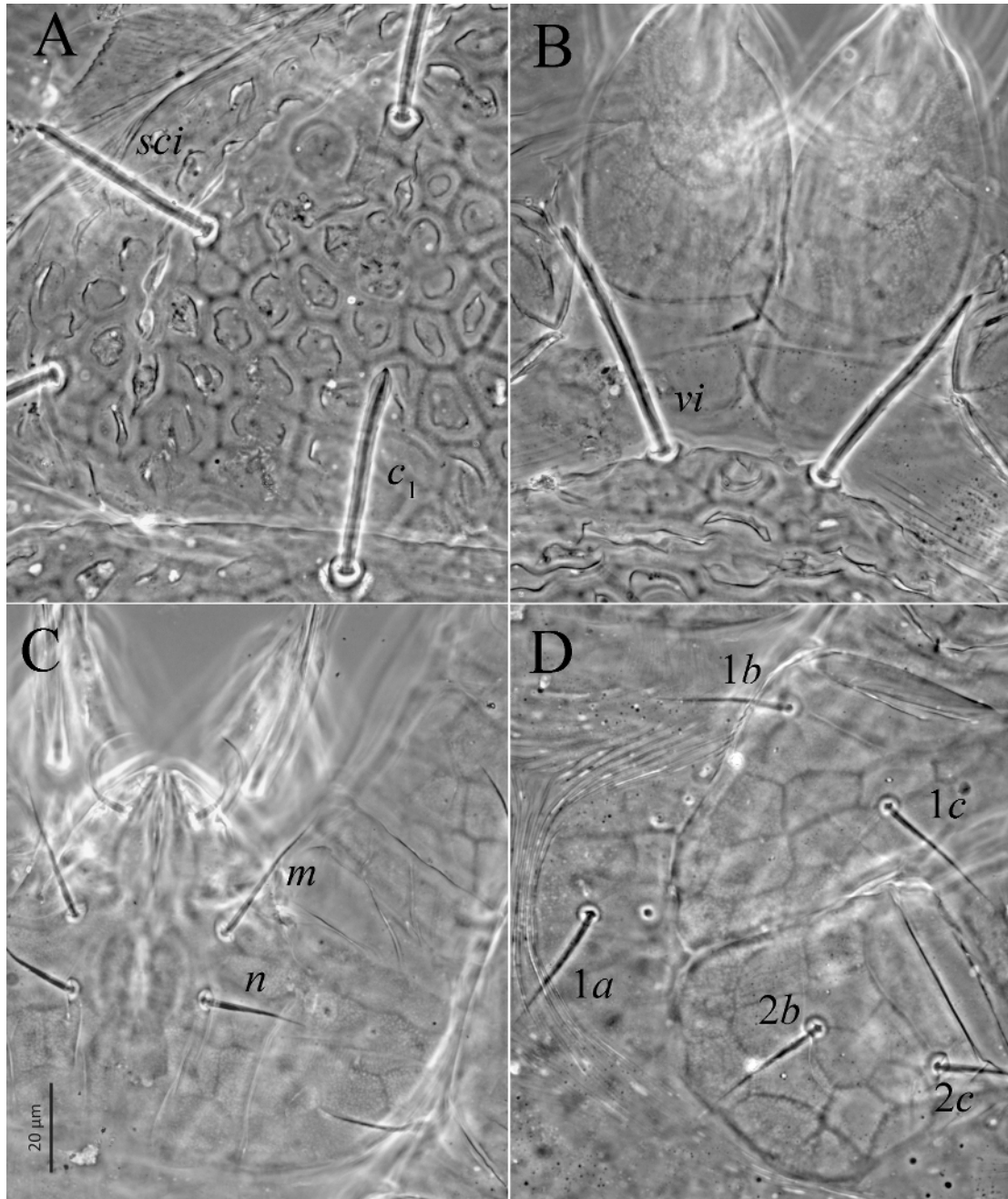


FIGURE 5: Phase-contrast micrographs of *Eustigmaeus ovatus* (Chaudhri, 1965), female: A – lateral part of prodorsum and seta *c*₁, B – chelicerae and setae *vi*, C – subcapitulum, D – coxae I-II and endopodal plate.

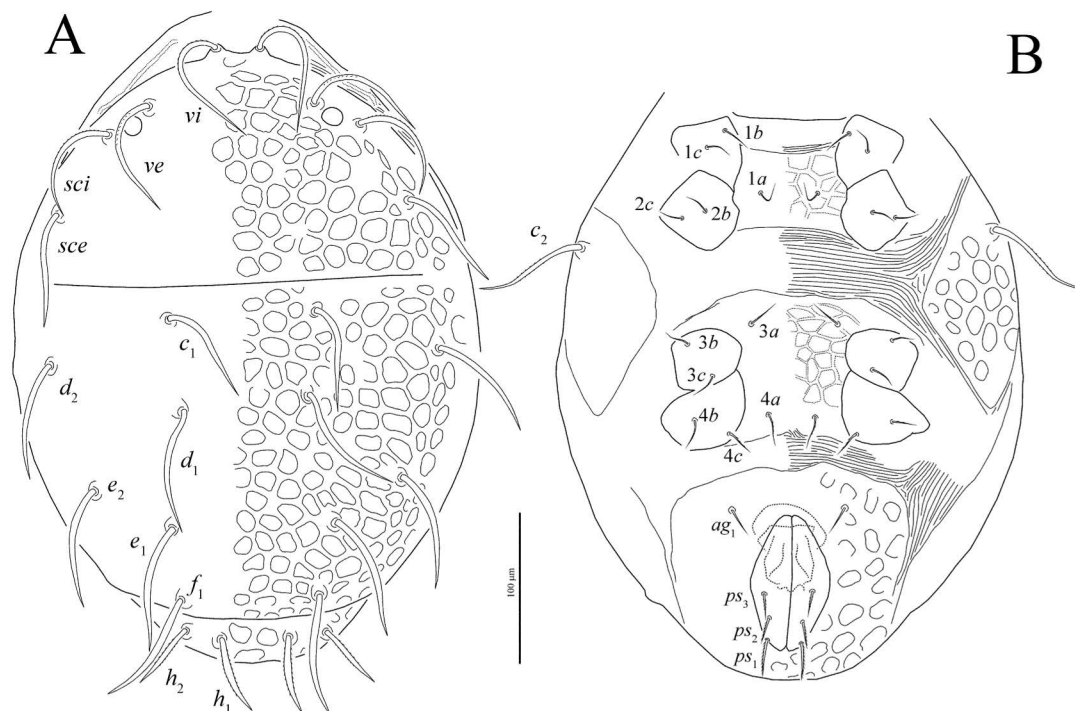


FIGURE 6: *Eustigmaeus chilensis* (Chaudhri, 1965), female: A – idiosomal dorsum, B – idiosomal venter.

original description of *Eustigmaeus ovatus*, except for long seta *k* of genu I, which is more than half length of seta *d* of genu I. In original description of *E. ovatus* seta *k* of genu I short, needle-like and about 1/4 length of seta *d* of genu I (Chaudhri 1965). I consider the specimens from Chile and U.S.A. are conspecific with difference in length of seta *k* of genu I resulting from geographical variability.

***Eustigmaeus chilensis* (Chaudhri, 1965)
(Figures 6-10)**

Ledermuelleria chilensis Chaudhri, 1965, p. 471, figs. 3, 4, 26.

Redescription

Female (Figures 6-10) — Idiosoma oval in outline. Length of idiosoma (measurements for 5 specimens) 390 – 435, width 310 – 320.

Idiosomal dorsum (Figures 6A, 10A, B) — Idiosoma completely covered by 3 well sclerotized plates. Plates with large oval dimples and numerous tiny alveoli inside dimples (Figures 10A, B);

subcuticular reticulation indistinct. Dorsal setae long, curved, smooth or with few minute barbs, situated on distinct protuberances (Figures 10A, B). Suranal plate and setae *h*₁ and *h*₂ situated dorsally. Setae *h*₁ and *h*₂ more distinctly barbed than other hysterosomal setae. Lengths of dorsal setae: *vi* 82 – 98, *ve* 90 – 95, *sci* 75 – 81, *sce* 77 – 86, *c*₁ 75 – 78, *c*₂ 76 – 92, *d*₁ 85 – 90, *d*₂ 80 – 90, *e*₁ 88 – 95, *e*₂ 84 – 87, *f*₁ 81 – 83, *h*₁ 58 – 60, *h*₂ 49 – 53.

Idiosomal venter (Figures 6B, 10D, E) — Callosities absent. Endopodal plates fused medially, with weak subcuticular reticulate ornamentation (Figure 10D). Humeral plate subtriangular, with distinct large dimples. Most of ventral setae smooth or weakly barbed; with 1 pair of smooth aggenital, and 3 pairs of distinctly barbed pseudanal setae; setae *ps*₁ slightly thicker than other pseudanal setae (Figure 10E). Lengths of ventral setae: *1a* 21 – 23, *1b* 22 – 25, *1c* 18 – 20, *2b* 19 – 22, *2c* 18 – 19, *3a* 19 – 24, *3b* 18 – 20, *3c* 19 – 21, *4a* 21 – 23, *4b* 16 – 19, *4c* 17 – 19, *ag*₁ 19 – 21, *ps*₁ 22 – 25, *ps*₂ 17 – 19, *ps*₃ 17 – 19.

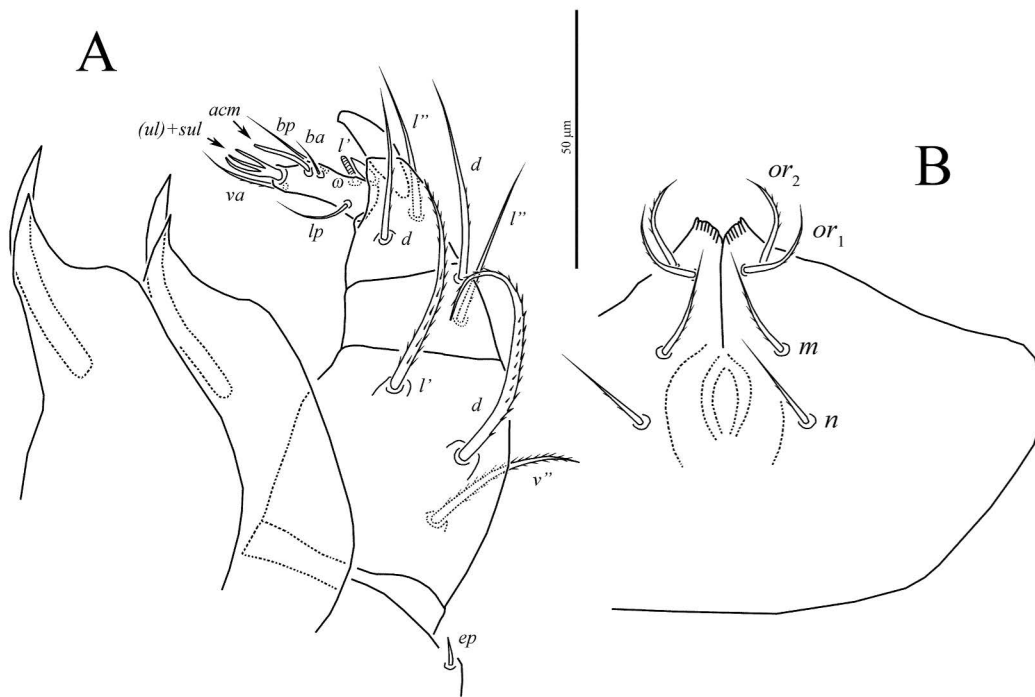


FIGURE 7: *Eustigmaeus chilensis* (Chaudhri, 1965), female: A – gnathosoma dorsally, B – subcapitulum.

Gnathosoma (Figures 7, 10C, F) — Tibial claw well-developed. Setae of palpal femur slightly thickened and distinctly barbed; other palpal setae of genu and tibia (except *l'Ti*) weakly barbed; seta *l'* of tibia very thick, lanceolate; seta *va* of palptarsus weakly barbed; other setae of palptarsus smooth. Number of setae on palpal segments: Tr 0, Fe 3 (*d*, *l'*, *v''*), Ge 2 (*d*, *l''*), Ti 3 (*d*, *l'*, *l''*), Ta 8(1) (fused eupathidia *ul'*, *ul''*, *sul*, eupathidion *acm*, *ba*, *bp*, *lp*, 1 solenidion ω). Palpal segments without reticulation. Palpal supracoxal setae (*ep*) needle-like. Rostrum of subcapitulum short and wide. All subcapitular setae pointed and weakly barbed. Basal part of subcapitulum without subcuticular reticulation (Figure 10F). Lengths of subcapitular setae: *m* 24 – 25, *n* 20 – 21, *or*₁ 19 – 21, *or*₂ 20 – 21. Chelicerae dorsally smooth (Figure 10C).

Legs (Figures 8, 9) — Empodial raylets weakly capitate. Leg I (Figure 8A). Leg segments without reticulation. Coxae I posterodorsally with needle-like leg supracoxal setae (*el*). Leg setation: Tr 1 (*v'*,

Fe 6 (*d*, *l'*, *l''*, *v'*, *v''*, *bv''*), Ge 4 (*d*, *l'*, *l''*, *k*), Ti 5(2) (*d*, *l'*, *l''*, *v'*, *v''*, φ , φp), Ta 13(1) (*p'*, *p''*, *tc'*, *tc''*, *ft'*, *ft''*, *u'*, *u''*, *a'*, *a''*, *pl'*, *pl''*, *vs*, ω). Setae (*p*), (*tc*) and (*ft*) of tarsus are eupathidia. Setae *d*, *l'*, *l''* of tibia and genu, *d* and *l''* of femur distinctly widened, curved, barbed. Seta *k* 7 – 8 long, needle-like, about five times shorter than seta *d* of genu I. Solenidion ω 23 – 25 long, finger-shaped; solenidia φ 10 and φp 16 baculiform. All setae of tarsus (except eupathidia) barbed. Leg II (Figure 8B). Leg setation: Tr 1 (*v'*), Fe 5 (*d*, *l'*, *l''*, *v'*, *bv''*), Ge 3 (*d*, *l'*, *l''*), Ti 5(1) (*d*, *l'*, *l''*, *v'*, *v''*, φ), Ta 8(1) (*tc'*, *tc''*, *u'*, *u''*, *a'*, *a''*, *pl'*, *vs*, ω). Seta *tc'* of tarsus represented by eupathidion. Seta *p'* absent. Seta *k* of genu absent. Setae *d*, *l'*, *l''* of tibia and genu, *d* and *l''* of femur distinctly widened, curved, barbed. Solenidion ω 15 – 17 finger-shaped; solenidion φp 12 – 13 baculiform. All setae of tarsus (except eupathidion) barbed. Leg III (Figure 9A). Leg setation: Tr 2 (*v'*, *l'*), Fe 3 (*d*, *l'*, *ev'*), Ge 1 (*d*), Ti 5(1) (*d*, *l'*, *l''*, *v'*, *v''*, φ), Ta 7(1) (*tc'*, *tc''*, *u'*, *u''*, *a'*, *a''*, *vs*, ω). Solenidion ω 5 – 6 baculiform; solenidion φp 7 – 8

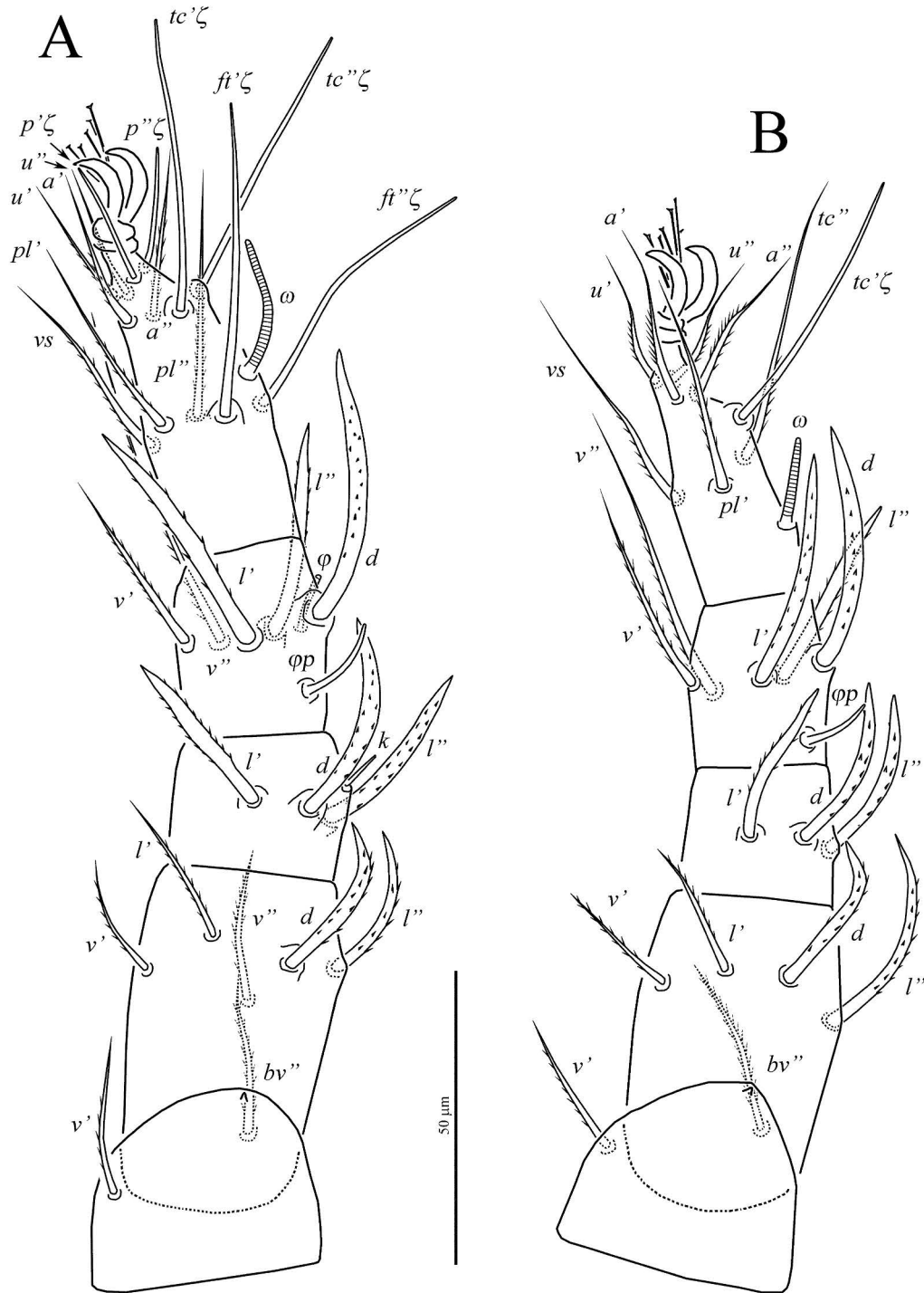


FIGURE 8: *Eustigmaeus chilensis* (Chaudhri, 1965), female: A – leg I, B – leg II.

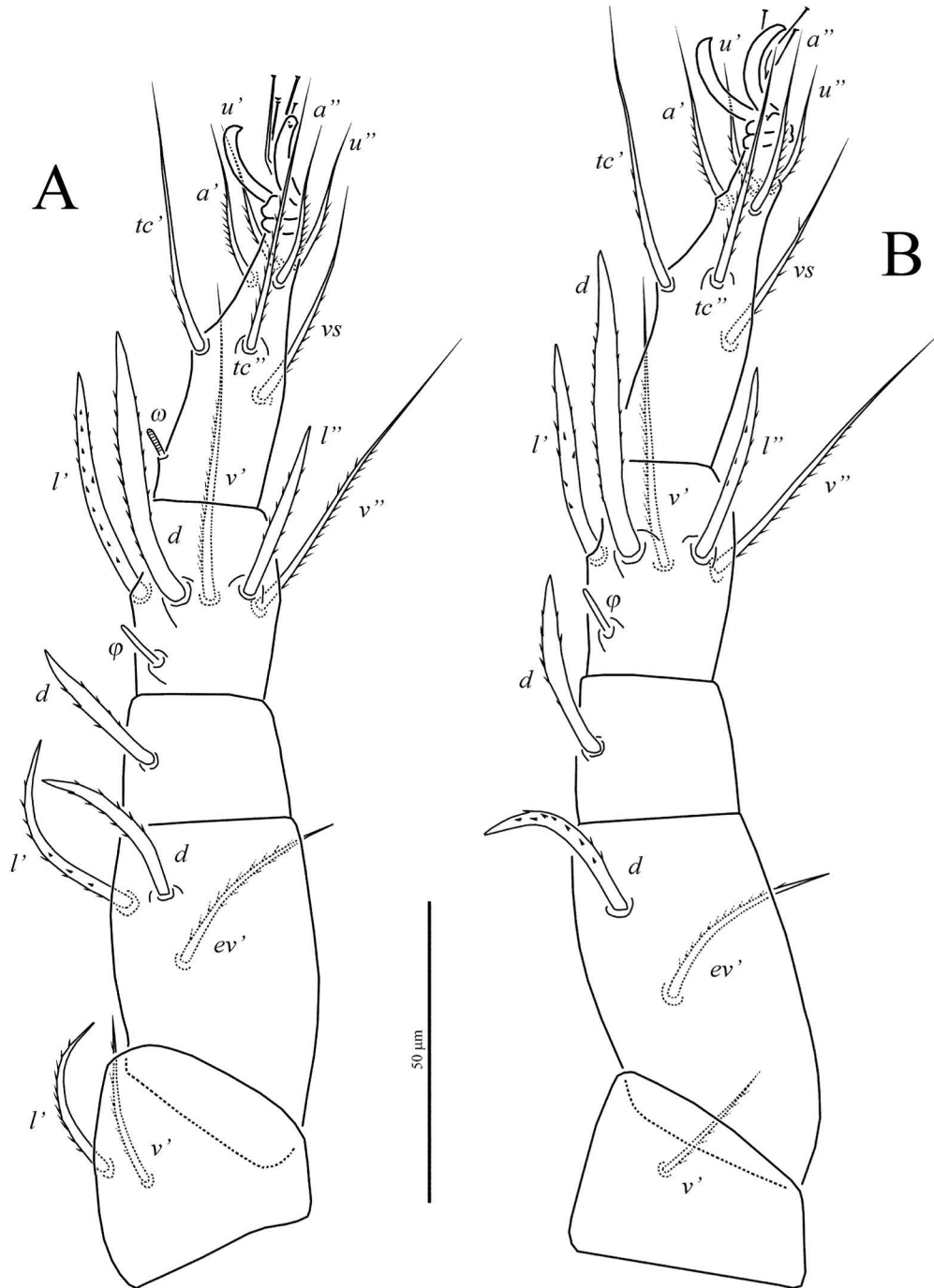


FIGURE 9: *Eustigmaeus chilensis* (Chaudhri, 1965), female: A – leg III, B – leg IV.

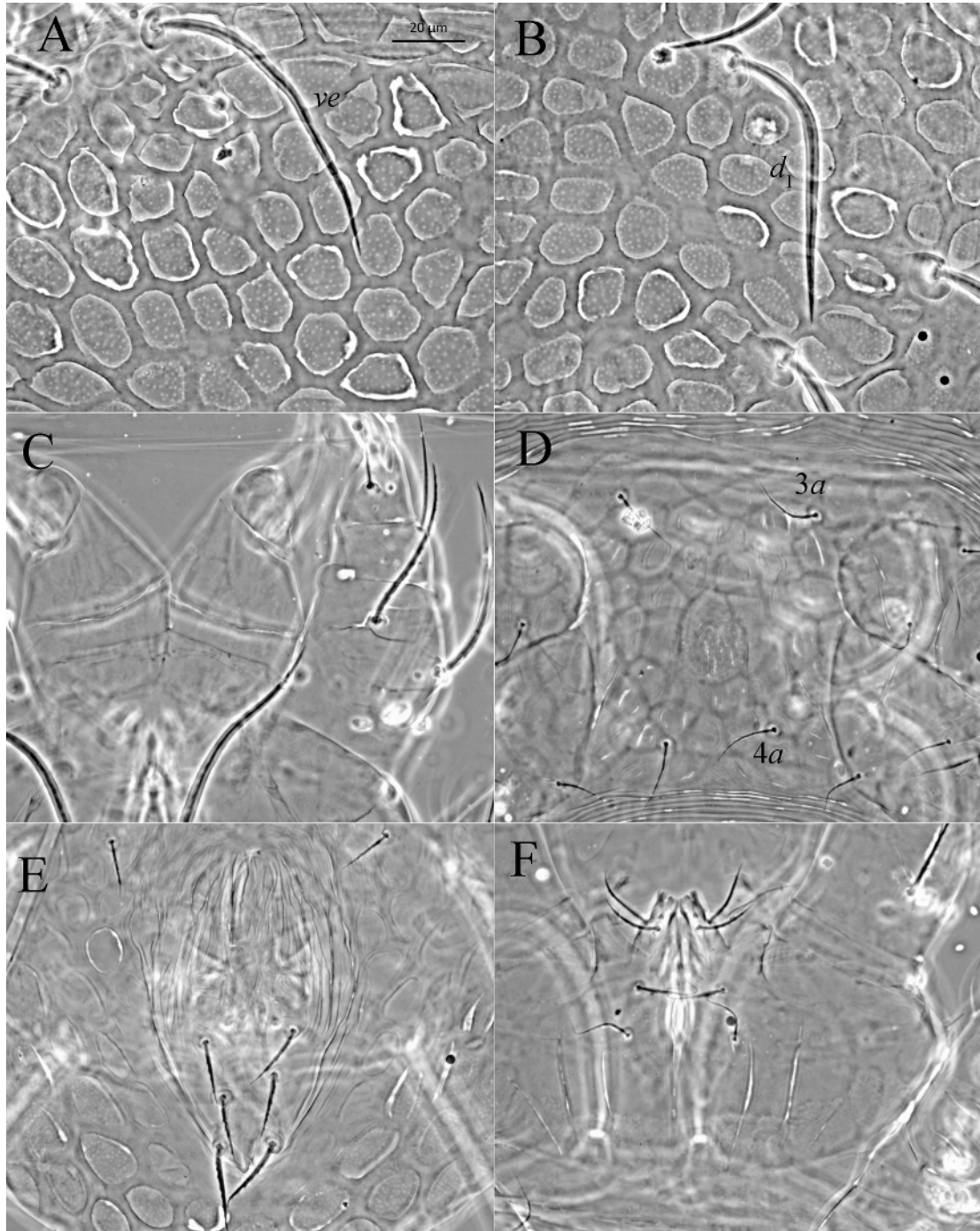


FIGURE 10: Phase-contrast micrographs of *Eustigmaeus chilensis* (Chaudhri, 1965), female: A – anterolateral part of prodorsum, B – seta d_1 , C – gnathosoma dorsally, D – ventral metapodosomal plate, E – anogenital area, F – subcapitulum.

baculiform. Setae d , l' , l'' of tibia, d of genu, d and l' of femur distinctly widened, curved, barbed. All setae of tarsus barbed. Leg IV (Figure 9B). Leg setation: Tr 1 (v'), Fe 2 (d , ev'), Ge 1 (d), Ti 5(1) (d , l' , l'' , v' , v'' , φ), Ta 7 (tc' , tc'' , u' , u'' , a' , a'' , vs). Solenidion ω absent; solenidion φp 7–9 baculiform. Setae d , l' , l'' of tibia, d of genu and femur distinctly widened, curved, barbed. All setae of tarsus barbed.

Male and immatures unknown.

Material examined — Eleven females, Chile, Patagonia, Tierra del Fuego island, 54°29'550" S, 068°43'103" W, from *Sphagnum magellanicum* in the swamp, 3 November 2015, coll. A.A. Khaustov.

Distribution — This species was described from Chile (Jardin Botanico Nacional, Vina del Mar) (Chaudhri 1965). It was also recorded from Latvia and Lithuania (Kuznetsov and Petrov 1984) and Turkey (Doğan 2007). However records of *E. chilensis* from Latvia, Lithuania and Turkey would need confirmation. This species is first time recorded in the fauna of Tierra del Fuego.

Genus *Stigmaeus* Koch, 1836

Type species: *Stigmaeus cruentus* Koch, 1836, by subsequent designation by Berlese (1910).

Stigmaeus palustris n. sp. (Figures 11-15)

Description

Female (Figures 11-15) — Length of idiosoma 505 (535), width 280 (330) (Two females measured).

Idiosomal dorsum (Figures 11A, 15B, C) — Idiosoma fusiform, soft, mostly striated. Eyes absent. Propodosomal plate with setae vi and ve , weakly defined by more narrow striae than outside ones; with distinct median propodosomal apodeme and tiny dimples (Figure 15B). Area anteriorly and anterolaterally to propodosomal plate with numerous microtubercles. All dorsal setae smooth; setae ve and c_2 long, pointed; other dorsal setae short, blunt-ended. Setae c_2 situated laterally. Ratio $ve/sci = 4$. Suranal plate divided, with two pairs of setae. Setae e_2 and f_1 situated on platelets, remaining surface of hysterosoma without plates. Lengths of dorsal setae: vi 29 (32), ve 105 (100), sci 26 (36), sce 33 (32), c_1

24 (21), c_2 110 (120), d_1 22 (22), d_2 22 (22), e_1 23 (21), e_2 23 (24), f_1 34 (31), h_1 33 (33), h_2 36 (33).

Idiosomal venter (Figure 11B) — Ventral setae smooth and pointed, four pairs of aggenital setae; ag_1 situated on soft cuticle; $ag_2 - ag_4$ on weakly defined platelet. Two pairs of genital setae. Cuticle posteriad to gnathosomal base and posterolaterad to coxae IV with microtubercles. Endopodal plates weakly developed. Coxal fields with small dimples. Lengths of ventral setae: $1a$ 40 (42), $1b$ 30 (29), $1c$ 87 (92), $2b$ 150 (160), $2c$ 42 (44), $3a$ 44 (43), $3b$ 36 (37), $3c$ 24 (26), $4a$ 100 (105), $4b$ 28 (30), $4c$ 24 (23), ag_1 26 (27), ag_2 22 (22), ag_3 26 (27), ag_4 39 (38), g_1 26 (28), g_2 50 (50), ps_1 49 (45), ps_2 42 (41), ps_3 28 (26).

Gnathosoma (Figures 12, 15A, D) — Tibial claw large. Setae l' of palpal tibia thin, seta-like. All palpal setae pointed; setae of femur and genu weakly barbed. Number of setae on palpal segments: Tr 0, Fe 3 (d , l' , v''), Ge 2 (d , l''), Ti 3 (d , l' , l''), Ta 8(1) (fused eupathidia ul' , ul'' , sul , eupathidion acm , ba , bp , lp , 1 solenidion ω). Palpal supracoxal setae (ep) small, thick, with distinctly rounded tip. Chelicerae dorsally with numerous dimples (Figure 15A). Rostrum of subcapitulum long. Subcapitular setae pointed and smooth. Basal part of subcapitulum without reticulation (Figure 15D). Lengths of subcapitular setae: m 34 (35), n 37 (38), or_1 19 (20), or_2 16 (16).

Legs (Figures 13, 14) — Empodial raylets distinctly capitate. Leg segments without reticulation. Leg I (Figure 13A). Coxae I posterodorsally with small, thick, with distinctly rounded tip leg supra-coxal setae (el). Leg setation: Tr 1 (v'), Fe 4 (d , l' , l'' , bv''), Ge 5 (d , l' , l'' , v' , k), Ti 5(1) (d , l' , l'' , v' , v'' , φp), Ta 13(1) (p' , p'' , tc' , tc'' , ft' , ft'' , u' , u'' , a' , a'' , pl' , pl'' , vs , ω). Setae d of tibia, (p) and (tc) of tarsus are eupathidia. Seta k 8 (9) needle-like. Solenidion ω short 11 (10), finger-shaped; solenidion φp 23 (18) attenuate. solenidion φ absent. Setae (ft), (pl), (a) and vs of tarsus weakly barbed; (u) smooth. Leg II (Figure 13B). Leg setation: Tr 1 (v'), Fe 4 (d , l' , l'' , bv''), Ge 1 (l'), Ti 5(1) (d , l' , l'' , v' , v'' , φp), Ta 8(1) (tc' , tc'' , u' , u'' , a' , a'' , vs , pl' , ω). Seta p' of tarsus absent. Solenidion ω 9 (9) finger-shaped; solenidion φp 16 (15) attenuate. Seta pl' weakly barbed, other tarsal setae smooth. Setae d of tibia and (tc) of tarsus very long

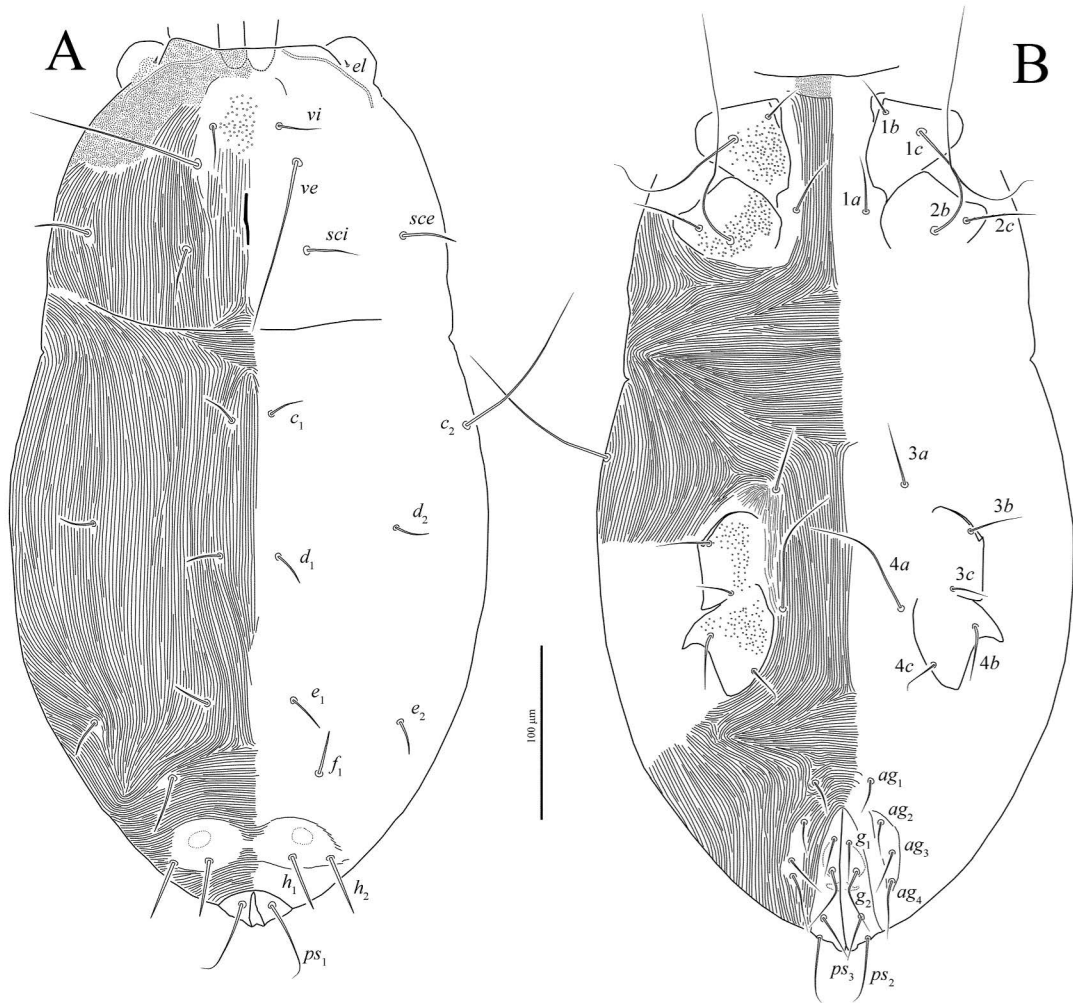


FIGURE 11: *Stigmaeus palustris* n. sp., female: A – idiosomal dorsum, B – idiosomal venter.

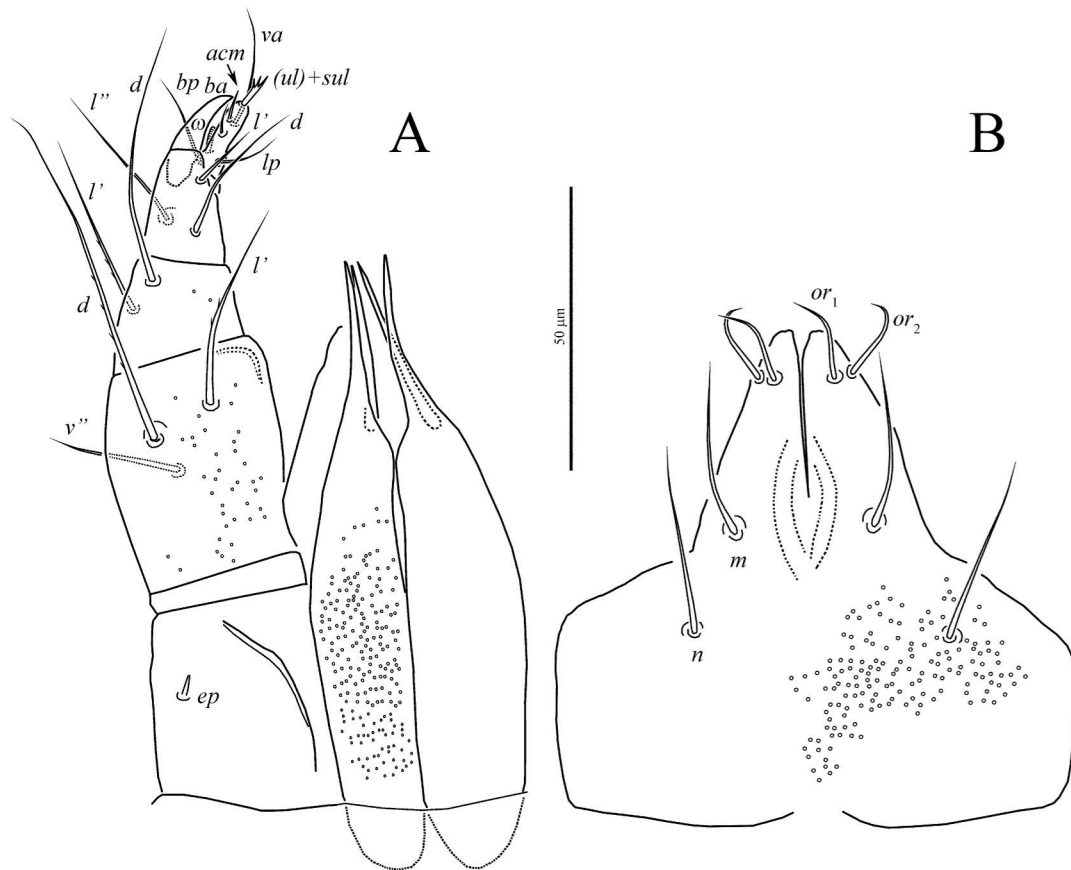


FIGURE 12: *Stigmaeus palustris* n. sp., female: A – gnathosoma dorsally, B – subcapitulum.

and smooth. Leg III (Figure 14A). Leg setation: Tr 1 (v'), Fe 2 (d, ev'), Ge 0, Ti 5(1) ($d, l', l'', v', v'', \varphi p$), Ta 7(1) ($tc', tc'', u', u'', a', a'', vs, \omega$). Solenidion ω 6 (6) baculiform; solenidion φp 17 (18) attenuate. Setae d of tibia and (tc) of tarsus very long and smooth. Seta v' of trochanter weakly barbed, other leg setae smooth. Leg IV (Figure 14B). Leg setation: Tr 1 (v'), Fe 2 (d, ev'), Ge 0, Ti 5(1) ($d, l', l'', v', v'', \varphi p$), Ta 7 ($tc', tc'', u', u'', a', a'', vs$). Solenidion ω absent; solenidion φp 17 (16) attenuate. Setae d of tibia and (tc) of tarsus very long and smooth. Setae v'' of tibia and v' of trochanter weakly barbed, other leg setae smooth.

Male and immatures unknown.

Type material — Female holotype, slide N^o VS171114, Chile, Patagonia, vicinity of Punta Arenas, 53°38'028"S, 70°57'017"W, 17 November 2014, *Sphagnum magellanicum* in swamp, coll. V.A. Stol-

bov. Paratypes: 1 female, same data.

Etymology — The name of the new species is derived from Latin word *palustris* meaning *swamp* and refers to a habitat of the new species.

Differential diagnosis — The new species is most similar to *S. arboricola* Wood, 1981, described from New Zealand (Fan and Zhang 2005), by soft and finely striated body, divided suranal plate and similar leg setation. However, it differs from the latter by the absence of seta h_3 (vs. present in *S. arboricola*), absence of seta l' of femur III (vs. present in *S. arboricola*), absence of solenidion ω of tarsus IV (vs. present in *S. arboricola*).

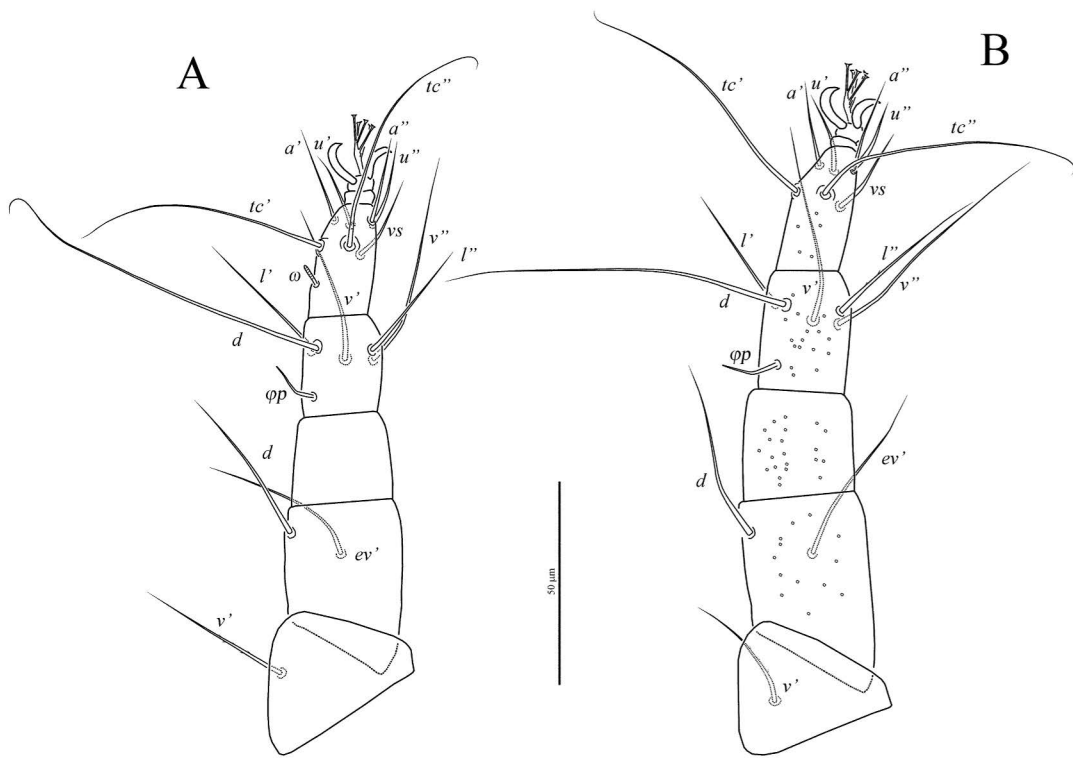


FIGURE 14: *Stigmaeus palustris* n. sp., female: A – leg III, B – leg IV.

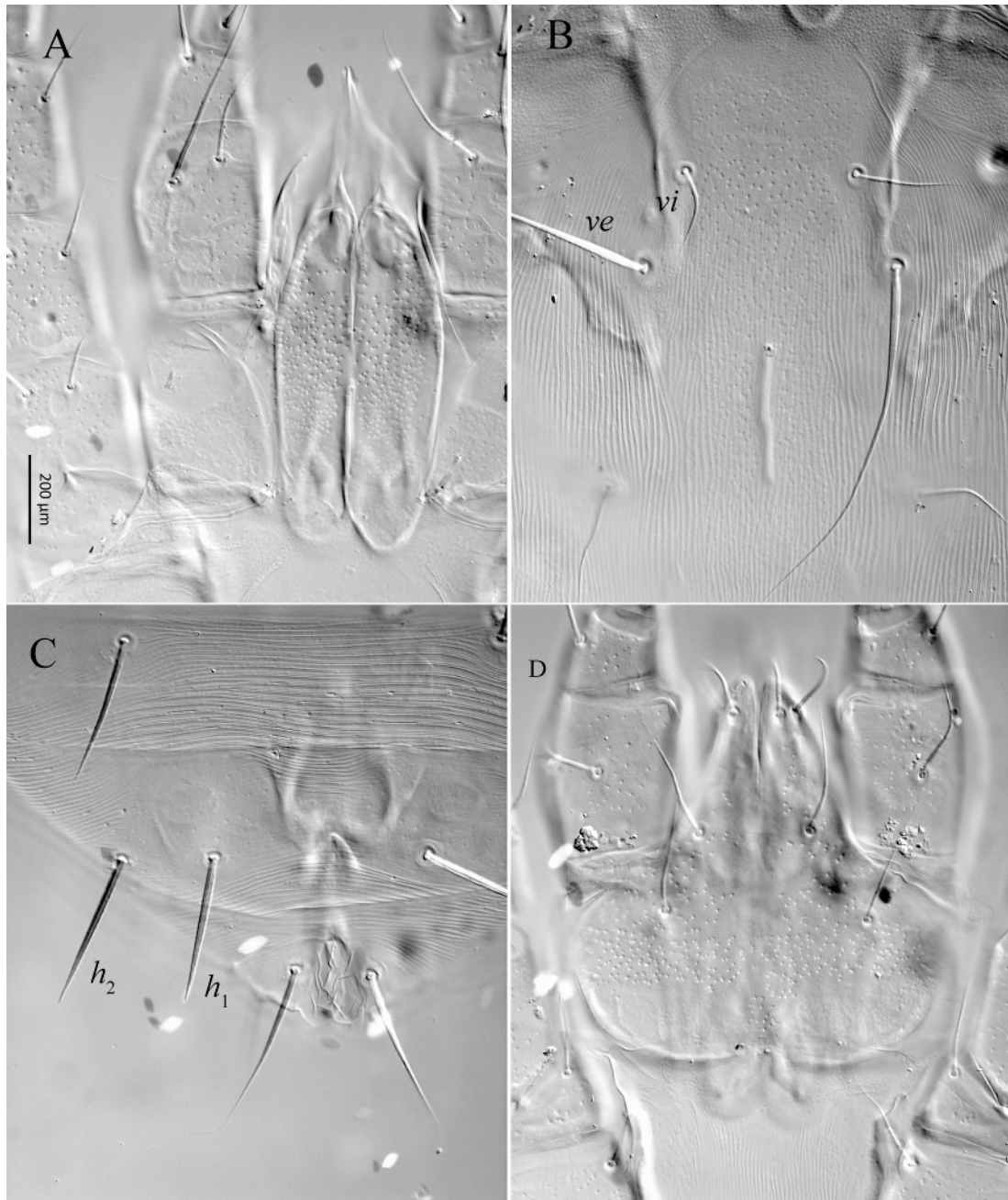


FIGURE 15: DIC micrographs of *Stigmaeus palustris* n. sp., female: A – gnathosoma dorsally, B – prodorsum, C – opisthosoma dorsally, D – gnathosoma ventrally.

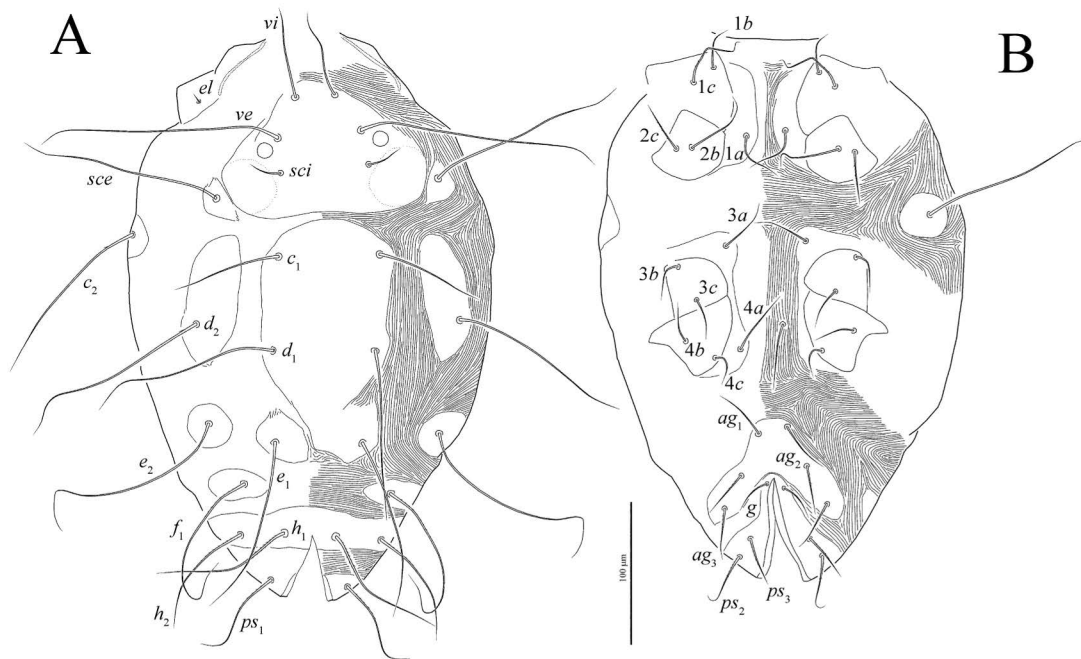


FIGURE 16: *Stigmaeus flexisetus* n. sp., female: A – idiosomal dorsum, B – idiosomal venter.

***Stigmaeus flexisetus* n. sp.**
(Figures 16–22)

Description

Female (Figures 16–19, 22) — Length of idiosoma 405 (335), width 260 (285) (two females measured).

Idiosomal dorsum (Figures 16A, 22A, B, D) — Idiosoma oval, soft, mostly covered by smooth dorsal plates. Eyes present. Propodosomal plate with setae *vi*, *ve* and *sci*; setae *sce* situated on separate platelets. Postocular bodies large, weakly defined. Striae anteriorly to propodosomal plate without microtubercles. All dorsal setae pointed; setae *f*₁, *h*₁ and *h*₂ weakly barbed in basal half, other dorsal setae smooth. Setae *ve*, *sce*, *c*₂, *d*₁, *d*₂, *e*₁, *e*₂, *f*₁, *h*₁ and *h*₂ very long and flexible. Ratio *ve/sci* = 6.2. Setae *e*₁ situated on platelets separated from central hysterosomal plate (Figures 22A, B, D); in female holotype right seta *e*₁ situated on platelet, which partly fused to central hysterosomal plate (Figure 22D). Suranal plate not divided, with two pairs of setae. Setae *d*₂, *e*₂, and *f*₁ situated on separate plates. Lengths of dorsal setae: *vi* 67 (100), *ve* 180 (190), *sci* 29 (27), *sce* 150 (160), *c*₁ 76 (90), *c*₂ 130 (140), *d*₁ 120 (140), *d*₂ 145

(165), *e*₁ 115 (135), *e*₂ 160 (175), *f*₁ 100 (160), *h*₁ 100 (125), *h*₂ 90 (110).

Idiosomal venter (Figure 16B) — Ventral setae smooth or weakly barbed, pointed. Three pairs of aggenital setae situated on single plate. One pair of genital setae. Endopodal plates without subcuticular reticulation. Lengths of ventral setae: *1a* 35 (47), *1b* 36 (35), *1c* 57 (60), *2b* 57 (56), *2c* 38 (34), *3a* 42 (43), *3b* 33 (31), *3c* 33 (31), *4a* 49 (45), *4b* 33 (36), *4c* 32 (31), *ag*₁ 37 (43), *ag*₂ 35 (41), *ag*₃ 42 (43), *g* 36 (34), *ps*₁ 70 (80), *ps*₂ 39 (45), *ps*₃ 36 (41).

Gnathosoma (Figure 17) — Tibial claw large. Setae *l'* of palpal tibia thin, seta-like. All palpal setae pointed; setae of femur and genu weakly barbed; seta *va* of palptarsus weakly barbed; other setae of palptarsus smooth. Number of setae on palpal segments: Tr 0, Fe 3 (*d*, *l'*, *v''*), Ge 2 (*d*, *l''*), Ti 3 (*d*, *l'*, *l''*), Ta 8(1) (fused eupathidia *ul'*, *ul''*, *sul*, eupathidion *acm*, *ba*, *bp*, *lp*, 1 solenidion ω). Palpal supracoxal setae (*ep*) with thickened basal part and thin distal one. Chelicerae dorsally smooth. Rostrum of subcapitulum long. Subcapitular setae pointed, smooth. Basal part of subcapitulum without retic-

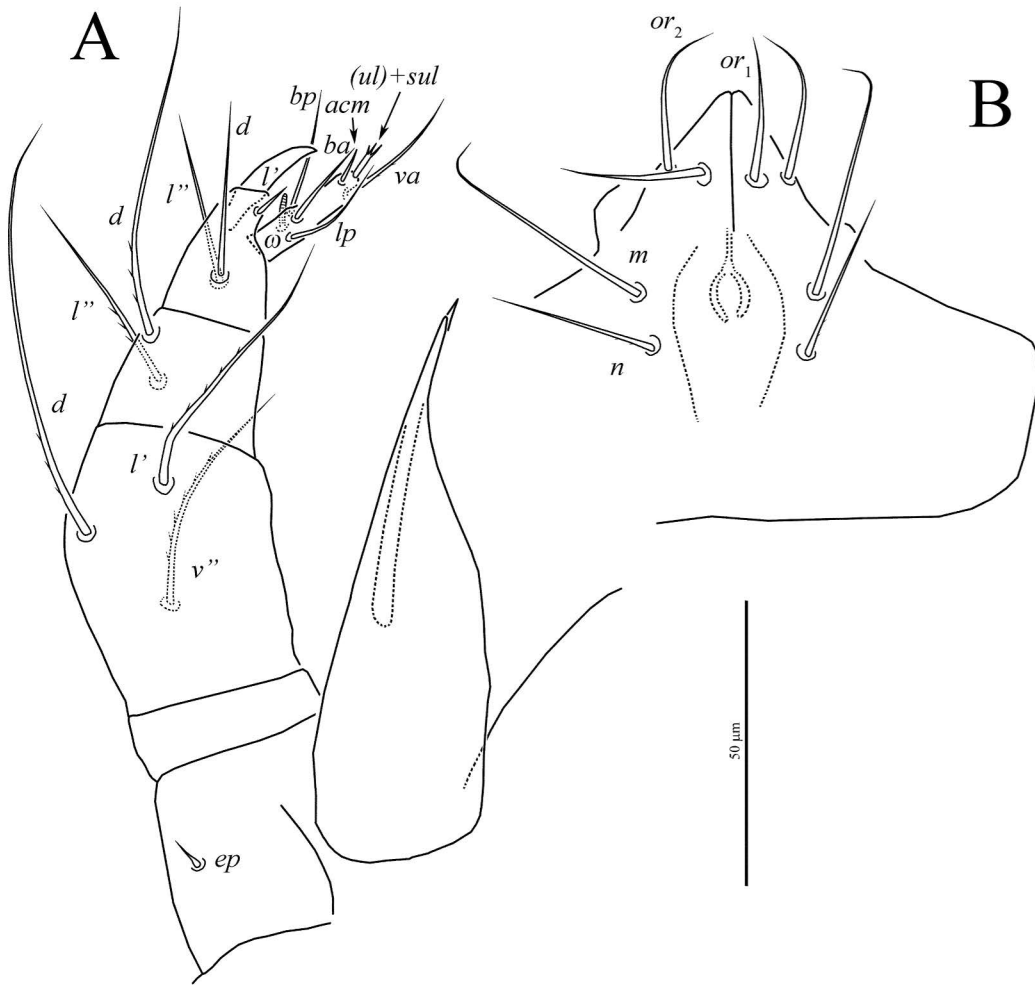


FIGURE 17: *Stigmaeus flexisetus* n. sp., female: A – gnathosoma dorsally, B – subcapitulum.

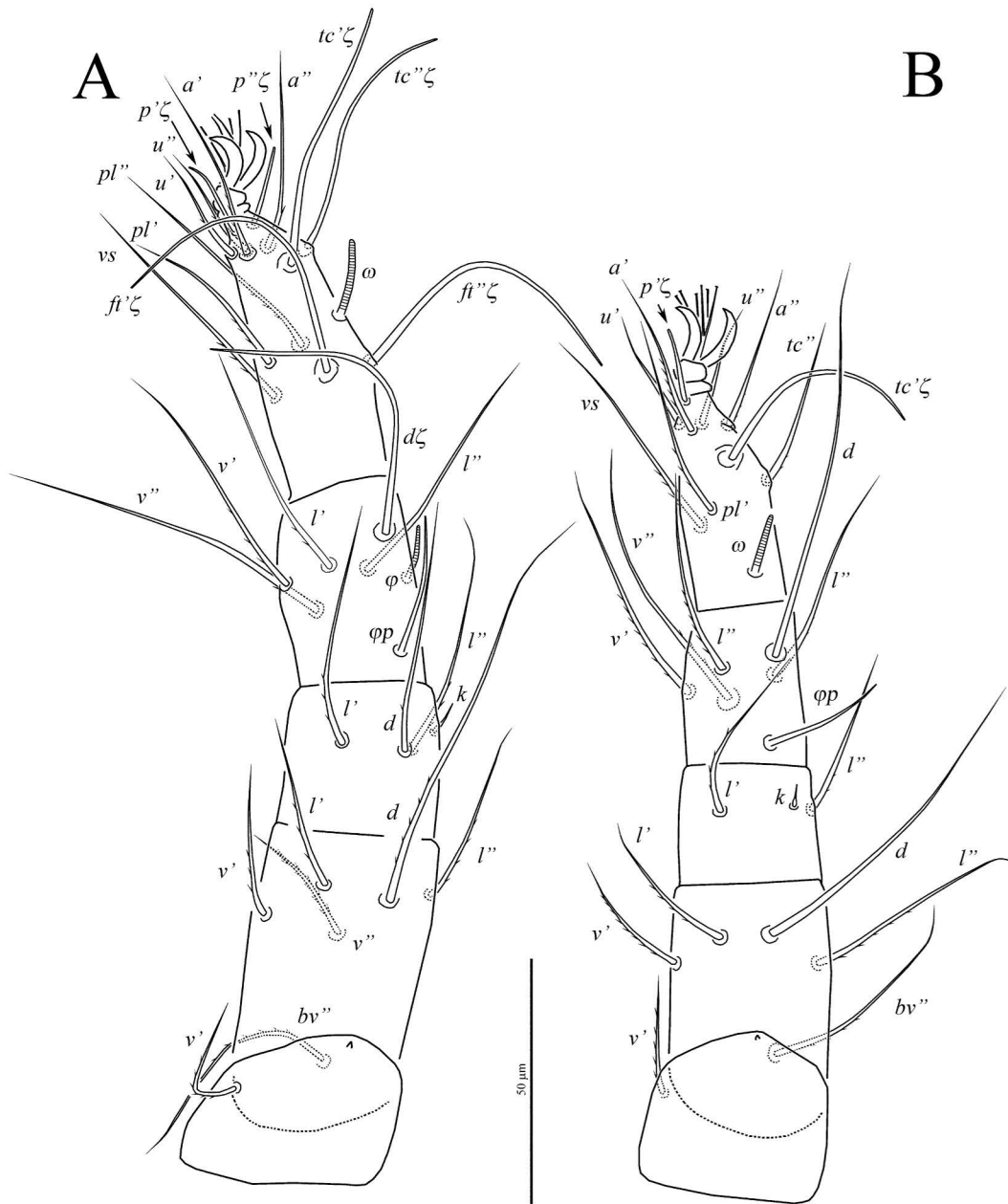


FIGURE 18: *Stigmaeus flexisetus* n. sp., female: A – leg I, B – leg II.

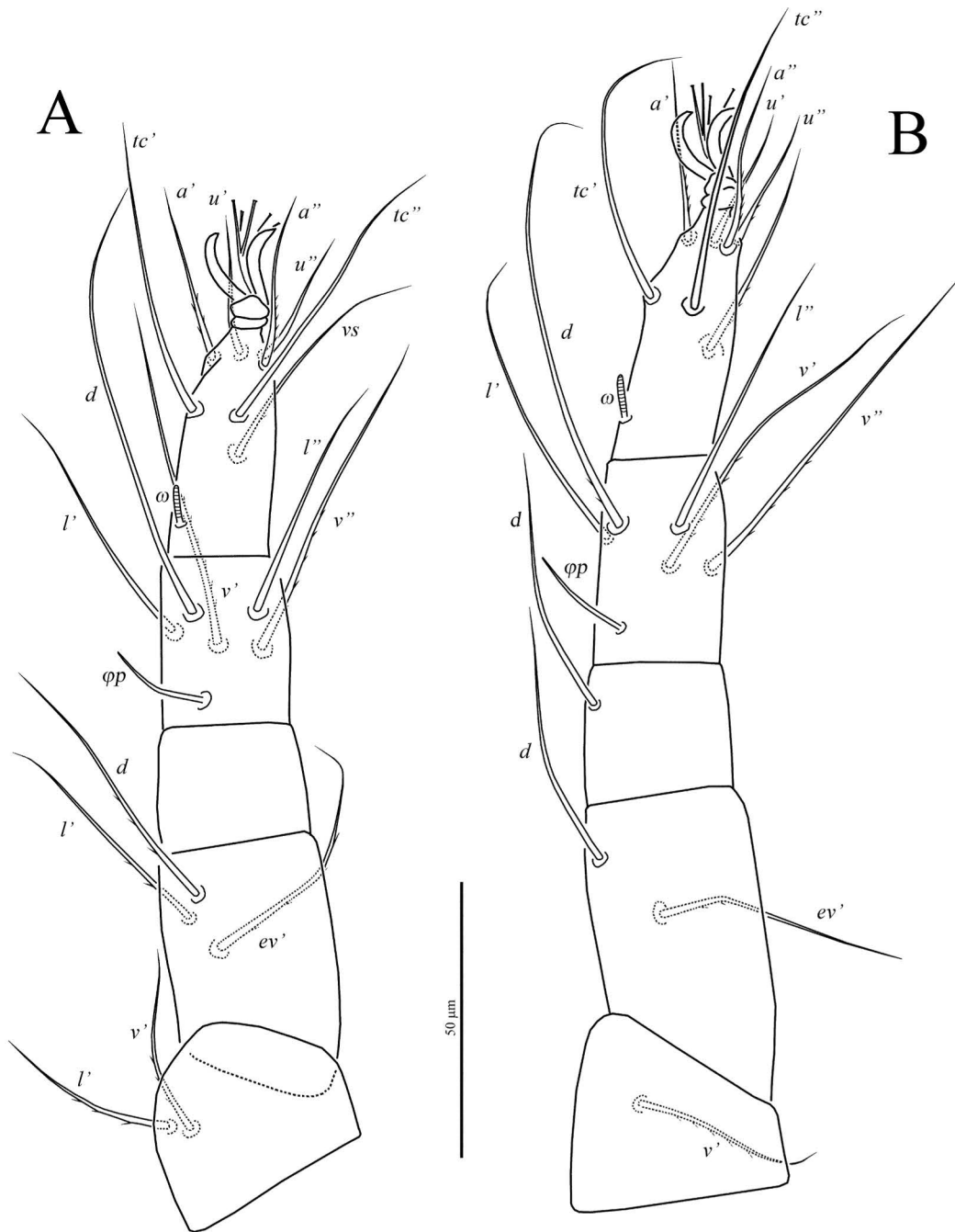


FIGURE 19: *Stigmaeus flexisetus* n. sp., female: A – leg III, B – leg IV.

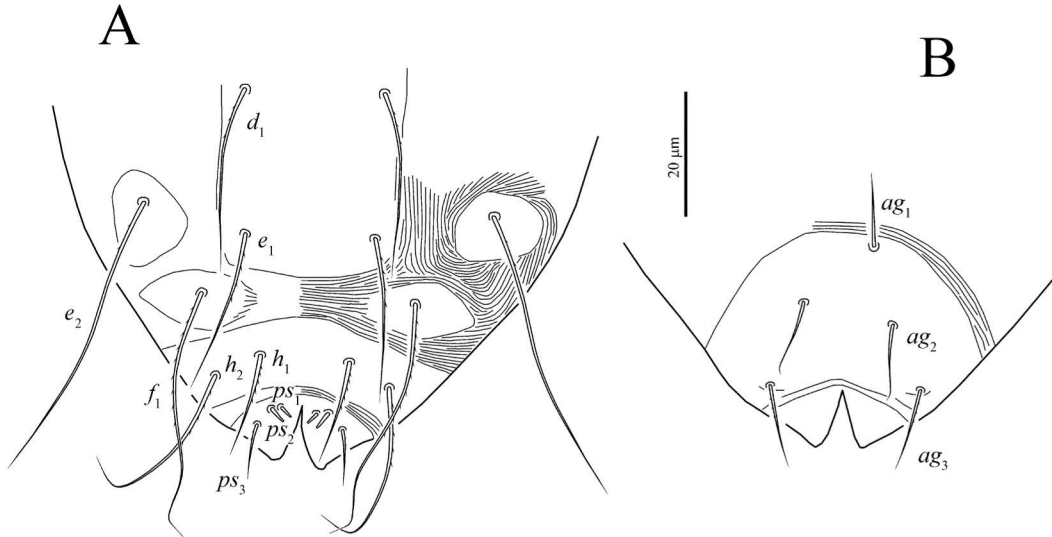


FIGURE 20: *Stigmaeus flexisetus* n. sp., male: A – opisthosomal dorsum, B – opisthosomal venter.

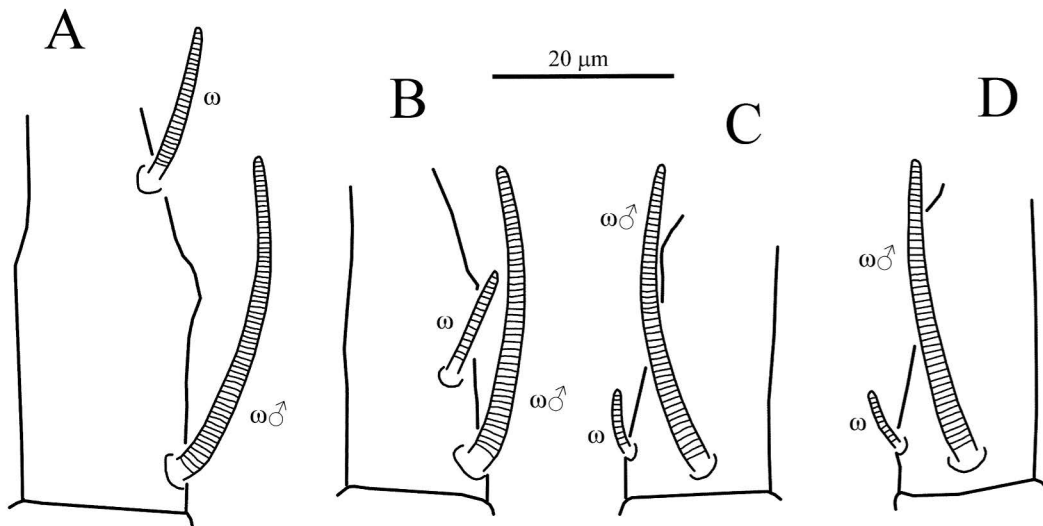


FIGURE 21: *Stigmaeus flexisetus* n. sp., male: A-D – solenidia on tarsi I-IV, respectively.

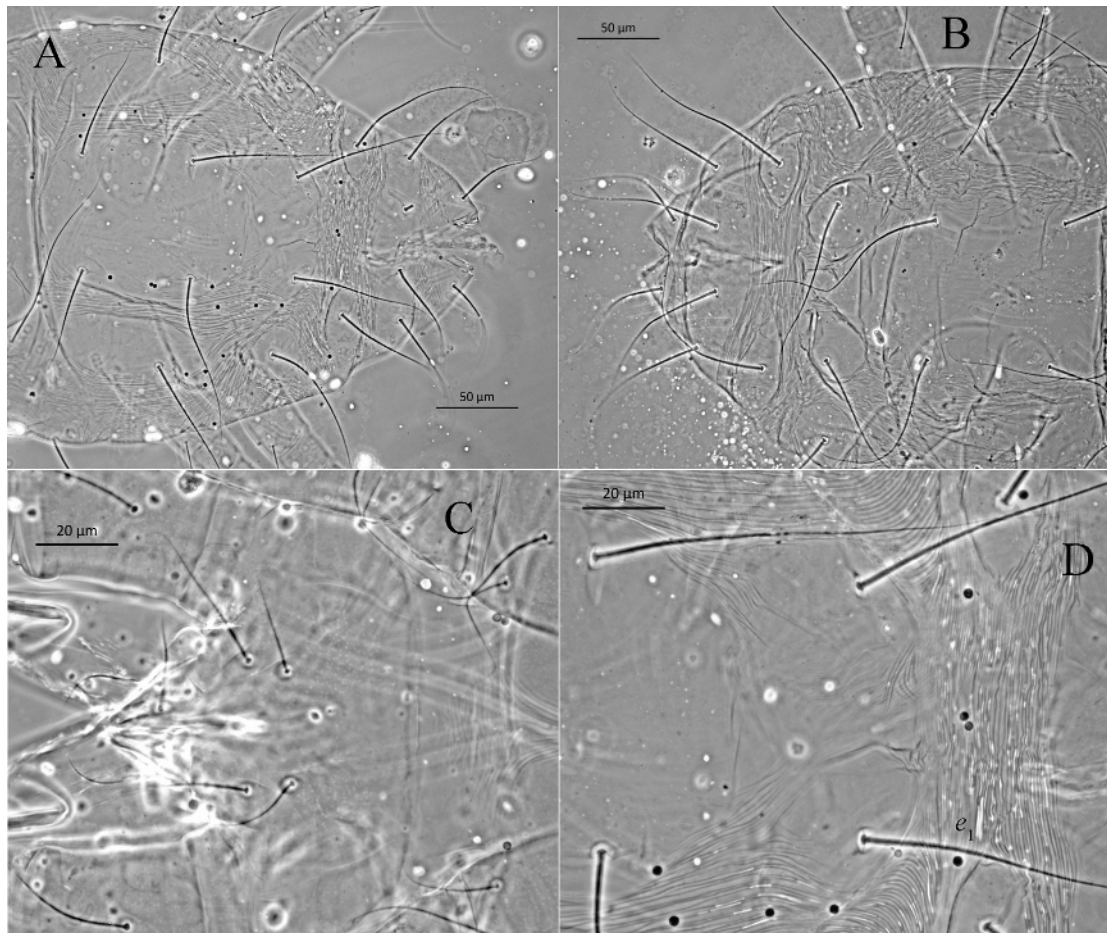


FIGURE 22: Phase-contrast micrographs of *Stigmaeus flexisetus* n. sp., female: A – hysterosomal dorsum of holotype, B – hysterosomal dorsum of paratype, C – subcapitulum, D – setae e_1 of holotype.



FIGURE 23: *Stigmaeus patagoniensis* n. sp., female: A – idiosomal dorsum, B – idiosomal venter.

ulation (Figure 22C). Lengths of subcapitular setae: *m* 46 (53), *n* 32 (29), *or*₁ 27 (24), *or*₂ 30 (33).

Legs (Figures 18 – 19) — Empodial raylets weakly capitate. Leg segments without reticulation. Leg I (Figure 18A). Coxae I posterodorsally with supracoxal setae (*el*) thickened basally and thin in distal half. Leg setation: Tr 1 (*v'*), Fe 6 (*d*, *l'*, *l''*, *v'*, *v''*, *bv''*), Ge 4 (*d*, *l'*, *l''*, *k*), Ti 5(2) (*d*, *l'*, *l''*, *v'*, *v''*, φ , $\varphi\varphi$), Ta 13(1) (*p'*, *p''*, *tc'*, *tc''*, *ft'*, *ft''*, *u'*, *u''*, *a'*, *a''*, *pl'*, *pl''*, *vs*, ω). Setae *d* of tibia, (*p*), (*tc*) and (*ft*) of tarsus are eupathidia. Seta *k* 6 (10) needle-like. Solenidion ω 16 (21), finger-shaped; solenidion $\varphi\varphi$ 30 (33) attenuate. solenidion φ 11 (13) baculiform. All setae of tarsus (except eupathidia) weakly barbed. Leg II (Figure 18B). Leg setation: Tr 1 (*v'*), Fe 5 (*d*, *l'*, *l''*, *v'*, *bv''*), Ge 3 (*l'*, *l''*, *k*), Ti 5(1) (*d*, *l'*, *l''*, *v'*, *v''*, $\varphi\varphi$), Ta 9(1) (*p'*, *tc'*, *tc''*, *u'*, *u''*, *a'*, *a''*, *pl'*, *vs*, ω). Setae *p'* and *tc'* of tarsus are eupathidia. Solenidion ω 12 (16) finger-shaped; solenidion $\varphi\varphi$ 27 (31) attenuate. Setae *d* of tibia and femur long and smooth. All setae of tarsus (except eupathidia) weakly barbed. Leg III (Figure 19A). Leg setation: Tr 2 (*l'*, *v'*), Fe 3 (*d*, *l'*, *ev'*), Ge 0, Ti 5(1) (*d*, *l'*, *l''*, *v'*, *v''*, $\varphi\varphi$), Ta 7(1) (*tc'*, *tc''*, *u'*, *u''*, *a'*, *a''*, *vs*, ω). Solenidion ω 7 (9) baculiform; solenidion $\varphi\varphi$

23 (24) attenuate. Setae *d* of tibia long and smooth. Seta (*a*) and *vs* of tarsus weakly barbed, other tarsal setae smooth. Leg IV (Figure 19B). Leg setation: Tr 1 (*v'*), Fe 2 (*d*, *ev'*), Ge 1 (*d*), Ti 5(1) (*d*, *l'*, *l''*, *v'*, *v''*, $\varphi\varphi$), Ta 7(1) (*tc'*, *tc''*, *u'*, *u''*, *a'*, *a''*, *vs*, ω). Sometimes seta *d* of genu IV absent. Solenidion ω 8 (8) baculiform; solenidion $\varphi\varphi$ 22 (23) attenuate. Setae *d* of tibia long and smooth. Setae (*tc*) of tarsus smooth, other tarsal setae weakly barbed.

Male (Figures 20, 21) — Similar with female, but smaller. Length of idiosoma 345, width 235.

Idiosomal dorsum (Figure 20A) — Central hysterosomal plate with three pairs of setae. Lengths of dorsal setae: *vi* 62, *ve* 165, *sci* 25, *sce* 125, *c*₁ 62, *c*₂ 120, *d*₁ 76, *d*₂ 130, *e*₁ 76, *e*₂ 125, *f*₁ 135, *h*₁ 51, *h*₂ 97. Setae *ps*₁₋₃ situated dorsally; *ps*₁₋₂ short, spine-like.

Idiosomal venter (Figure 20B) — Aggenital setae situated on single plate. Only one right seta *ag*₁ present in a single available specimen. Lengths of ventral setae: *1a* 35, *1b* 36, *1c* 55, *2b* 45, *2c* 36, *3a* 35, *3b* 29, *3c* 24, *4a* 43, *4b* 28, *4c* 27, *ag*₁ 34, *ag*₂ 32, *ag*₃ 39, *ps*₁ 6, *ps*₂ 8, *ps*₃ 25. Aedeagus weakly sclerotized, difficult to discern.

Legs (Figure 21) — Leg setation as in female, ex-

cept presence of large male solenidia $\omega\sigma$ on tarsi I – IV.

Immatures unknown.

Type material — Female holotype, slide N° AK231015, Chile, Patagonia, vicinity of Punta Arenas, 53°38'028"S, 70°57'017"W, 23 October 2015, in *Sphagnum magellanicum* on swamp, coll. A.A. Khaustov. Paratypes: 1 female, same data; 1 male, same place, 13. November 2014, coll. V.A. Stolbov.

Etymology — The name of the new species is derived from Latin words *flexus* meaning *to bend* and *seta* and refers to thin and flexible dorsal setae.

Differential diagnosis — The new species is most similar to *S. ayyildizi* Dönel and Doğan, 2011, described from Turkey (Dönel and Doğan 2011), by smooth dorsal plates, three pairs of aggenital setae situated on single plate, presence of eyes. However, it differs from the latter by much longer dorsal body setae, absence of seta *d* on genu III (vs. present in *S. ayyildizi*), presence of five setae on femur II (vs. four in *S. ayyildizi*), absence of seta *d* on genu II (vs. present in *S. ayyildizi*).

***Stigmaeus patagoniensis* n. sp.**
(Figures 23-26)

Description

Female (Figures 23-26) — Length of idiosoma 455, width 300.

Idiosomal dorsum (Figure 23A) — Idiosoma oval, soft, mostly covered by smooth dorsal plates. Eyes present. Propodosomal plate with setae *vi*, *ve* and *sci*; setae *sce* situated on separate platelets. Postocular bodies large, weakly defined. Striae anteriorly to propodosomal plate without microtubercles. Setae *c*₁, *d*₁ and *e*₁ blunt-ended, other dorsal setae pointed. All dorsal setae smooth. Setae *ve*, *sce*, *c*₂, *e*₂ and *f*₁ very long and flexible. Ratio *ve/sci* = 7,8. Central hysterosomal plate with two pairs of setae. Suranal plate not divided, with two pairs of setae. Lengths of dorsal setae: *vi* 64, *ve* 150, *sci* 19, *sce* 135, *c*₁ 43, *c*₂ 135, *d*₁ 35, *d*₂ 125, *e*₁ 34, *e*₂ 135, *f*₁ 140, *h*₁ 56, *h*₂ 61.

Idiosomal venter (Figure 23B) — Ventral setae smooth or weakly barbed, pointed. Three pairs

of aggenital setae; *ag*₁ situated on small platelets; *ag*₂₋₃ on single platelet. One pair of genital setae. Endopodal plates without subcuticular reticulation. Lengths of ventral setae: *1a* 36, *1b* 35, *1c* 65, *2b* 52, *2c* 33, *3a* 31, *3b* 29, *3c* 23, *4a* 36, *4b* 23, *4c* 25, *ag*₁ 27, *ag*₂ 25, *ag*₃ 36, *g* 17, *ps*₁ 70, *ps*₂ 35, *ps*₃ 24.

Gnathosoma (Figure 24) — Tibial claw large. Setae *l'* of palpal tibia spine-like. All palpal setae pointed; setae of femur and genu weakly barbed; all setae of palptarsus smooth. Number of setae on palpal segments: Tr 0, Fe 3 (*d*, *l'*, *v''*), Ge 2 (*d*, *l''*), Ti 3 (*d*, *l'*, *l''*), Ta 8(1) (fused eupathidia *ul'*, *ul''*, *sul*, eupathidion *acm*, *ba*, *bp*, *lp*, 1 solenidion ω). Palpal supracoxal setae (*ep*) with thickened basal part and thin distal one. Chelicerae dorsally smooth. Rostrum of subcapitulum long. Subcapitular setae pointed; *n* weakly barbed, other subcapitular setae smooth. Basal part of subcapitulum without reticulation. Lengths of subcapitular setae: *m* 48, *n* 26, *or*₁ 25, *or*₂ 28.

Legs (Figures 25, 26) — Empodial raylets weakly capitate. Leg segments without reticulation. Leg I (Figure 25A). Coxae I posterodorsally with supra-coxal setae (*el*) thickened basally and thin in distal half. Leg setation: Tr 1 (*v'*), Fe 6 (*d*, *l'*, *l''*, *v'*, *v''*, *bv''*), Ge 4 (*d*, *l'*, *l''*, *k*), Ti 5(2) (*d*, *l'*, *l''*, *v'*, *v''*, φ , φp), Ta 13(1) (*p'*, *p''*, *tc'*, *tc''*, *ft'*, *ft''*, *u'*, *u''*, *a'*, *a''*, *pl'*, *pl''*, *vs*, ω). Setae *d* of tibia, (*p*), (*tc*) and (*ft*) of tarsus are eupathidia. Seta *k* 8 needle-like. Solenidion ω 27, finger-shaped; solenidion φp 31 attenuate. solenidion φ 10 baculiform. Tarsal setae *vs*, (*pl*) weakly barbed, other tarsal setae smooth. Leg II (Figure 25B). Leg setation: Tr 1 (*v'*), Fe 5 (*d*, *l'*, *l''*, *v'*, *bv''*), Ge 4 (*d*, *l'*, *l''*, *k*), Ti 5(1) (*d*, *l'*, *l''*, *v'*, *v''*, φp), Ta 9(1) (*p'*, *tc'*, *tc''*, *u'*, *u''*, *a'*, *a''*, *pl'*, *vs*, ω). Setae *p'*, *tc'* of tarsus and *d* of tibia are eupathidia. Solenidion ω 17 finger-shaped; solenidion φp 25 attenuate. Tarsal setae *pl'*, *vs* and (*a*) weakly barbed, other tarsal setae smooth. Leg III (Figure 26A). Leg setation: Tr 2 (*l'*, *v'*), Fe 3 (*d*, *l'*, *ev'*), Ge 1 (*d*), Ti 5(1) (*d*, *l'*, *l''*, *v'*, *v''*, φp), Ta 7(1) (*tc'*, *tc''*, *u'*, *u''*, *a'*, *a''*, *vs*, ω). Solenidion ω 8 baculiform; solenidion φp 20 attenuate. Seta (*tc*) of tarsus smooth, other tarsal setae barbed. Leg IV (Figure 26B). Leg setation: Tr 1 (*v'*), Fe 2 (*d*, *ev'*), Ge 1 (*d*), Ti 5(1) (*d*, *l'*, *l''*, *v'*, *v''*, φp), Ta 7(1) (*tc'*, *tc''*, *u'*, *u''*, *a'*, *a''*, *vs*, ω). Solenidion ω 8 baculiform; solenidion

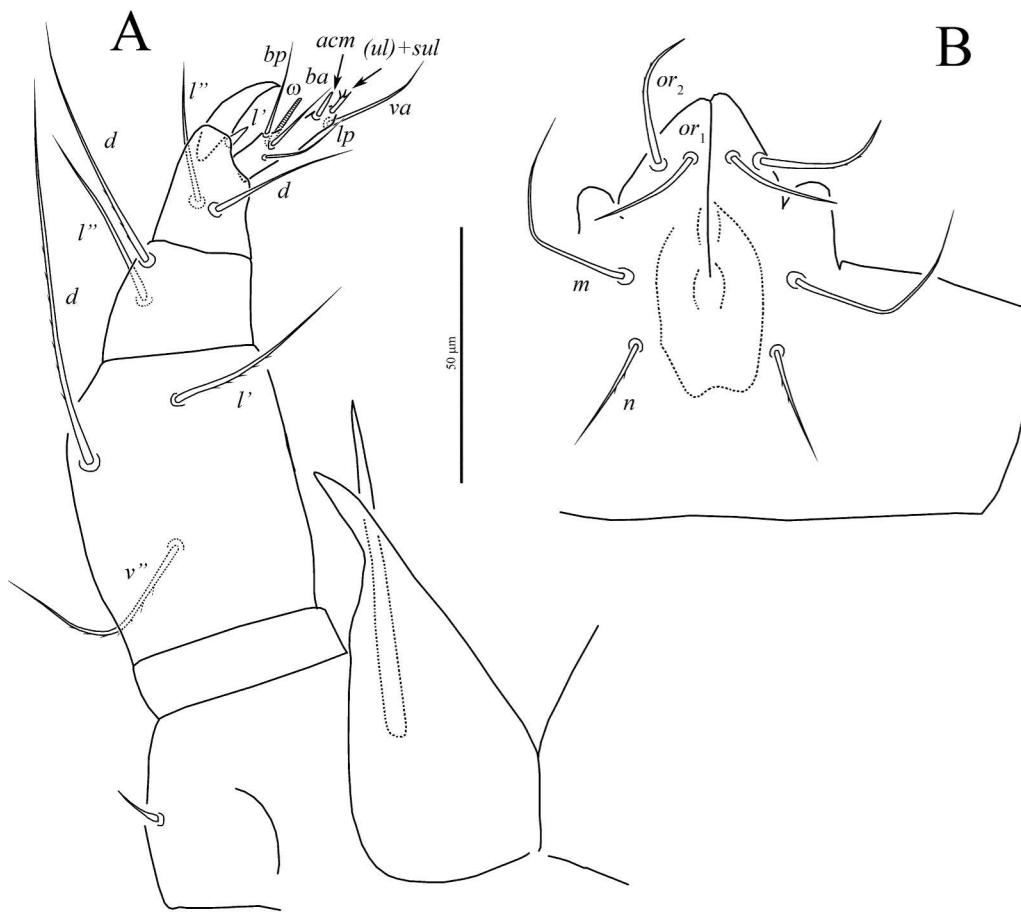


FIGURE 24: *Stigmaeus patagoniensis* n. sp., female: A – gnathosoma dorsally, B – subcapitulum.

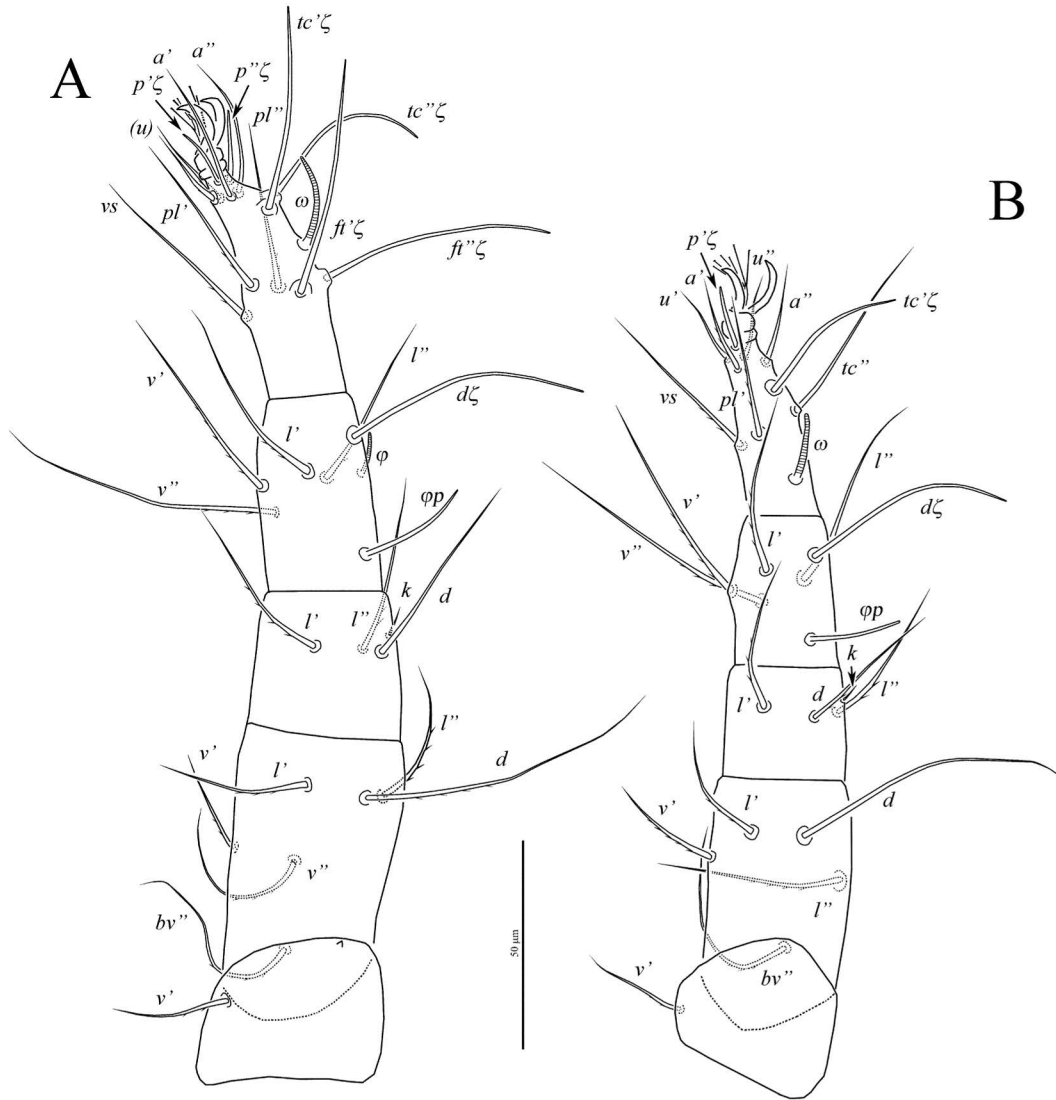


FIGURE 25: *Stigmaeus patagoniensis* n. sp., female: A – leg I, B – leg II.

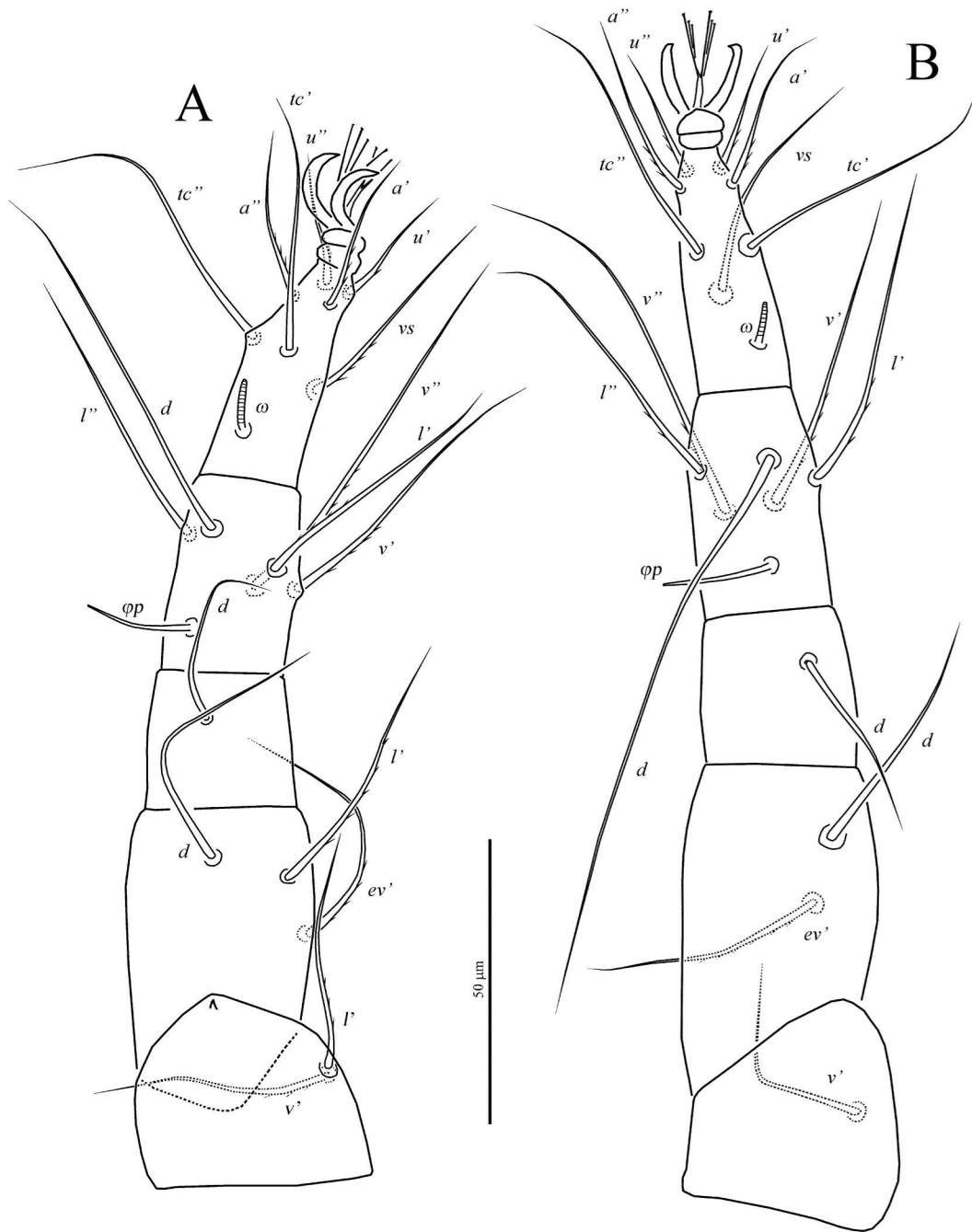


FIGURE 26: *Stigmaeus patagoniensis* n. sp., female: A – leg III, B – leg IV.

φp 20 attenuate. Setae d of tibia long and smooth. Setae (tc) of tarsus smooth, other tarsal setae weakly barbed.

Male and immatures unknown.

Type material — Female holotype, slide AT260115/S, Chile, the Region of Magallanes, *Nothofagus* forest, in *Sphagnum* sp., 53°41'08.8"S, 70°58'24.2"W, 26 January 2015, coll. A.V. Tolstikov.

Etymology — The name of the new species refers to its distribution in Patagonia.

Differential diagnosis — The new species is most similar to *S. flexisetus* n. sp., by smooth dorsal plates, presence of eyes, long and flexible dorsal setae ve , sce , c_2 , e_2 and f_1 . However, it differs from the latter by much shorter and blunt-ended setae c_1 , d_1 and e_1 (vs. much longer and pointed in *S. flexisetus*), presence of seta d on genu III (vs. absent in *S. flexisetus*), presence of seta d on genu II (vs. absent in *S. flexisetus*).

Genus *Pseudostigmaeus* Wood, 1967

Type species: *Pseudostigmaeus collyerae* Wood, 1967, by original designation.

Pseudostigmaeus magellani n. sp. (Figures 27-30)

Description

Female (Figures 27-30) — Length of idiosoma 480, width 260.

Idiosomal dorsum (Figure 27A) — Idiosoma fusiform, soft, mostly striated. Eyes present. Propodosomal plate smooth, with three setae: vi , ve and sci , with weak median propodosomal apodeme. Area anteriorly and anterolaterally to propodosomal plate with numerous microtubercles. All dorsal setae weakly barbed; setae ve , sci , sce and c_2 pointed; other dorsal setae blunt-ended. Setae c_2 situated dorsally. Ratio $ve/sci = 3$. Suranal plate not divided, with two pairs of setae. Other dorsal hysterosomal setae situated on platelets. Lengths of dorsal setae: vi 35, ve 105, sci 35, sce 80, c_1 32, c_2 105, d_1 33, d_2 43, e_1 42, e_2 36, f_1 55, h_1 46, h_2 55.

Idiosomal venter (Figure 27B) — Ventral setae smooth or weakly barbed; setae ps_{1-3} blunt-ended,

other ventral setae pointed. Three pairs of aggenital setae; ag_1 situated on soft cuticle; $ag_2 - ag_3$ on weakly defined platelet. One pair of genital setae. Cuticle posteriad to gnathosomal base, posterolaterad to coxae IV and transverse striae between coxae II and III with microtubercles. Endopodal plates weakly developed. Coxal fields with small dimples. Lengths of ventral setae: $1a$ 41, $1b$ 37, $1c$ 59, $2b$ 75, $2c$ 60, $3a$ 67, $3b$ 32, $3c$ 29, $4a$ 43, $4b$ 27, $4c$ 19, ag_1 33, ag_2 47, ag_3 68, g 77, ps_1 33, ps_2 28, ps_3 30.

Gnathosoma (Figure 28) — Tibial claw large. Setae l' of palpal tibia thin, seta-like. All palpal setae pointed; setae of femur, genu and l'' of tibia weakly barbed. Number of setae on palpal segments: Tr 0, Fe 3 (d , l' , v''), Ge 1 (d), Ti 3 (d , l' , l''), Ta 8(1) (fused eupathidia ul' , ul'' , sul , eupathidion acm , ba , bp , lp , 1 solenidion ω). Tarsal eupathidia ul' , ul'' and sul almost completely fused, without distinct distal prongs. Palpal supracoxal setae (ep) small, spine-like. Chelicerae dorsally with numerous small dimples. Rostrum of subcapitulum long. Subcapitular setae pointed; n smooth and very long, other subcapitular setae barbed. Basal part of subcapitulum without reticulation. Lengths of subcapitular setae: m 42, n 115, or_1 24, or_2 23.

Legs (Figures 29 – 30) — Empodial raylets distinctly capitate. Leg segments without reticulation. Leg I (Figure 19A). Coxae I posterodorsally with small, spine-like leg supracoxal setae (el). Leg setation: Tr 1 (v'), Fe 6 (d , l' , l'' , v' , v'' , bv''), Ge 4 (d , l' , l'' , k), Ti 5(1) (d , l' , l'' , v' , v'' , φp), Ta 13(1) (p' , p'' , tc' , tc'' , ft' , ft'' , u' , u'' , a' , a'' , pl' , pl'' , vs , ω). Setae d of tibia, (p), (tc) and (ft) of tarsus are eupathidia. Seta k 5 needle-like. Solenidion ω 22 finger-shaped; solenidion φp 23 attenuate. solenidion φ absent. Setae (pl) and vs of tarsus weakly barbed; other tarsal setae smooth. Leg II (Figure 29B). Leg setation: Tr 1 (v'), Fe 4 (d , l' , l'' , bv''), Ge 2 (l' , l''), Ti 5(1) (d , l' , l'' , v' , v'' , φp), Ta 9(1) (p' , tc' , tc'' , u' , u'' , a' , a'' , pl' , vs , ω). Solenidion ω 21 finger-shaped; solenidion φp 19 attenuate. Seta pl' and vs weakly barbed, other tarsal setae smooth. Setae d of tibia and tc'' of tarsus very long and smooth. Leg III (Figure 30A). Leg setation: Tr 2 (v' , l'), Fe 3 (d , l' , ev'), Ge 0, Ti 5(1) (d , l' , l'' , v' , v'' , φp), Ta 7(1) (tc' , tc'' , u' , u'' , a' , a'' , vs , ω). Solenidion ω 9 baculiform; solenidion φp 15 attenuate. Setae d of

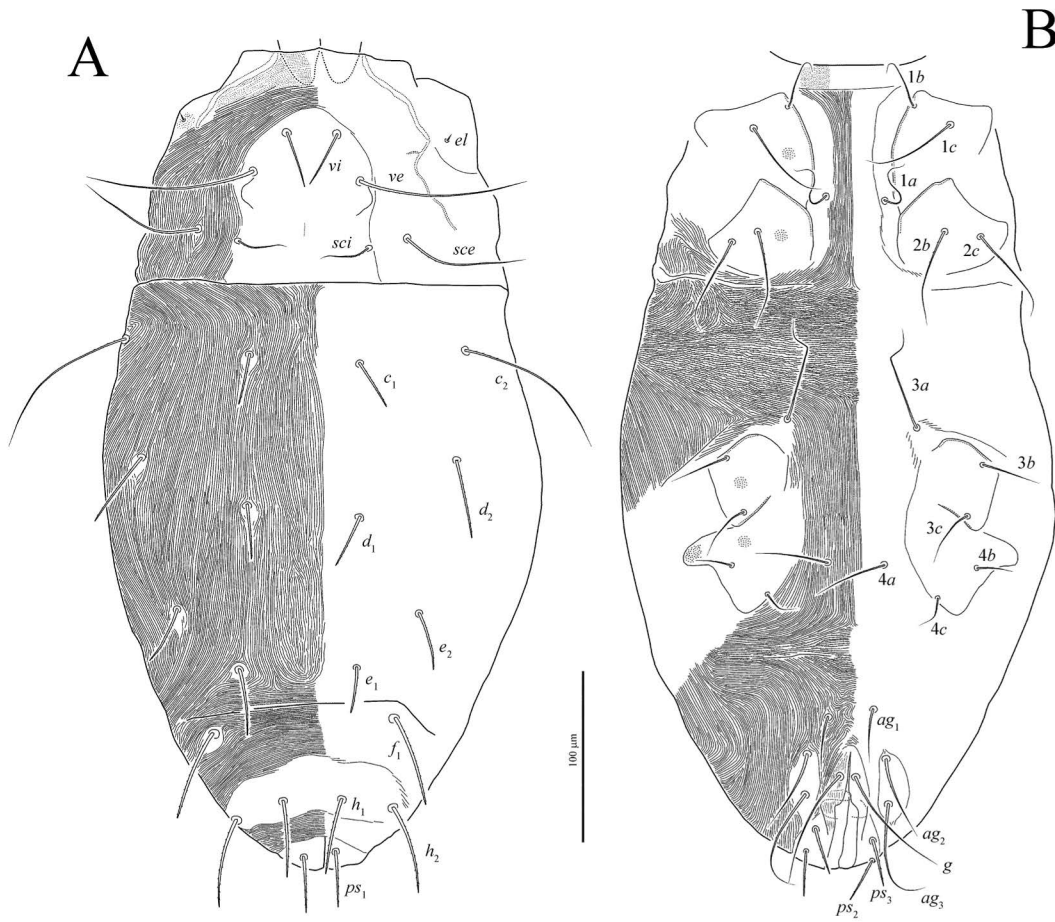


FIGURE 27: *Pseudostigmaeus magellani* n. sp., female: A – idiosomal dorsum, B – idiosomal venter.

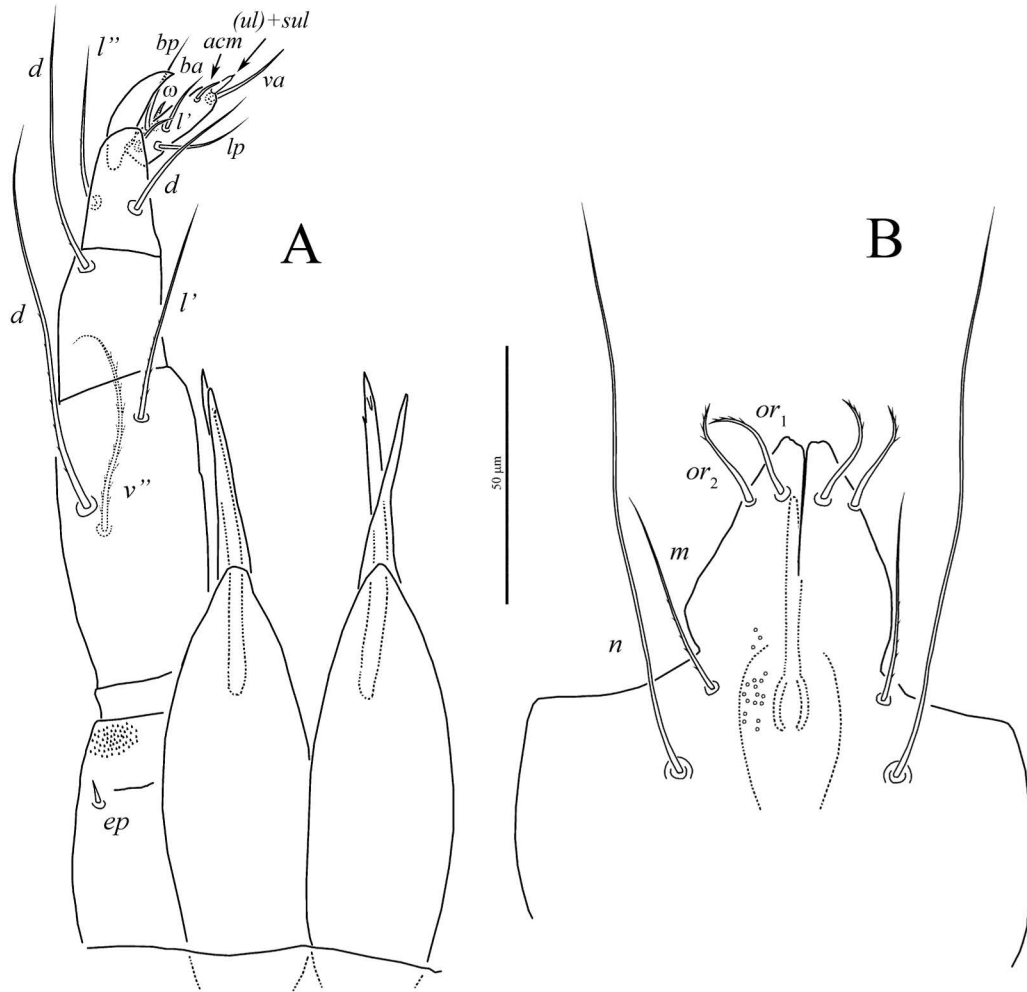


FIGURE 28: *Pseudostigmaeus magellani* n. sp., female: A – gnathosoma dorsally, B – subcapitulum.

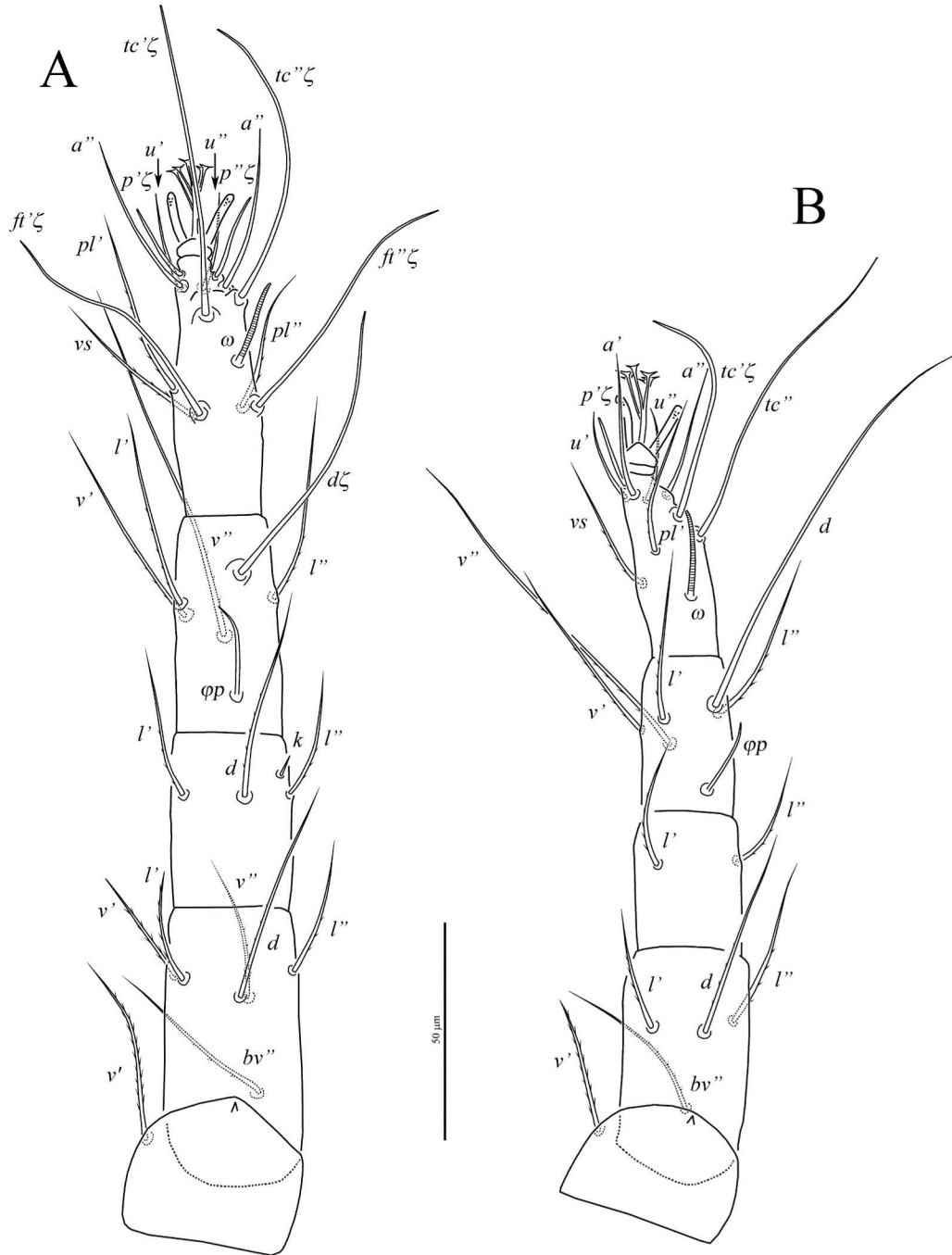


FIGURE 29: *Pseudostigmaeus magellani* n. sp., female: A – leg I, B – leg II.

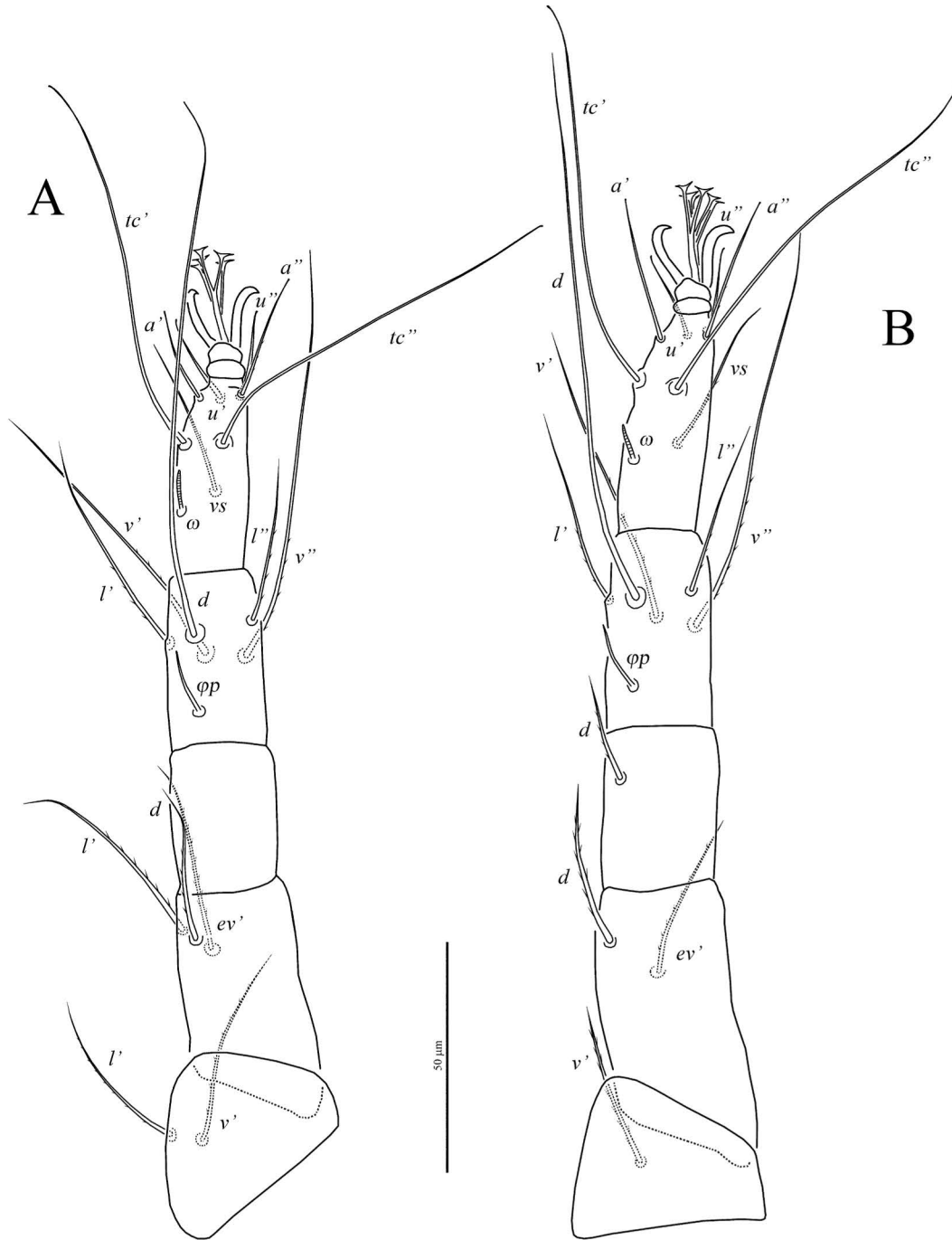


FIGURE 30: *Pseudostigmaeus magellani* n. sp., female: A – leg III, B – leg IV.

tibia and (*tc*) of tarsus very long and smooth. Seta *vs* and (*a*) of tarsus weakly barbed, other tarsal setae smooth. Leg IV (Figure 30B). Leg setation: Tr 1 (*v'*), Fe 2 (*d, ev'*), Ge 1 (*d*), Ti 5(1) (*d, l', l'', v', v'', φp*), Ta 7(1) (*tc', tc'', u', u'', a', a'', vs, ω*). Solenidion ω 8 baculiform; solenidion φp 17 attenuate. Setae *d* of tibia and (*ts*) of tarsus very long and smooth. Seta *vs* and (*a*) of tarsus weakly barbed, other tarsal setae smooth.

Male and immatures unknown.

Type material — Female holotype, slide AT260115/S1, Chile, The Region of Magallanes, *Nothofagus* forest, in *Sphagnum* sp., 53°41'08.8"S, 70°58'24.2"W, 26 January 2015, coll. A.V. Tolstikov.

Etymology — The new species is named after Ferdinand Magellan, the first European explorer who sailed past southernmost tip of South America and discovered Patagonia in 1520.

Differential diagnosis — The new species differs from all known *Pseudostigmaeus* species by the absence of seta *d* of genu III and *l''* of palpal genu (vs. present in all known species).

Remarks — The genus *Pseudostigmaeus* Wood, 1967 includes four species, which were described from New Zealand (Fan and Zhang 2005). This is the first report of the genus *Pseudostigmaeus* from South America.

Genus *Eryngiopus* Summers, 1964

Type species: *Eryngiopus gracilis* Summers, 1964, by original designation.

Eryngiopus techuelche n. sp. (Figures 31-35)

Description

Female (Figures 31-35) — Length of idiosoma 365, width 185.

Idiosomal dorsum (Figures 31A, 35A, B) — Idiosoma fusiform, soft, mostly striated. Eyes present. Propodosomal plate divided into two separated longitudinally aligned parts bearing setae *vi* and *ve* (Figure 35B). All dorsal setae uniform, blunt-ended and weakly barbed. Setae *c*₂ situated dorsally. Suranal plate divided, with two pairs of setae

(Figure 35A). A pair of platelets situated between setae *c*₁ and *d*₁; another pair of very small platelets situated anteriorly to setae *e*₁. Lengths of dorsal setae: *vi* 17, *ve* 26, *sci* 26, *sce* 31, *c*₁ 27, *c*₂ 30, *d*₁ 22, *d*₂ 24, *e*₁ 16, *e*₂ 16, *f*₁ 23, *h*₁ 29, *h*₂ 33.

Idiosomal venter (Figure 31B) — Ventral setae smooth and pointed, except weakly barbed and blunt-ended *ps*₁₋₂. Two pairs of aggenital setae; *ag*₁ situated on soft cuticle; *ag*₂ on weakly defined platelet. Another small platelet situated posterolaterally to seta *ag*₂. One pair of genital setae. Cuticle posteriad to gnathosomal base with microtubercles. Setae *1a*, *3a* and *4a* very long. Coxal fields IV with one pair of setae. Lengths of ventral setae: *1a* 81, *1b* 20, *1c* 22, *2b* 27, *3a* 67, *3b* 25, *3c* 27, *4a* 81, *4b* 24, *ag*₁ 22, *ag*₂ 28, *g* 30, *ps*₁ 19, *ps*₂ 17, *ps*₃ 23.

Gnathosoma (Figure 32) — Tibial claw large. Setae *l'* of palpal tibia thin, seta-like. All palpal setae pointed and smooth. Number of setae on palpal segments: Tr 0, Fe 3 (*d, l', v''*), Ge 1 (*d*), Ti 3 (*d, l', l''*), Ta 8(1) (fused eupathidia *ul', ul'', sul*, eupathidion *acm, ba, bp, lp*, 1 solenidion ω). Setae *v''* of femur very short (Figure 35C). Palpal supracoxal setae (*ep*) small, thick, with distinctly rounded tip. Chelicerae dorsally smooth (Figure 35D). Rostrum of subcapitulum long. Subcapitular setae pointed; and smooth. Setae *n* very long. Basal part of subcapitulum without reticulation (Figure 35C). Lengths of subcapitular setae: *m* 26, *n* 70, *or*₁ 14, *or*₂ 15.

Legs (Figures 33, 34) — Empodial raylets distinctly capitate. Leg segments without reticulation. Leg I (Figure 33A). Coxae I posterodorsally with small, thick, with distinctly rounded tip leg supracoxal setae (*el*). Leg setation: Tr 1 (*v'*), Fe 4 (*d, l', l'', bv''*), Ge 4 (*d, l', l'', k*), Ti 5(1) (*d, l', l'', v', v'', φp*), Ta 13(1) (*p', p'', tc', tc'', ft', ft'', u', u'', a', a'', pl', pl'', vs, ω*). Setae *d* of tibia, (*p*) and (*tc*) of tarsus are eupathidia. Seta *k* 4 needle-like. Solenidion ω short 8, finger-shaped; solenidion φp 12 uniformly thin. All leg setae smooth. Leg II (Figure 33B). Leg setation: Tr 1 (*v'*), Fe 4 (*d, l', l'', bv''*), Ge 1 (*l'*), Ti 5(1) (*d, l', l'', v', v'', φp*), Ta 9(1) (*p', tc', tc'', u', u'', a', a'', pl', vs, ω*). Solenidion ω 6 finger-shaped; solenidion φp 10 uniformly thin. All leg setae smooth. Setae *d* of tibia and *tc''* of tarsus long. Leg III (Figure 34A). Leg setation: Tr 1 (*v'*), Fe 2 (*d, ev'*), Ge 0, Ti 5(1) (*d, l', l'', v', v''*,

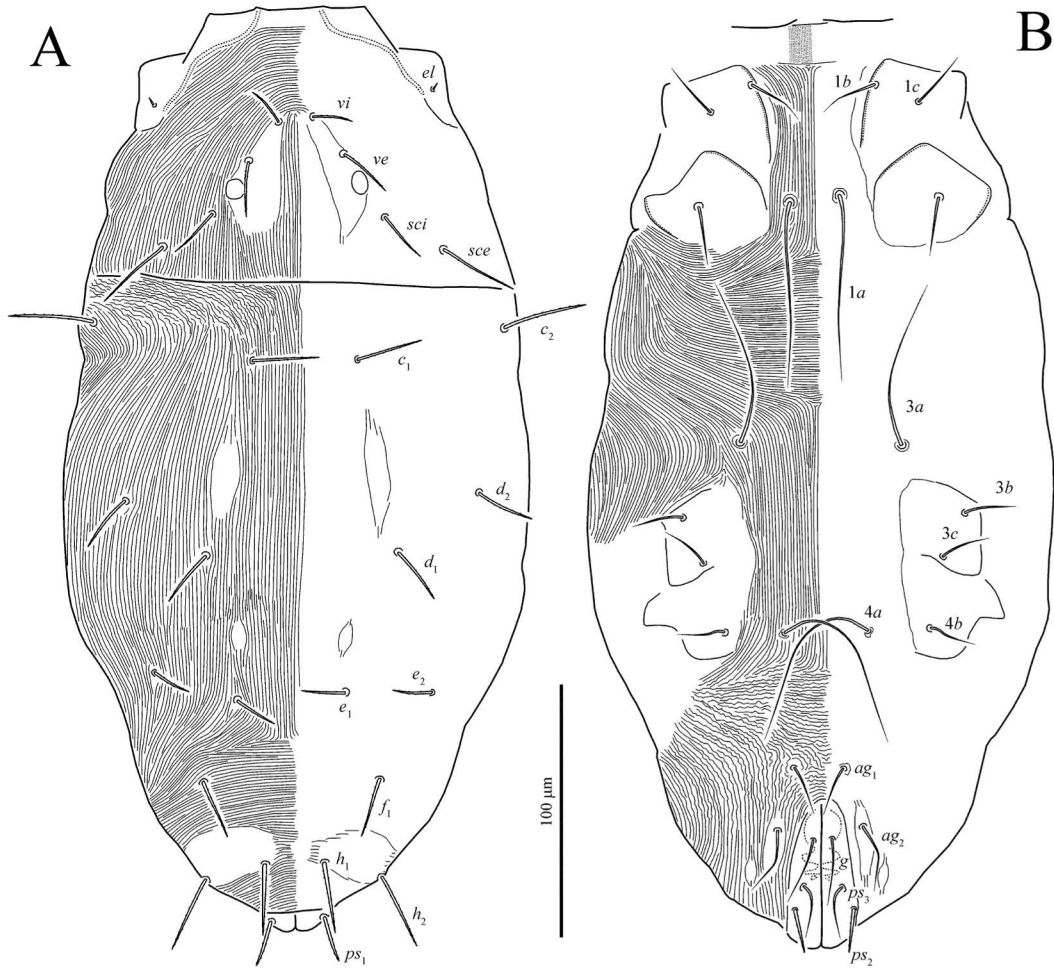


FIGURE 31: *Eryngiopus techuelche* n. sp., female: A – idiosomal dorsum, B – idiosomal venter.

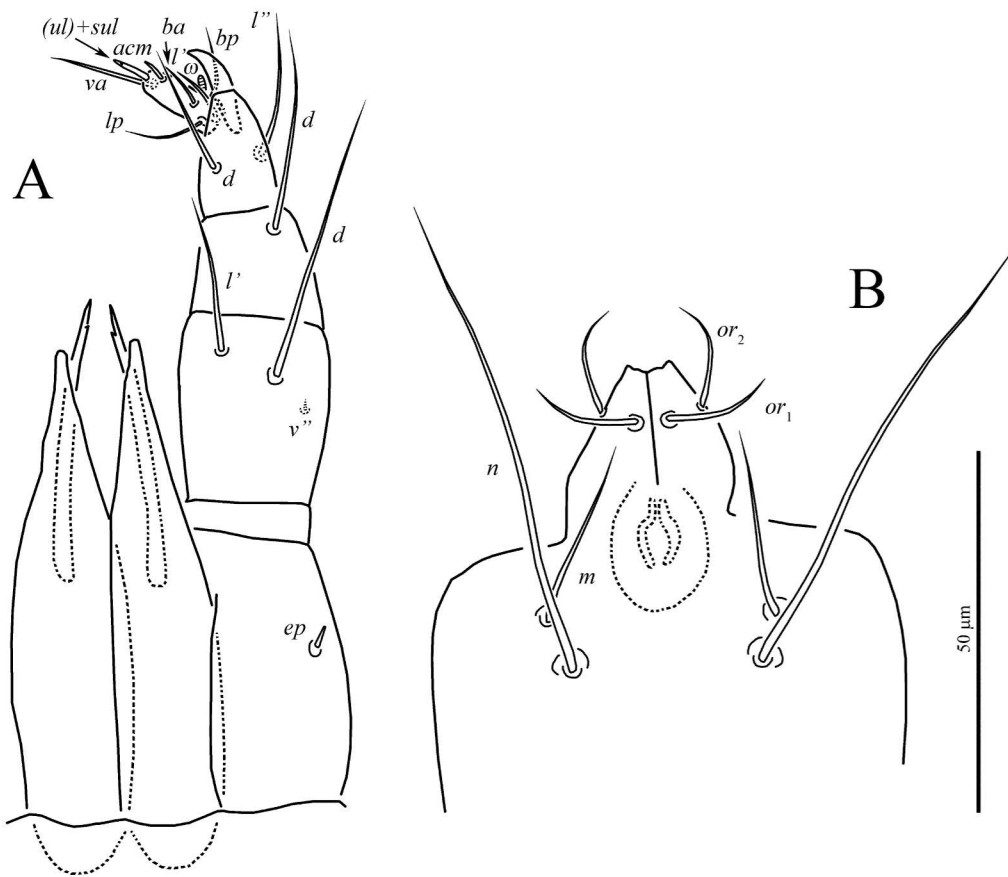


FIGURE 32: *Eryngiopus techuelche* n. sp., female: A – gnathosoma dorsally, B – subcapitulum.

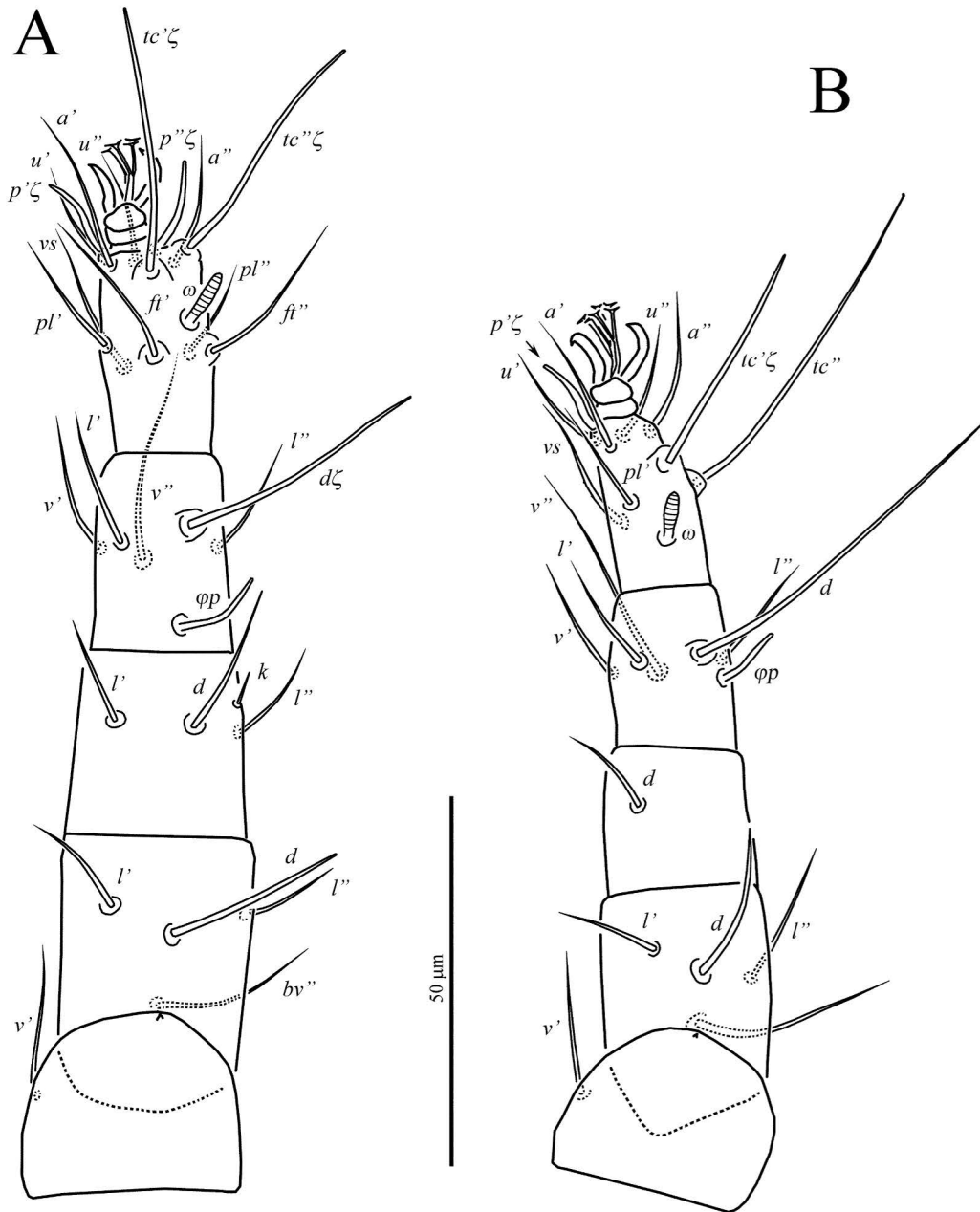


FIGURE 33: *Eryngiopus techuelche* n. sp., female: A – leg I, B – leg II.

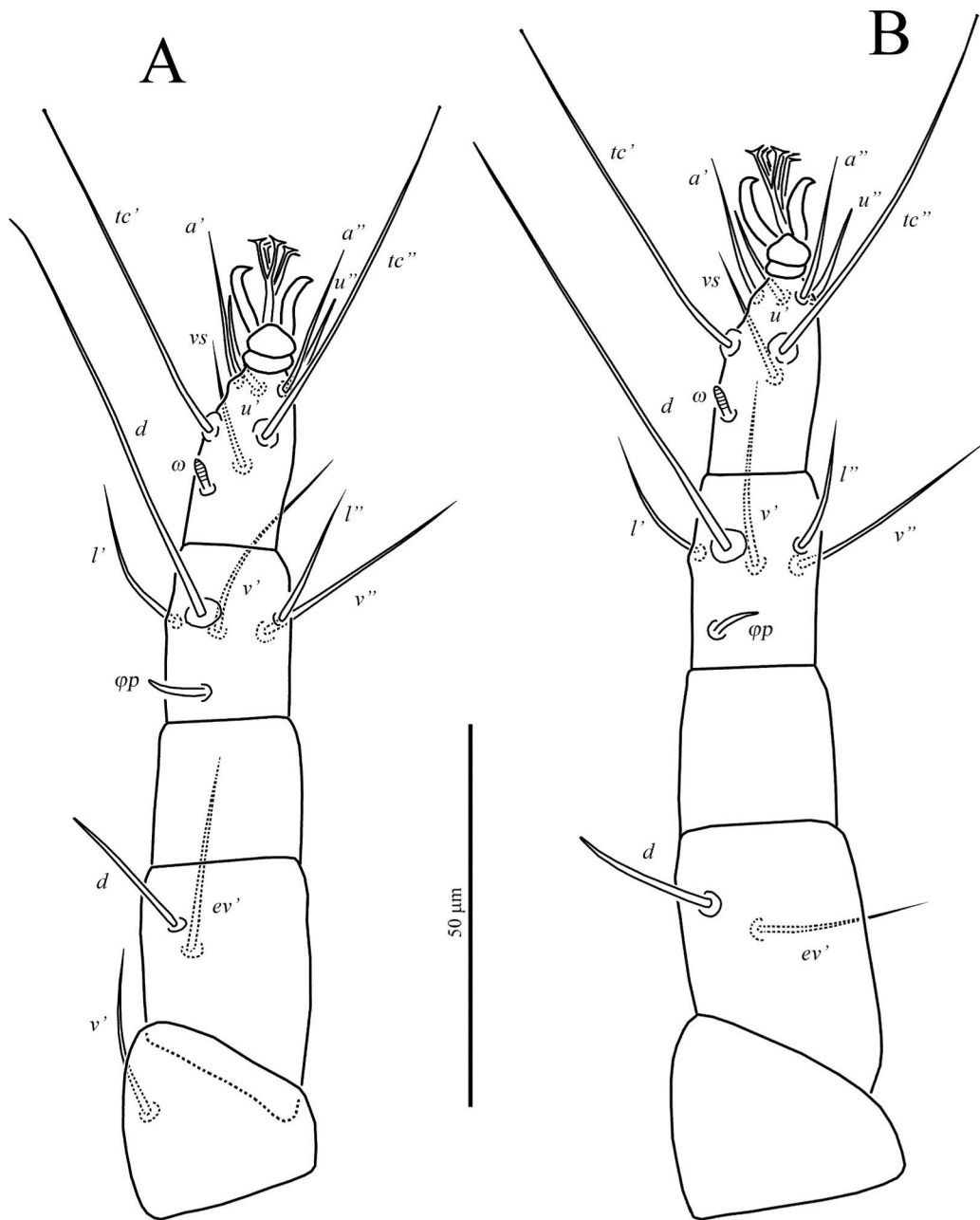


FIGURE 34: *Eryngiopus techuelche* n. sp., female: A – leg III, B – leg IV.

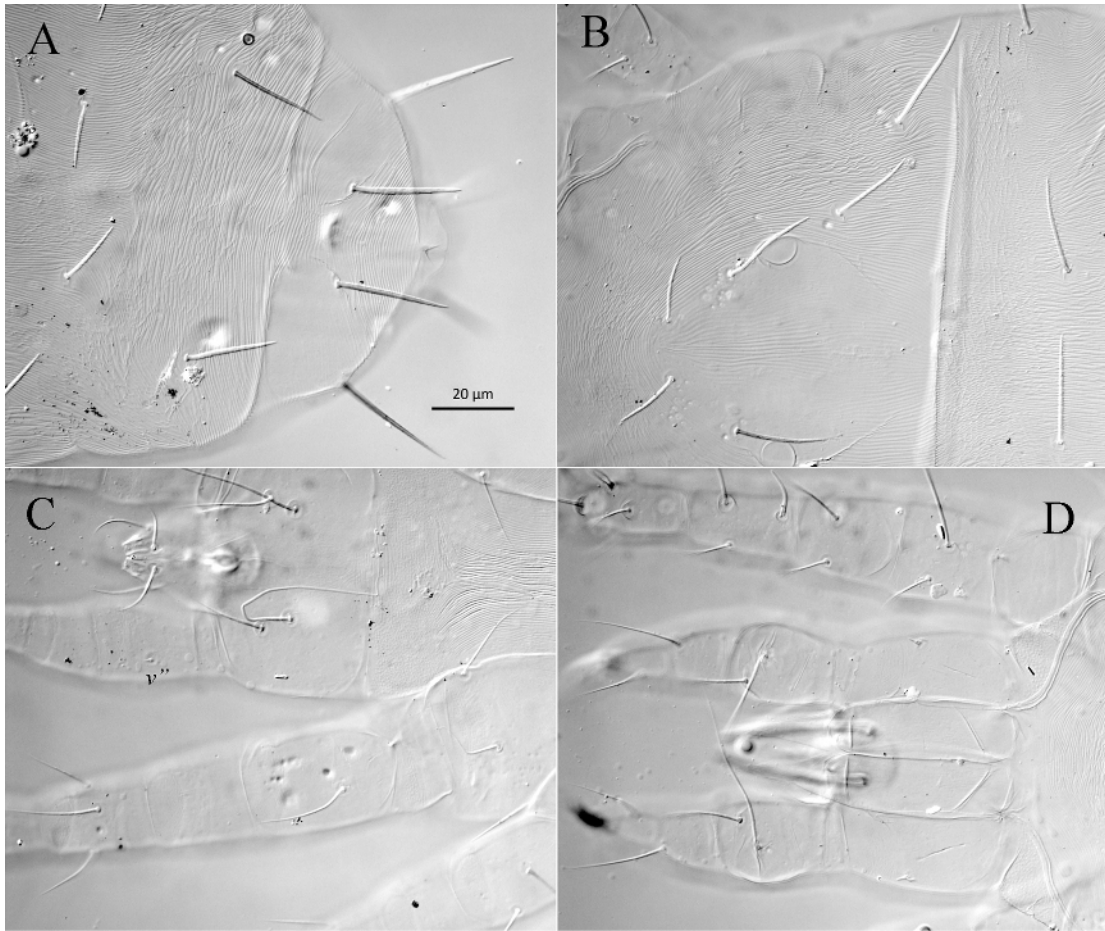


FIGURE 35: DIC micrographs of *Eryngiopus techuelche* n. sp., female: A – opisthosoma dorsally, B – prodorsum, C – gnathosoma ventrally, D – gnathosoma dorsally.

φp), Ta 7(1) (tc' , tc'' , u' , u'' , a' , a'' , vs , ω). Solenidion ω 5 baculiform; solenidion φp 9 uniformly thin. Setae d of tibia and (tc) of tarsus very long. All leg setae smooth. Leg IV (Figure 34B). Leg setation: Tr 0, Fe 2 (d , ev'), Ge 0, Ti 5(1) (d , l' , l'' , v' , v'' , φp), Ta 7(1) (tc' , tc'' , u' , u'' , a' , a'' , vs , ω). Solenidion ω 4 baculiform; solenidion φp 7 uniformly thin. Setae d of tibia and (ts) of tarsus very long. All leg setae smooth.

Male and immatures unknown.

Type material — Female holotype, slide AT260115/S2, Chile, the Region of Magallanes, *Nothofagus* forest, in *Sphagnum* sp., 53°41'08.8"S, 70°58'24.2"W, 26 January 2015, coll. A.V. Tolstikov.

Etymology — The name of the new species is derived from the name of Tehuelche people, a group of Amerindian tribes indigenous to Patagonia and the southern pampas regions of Argentina and Chile.

Differential diagnosis — The new species is most similar to *E. similis* Wood, 1967, described from New Zealand (Fan and Zhang 2005), by divided propodosomal and suranal plates and similar leg setation. However, it differs from the latter by very short seta v'' of palpfemur (vs. well-developed in *E. similis*), by much longer setae (tc) on tarsi III and IV, presence of small platelets anteriorly to setae e_1 (vs. absent in *E. similis*).

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