

TAXONOMIC CONTRIBUTION TO THE KNOWLEDGE OF *GALUMNA* (ACARI, ORIBATIDA, GALUMNIDAE) OF THE NEOTROPICAL REGION: DESCRIPTION OF A NEW SPECIES FROM BOLIVIA AND A KEY TO KNOWN SPECIES OF THE GENUS

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ABSTRACT: A new species of *Galumna* (Oribatida, Galumnidae) is described from Bolivian rainforest leaf litter. *Galumna parareticulata* sp.n. differs from *Galumna reticulata* Hammer, 1958 in longer body, pointed rostrum, the presence of a median rostral ridge, longer lamellar seta, and slightly developed head of bothridial seta. The species *Galumna lyrica* is transferred from the subgenus *Galumna* to *Neogalumna*: *Galumna (Neogalumna) lyrica* (Jacot, 1935) comb. nov. An identification key to the known species/subspecies of the genus from the Neotropical region is presented.

KEY WORDS: Galumnid mites, taxonomy, morphology, identification key, tropics.

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INTRODUCTION

During the taxonomic identification of oribatid mites (Acari, Oribatida) collected from Bolivia, we found one new species belonging to the genus *Galumna* Heyden (1826). The primary goal of the paper is to describe and illustrate this new species.

Galumna (Galumnidae) was described by Heyden (1826), with *Notaspis alatus* Hermann, 1804 as type species. The genus comprises three subgenera and more than 200 species: *G. (Atypicogalumna)* Ermilov, Sandmann, Klarner, Widyasuti and Scheu, 2015—one species; *G. (Galumna)* Heyden, 1826—about 190 species; and *G. (Neogalumna)* Hammer, 1973—11 species (see Ermilov and Klimov 2017). Collectively, the above species have a cosmopolitan distribution (Subías 2021). Prior to this study, three species of *Galumna* have been recorded from Bolivia (Hammer 1958; Ermilov and Niedbała 2013): *G. (G.) circularis* Hammer, 1958, *G. (G.) flabellifera* Hammer, 1958 and *G. (N.) araujo* Pérez-Íñigo and Baggio, 1994. The generic and subgeneric diagnoses were presented by Ermilov and Klimov (2017). An identification key to the known species of *Galumna* from the Neotropical region has been published by Ermilov *et al.* (2015). However, since then, new species have been described, new findings have been recorded (e.g., Ermilov 2016, 2017, 2019a; Ermilov and Friedrich 2016), and new taxonomic proposals have been made (e.g. Ermilov and Klimov 2017). Therefore, the additional goal of this paper is to update the identification key of *Galumna*.

MATERIALS AND METHODS

Specimens. The specimens of the new species were kindly provided by the Institute of Soil Biology, České Budějovice, Czech Republic (the collection localities are listed in the *Material examined* section). Specimens have been deposited in two institutions: the Senckenberg Museum of Natural History, Görlitz, Germany (SMNH); and the Tyumen State University Museum of Zoology, Tyumen, Russia (TSUMZ).

Observation and documentation. Specimens were mounted in lactic acid on temporary cavity slides for measurement and illustration. Body length was measured in lateral view, from the tip of the rostrum to the posterior edge of the notogaster. Notogastral width refers to the maximum width of the notogaster in dorsal view (behind pteromorph). Lengths of body setae were measured in lateral aspect. All body measurements are presented in micrometers. Formulas for leg setation are given in parentheses according to the sequence trochanter–femur–genu–tibia–tarsus (femulus 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 transmission light microscope “Leica DM 2500”.

Terminology. Morphological terminology used in this paper follows that of Grandjean (see Ermilov and Klimov 2017 for review and application).

Abbreviations. *Prodorsum*: *rr*—rostral ridge; *L*—lamellar line; *S*—sublamellar line; *N*—prodorsal leg niche; *E*, *T*—lateral ridges of prodorsum;

ro, le, in, bs—rostral, lamellar, interlamellar and bothridial setae, respectively; *Ad*—dorsosejugal porose area; *D*—dorsophragma; *P*—pleurophragma. *Notogaster*: *c, la, lm, lp, h, p*—notogastral setal alveoli; *Aa, A1, A2, A3*—notogastral porose areas; *ia, im, ip, ih, ips*—lyrifissures; *gla*—opisthonotal gland opening. *Gnathosoma*: *a, m, h*—subcapitular setae; *or*—adoral seta; *sup, inf, d, l, cm, acm, ul, su, vt, lt*—palp setae; ω —palp solenidion; *as*—axillary sacculae; *cha, chb*—cheliceral setae; *Tg*—Trägårdh's organ. *Epimeral and lateral podosomal regions*: *1a, 3b, 4a, 4b, 4c*—epimeral setae; *PdI, PdII*—pedotecta I, II, respectively; *dis*—discidium; *cpc*—circumpedal carina. *Anogenital region*: *g, ag, an, ad*—genital, aggenital, anal and adanal setae, respectively; *iad*—adanal lyrifissure; *po*—preanal organ. *Legs*: *Tr, Fe, Ge, Ti, Ta*—leg trochanter, femur, genu, tibia and tarsus, respectively; ω, ϕ, σ —leg solenidia; ϵ —leg famulus; *d, l, v, bv, ev, ft, tc, it, p, u, a, s, pv, pl*—leg setae; *pa*—porose area.

SYSTEMATICS

Galumna (Galumna) parareticulata sp. n.

(Figs. 1–3)

Diagnosis. Body size: 780–962 × 614–713. Prodorsum and epimeres tuberculate; pteromorph, basal part of prodorsum and anterior part of notogaster striate; notogaster and anogenital region microgranulate. Rostrum pointed, with median, longitudinal ridge. Lamellar and sublamellar parallel, curving backwards. Rostral and lamellar setae of medium length, setiform, barbed, *le* thinner and less barbed than *ro*; interlamellar seta minute; bothridial seta long, with slightly developed, elongate clavate, barbed head. Dorsosejugal suture complete. Four pairs of oval porose areas, *Aa* located close to pteromorph hinge. Median pore present. Circumpedal carina long, directed to epimere I. Epimeral and anogenital setae short, setiform, roughened. Postanal porose area oval. Solenidion on tibia IV inserted in the anterior part of the segment.

Description of adult. *Measurements.* Large species. Body length: 879 (holotype: female), 780–796 (three paratypes: males), 846–962 (11 paratypes: females); notogaster width: 697 (holotype), 614–647 (three paratypes: males), 664–713 (11 paratypes: females).

Integument (Figs. 1A–C). Body color brown. Prodorsum, dorsosejugal region, subcapitular mentum and epimeres densely tuberculate. Pteromorph, basal part of prodorsum and anterior part of noto-

gaster striate. Notogaster and anogenital region densely microgranulate.

Prodorsum (Figs. 1A, C; 2A). Rostrum pointed, with short median, longitudinal ridge creating illusion of a pointed rostrum in dorsal aspect. Lamellar and sublamellar lines thin, parallel, curving backwards. Lateral structure *N* and ridges *E, T* well visible. Rostral seta (69–73) setiform, barbed. Lamellar seta (69–73) thinner than *ro*, setiform, slightly barbed. Interlamellar seta (4) setiform, thin, roughened. Bothridial seta (118–127) with long stalk and shorter, slightly developed, elongate clavate, barbed head. Dorsosejugal porose area oval (20–24 × 14–16), located posterior to insertion of interlamellar seta. Dorsophragma distinctly elongate longitudinally.

Notogaster (Figs. 1A, C; 2B). Dorsosejugal suture complete, strong. Ten pairs of setal alveoli and four pairs of oval porose areas (*Aa*: 41–49 × 28–32; *A1, A2, A3*: 32–41 × 28–32) developed; *Aa* located close to pteromorph hinge, anterior to *la*. Median pore present, located between *A2*. Opisthonotal gland opening and all lyrifissures distinct: *gla* located anterolateral and close to *A2*; *im* anterior and close to *A1*; *ip* posterior or medial to *p₁*; *ih* and *ips* close to *p₃*, distanced from each other.

Gnathosoma (Figs. 2C–E). Size of subcapitulum: 184–192 × 155–164. Subcapitular setae (*a*: 36–38; *m* and *h*: 28–30) setiform, slightly barbed; *a* thickest. Adoral seta (24–26) setiform, barbed. Length of chelicera: 255–264. Cheliceral setae (*cha*: 77–82; *chb*: 49–53) setiform, barbed. Length of palp: 155–164. Postpalpal seta (8) spiniform, smooth.

Epimeral and lateral podosomal regions (Figs. 1B, C). Epimeral setal formula: 1–0–1–2. Setae (*1a, 3b*: 16; *4a, 4b*: 8) setiform, thin, roughened. Pedotectum II rounded in ventral aspect. Discidium triangular. Circumpedal carina comparatively long, directed to epimere I.

Anogenital region (Figs. 1B, C; 2B). Genital (*g₁, g₂*: 16–18; others: 8), aggenital (8), anal (8) and adanal (8) setae setiform, thin, roughened. Anterior edge of genital plate with two setae (*g₁, g₂*), but *g₃* also inserted very close to it. Aggenital seta located posterolateral to genital aperture. Adanal lyrifissure located close and parallel to anal plate. Adanal setae *ad₁* and *ad₂* posterior, *ad₃* lateral to anal plate and *iad*; distance *ad₁–ad₂* shorter than *ad₂–ad₃*. Postanal porose area oval (41–53 × 28–32).

Legs (Figs. 3A–D). Median claw thicker than lateral claws, all slightly barbed on dorsal side. Dorsoantiaxial porose area on femora I–IV and

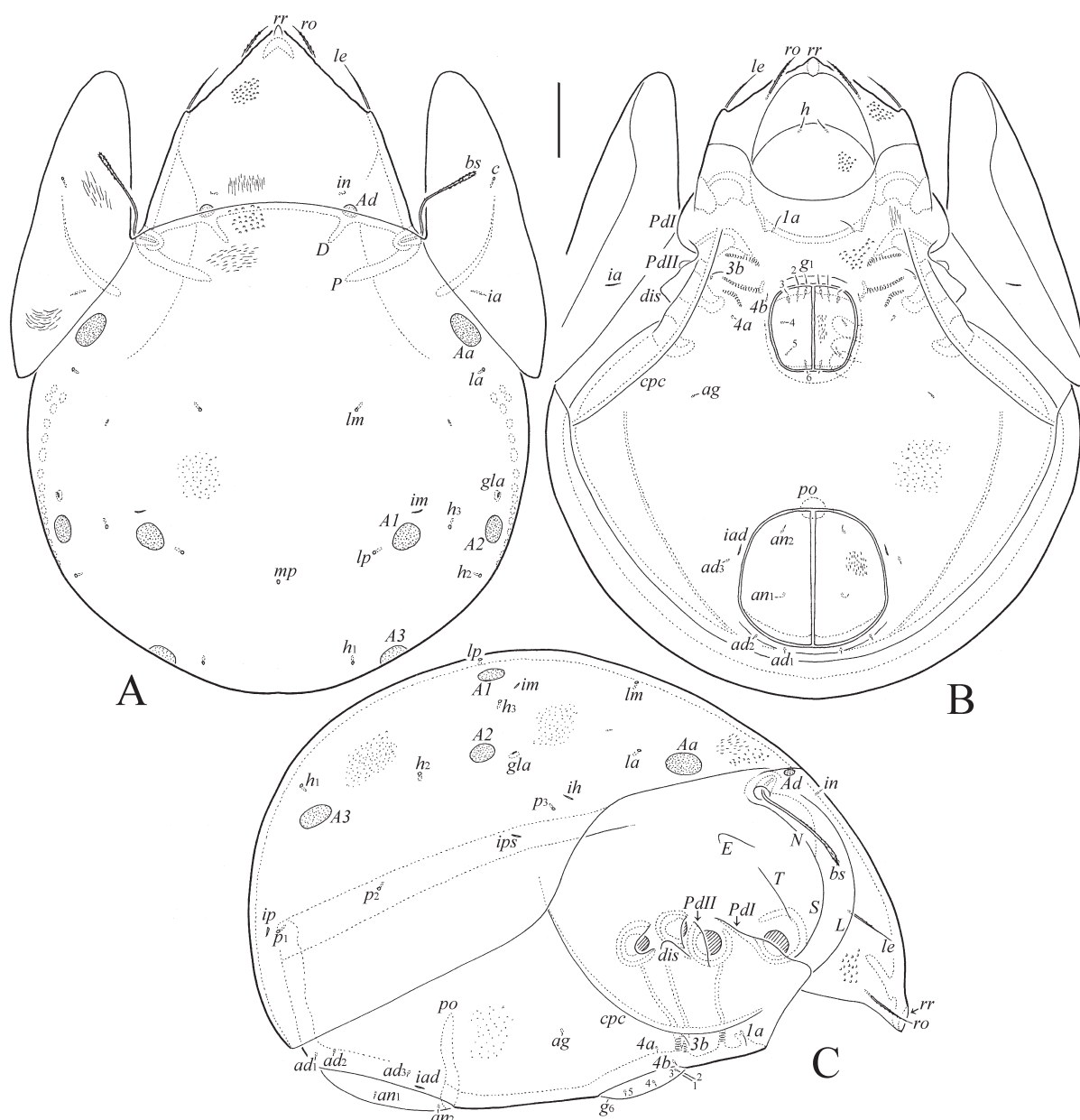


Fig. 1. *Galumna (Galumna) parareticulata* sp.n., adult: A—dorsal view; B—ventral view (gnathosoma except subcapitular mentum, legs and part of right pteromorph not shown); C—lateral view (gnathosoma, legs and pteromorph not shown). Scale bar=100 μ m.

dorsoparaxial porose area on trochanters III, IV well visible; proximoventral porose area on tarsi I–IV and distoventral porose area on tibiae I–IV slightly observed. Formulas of leg setation and solenidia: I (1–4–3–4–20) [1–2–2], II (1–4–3–4–15) [1–1–2], III (1–2–1–3–15) [1–1–0], IV (1–2–2–3–12) [0–1–0]; homology of setae and solenidia indicated in Table 1. Famulus of tarsus I mini-stickform, slightly swollen and blunt-ended apically, inserted between solenidia ω_1 and ω_2 . Seta *s* of tarsus I eupathidial, located before setae *a*. Solenidia ω_1 and ω_2 on tarsus II and σ on genu III

bacilliform, other solenidia setiform, pointed or rounded apically. Solenidion on tibia IV inserted in the anterior part of the segment.

Material examined. Holotype (female) and 14 paratypes (three males and 11 females): Bolivia, Espejillos environs near Amboró National Park, 17°53'22" S, 63°26'48" W, 562 m a.s.l., sifting leaf litter in rain forest, 29.XI.2009 (collected by B. Greenway).

Type deposition. The holotype is deposited in the collection of the SMNH; 14 paratypes are deposited in the collection of the TSUMZ. All speci-

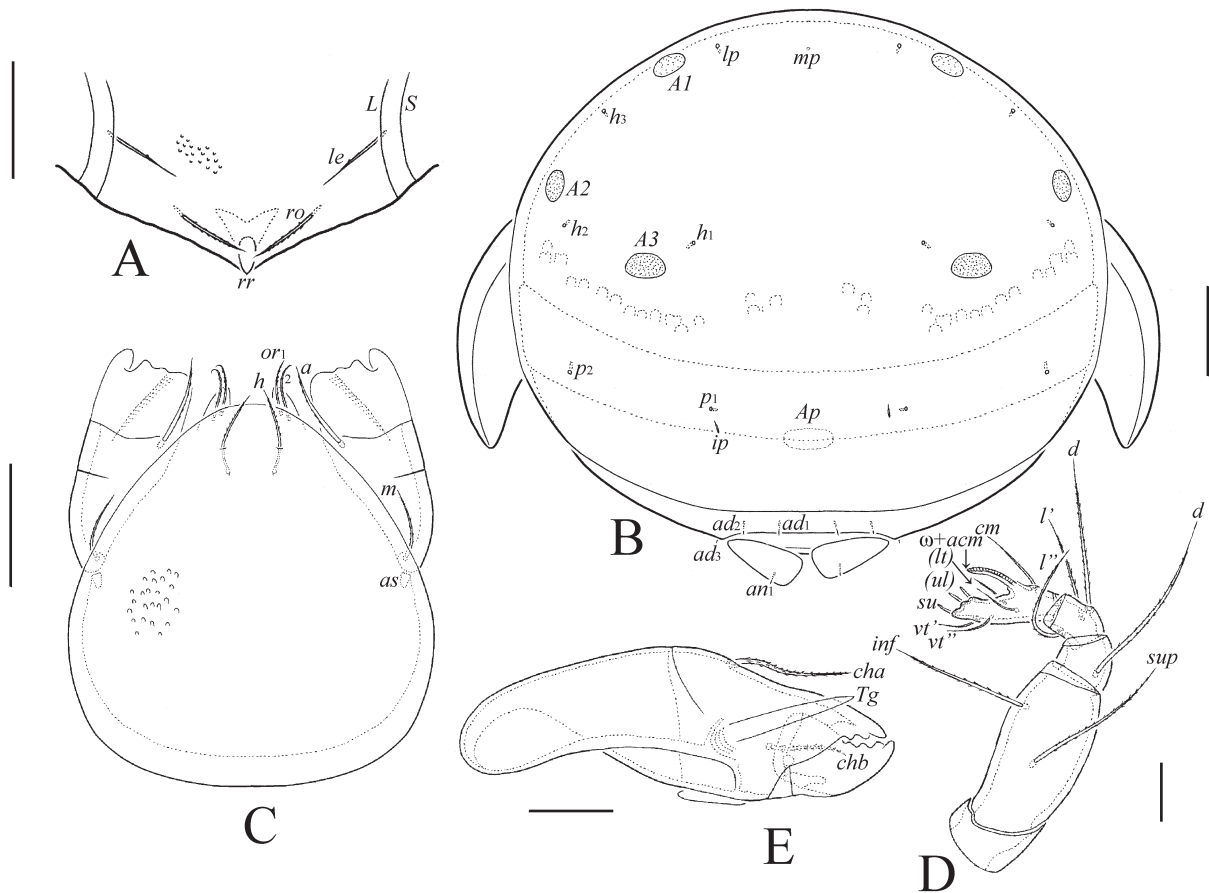


Fig. 2. *Galumna (Galumna) parareticulata* sp. n., adult: A—anterior part of prodorsum, dorsoanterior view; B—posterior view; C—subcapitulum, ventral view; D—palp, left, antiaxial view; E—chelicera, right, antiaxial view. Scale bars: 100 µm (A, B), 50 µm (C, E), 20 µm (D).

mens are preserved in 70% solution of ethanol with a drop of glycerol.

Etymology. The species name refers to the similarity of the new species and *Galumna reticulata* Hammer, 1958.

Remarks. *Galumna parareticulata* sp. n. is morphologically most similar to *Galumna reticulata* Hammer, 1958 from the Neotropical region in the presence of a complete dorsosejugal suture, four pairs of rounded/oval notogastral porose areas (*Aa* located close to the pteromorph hinge), minute interlamellar seta, clavate bothridial seta, median pore, tuberculate prodorsum, striate pteromorph and striate basal part of prodorsum. *Galumna parareticulata* differs from *G. reticulata* in longer body (780–962 vs. 390), pointed (vs. rounded) rostrum, presence (vs. absence) of a median rostral ridge, longer lamellar seta (medium length vs. minute) and a slightly developed (vs. well developed) head of bothridial seta.

Systematic placement of *Galumna lyrice* (Jacot, 1935)

The analysis of literature on *Galumna* of the Neotropical region has revealed an incorrect systematic placement of the species *Galumna lyrice* (Jacot, 1935), described by Jacot (1935b) from the USA (Florida). At present, it is considered a representative of the nominative subgenus (e.g., Subías 2004; Ermilov and Klimov 2017). However, *G. lyrice* should belong to *Galumna (Neogalumna)* Hammer, 1973 because it fits the definition/diagnosis of this subgenus (see Ermilov and Klimov 2017), including the essential distinctive morphological character—adanal lyrifissure oblique and distinctly distanced from the anal aperture (vs. adanal lyrifissure very close and mostly parallel in *Galumna (Galumna)*). Thus, we propose the following combination: *Galumna (Neogalumna) lyrice* (Jacot, 1935) comb. nov.

**Key to known species of *Galumna*
from the Neotropical region***

(updated after Ermilov *et al.* 2015)

1. Adanal lyrifissure distinctly distanced from anal aperture 2
(subgenus *Neogalumna* Hammer, 1973)
— Adanal lyrifissure located close to anal aperture 4
(subgenus *Galumna* Heyden, 1826)
2. Interlamellar seta very long (distinctly longer than length of prodorsum), flagellate; dorsosejugal suture absent; head of bothridial seta nearly rounded; body size: 530 × 400
..... *Galumna (N.) lyrica* (Jacot 1935)
(see Jacot 1935b). Distribution: USA (Florida).
— Interlamellar seta minute or represented by alveolus; dorsosejugal suture present; head of bothridial seta distinctly elongate 3
3. Rostrum pointed; lamellar and sublamellar lines distally divergent, *L* directed to insertion of rostral seta, *S* curving backward; notogastral porose area *Aa* triangular, *A3* rounded; body length: 614–641 *Galumna (N.) araujo* Pérez-Íñigo and Baggio, 1994.
Distribution: Neotropical region.
— Rostrum rounded; lamellar and sublamellar lines parallel, distally slightly divergent, *L* directed to lateral side of prodorsum; notogastral porose area *Aa* boomerang-shaped, *A3* narrowly elongate oval; body size: 564–664 × 431–514
..... *Galumna (N.) harrysmiti* Ermilov, 2016.
Distribution: Antilles.
4. Bothridial seta setiform 5
— Bothridial seta with developed head 7
5. Interlamellar seta of medium length; dorsosejugal suture absent; notogastral porose area *AI* narrowly elongate oval; body size: 538–582 × 509–533
... *Galumna (G.) lunaris* Jeleva, Scull and Cruz, 1984.
Distribution: Cuba.
— Interlamellar seta minute or represented by alveolus; dorsosejugal suture complete; notogastral porose area *AI* rounded 6
6. Rostrum without tubular protrusion; bothridial seta ciliate unilaterally; body size: 285–300 × 180–190 *Galumna (G.) pusilla* Sellnick, 1923.
Distribution: Brazil.
— Rostrum with strong tubular protrusion; bothridial seta smooth; body size: 882 × 666 *Galum-*

na (G.) chrisengelbrechti Ermilov and Klimov, 2017.
Distribution: South Africa, Mexico.

7. Interlamellar seta of medium length or long... 8
— Interlamellar seta minute or represented by alveolus 21

8. Entire surface of prodorsum heavily striate/rugose; body size: 514–597 × 365–415 *Galumna (G.) parazeucta* Ermilov and Friedrich, 2016.
Distribution: Peru.

— Surface of prodorsum not heavily striate/rugose (sometimes indistinctly striate) 9

9. Lamellar and sublamellar lines distally divergent, *L* directed to insertion of rostral seta, *S* curving backward 10

— Lamellar and sublamellar lines parallel or slightly divergent, both curving backward 11

10. Rostrum pointed, with tooth on each side; bothridial seta comparatively short, head and stalk similar in length; body size: 747 × 564
..... *Galumna (G.) acutifrons* Banks, 1915**.

Distribution: Mexico.

— Rostrum rounded, without tooth on each side; bothridial seta long, head distinctly shorter than stalk; body size: 531–547 × 365–373
..... *Galumna (G.) paraoctopunctata* Ermilov, Alvarado-Rodríguez and Retana-Salazar, 2015.

Distribution: Costa Rica.

11. Rostrum pointed; body size: 500–630 × 384–396 *Galumna (G.) alata alata* (Hermann, 1804)
(e.g. see also Grandjean 1936; Pérez-Íñigo 1993; Ermilov 2019b). Distribution: Semicosmopolitan.

— Rostrum rounded 12

12. Dorsosejugal suture interrupted medially; body size: 439–490 × 332–357
..... *Galumna (G.) hammerae* Balogh, 1985.
Distribution: Australia, Mexico.

— Dorsosejugal suture complete 13

13. Interlamellar seta very long (distinctly longer than length of prodorsum), flagellate; body size: 510–638 × 330–429 *Galumna (G.) mystax* Pérez-Íñigo and Pérez-Íñigo Jr., 1993.

Distribution: Brazil.

— Interlamellar seta of medium length or long (shorter than length of prodorsum), setiform 14

14. Head of bothridial seta nearly rounded 15

— Head of bothridial seta distinctly elongate... 17

15. Notogastral porose area *Aa* rounded; body size: 450–550 × 370–420
..... *Galumna (G.) neonominata* Subías, 2004
(see also Pérez-Íñigo and Baggio 1991). Distribution: Brazil.

— Interlamellar seta of medium length or long (shorter than length of prodorsum), setiform 14

14. Head of bothridial seta nearly rounded 15
— Head of bothridial seta distinctly elongate... 17

15. Notogastral porose area *Aa* rounded; body size: 450–550 × 370–420
..... *Galumna (G.) neonominata* Subías, 2004
(see also Pérez-Íñigo and Baggio 1991). Distribution: Brazil.

*We exclude *Galumna (G.) bradleyi* (Jacot, 1935) (see Jacot 1935a) from the USA (Florida) and *Galumna (G.) jacoti* Wharton, 1938 from Mexico from the key because these species were very poorly described.

**The first author examined one specimen of *Galumna acutifrons* from R. A. Norton's personal collection.

- Notogastral porose area *Aa* triangular..... 16
16. Interlamellar seta long (not shorter than lamellar seta); body size: 707 × 579
.....*Galumna* (*G.*) *nodula* Nevin, 1974.
Distribution: USA (Florida).
- Interlamellar seta of medium length (distinctly shorter than lamellar seta); body size: 770 × 600 ...
.....*Galumna* (*G.*) *elegantula* (Jacot, 1935)
(see Jacot 1935a). Distribution: USA (Florida).
17. Notogastral porose area *Aa* slightly or distinctly triangular..... 18
- Notogastral porose area *Aa* oval/rounded.... 19
18. Head of bothridial seta comparatively short (one fifth of length of stalk); median pore absent; body size: 492 × 420*Galumna* (*G.*) *longiclava* Pérez-Íñigo and Baggio, 1991.
Distribution: Brazil.
- Head of bothridial seta comparatively long (one second to one third of length of stalk); median pore present; body length: 360–490.....
.....*Galumna* (*G.*) *fordi* (Jacot, 1934).
Distribution: Tropical region.
19. Head of bothridial seta asymmetrically developed; body size: 550 × 390 *Galumna* (*G.*) *macroptera matecumbei* (Jacot, 1935) (see Jacot 1935a).
Distribution: USA (Florida).
- Head of bothridial setae not asymmetrically developed..... 20
20. Median pore present; basal part of prodorsum not striate; body size: 430–635 × 341–380
.....*Galumna* (*G.*) *tarsipennata* Oudemans, 1914
(e.g., see also Travé 1970; Pérez-Íñigo 1972, 1993; Weigmann 2006). Distribution: Palearctic region and Brazil.
- Median pore absent; basal part of prodorsum striate; body length: 530.....
.....*Galumna* (*G.*) *pallida* Hammer, 1958.
Distribution: Neotropical region.
21. Rostrum trapezoid; dorsosejugal region with distinct lenticulus; body size: 730–747 × 614–664.....*Galumna* (*G.*) *naturalisi* Ermilov, 2017.
Distribution: Colombia.
- Rostrum not trapezoid; dorsosejugal region without lenticulus..... 22
22. Notogastral porose area *Aa* boomerang-shaped; body size: 538–676 × 396–509*Galumna* (*G.*) *angularis* Jeleva, Scull and Cruz, 1984 (= *Galumna hamifer* Mahunka, 1985) (see also Pérez-Íñigo and Baggio 1994). Distribution: Neotropical region.
- Notogastral porose area *Aa* not boomerang-shaped 23
23. Head of bothridial setae asymmetrically developed, with short cilia unilaterally..... 24
- Head of bothridial setae not asymmetrically developed, without cilia unilaterally..... 28
24. Dorsosejugal suture absent or interrupted medially..... 25
- Dorsosejugal suture complete 26
(three very similar species)
25. Lamellar seta inserted closer to interlamellar seta than to rostral seta; postanal porose area longer than width of anal apertures; body size: 290–298 × 207–215.....*Galumna* (*G.*) *miniporosa* Ermilov, Starý, Sandmann, Marian and Maraun, 2013.
Distribution: Ecuador.
- Lamellar seta inserted closer to rostral seta than to interlamellar seta; postanal porose area shorter than width of anal aperture; body size: 381–385 × 274.....*Galumna* (*G.*) *laselva* Balogh, 1997.
Distribution: Neotropical region.
26. Lamellar seta distinctly shorter than rostral seta; body size: 303–337 × 204–220
.....*Galumna* (*G.*) *flabellifera* Hammer, 1958 (? = *Galumna arrugata* Jeleva, Scull and Cruz, 1984; ? = *Galumna glabra* Pérez-Íñigo and Baggio, 1991; ? = *Galumna nuda* Engelbrecht, 1972) (e.g., see also Mahunka 1978; Aoki 1982; Bayartogtokh and Shimano 2019). Distribution: Tropical and Subtropical regions.
- Lamellar seta not shorter than rostral seta ... 27
27. Lamellar seta distinctly longer than rostral seta, interlamellar seta minute; body length: 365....*Galumna* (*G.*) *perezi* Pérez-Íñigo and Baggio, 1994.
Distribution: Brazil.
- Rostral, lamellar and interlamellar setae similar in length; body size: 350 × 240.....
.....*Galumna* (*G.*) *minuta* (Ewing, 1909)
(see also Jacot 1935a, b). Distribution: central and eastern USA
28. Dorsosejugal suture absent or interrupted medially..... 29
- Dorsosejugal suture complete 34
29. Notogastral porose area *Aa* distanced from pteromorphal hinge and located between setal alveoli *la* and *lm*; body size: 520 × 380
.....*Galumna* (*G.*) *unica* Sellnick, 1923.
Distribution: Brazil.
- Notogastral porose area *Aa* located close to pteromorphal hinge and located anterior to setal alveolus *la* 30
30. Rostrum pointed, with longitudinal median rostral ridge; body size: 680–763 × 514–564
.....*Galumna* (*G.*) *antiguaensis* Ermilov, 2016.
Distribution: Antilles.

- Rostrum rounded, without longitudinal median rostral ridge 31
31. Rostral and lamellar setae minute; head of bothridial seta about one-fourth of length of stalk; body length: 250
..... *Galumna (G.) circularis* Hammer, 1958.
Distribution: Neotropical region.
- Rostral and lamellar setae of medium length; head of bothridial seta about one-half/third of length of stalk..... 32
32. Median pore absent; head of bothridial seta narrowly elongate fusiform; body size: 435 × 318.....
..... *Galumna (G.) agueroi* Balogh, 1997.
Distribution: Costa Rica.
- Median pore present; head of bothridial seta clavate 33
33. Head of bothridial seta barbed; postanal porose area present; body size: 530 × 400.....
..... *Galumna (G.) coloradensis* (Jacot, 1929) (see also Jacot 1935b; Nevin 1979). Distribution: central and southern USA
- Head of bothridial seta smooth; postanal porose area absent; body size: 795–887 × 615–672.....
..... *Galumna (G.) irazu* Balogh, 1997.
Distribution: Neotropical region.
34. Notogaster with three pairs of notogastral porose areas (*A1* or *A2* absent)..... 35
- Notogaster with four pairs of notogastral porose areas (*A1* and *A2* present) 36
35. Rostrum pointed; lamellar seta distinctly shorter than rostral seta; body size: 647–780 × 498–581..... *Galumna (G.) napoensis* Ermilov, 2019 (see Ermilov 2019a).
Distribution: Ecuador.
- Rostrum rounded; rostral and lamellar seta similar in length; body size: 820 × 586.....
..... *Galumna (G.) nonoensis* Balogh, 1988.
Distribution: Ecuador.
36. Rostrum pointed, with longitudinal median rostral ridge; body size: 780–962 × 614–713
..... *Galumna (G.) parareticulata* sp.n.
Distribution: Bolivia.
- Rostrum rounded, without longitudinal median rostral ridge 37
37. Notogastral porose area *A2* located posterior to *A1*, *Aa* irregularly square roundish; body size: 311–400 × 249–276 *Galumna (G.) delectum* Pérez-Íñigo and Baggio, 1996.
Distribution: Brazil.
- Notogastral porose area *A2* located posterolateral to *A1*, *Aa* not irregularly square roundish.... 38
38. Head of bothridial seta comparatively short (one-sixth of length of stalk); body size: 1,025–1,150 × 790–950
..... *Galumna (G.) egregea* Sellnick, 1923.
Distribution: Neotropical region.
- Head of bothridial seta comparatively long (one-half to one-fourth of length of stalk)..... 39
39. Notogastral porose area *Aa* oval, transversely oriented; body size: 457 × 276..... *Galumna (G.) cubana* Jeleva, Scull and Cruz, 1984.
Distribution: Neotropical region.
- Notogastral porose area *Aa* rounded 40
40. Surface of pteromorph heavily striate/rugose... 41
- Surface of pteromorph not heavily striate/rugose (sometimes partially indistinctly striate)..... 43
41. Lamellar seta minute; body length: 390.....
..... *Galumna (G.) reticulata* Hammer, 1958.
Distribution: Neotropical region.
- Lamellar seta of medium length 42
42. Surface of prodorsum heavily granulate; head of bothridial seta lanceolate; notogastral lyrifissure *im* located lateral to notogastral porose area *A1*; body size: 629–684 × 526–540..... *Galumna (G.) innexa* Pérez-Íñigo and Baggio, 1986.
Distribution: Neotropical region.
- Surface of prodorsum not heavily granulate; head of bothridial seta clavate; notogastral lyrifissure *im* located anterior to notogastral porose area *A1*; body length: 600..... *Galumna (G.) similis* Pérez-Íñigo and Baggio, 1980.
Distribution: Neotropical region, USA.
43. Surface of prodorsum not heavily striate/rugose 44
- Surface of prodorsum partially heavily striate/rugose..... 45
44. Head of bothridial seta smooth; median pore absent; body size: 624–720 × 528–576..... *Galumna (G.) incerta* Pérez-Íñigo and Baggio, 1991.
Distribution: Brazil.
- Head of bothridial seta barbed; median pore present; body size: 760 × 600
..... *Galumna (G.) iterata* Subías, 2004 (see also Jacot 1935a, b). Distribution: southern USA.
45. Bothridial seta shorter than distance between interlamellar setae; lamellar seta distinctly longer than rostral seta; body size: 620–710 × 520–535.. .. *Galumna (G.) australis australis* Berlese, 1914 (see also Mahunka 1992; ? Sellnick 1923*). Distribution: Neotropical region.

*Morphological data (e.g., the length of lamellar seta; prodorsal sculpturing) and figures of *Galumna (G.) australis* in Sellnick (1923) differ from those in Mahunka (1992), who examined the type material. We follow the original description (Berlese 1914) and Mahunka (1992).

— Bothridial seta not shorter than distance between interlamellar setae; rostral and lamellar setae similar in length; body size: 647–730 × 464–564.....
.....*Galumna* (*G.*) *colombiana* Ermilov, 2017.
Distribution: Colombia.

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Table 1

Leg setation and solenidia of adult *Galumna (Galumna) parareticulata* sp.n.

Leg	Tr	Fe	Ge	Ti	Ta
I	v'	d, (l), bv''	(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''	(l), v', σ	(l), (v), φ	(ft), (tc), (it), (p), (u), (a), s, (pv), ω ₁ , ω ₂
III	v'	d, 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, Greek letters—to solenidia (except ε—famulus). Single quotation mark (') marks setae on the anterior and double quotation mark (')—setae on the posterior side of a given leg segment. Parentheses refer to a pair of setae.