



## ***Plateurytion roigi* sp. nov., a new geophilid centipede (Myriapoda: Chilopoda: Geophilomorpha) from Southern Chile**

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### **Abstract**

*Plateurytion roigi* sp. nov. (Chilopoda: Geophilomorpha: Geophilidae) is fully described and illustrated from the holotype female from southern Chile (Region X (de Los Lagos region): Palena province). The new species seems particularly similar to *P. gracilis* (Gervais, 1849) (from Chile and Argentina), to which it is accordingly compared in detail for a confident identification. This is the sixth report of a species of the genus *Plateurytion* Attems, 1909, from Chile. The others are *P. gracilis* (Gervais, 1849); *P. metopias* (Attems, 1903); *P. michaelsoni* (Attems, 1903); *P. mundus* (Chamberlin, 1955); and *P. zapallar* (Chamberlin, 1955). New geographic records are given for *Plateurytion mauryi* Pereira, 2008, which is reported for the first time from San Juan province, up to now only known from the type locality (in Mendoza province), central-western Argentina. *Plateurytion yungarum* (Pereira, 2005), is reported from the montane cloud forest altitudinal level of the Yungas forest of northwestern Argentina, until now it has only been recorded from the (lowest) montane forest altitudinal level of the Yungas.

**Key words:** Chilopoda, Geophilomorpha, Geophilidae, *Plateurytion*, new species, new records, Chile, Argentina, southwestern South America

### **Introduction**

Forty-two species (in fifteen genera) are currently known from Chile for the geophilomorph centipede family Geophilidae: One species in the genus *Apogeophilus* Silvestri, 1905; four in *Chilenophilus* Attems, 1909; one in *Filipponus* Chamberlin, 1962; one in *Nicopus* Attems, 1947; one in *Orinomerium* Chamberlin, 1955; five in *Pachymerinus* Silvestri, 1905; one in *Pachymerium* C. L. Koch, 1847; ten in *Pandineum* Chamberlin, 1955; five in *Plateurytion* Attems, 1909; one in *Polycricus* Saussure & Humbert, 1872; two in *Schendyloides* Attems, 1897; six in *Schizonium* Chamberlin, 1955; one in *Synerium* Chamberlin, 1955; two in *Tuoba* Chamberlin, 1920; one in *Ketampa* Chamberlin, 1955.

The purpose of the present contribution is to describe a new species of *Plateurytion* from the holotype female collected in the Valdivian forest of southern Chile (de Los Lagos region: Palena province). Among the other species of *Plateurytion* living in South America, *P. roigi* sp. nov. most closely resembles *P. gracilis* (Gervais, 1849) (from Chile and Argentina), from which it differs mainly in the number of leg-bearing segments, body length, posterior limit of undivided pore-fields in the anterior region of the trunk, distribution of coxal pores on the coxopleura of the ultimate leg-bearing segment, presence/absence of anal organs.

*Plateurytion* is one of the most speciose of the geophilid genera in South America, with eleven species distributed as follows: one in Chile and Argentina: *P. gracilis* (Gervais, 1849); two in Argentina and Uruguay: *P. heurtaaultae* (Pereira, 2006) and *P. tenebrosus* (Meinert, 1886); two in Argentina only: *P. mauryi* Pereira, 2008 and *P. yungarum* (Pereira, 2005); one in Peru only: *P. lethifer* (Crabill, 1968); and 5 in Chile only (including the new species described below): *P. metopias* (Attems, 1903); *P. michaelsoni* (Attems, 1903); *P. mundus* (Chamberlin, 1955); *P. zapallar* (Chamberlin, 1955); and *P. roigi* sp. nov.

A chance to examine unsorted material of geophilomorph centipedes from Argentina, deposited at the Museo Argentino de Ciencias Naturales "Bernardino Rivadavia" (Buenos Aires), allowed me to identify new specimens of

*P. mauryi* and *P. yungarum*, giving here new geographic records for both taxa (including complementary morphological information for the first).

The genus *Plateurytion* also embraces fourteen species and subspecies distributed in sub-Saharan Africa, listed in Bonato *et al.* (2007) and ChiloBase 2.0 (Bonato *et al.* 2016).

## Material and methods

The holotype herein designated is deposited in the Collection of Arachnology and Myriapodology of the Museo de La Plata, La Plata, Buenos Aires province, Argentina (MLP-Ar, María C. Damborenea and Luis A. Pereira). Other, non-type specimens are deposited in the collections of the Museo Argentino de Ciencias Naturales "Bernardino Rivadavia", Buenos Aires, Argentina (MACN-My, Martín J. Ramírez and Cristina L. Scioscia).

The specimens were examined through light microscopy. Temporary mounts have been prepared by direct transfer of the specimens from the preservation liquid (70% ethanol) onto microscope slides, using undiluted 2-phenoxyethanol = ethylene glycol monophenyl ether (CAS # 122-99-6) as a mounting medium. No additional steps were employed before mounting. Details of the preparation of microscope slides and dissection procedures are described in Pereira (2000) and Foddai *et al.* (2002).

The figures were delineated using a compound microscope equipped with a camera lucida drawing tube attachment (the latter was also employed to draw scale bars with the aid of a glass stage-micrometer). Measurements are given in mm. Terminology for external anatomy follows Bonato *et al.* (2010). The following abbreviation is used in the text, tables, and legends of the figures: a.a. = antennal article/articles.

## Results

### Class Chilopoda Latreille, 1817

### Order Geophilomorpha Pocock, 1896

### Family Geophilidae Leach, 1815

### Genus *Plateurytion* Attems, 1909

**Type species of the genus.** *Geophilus (Eurytion) michaelsoni* Attems, 1903, by original designation.

**Remarks.** Diagnoses of *Plateurytion* can be found in Bonato *et al.* (2007) and Pereira (2015).

The current allocation of *P. mundus* (Chamberlin, 1955), from southern Chile, under *Plateurytion*, has required some change in the generic diagnosis (Pereira 2015), as to the presence of sternal pores arranged in a single area on the first metasternite of the pore-field series (in two paired areas on all remaining metasternites). Conversely, in the other species currently assigned to the genus, undivided pore-fields occur on metasternites of at least the first quarter of the body. (However, the importance of this character as separating putative genera needs further investigation).

### *Plateurytion roigi* sp. nov.

(Figs. 1–50)

**Diagnosis.** A species of *Plateurytion* characterized by having the following features: coxosternite of first maxillae without lappets; sclerotized rim of coxosternites of second maxillae not elongated; ventral pore-fields present in an uninterrupted series all along the trunk; all coxal organs distinct and open separately; dorsal side of coxopleura of the ultimate leg-bearing segment devoid of coxal pores. Of the other South American species currently included in the genus, only the present new species and *P. gracilis* (Gervais, 1849) share all these combined characters. *Plateurytion roigi* can be confidently differentiated from *P. gracilis* by means of the following selected traits (the corresponding ones in the latter are given in parentheses): body length of female 18 mm (40 mm); female with 43

leg-bearing segments (with 67 leg-bearing segments); undivided pore-fields of anterior region of the body extended up to *ca.* metasternite 11 (up to *ca.* metasternite 25); coxal pores dispersed on ventral and lateral surfaces of coxopleuron, Figs. 46, 47 (restricted along the membrane between coxopleuron and metasternite); anal organs present, Figs. 46: c, 50: b (absent).

**Remarks.** Other morphological traits included in Table 1 differentiate *P. roigi* **sp. nov.** from *P. gracilis*.

**TABLE 1.** Comparative matrix of morphological traits for *Plateurytion roigi* **sp. nov.** and *Plateurytion gracilis* (Gervais, 1849). (Features of *P. roigi* after the holotype female; traits of *P. gracilis* taken from Attems 1903, after the original description of the type female (ref. *Geophilus (Eurytion) moderatus*)).

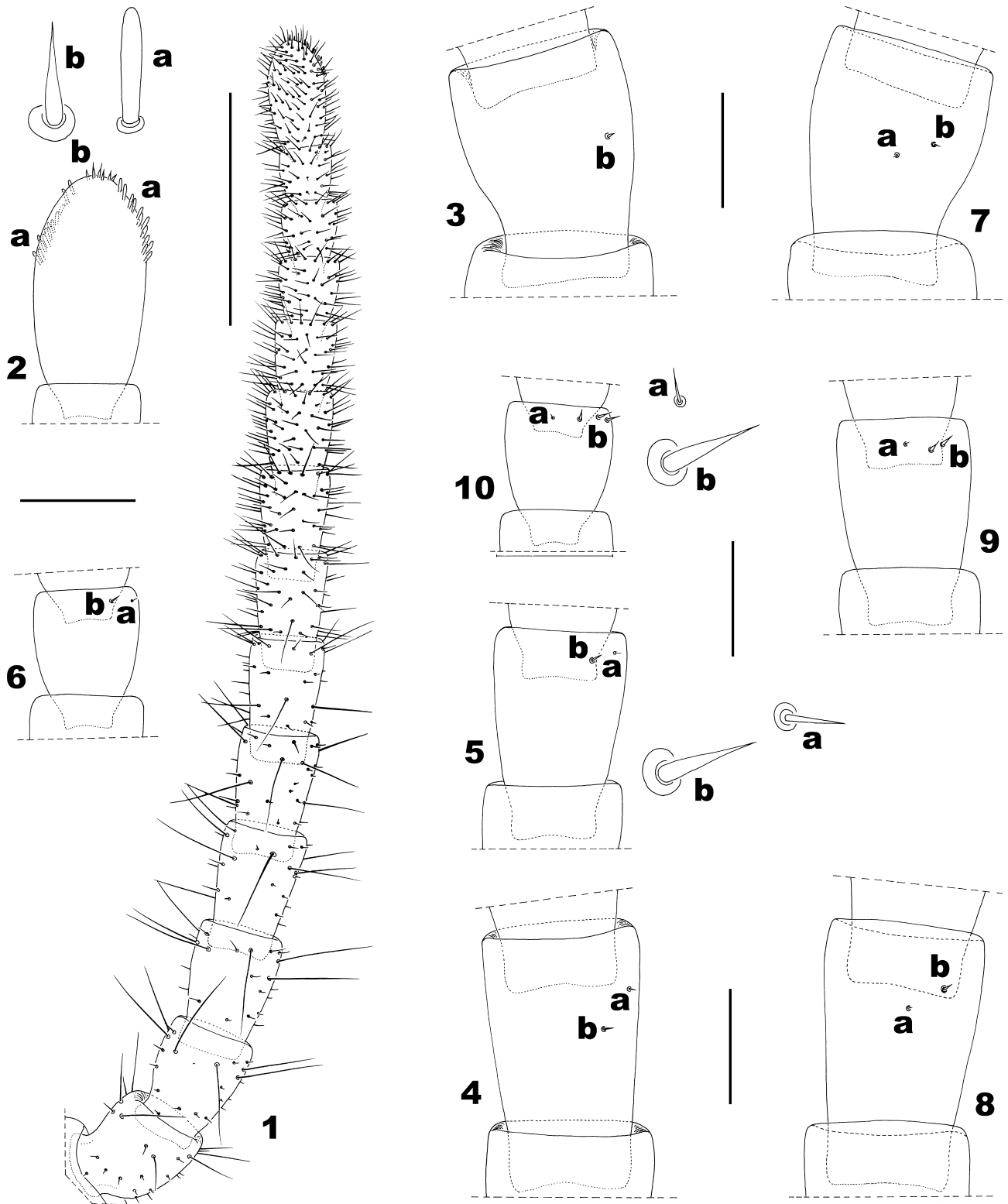
	<i>P. roigi</i>	<i>P. gracilis</i>
Number of leg-bearing segments	43 (♀)	67 (♀)
Body length	18 mm (♀)	40 mm (♀)
Body width	0.70 mm (♀)	1.00 mm (♀)
Color	ground color pale orange, forcipular segment darker ocher - ferrugineous	color pale yellow, head barely darker
Posterior limit of undivided pore-fields on anterior region of the body	up to <i>ca.</i> metasternite 11	up to <i>ca.</i> metasternite 25
Shape of single pore-fields of anterior region of the body	as in Figs. 24–29	large, rounded
Shape of metasternite of ultimate leg-bearing segment	as in Fig. 46	very broad at the anterior margin, strongly narrowed at the rear end, posterior edge straight, lateral sides rounded
Coxal pores	a few distributed along the membrane between coxopleuron and metasternite, the others dispersed on the remaining ventral and lateral surfaces (Figs. 46, 47)	all distributed along the membrane between coxopleuron and metasternite
Anal organs	present (Figs. 46: c, 50: b)	absent

**Type material examined.** CHILE: Region X (de Los Lagos region): Palena province: Chaitén: El Amarillo, December 12, 1986, S. A. Roig-Juñent coll.: holotype ♀ with 43 leg-bearing segments, body length 18 mm, in ethanol, head detached from trunk (MLP-Ar 19441).

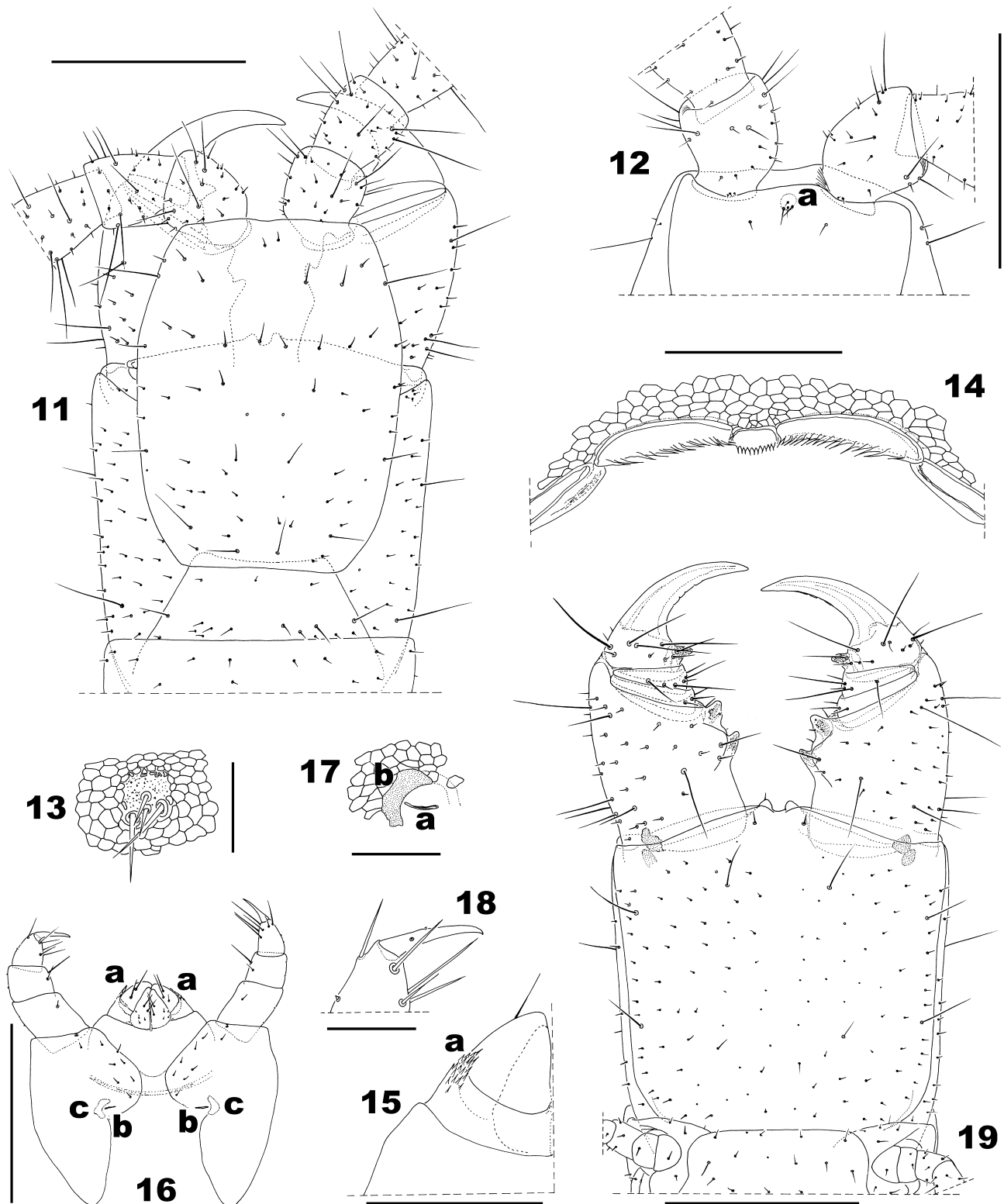
**Depository of type.** MLP-Ar.

**Description.** Female holotype (adult). *General features.* Forty three leg-bearing segments, body length 18 mm, maximum body width 0.70 mm, maximum width of cephalic plate 0.54 mm, length of cephalic plate 0.72 mm, maximum width of forcipular coxosternite 0.70 mm. Colour (of preserved specimen in ethanol): forcipular segment bright ferrugineous, rest of the body pale orange-brownish.

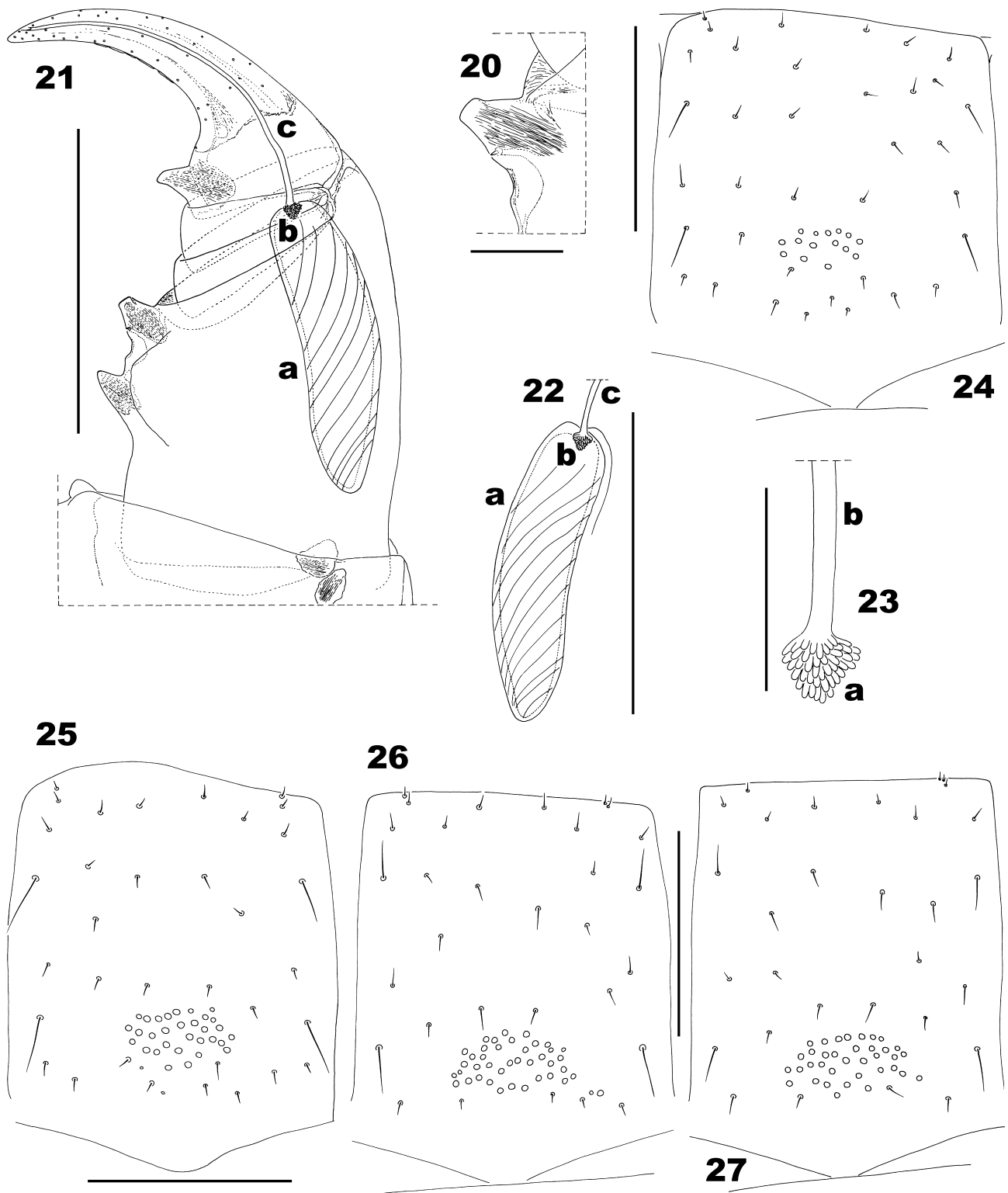
*Antennae.* About 2.90 times as long as the cephalic plate, ratio of width of a.a. II/width of a.a. XIV 1.55: 1. A.a. I nearly as long as wide, remaining a.a. longer than wide. Length/width ratio of a.a. XIV 2.05: 1. Ventral chaetotaxy: setae on a.a. I–VII of various lengths and relatively few in number, those on a.a. VIII–XIV progressively shorter and more numerous towards the tip of the appendage (Fig. 1). Dorsal chaetotaxy: setae slightly shorter and less numerous than on ventral side. A.a. XIV with 13 claviform sensilla on the external margin and 12 on the internal margin (Fig. 2: a); distal end of this a.a. with *ca.* 5–6 very small hyaline specialized sensilla not split apically (Fig. 2: b). Ventral and dorsal surface of a.a. II, V, IX and XIII with very small specialized sensilla. Ventrally, sensilla restricted to a middle and apical latero-internal area (Figs. 3–6), and represented by two different types: *a* and *b*. Type *a* sensilla very thin, not split apically (Fig. 5: a); type *b* sensilla (Fig. 5: b) thicker and very similar to those of the apex of a.a. XIV. Specialized sensilla on dorsal side restricted to a middle and apical latero-external area (Figs. 7–10) and represented by two different types: *a* similar to *a* of ventral side, but proportionally much shorter (Fig. 10: a), and *b* similar to *b* of ventral side (Fig. 10: b). Number and distribution of specialized sensilla on ventral and dorsal sides of a.a. II, V, IX and XIII, as in Table 2.



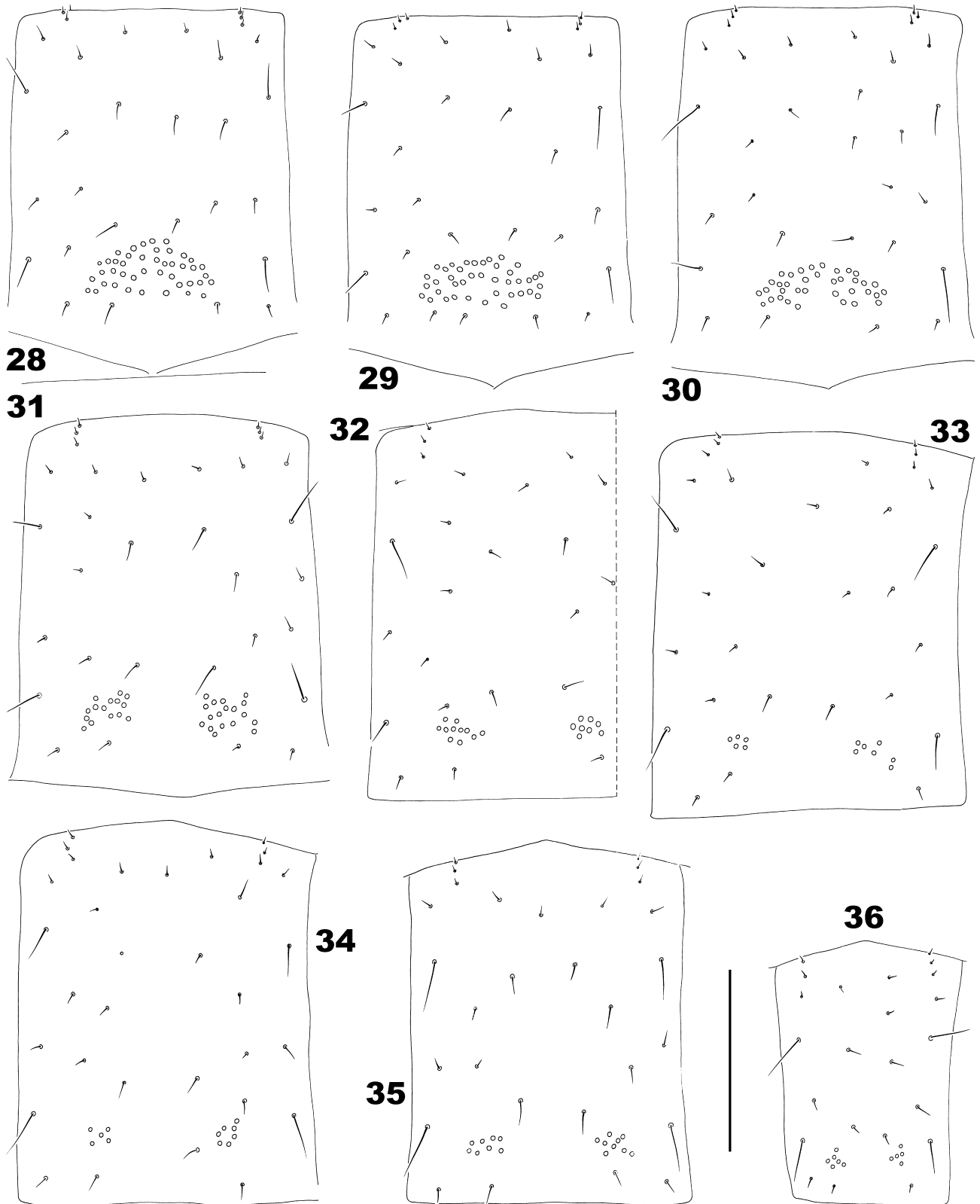
**FIGURES 1–10.** *Plateurytion roigi* sp. nov. (female holotype (MLP-Ar 19441)): (1) Right antenna, ventral. (2) Right a.a. XIV, ventral (a: claviform sensilla, b: apical specialized sensilla). (3) Right a.a. II, ventral (b: *b* type sensilla). (4) Right a.a. V, ventral (a, b: *a, b* type sensilla). (5) Right a.a. IX, ventral (a, b: *a, b* type sensilla). (6) Right a.a. XIII, ventral (a, b: *a, b* type sensilla). (7) Right a.a. II, dorsal (a, b: *a, b* type sensilla). (8) Right a.a. V, dorsal (a, b: *a, b* type sensilla). (9) Right a.a. IX, dorsal (a, b: *a, b* type sensilla). (10) Right a.a. XIII, dorsal (a, b: *a, b* type sensilla). Scale bars: 0.1 mm (2–10); 0.4 mm (1).



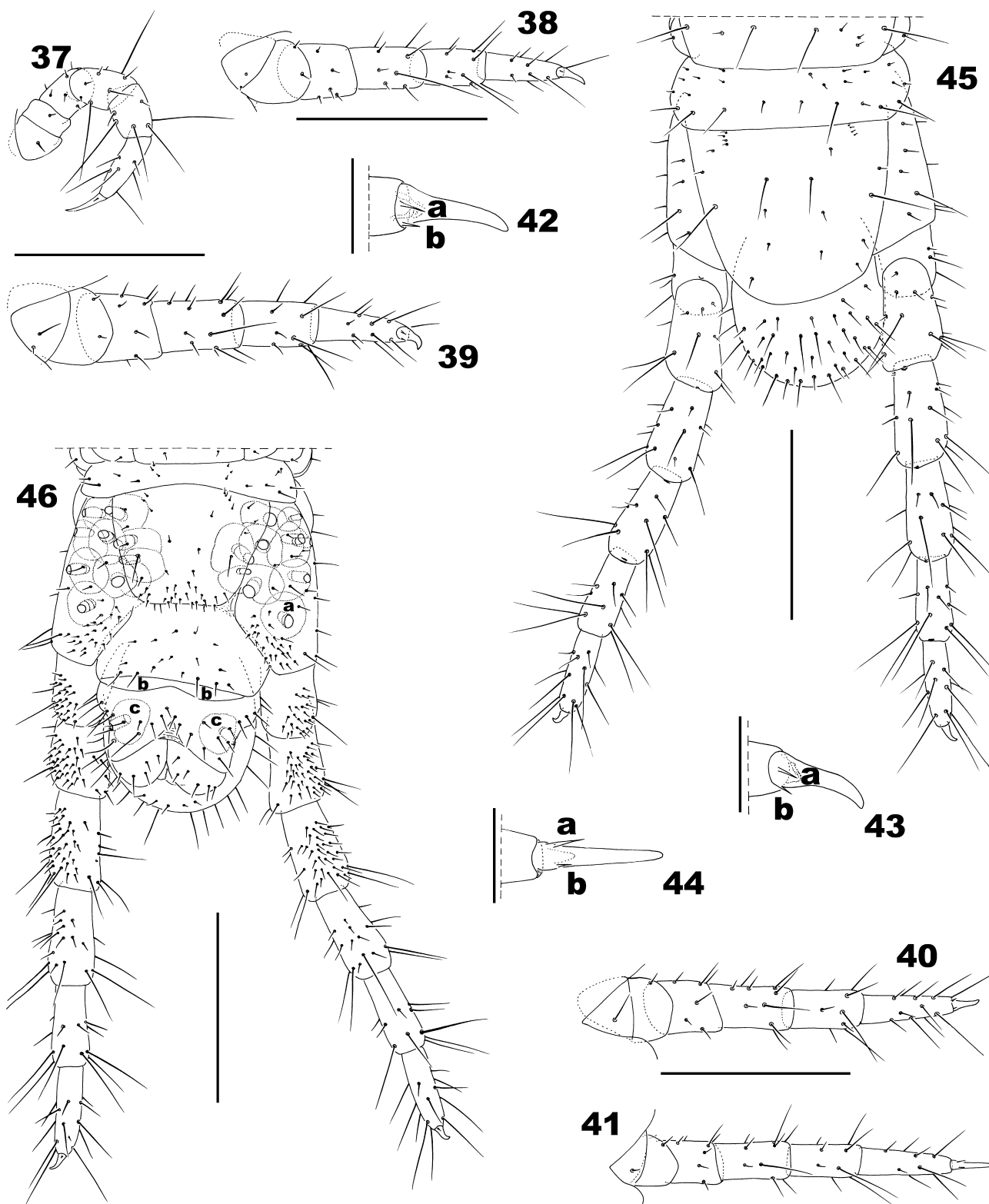
**FIGURES 11–19.** *Plateurytion roigi* sp. nov. (female holotype (MLP-Ar 19441)): (11) Dorsal view of anterior region of the body, showing cephalic plate, bases of antennae, forcipular segment, and anterior portion of leg-bearing segment I. (12) Clypeus and bases of antennae (a: clypeal area). (13) Detail of clypeal area. (14) Labrum. (15) Left side of first maxillae, dorsal (a: lappet of telopodite). (16) First and second maxillae, ventral (a: lappets of telopodites of first maxillae, b: metameric pore of coxosternites of second maxillae, c: sclerotized rim). (17) Detail of sclerotized rim (b) in right coxosternite of second maxillae, ventral (a: metameric pore). (18) Claw of right telopodite of second maxillae, ventral. (19) Forcipular segment and anterior portion of leg-bearing segment I, ventral. Scale bars: 0.05 mm (13, 17, 18); 0.1 mm (14, 15); 0.3 mm (16); 0.4 mm (11, 12, 19).



**FIGURES 20–27.** *Plateurytion roigi* sp. nov. (female holotype (MLP-Ar 19441)): (20) Detail of distal tooth on medial edge of left forcipular trochanteroprefemur, ventral. (21) Detail of poison gland (a), calyx (b), and duct (c) of venom apparatus in left forcipular telopodite, ventral. (22) Detail of poison gland (a), calyx (b), and duct (c) of left venom apparatus, dorsal. (23) Detail of calyx of poison gland (a) of left venom apparatus, ventral (b: duct). (24) Metasternite 2. (25) Metasternite 3. (26) Metasternite 6. (27) Metasternite 9. Scale bars: 0.05 mm (20, 23); 0.2 mm (24–27); 0.3 mm (21, 22).

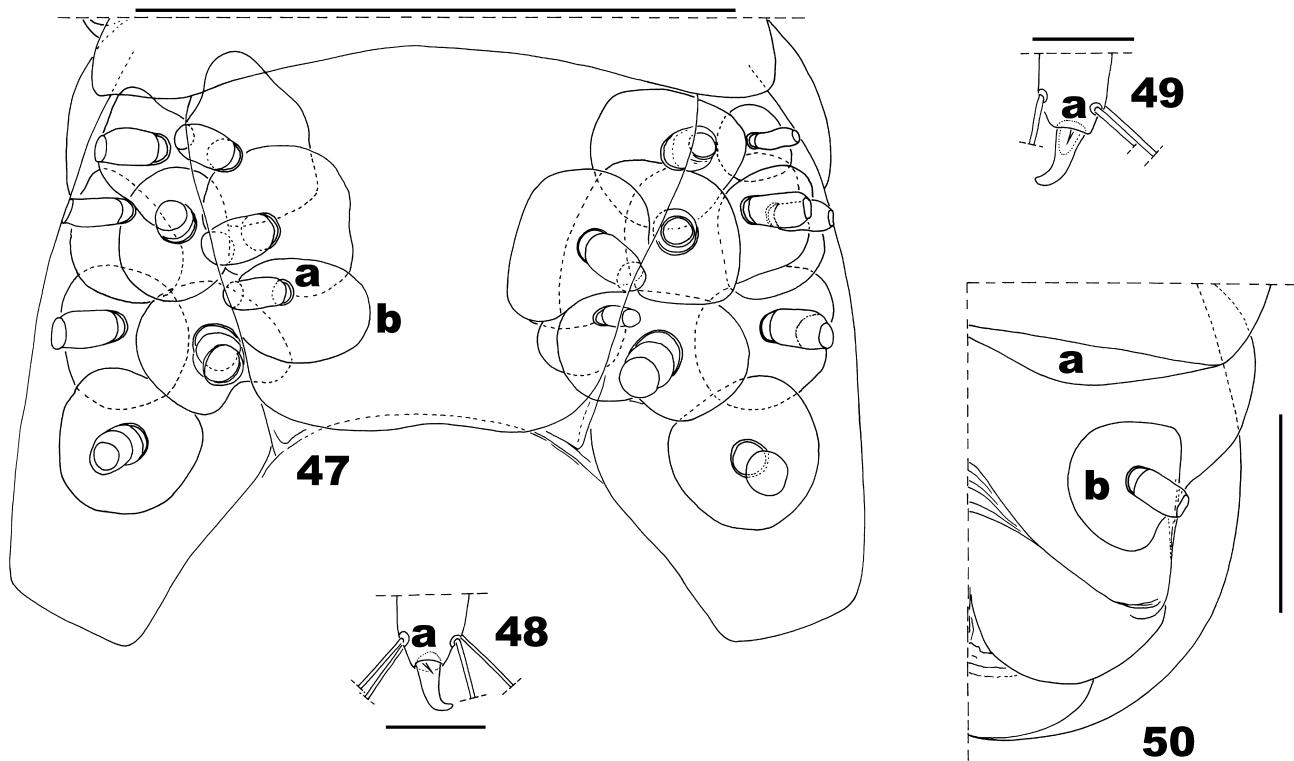


**FIGURES 28–36.** *Plateurytion roigi* sp. nov. (female holotype (MLP-Ar 19441)): (28) Metasternite 10. (29) Metasternite 11. (30) Metasternite 12. (31) Metasternite 13. (32) Metasternite 17 (left portion omitted). (33) Metasternite 21. (34) Metasternite 30. (35) Metasternite 36. (36) Metasternite 42. Scale bar: 0.2 mm.



**FIGURES 37–46.** *Plateurytion roigi* sp. nov. (female holotype (MLP-Ar 19441)): (37) Left leg (pair 1), anteroventral view. (38) Left leg (pair 2), ventral view. (39) Left leg (pair 9), ventral view. (40) Left leg (pair 20), ventral view. (41) Left leg (pair 42), ventral view. (42) Claw of the left leg (pair 3), anteroventral view (a: anterior spine, b: posterior spine). (43) Claw of the left leg (pair 26), anteroventral view (a: anterior spine, b: posterior spine). (44) Claw of the left leg (pair 42), ventral view (a: anterior spine, b: posterior spine). (45) Ultimate leg-bearing segment and postpedal segments, dorsal. (46) Ultimate leg-bearing segment and postpedal segments, ventral (a: coxal organ, b: gonopod, c: anal organ). Scale bars: 0.05 mm (42–44); 0.3 mm (37–41, 45, 46).





**FIGURES 47–50.** *Plateurytion roigi* sp. nov. (female holotype (MLP-Ar 19441)): (47) Coxal organs, ventral (a: mucous layer, b: contour of lobe). (48) Claw of the left ultimate leg, ventral-internal view (a: single internal spine). (49) Claw of the right ultimate leg, ventral-internal view (a: single internal spine). (50) Left side of postpedal segments, ventral (a: gonopod, b: anal organ). Scale bars: 0.05 mm (48, 49); 0.1 mm (50); 0.3 mm (47).

**TABLE 2.** Number of type *a* and *b* sensilla on a.a. II, V, IX and XIII in the female holotype of *Plateurytion roigi* sp. nov. (MLP-Ar 19441).

A.a.	Ventral		Dorsal		Figs.
	<i>a</i>	<i>b</i>	<i>a</i>	<i>b</i>	
II	–	1	1	1	3, 7
V	1	1	1	1	4, 8
IX	1	1	1	2	5, 9
XIII	1	1	1	3	6, 10

**Remarks.** The original source for the nomenclature of specialized sensilla, is Pereira *et al.* (1995).

**Cephalic plate.** Distinctly longer than wide (length/width ratio *ca.* 1.30: 1), without a distinct frontal sulcus. Anterior margin very slightly concave at middle; lateral margins slightly convex; posterior margin slightly concave; anterior and posterior sides, curved. Shape and chaetotaxy as in Fig. 11.

**Clypeus.** Four setae located on the clypeal area; posteriorly accompanied by 1 + 1 setae at either side (Fig. 12). Clypeal area with surface minutely punctate or granulate not areolate (Figs. 12: a, 13).

**Labrum.** Mid-piece slightly pigmented, well-developed with 10 short distinct teeth. Side-pieces with *ca.* 13 + 16 hyaline filaments (Fig. 14).

**Mandible.** Pectinate lamella with *ca.* 14 hyaline teeth.

**First maxillae.** Coxosternite without lappets, telopodites with small lappets (Fig. 15: a). Coxosternite devoid of setae; coxal projections subtriangular, well-developed, round tipped and provided with 2 + 2 large setae and 4 + 4 small setae (Fig. 16). Apical article of telopodites with 2 + 3 setae on ventral side (Fig. 16).

**Second maxillae.** Coxosternites medially joined through a narrow, hyaline and non-areolate membranous isthmus only, and with 8 + 8 setae near the internal margins (Fig. 16). Antero-internal corners of coxosternites without processes (Fig. 16). Metameric pores accompanied by a sclerotized, not elongated rim (Figs. 16: c, 17: b).

Articles of telopodites without distoectal processes; apical claw well-developed, a little shorter than the third article, shape as in Figs. 16, 18. Chaetotaxy of coxosternite and telopodites as in Fig. 16.

*Forcipular segment.* Telopodites, when extended, almost attaining the end of a.a. II (Fig. 11). Forcipular tergite trapeziform, anterior and posterior margins respectively covered by the cephalic plate and the tergite of the first leg-bearing segment; chaetotaxy represented by *ca.* 14 large and short setae distributed as in Fig. 11. Coxosternite without chitin-lines, middle part of anterior margin slightly notched and concave, provided with 1 + 1 slightly pigmented denticles bearing 1 + 0 dorsal small setae, aspect and relative size as in Figs. 19, 21. Telopodites: medial edge of trochanteroprefemur with two teeth, both deeply pigmented, relative size and shape as in Figs. 19–21; ratio width of trochanteroprefemur at level of distal basal part of apical tooth/width of trochanteroprefemur at level of distal basal part of proximal tooth *ca.* 0.87: 1. Femur and tibia without denticles. Tarsungulum basally with a well-developed, round tipped and deeply pigmented subtriangular tooth (Figs. 19, 21); ventral and dorsal medial edges of forcipular tarsungulum not serrate, ventral edge very slightly crenulate (Figs. 19, 21). Relative size of poison glands as in Figs. 21, 22: a; calyx of poison gland subtriangular in shape (Figs. 21, 22: b, 23: a). Chaetotaxy of coxosternite and telopodites as in Fig. 19.

*Metasternites of leg-bearing segments 1 to penultimate.* Pore-fields present in an uninterrupted series from metasternite 2 to penultimate inclusive, fields undivided on metasternites 2–11, incompletely divided on metasternite 12 (Fig. 30), divided in two subsymmetrical areas on metasternites 13–42. Shape and relative size of pore-fields changing along the trunk as in Figs. 24–36. Number of pores on selected metasternites as follows: metasternite 2 (15 pores); 3 (31); 6 (41); 9 (36); 10 (43); 11 (40); 12 (36); 13 (15 + 18); 17 (11 + 8); 21 (5 + 7); 30 (5 + 7); 36 (8 + 9); 42 (6 + 5).

*Legs (pair 1 to penultimate).* Ratio of length of first pair/length of second pair *ca.* 0.79: 1 (relative size as in Figs. 37, 38). Chaetotaxy similar throughout the whole body length (Figs. 37–41). Claws with two thin and pale accessory spines ventrobasally, one anterior (Figs. 42–44: a) and one posterior, shorter (Figs. 42–44: b).

*Ultimate leg-bearing segment.* Intercalary pleurites absent at both sides of the ultimate pretergite; ultimate presternite not divided along the sagittal plane; length/width ratio of metatergite 0.86: 1; length/width ratio of metasternite 0.76: 1. Shape and chaetotaxy of metatergite and metasternite as in Figs. 45, 46. Coxopleura slightly protruding at distal-internal ventral ends, setae small and numerous distributed on the internal ventral area, the remaining coxopleural surface with few small and larger setae (Figs. 45, 46). Coxopleura with 9 + 10 single (“homogeneous” *sensu* Brölemann & Ribaut 1912) coxal organs, opening independently; a few coxal pores placed near the membrane between coxopleuron and metasternite, partially covered by the latter, remaining ones dispersed on ventral and lateral surfaces (Figs. 46, 47), dorsal side of coxopleura devoid of coxal pores (Fig. 45); internal cuticular structure of coxal organs as in Fig. 47 (a: mucous layer, b: contour of lobe). Telopodites of ultimate legs with six articles, shape and chaetotaxy as in Figs. 45, 46. Length of telopodites of ultimate legs/length of metasternite *ca.* 4.21: 1. Ultimate pretarsus unguiform, bearing a single internal spine ventrobasally (Figs. 48, 49: a).

*Postpedal segments.* Intermediate tergite with posterior margin strongly convex, bearing numerous small and large setae (Fig. 45); intermediate sternite seemingly covered by the metasternite of the ultimate leg-bearing segment; posterior margin of first genital sternite slightly concave (Fig. 46). Gonopods uniaarticulate not separated on the middle line (Figs. 46: b, 50: a). Anal organs present (Figs. 46: c, 50: b).

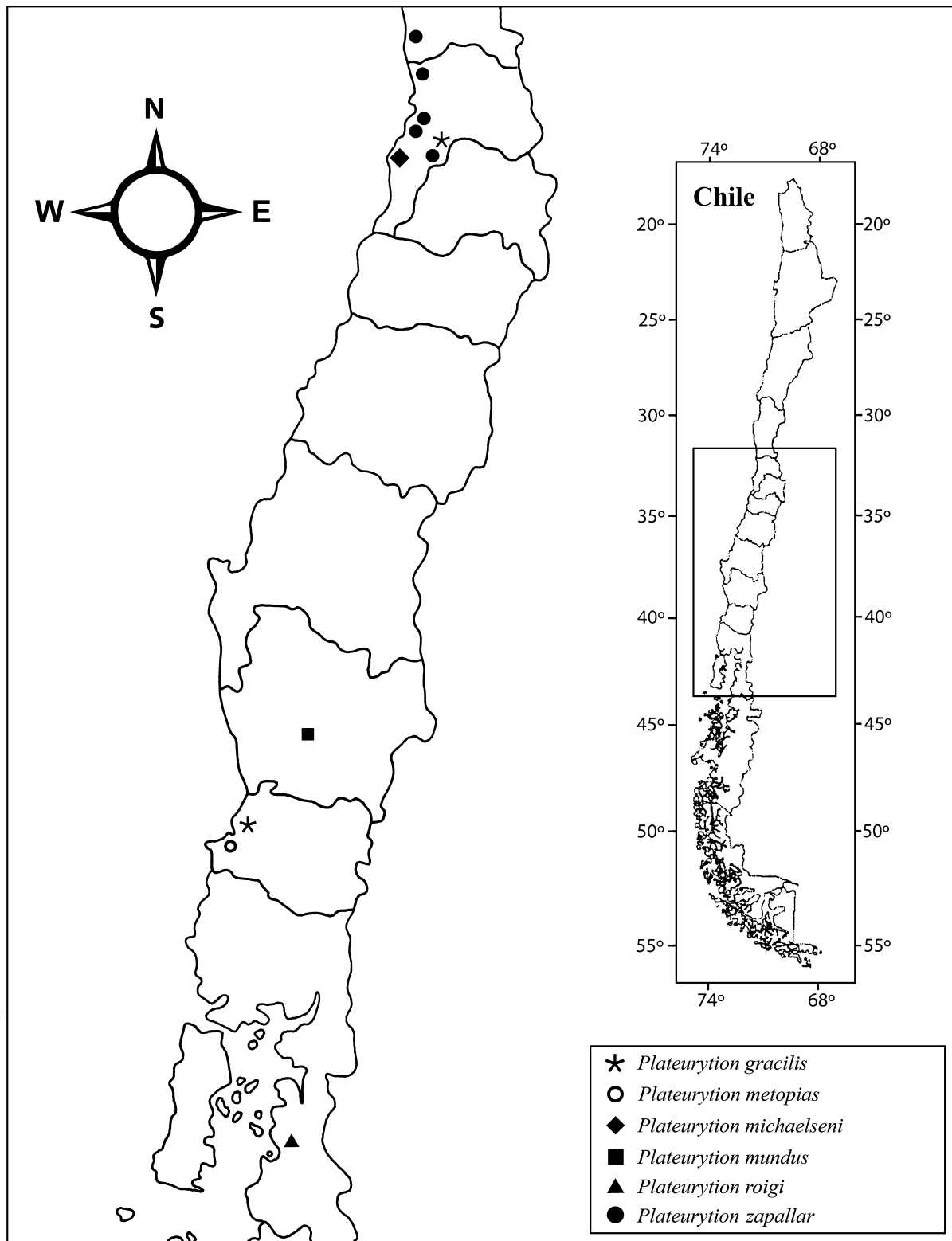
*Male.* Unknown.

**Etymology.** The new species is respectfully dedicated to the collector of the type specimen Dr. Sergio Alberto Roig-Juñent, researcher of the CONICET, working at the Instituto Argentino de Investigaciones de las Zonas Áridas (IADIZA), Mendoza, Argentina.

**Ecology.** The holotype was collected in the soil, at about 800 m a.s.l., in a temperate rain forest environment, the Valdivian forest, which occurs on the west coast of southern South America, lying mostly in Chile extending into small parts of Argentina, from roughly 37° to 48° south latitude. (Details on altitudinal levels, floristic, and faunal components of this forest, can be consulted in Cabrera and Willink 1973; Morrone 2015).

**Type locality.** See above.

**Known range.** Only known from the type locality.



**FIGURE 51.** Distribution records of *Plateurytion gracilis* (Gervais, 1849), *Plateurytion metopias* (Attems, 1903), *Plateurytion michaelseni* (Attems, 1903), *Plateurytion mundus* (Chamberlin, 1955), *Plateurytion roigi* sp. nov., and *Plateurytion zapallar* (Chamberlin, 1955).

## ***Plateurytion mauryi* Pereira, 2008**

*Plateurytion mauryi* Pereira, 2008: 80

*Plateurytion mauryi*: Pereira, 2015: 510, 535 (in key)

**New material examined.** ARGENTINA: Mendoza province: Las Heras department: Puente del Inca, 32°49' S, 69°55' W, ca. 2.933 m a.s.l., 28 December 1981, A. H. Roig-Alsina coll.: 1 ♀ with 65 leg-bearing segments, body length 40 mm (MACN-My 31). San Juan province: Calingasta department: Sierra del Tontal, 16.91 km E of Barreal, S31.62592° W69.27496°, 2627 m a.s.l., 4-6 November 2013, C. J. Grismado *et al.* coll.: 1 ♀ with 61 leg-bearing segments, body length 42 mm (MACN-My 32); Iglesia department: Paso Agua Negra, km 110, 3250 m a.s.l., 23 January 1982, A. H. Roig-Alsina coll.: 4 ♀♀ with 65 leg-bearing segments, body length 35, 40, 42, 43 mm, 1 ♀ with 63 leg-bearing segments, body length 35 mm (MACN-My 33); Angaco department: Sierra de Pie de Palo, Cerro Mogote Corralitos, ca. 3200 m a.s.l., 11-12 November 1980, E. A. Maury coll.: 3 ♀♀ with 61 leg-bearing segments, body length 34, 34, 42 mm (MACN-My 34).

**Remarks.** This high altitude species was currently known from the female holotype only, from Mendoza province; the three latter localities cited above represent the first records of this taxon from San Juan province.

**Variation.** Holotype female with 63 leg-bearing segments, body length 30 mm (additional female from the same locality as the holotype, with 65 leg-bearing segments, body length 40 mm). According to the new material listed herein, females having either 61, 63 or 65 leg-bearing segments, and body length ranging from 30 to 43 mm in adult specimens. (Male, unknown).

**Type locality.** ARGENTINA: Mendoza province: Las Heras department: Puente del Inca, ca. 2.933 m a.s.l. (32°49' S, 69°55' W).

**Known range.** ARGENTINA: Mendoza province: Las Heras department. San Juan province: Calingasta department; Iglesia department; Angaco department.

## ***Plateurytion yungarum* (Pereira, 2005)**

*Eurytion yungarum* Pereira, 2005: 3

*Eurytion yungarum*: Pereira, 2006: 153, 165, 167 (in key)

*Plateurytion yungarum*: Bonato, Pereira & Minelli, 2007: 6; Pereira, 2008: 56, 80, 81, 91; Pereira, 2015: 535 (in key).

**New material examined.** ARGENTINA: Jujuy province: Ledesma department: Parque Nacional Calilegua (near monolith), ca. 1700 m a.s.l., 9 August 1997, M. J. Ramírez and L. Compagnucci coll.: 1 ♀ with 53 leg-bearing segments, body length 27 mm (MACN-My 35).

**Remarks.** This species inhabiting the Yungas rainforests of northwestern Argentina (Yungas biogeographic province), is currently known from only two specimens, both collected in the montane forest altitudinal level: male holotype, with 49 leg-bearing segments, body length 19 mm (from Jujuy province: Ledesma department: ca. 50 km W of Fraile Pintado, ca. 900 m a.s.l.), and a female specimen with 53 leg-bearing segments, body length 24 mm (from Jujuy province: Ledesma department: Parque Nacional Calilegua, entry area, ca. 605 m a.s.l.). The present new specimen, as the latter, comes from Parque Nacional Calilegua, but it was collected in a different area of the park, at ca. 1700 m a.s.l. (montane cloud forest altitudinal level). (For details on geographic location; floristic and faunal components of the Argentinian Yungas, see Cabrera 1971; Cabrera and Willink 1973; Brown 1995; Prado 1995; Pereira 2005, 2006, 2016; Guielbert & Montemayor 2010; Morrone 2014).

**Type locality.** ARGENTINA: Jujuy province: Ledesma department: ca. 50 km W of Fraile Pintado.

**Known range.** ARGENTINA: Jujuy province: Ledesma department.

## **Discussion**

*P. roigi* sp. nov. (from Region X (de Los Lagos region)), is the sixth species of the genus *Plateurytion* described from Chile. The others (distributed as follows) are: *P. gracilis* (Gervais, 1849) (from Region XIV (de Los Rios region): Valdivia province: Valdivia. Region V (Valparaíso region): Marga-Marga province: Quilpué); *P. metopias*

(Attems, 1903) (from Region XIV (de Los Rios region): Valdivia province: Corral); *P. michaelsoni* (Attems, 1903) (from Region V (Vaparaíso region): Valparaíso province: Valparaíso); *P. mundus* (Chamberlin, 1955) (from Region IX (Araucanía region): Cautín province: 35 km E of Temuco); and *P. zapallar* (Chamberlin, 1955) (from Region IV (Coquimbo region): Elqui province: 11 Km N of Los Vilos. Region V (Valparaíso region): Petorca province: Zapallar; Quebrada Huaquén, Pichicuy. Quilota province: La Campana National Park. Valparaíso province: Quebrada el Tigre, Cachagua). (Distribution records of the aforementioned species as in Fig. 51).

A key to South American species of *Plateurytion* can be found in Pereira (2015); *P. roigi* sp. nov., may be incorporated in the couplet “8” of that key, together with *P. gracilis* (grouping both species on the basis of absence of coxal pores on dorsal surface of the coxopleura of the ultimate leg-bearing segment), but either present on ventral surface only, restricted along the membrane between coxopleuron and metasternite (*P. gracilis*), either dispersed on ventral and lateral surfaces (*P. roigi*). (Both species may be differentiated in detail, as explained in Table 1 included above).

Of the fifteen genera of geophilid centipedes currently recorded from Chile, eight (*Chilenophilus*, *Filipponus*, *Nicopus*, *Orinomerium*, *Pandineum*, *Schizonium*, *Synerium*, and *Ketampa*) are only known from this country (possibly endemic to it); while the remaining seven taxa, are widespread elsewhere as follows: *Apogeophilus* (also occurs in Argentina); *Pachymerinus* (in Argentina, Australia); *Pachymerium* (in the Palearctic Region, Nearctic Region, Cuba, Galapagos Ids., Madeira Ids., South Africa, Madagascar, New Zealand); *Plateurytion* (in Peru, Argentina, Uruguay, sub-Saharan Africa); *Polycricus* (in Mexico, Costa Rica, British West Indies, Florida, Cuba, Panama, Guatemala, Haiti, Honduras, Ecuador); *Schendylodes* (in Argentina); and *Tuoba* (in Ascension Id., Saint Helena Id., Virgin Ids., Canary Ids., Greece, Sudan, Japan, Australia, New Zealand, New Caledonia, Salomon Ids., Seychelles, Papua New Guinea, Hawaiian Ids., Federal States of Micronesia).

For considerations on endemism and affinities of the aforementioned genera, see Pereira *et al.* (1997).

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