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Research article

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Two new species of *Sarinda* Peckham & Peckham, 1892, with an update on Sarindini in Uruguay (Araneae: Salticidae)

Damián HAGOPIÁN [1,*], Abel A. BUSTAMANTE [2], Álvaro LABORDA [3] & Miguel SIMÓ [4]

[1,3,4]Sección Entomología, Facultad de Ciencias, Universidad de la República, Iguá 4225, PC 11400, Montevideo, Uruguay.
[2]Museu Paraense Emílio Goeldi, Coordenação de Zoologia, Laboratório de Aracnologia, Av. Perimetral, 1901, Terra Firme, CEP 66077−830, Belém, Pará, Brazil.

[*]Corresponding autor: dhagopian@fcien.edu.uy
[2]Email: a.bustamanteferrada@gmail.com
[3]Email: alaborda@fcien.edu.uy
[4]Email: simo@fcien.edu.uy

[1]urn:lsid:zoobank.org:author:B93E6659-7528-4230-B272-D3EBDAAFD5BB
[2]urn:lsid:zoobank.org:author:AB7BF4CC-3277-4376-99B9-8F12D9C00E6E
[3]urn:lsid:zoobank.org:author:DA4C0AC7-9EDB-497A-9BEC-197DA843ED9C
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Abstract. *Sarinda sombraluminosa* Hagopián, Laborda & Simó sp. nov. and *Sarinda contraluz* Hagopián & Bustamante sp. nov. are described from Uruguay based on males and females. New records of *Parafluda banksi* Chickering, 1946 and *Sarinda marcosi* Piza, 1937 for the country are provided. Illustrations and electron micrographs of sexual characters, photographs of alive specimens, natural history data and a distribution map of species of Sarandini from Uruguay are provided.

Keywords. Ant-like, Salticinae, Amycoida, *Parafluda*.

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Introduction

The species of the jumping spider tribe Sarindini Simon, 1901 are relatively poorly known. These jumping spiders of the Americas are characterized by mimicking ants in behavior and morphology (Galiano 1965, 1967, 1971), likely representatives of the genera *Formica* Linnaeus, 1758 and *Camponotus* Mayr, 1861 (Maddison 2015). A recent study on *Sarinda marcosi* Piza, 1937 revealed that the ant-like model of this species is *Camponotus mus* Roger, 1863 based on the defensive mimicry (Hagopián *et al.* 2021).

Currently, the Sarindini is composed of 45 species divided into seven genera: *Corcovetella* Galiano, 1975; *Martella* Peckham & Peckham, 1892; *Parafluda* Chickering, 1946; *Sarinda* Peckham & Peckham, 1892; *Simprulla* Simon, 1901; *Tanybelus* Simon, 1902 and *Zuniga* Peckham & Peckham,

1892 (Maddison 2015; World Spider Catalog 2023). The richest genus in this tribe is *Sarinda*, with 16 described species, followed by *Martella* (12 species) and *Corcovetella*, *Simprulla* and *Zuniga* (two species each). *Parafluda* and *Tanybelus* are monotypic (World Spider Catalog 2023).

According to Galiano (1965, 1996), the genus *Sarinda* resembles *Martella*, but males of *Sarinda* do not have the proximal ectal apophysis on the cymbium, which is present in males of *Martella*. Additionally, females of *Sarinda* present two main groups, based on genitalic patterns. One of these groups ("group 1") presents two pairs of spermathecae and the spiraled median copulatory ducts (common also in "group 2"), while those of *Martella* always have one pair of spermathecae and a membranous compartment from which spermathecal and glandular ducts originate (see Galiano 1964). On the other hand, Galiano's "group 2" of *Sarinda* presents the copulatory duct slightly dilated, not forming a second pair of spermathecae (Galiano 1964).

From recent surveys in Uruguay, we found specimens that agree with the diagnosis proposed for "group 1" of *Sarinda* (see Galiano 1965: 268) and do not correspond with the currently known species of this genus. Also, we found new records of other species for its tribe. Therefore, the aim of this study is to describe two new species of *Sarinda* from Uruguay, as well as to provide new data on the distribution and natural history of the species of Sarandini in the country.

Material and methods

Specimens are deposited in the arachnological collection of the Facultad de Ciencias, Universidad de la República (UdelaR), Montevideo, Uruguay (FCE-Ar, M. Simó) and the Spencer Entomological Collection, Beaty Biodiversity Museum, Vancouver, Canada (UBCZ, W. Maddison). Measurements are in millimeters. Total length includes anterior median eyes and anal tubercle (Edwards 2004). Color images were obtained using a Leica M205 A stereo microscope, attached to a Leica DMC 2900 camera enabled with the Leica LAS-X-Z and SW software. Photographs of female genitalia were taken with a Nikon D3500 digital camera attached to a microscope and images were stacked using Helicon Focus 7 ver. 7.6.4 Lite software. Also, we took electron micrographs of somatic and genital features with a JEOL 5900 Scanning Electron Microscope from the Servicio de Microscopía Electrónica de Barrido, Facultad de Ciencias, Universidad de la República (UdelaR). Drawings were made using a Wacom Intuos Pro pen tablet and SketchBook ver. 8.7.1 illustration software (https://sketchbook.com) following Cala-Riquelme (2021). Female genitalia were cleaned in a solution of trypsin for the digestion of soft tissues and then cleared using clove oil (Levi 1965). Length of embolus is approximated in degrees, starting from the base of the embolus and ending at the part of the embolus where the terminal coil starts (this coil is often at the tip of the embolus); the letter T (turn) in embolus description equals 360°; the length of the embolus was not estimated when the palp was distended (Bustamante & Ruiz 2017), the position of the embolus base is expressed using the position of the hours of the clock (Bustamante & Ruiz 2020). Leg spines are described as in Petrunkevitch (1925), with the modifications of Bustamante & Ruiz (2017); only for femora, patellae, tibiae and metatarsi. In general, ventral spines of tibia are equal size; when not, this is marked with an asterisk (*). In vivo pictures and videos were taken with an Olympus Tough Tg-4 digital camera. Geographic coordinates were taken directly from the labels. In cases when the labels did not give information about geographic coordinates, these were approximated with Google Earth® and marked with square brackets; in cases when an error was detected in the name of a locality, it was corrected and marked with square brackets. The distribution map was created using Simplemappr (Shorthouse 2010).

Abbreviations

Depository institution and curator

FCE-Ar = Arachnological Collection of Facultad de Ciencias, Universidad de la República, Montevideo, Uruguay (M. Simó)

UBCZ = Spencer Entomological Collection, Beaty Biodiversity Museum, Vancouver, Canada (W. Maddison)

Morphology

ac	=	aciniform gland
alS	=	anterior lateral spinneret
ap	=	apical
CD	=	copulatory duct
CO	=	copulatory opening
d	=	dorsal
E	=	embolus
FD	=	fertilization duct
gl	=	gland
ma	=	mastidion
mAP	=	minor ampullate spigot
MAP	=	major ampullate spigot
p	=	prolateral
pi	=	piriform gland
plE	=	posterior lateral eyes
plS	=	posterior lateral spinneret
pmS	=	posterior median spinneret
PS	=	primary spermatheca
r	=	retrolateral
RTA	=	retrolateral tibial apophysis
RvTA	=	retroventral tibial apophysis
S	=	spermatheca
SS	=	secondary spermatheca
v	=	ventral

Results

Class Arachnida Cuvier, 1812
Order Araneae Clerck, 1757
Family Salticidae Blackwall, 1841
Subfamily Salticinae Blackwall, 1841
Tribe Sarindini Simon, 1901

Genus ***Sarinda*** Peckham & Peckham, 1892

Type species

Sarinda nigra Peckham & Peckham, 1892.

Sarinda sombraluminosa Hagopián, Laborda & Simó sp. nov.
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Figs 1–12, 33

Diagnosis

Among *Sarinda* with an embolus longer than 2T, *S. sombraluminosa* Hagopián, Laborda & Simó sp. nov. can be distinguished from *S. nigra*, *S. capibarae* Galiano,1967, *S. silvatica* Chickering, 1946, *S. marcosi*, and *S. panamae* Galiano, 1965 by having a dorsally curved RvTA and a shorter embolus (3T+90°) (9T or 10T in *S. nigra*, see Galiano 1965: 301, fig. 1; 8T or 9T in *S. capibarae*, see Galiano 1967: 32, fig. 21; 6T or 7T in *S. silvatica*, see Galiano 1965: 301, fig. 4; 4T or 5T in *S. marcosi*, see Galiano 1965: 304, fig. 1 and Hagopián *et al.* 2021: 265, fig. 1e; 4T in *S. panamae*, see Galiano 1965: 304, fig. 2); males of

S. sombraluminosa can be distinguished of *S. ruficeps* (Simon, 1901) by having a curved RvTA pointing to the bulb and longer embolus (2T+90º in *S. ruficeps*, see Müller & Cutler 1989: 75, fig. 5) (Figs 4A–B, 5A–B, 6A–D). Among *Sarinda* with two pairs of spermathecae, *S. sombraluminosa* resemble those of *S. capibarae*, but can be distinguished from those of *S. capibarae* by having shorter copulatory ducts and an internal duct that connects the secondary spermatheca with the primary having four turns around the gland (16 in *S. capibarae*, see Galiano 1967: 32, fig. 23) (Figs 4E–F, 5E–F, 7A–B).

Etymology

The specific epithet is a compound noun in apposition that means 'luminous shadow' in Spanish, because of the contrasting colors of white scales on the chelicerae of the male and on the dark body of both sexes of the species.

Type material

Holotype

URUGUAY • ♂; Montevideo, Melilla; 34.73194° S, 56.32218° W; 18 Apr. 2020; D. Hagopián leg.; in a pile of grass cut with a tractor rotary cutter in grassland; FCE-Ar 13551.

Paratypes

URUGUAY • 1 ♀; same collection data as for holotype; FCE-Ar 5896 • 5 ♂♂, 7 ♀♀; same collection data as for holotype; FCE-Ar 5896.

Other material examined

URUGUAY – **Durazno** • 1 ♂, 3 ♀♀; San Eduardo; 32.59222° S, 55.71194° W; 29 Jan. 2019; G. Pompozzi leg.; FCE-Ar 11400 • 2 ♂♂, 2 ♀♀; same locality as for preceding; 12 Aug. 2019; G. Pompozzi leg.; FCE-Ar 11259. – **Flores** • 1 ♂, 1 ♀; Rincón de Piedra; 33.87750° S, 56.98833° W; 2 May 2019; G. Pompozzi leg.; in grassland; FCE-Ar 11393 • 1 ♀; same locality as for preceding; 21 Oct. 2019; G. Pompozzi leg.; FCE-Ar 11241. – **Montevideo** • 1 ♀; Melilla; 34.73261° S, 56.32110° W; 18 Feb. 2018; D Hagopián leg.; walking on outside wall; FCE-Ar 11214 • 1 ♂, same locality as for preceding; 8 Apr. 2018; D. Hagopián leg.; FCE-Ar 9010 • 1 ♂; same locality as for preceding; 15 May 2018; D. Hagopián leg.; FCE-Ar 9462 • 1 ♂; same locality as for preceding; 9 Dec. 2022; D. Hagopián leg.; FCE-Ar 14008. – **Río Negro** • 1 ♂; Ruta 24 Km 85, Estancia "Las Cadenas"; 32.52742° S, 58.03322° W; 30 Abr. 2020; A. Mailhos leg.; walking on fence (in grassland); FCE-Ar 13561 • 1 ♂; same locality as for preceding; 32.52706° S, 58.03436° W; 7 May 2020; A. Mailhos leg.; walking on fence (in grassland); FCE-Ar 13550 • 1 ♂; same locality as for preceding; 5 Jan. 2021; A. Mailhos leg.; walking on fence (in grassland); FCE-Ar 13778 • 1 ♂; same locality sa for preceding; 32.53036° S, 58.03533° W; 1 May 2021, A. Mailhos leg.; walking on fence (in grassland); FCE-Ar 13563. – **Rivera** • 3 ♂♂, 2 ♀♀; Mi Lucha; 31.43711° S, 55.27094° W; 10 Jul. 2019; G. Pompozzi leg.; in grassland; FCE-Ar 11251 • 1 ♂; Ypoá; 31.73139° S, 55.56972° W; 14 Oct. 2019; G. Pompozzi leg.; in grassland; FCE-Ar 11246 • 1 ♀; same locality as for preceding; 9 Jul. 2019; G. Pompozzi leg.; in grassland; FCE-Ar 11408 • 1 ♀; same locality as for preceding; 12 Feb. 2020; G. Pompozzi leg.; vFCE-Ar 11414.

Description

Male (holotype FCE-Ar 13551)

Color. Carapace black with white scales on face and on back of cephalic constriction. Abdomen as carapace, with slight dorsal constriction in middle and with transversal band of white scales, some of those scales scattered in lower density in posterior region of abdomen (Figs 1D, F, 2A–C, 9A–C). Ventrally black, sternum narrow as shown in Fig. 9D. Spinnerets dark brown. Palps dark brown. Legs I and II ventrally and dorsally yellowish, with lateral sides brown, being only the tarsus of leg I dark brown. Legs III with coxae, trochanter, femur and patella dark brown, tibiae, metatarsus and tarsus as

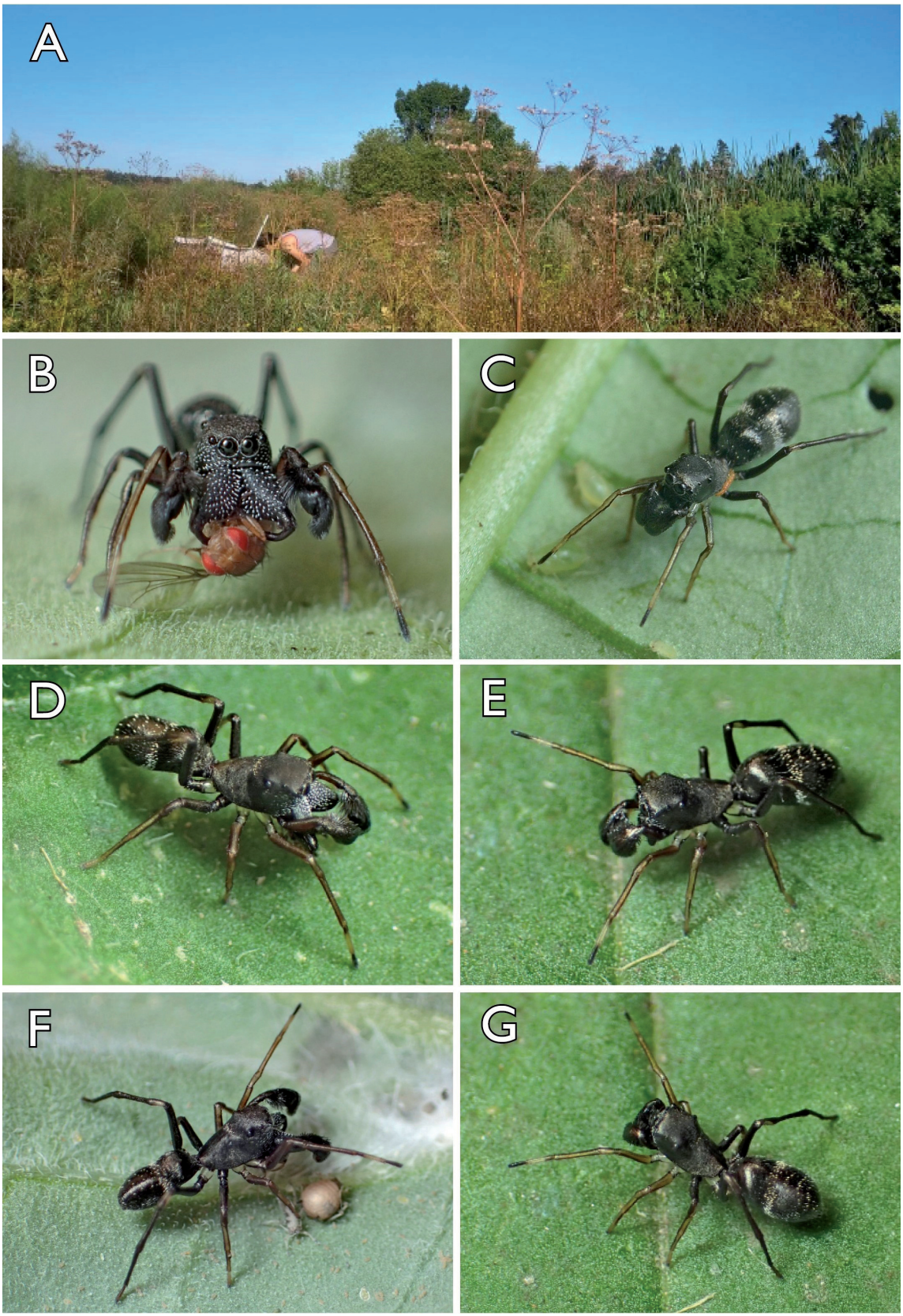

Fig. 1. *Sarinda sombraluminosa* Hagopián, Laborda & Simó sp. nov., photographs in vivo. **A**. Site where the species was collected. **B**, **D**, **F**. Male. **C**, **E**, **G**. Female.

leg II. Leg IV darker, with yellowish coxa and patella, rest of segments dark brown (Figs 1B, D, F, 2A–C, 3A, C). Trichobothria present in tarsus of leg I as shown in Fig. 9E. Cheliceral paturon dark brown with four promarginal teeth (distal one being bigger) and one bigger, not curved, and flat retromarginal tooth. Mastidion near base of claw (Fig. 10A). White spoon-shaped scales homogeneously scattered all over anterior surface of paturon (Figs 1B, D, 3A, 10).

Measurements. Total length 3.80. Carapace length 2.0, width 1.10, height 1.0. AME diameter 0.35. Ocular quadrangle length 0.90. Anterior eye row width 1.0. Posterior eye row width 0.90. Abdomen length 1.80.

Legs. Leg I: femur 1.0, patella 0.50, tibia 1.10, metatarsus 0.70, tarsus 0.40; II: fe 0.80, pa 0.40, ti 0.70, mt 0.55, ta 0.30; III: fe 0.80, pa 0.45, ti 0.70, mt 0.70, ta 0.30; IV: fe 1.40, pa 0.40, ti 1.50, mt 1.50,

Fig. 2. *Sarinda sombraluminosa* Hagopi□n, Laborda □ □im□sp. nov., habitus. **A–C**. Holotype, □ (FCE-Ar 13551). **D–F**. Paratype, □ (FCE-Ar 589□). **A, D**. Dorsal view. **B, E**. Lateral view. **C, F**. Ventral view.

ta 0.35. Leg formula 4132. Leg macrosetae: femur and patella I–IV d0, p0, r0, v0; tibia I v2-2-2; II v1r-1r-1r; III 0, IV v1p; metatarsus I–II v2-2; III v2-1r, p 2ap, r 2ap; IV v2-1r2, p1ap, r2ap, d1p-1p-2.

Palp. Tibia longer than wide; RTA tooth like, curved dorsally, longer than RvTA. RvTA thumb-like, curved ventrally, embolus simple, fixed to tegulum, arising distally (11:00) (3T+90°) (Figs 4A–D, 5A–D, 6).

Abdomen. Male without epiandrous fusules (Fig. 7C–D).

Female (paratype FCE-Ar 5896)

Color. As in male (Figs 1C, E, G, 2D–F, 3B, D). Modified scales present along constriction between cephalic and thoracic regions (Fig. 9A–C).

Measurements. Total length 4.50. Carapace length 2.10, width 1.0, height 0.90. AME diameter 0.30. Ocular quadrangle length 0.80. Anterior eye row width 1.0. Posterior eye row width 1.0. Abdomen length 2.40.

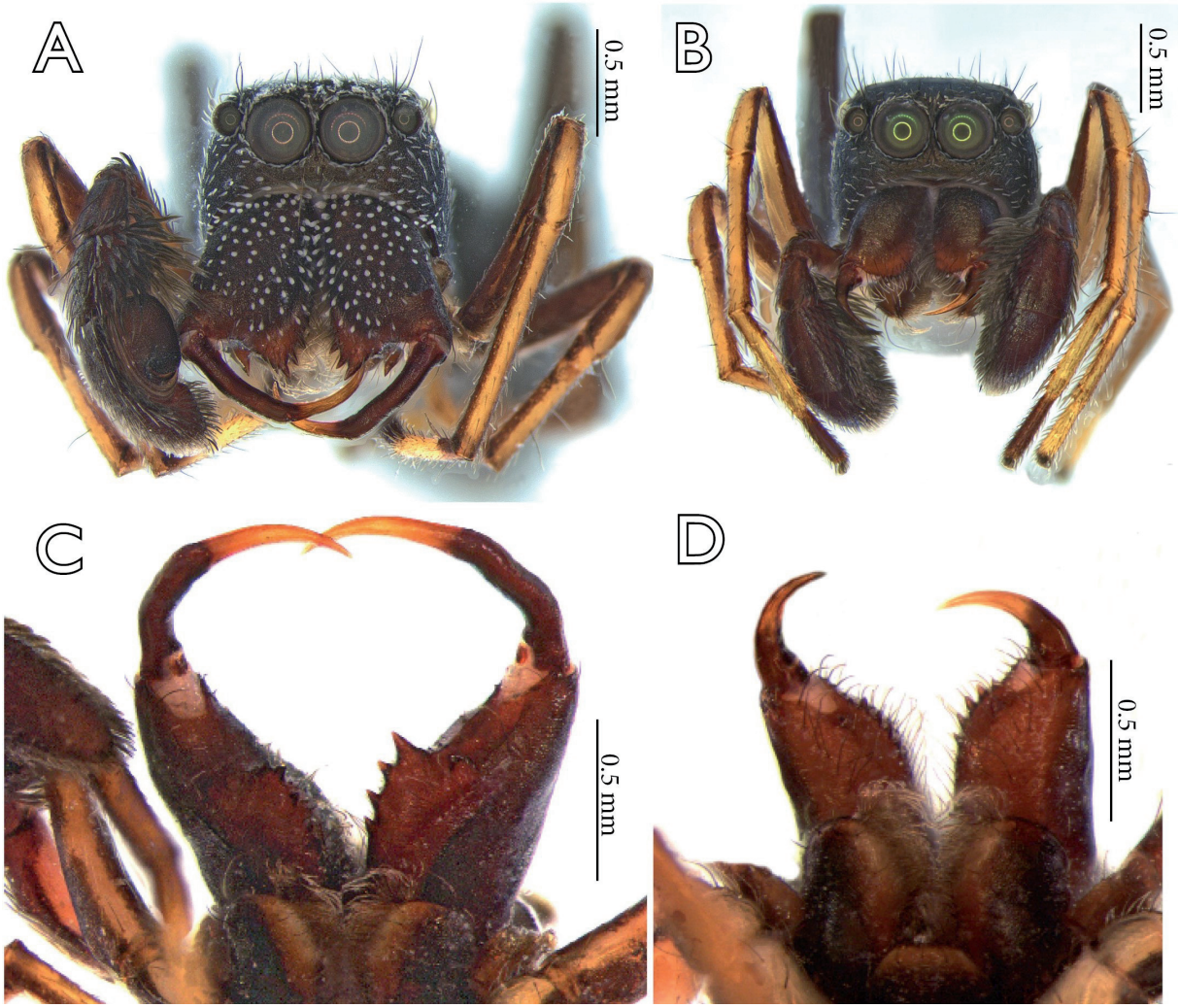

Fig. 3. *Sarinda sombraluminosa* □agopi□n, Laborda □ □im□sp. nov., face and chelicera. **A, C**. □olotype, □ (FCE-Ar 13551). **B, D**. Paratype, □ (FCE-Ar 5896). **A**–**B**. Face. **C**–**D**. Chelicera.

LEGS. Leg I: femur 1.0, patella 0.□□, tibia 1.0, metatarsus 0.□0, tarsus 0.□0. II: fe 0.□0, pa 0.□□, ti 0.□0, mt 0.□0, ta 0.□□. III: fe 1.0, pa 0.□0, ti 0.□□, mt 0.□0, ta 0.□0. IV: fe 1.□0, pa 0.□0, ti 1.□0, mt 1.0, ta 0.□0. Leg formula □1□□. Leg macrosetae: femur I–II □1□1□0, p0, r0; III □0□1□0 (□0□1□1 right), p0, r0; IV □1□1□1, p0, r0; patella I–IV 0; tibia I p0, r0, □□□□a 0; II p0, r0, □1r□1r□0; III–IV 0; metatarsus I p0, r0, □□□□; II p0, r0, □1r□□; III–IV 0.

PALP. Tibiae wider than cymbium, both with scattered setae (Fig. □). Chelicerae paturon with three promarginal teeth and one bigger retromarginal tooth (Fig. □D).

EPIGYNE. Atrium horseshoe-shaped, highly sclerotized with narrow copulatory openings. Posterior margin thick, with constriction reaching entrance of atrium (Figs □□, □□, 7A). Spermathecae can be seen through cuticle, secondary (posterior ones) bigger. Internally, spermatheca (anterior) touching each other, connected with slightly spiral duct with four turns around gland to secondary spermathecae (posterior). Internal gland thicker at inner duct and head almost touching primary spermathecae. Copulatory ducts membranous with three turns before connecting with secondary spermatheca (Figs □□, □□, 7□).

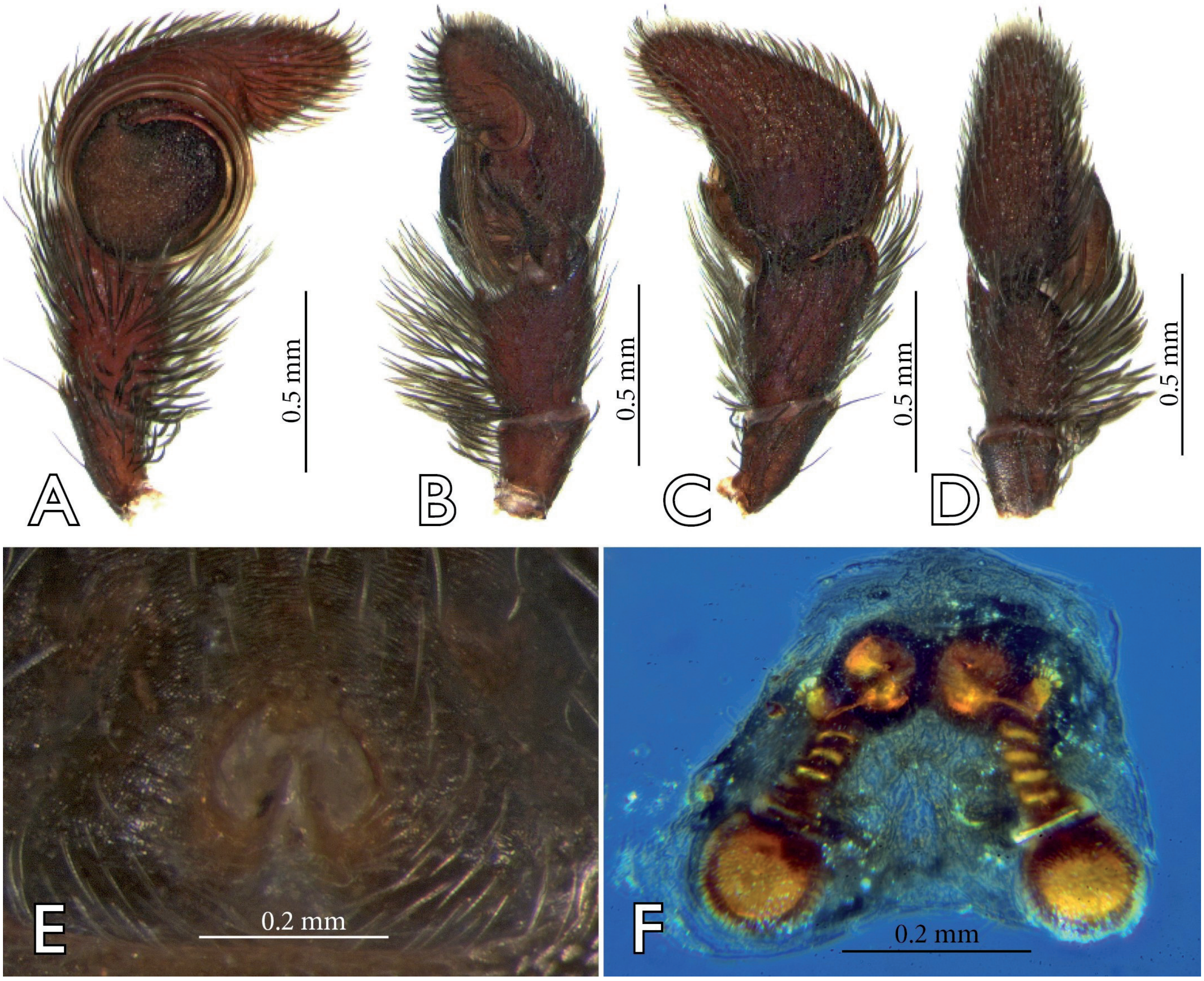

Fig. 4. *Sarinda sombraluminosa* Hagopián, Laborda & Simó sp. nov., photographs of genitalia. **A–D**. Holotype, ♂ (□□□Ar 1□□□1), pedipalp. **A**. Ventral view. **B**. Retrolateral view. **C**. Dorsal view. **D**. Prolateral view. **E–F**. Paratype, ♀ (□□□□Ar □□□□), epigynum. **E**. Ventral view. **F**. Dorsal view.

Spinnerets. [illegible] (Figure 12).

Natural history

[illegible] (Figure 10). [illegible] *Camponotus termitarius* [illegible] 1902 [illegible] *Drosophila* [illegible] 1823 [illegible] (Figure 8).

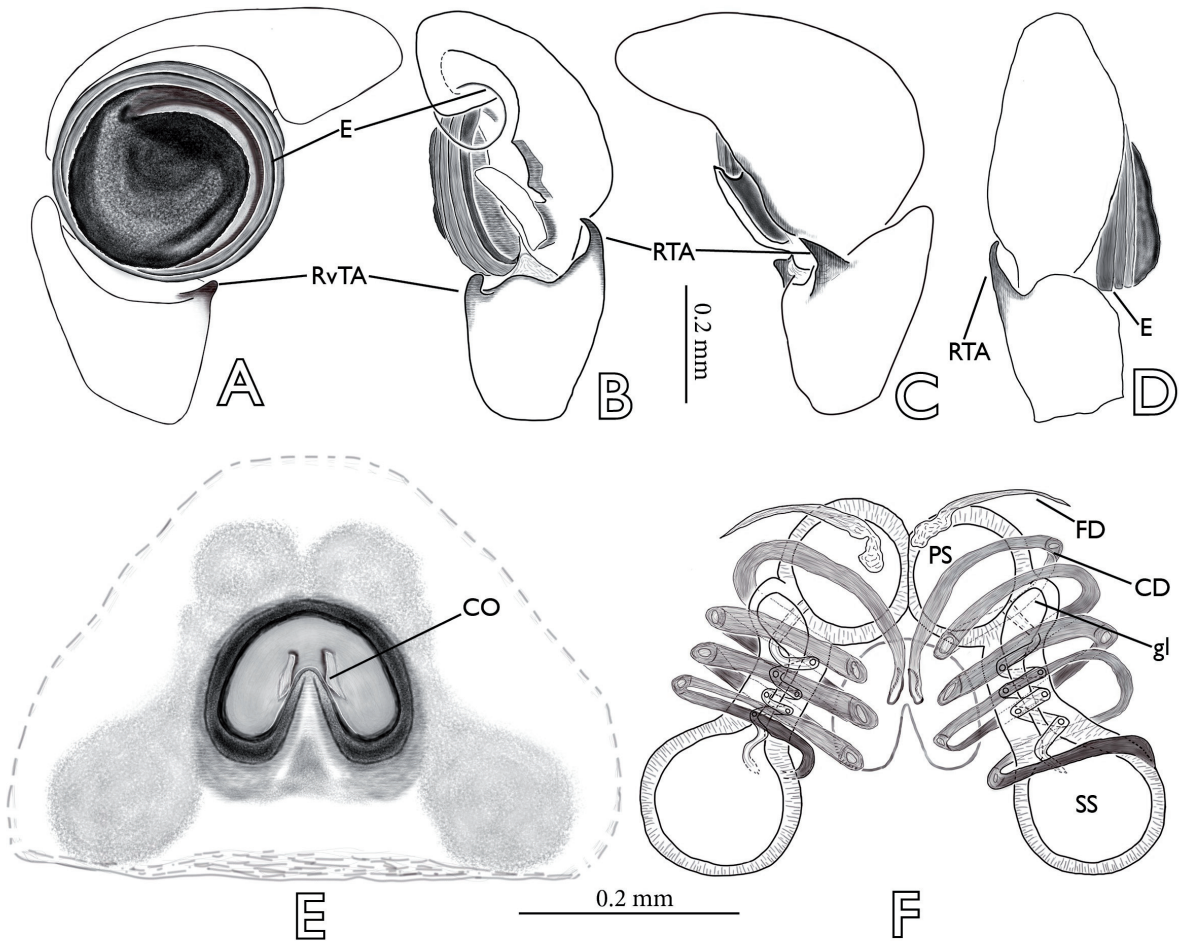

Fig. 5. *Sarinda sombraluminosa* [illegible] **A–D** [illegible] (Figure 13551) [illegible] **A** [illegible] **B** [illegible] **C** [illegible] **D** [illegible] **E–F** [illegible] (Figure 589) [illegible] **E** [illegible] **F** [illegible]

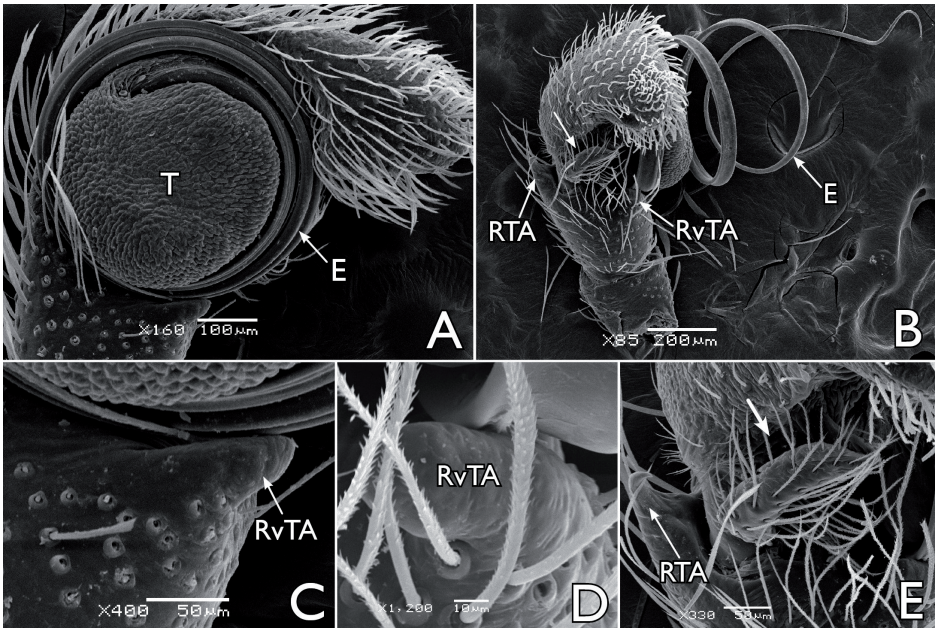

Fig. 6. *Sarinda sombraluminosa* Hagopián, Laborda & Simó sp. nov., paratype, ♂ (FCE-Ar 5896), scanning electronic microphotography (SEM) of pedipalp. **A**. Ventral view. **B**. Retrolateral view, arrow indicating paracymbium. **C**. Retroventral tibial apophysis, ventral view. **D–E**. RvTA, retrolateral view, with an arrow indicating the paracymbium. Abbreviations: E = embolus; RTA = retrolateral tibial apophysis; RvTA = retroventral tibial apophysis; T = tegulum.

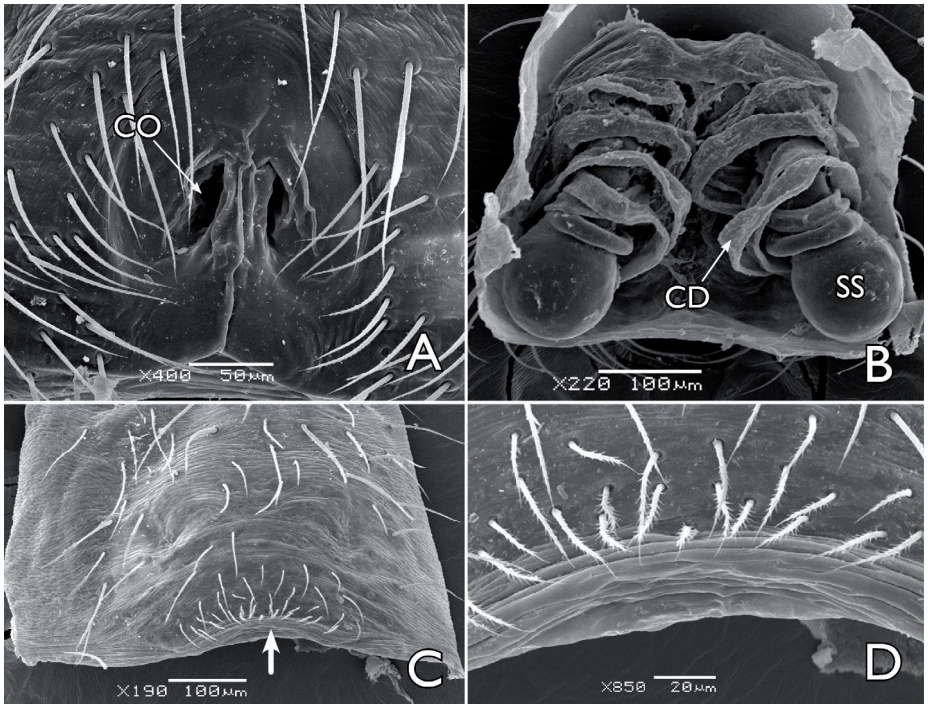

Fig. 7. *Sarinda sombraluminosa* Hagopián, Laborda & Simó sp. nov., SEM of genitalia. **A–B**. Paratype, ♀ (FCE-Ar 5896), epigynum. **A**. Ventral view. **B**. Dorsal view. **C–D**. Paratype, ♂ (FCE-Ar 5896), epigastric male zone, showing the absence of epiandric spigots. Abbreviations: CD = copulatory duct; CO = copulatory opening; SS = secondary spermatheca.

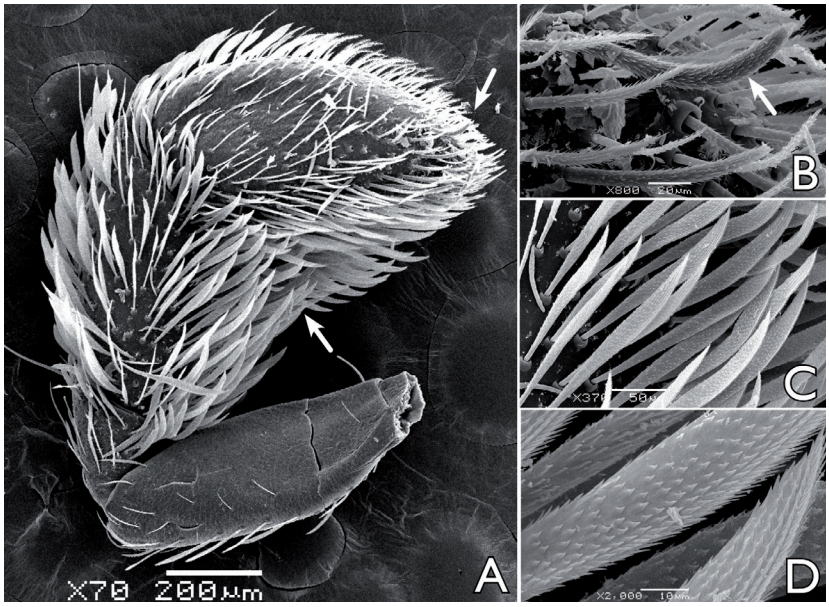

Fig. 8. *Sarinda sombraluminosa* Hagopián, Laborda & Simó sp. nov., paratype, ♀ (FCE-Ar 5896), SEM of female palp. **A**. General view, upper arrow pointing to distal macrosetae, lower pointing to the abundance of setae in tibia and cymbium. **B**. Distal macrosetae. **C–D**. Saber-shaped macrosetae details.

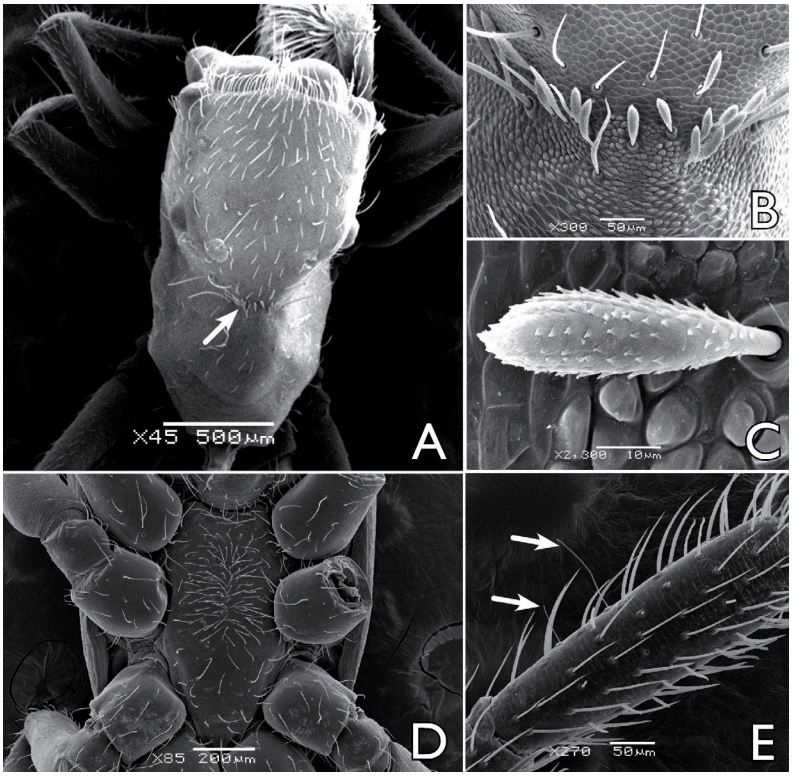

Fig. 9. *Sarinda sombraluminosa* Hagopián, Laborda & Simó sp. nov., SEM. **A–C**. Paratype, ♀ (FCE-Ar 5896**)**. **A**. Prosoma general view, arrow pointing to scales in the constriction between cephalic and thoracic regions. **B–C**. Arrangement and details of scales. **D–E**. Paratype, ♂ (FCE-Ar 5896). **D**. Sternum. **E**. Tarsus, arrows pointing to trichobothria.

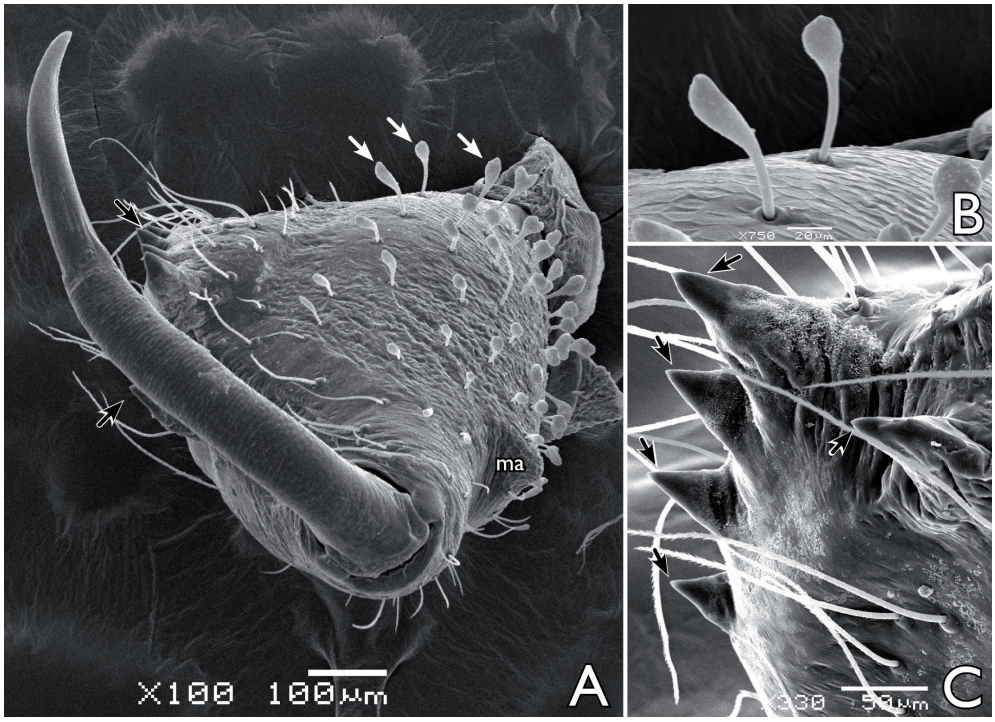

Fig. 10. *Sarinda sombraluminosa* Hagopián, Laborda & Simó sp. nov., paratype, ♂ (FCE-Ar 5896), SEM of left chelicerae. **A**. Chelicerae general view, black arrows pointing to the teeth of the promargin and retromargin, white arrows pointing to scales. **B**. Scale details. **C**. Teeth of the promargin and retromargin.

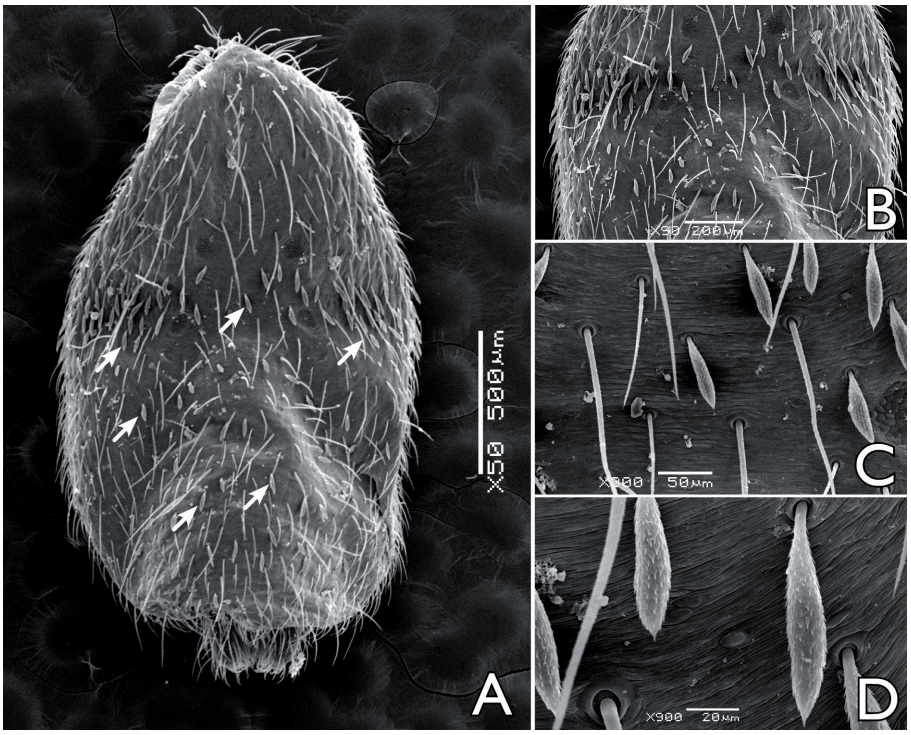

Fig. 11. *Sarinda sombraluminosa* Hagopián, Laborda & Simó sp. nov., paratype, ♂ (FCE-Ar 5896), SEM of opisthosoma. **A**. General view, white arrows pointing to scales. **B–D**. Scale details.

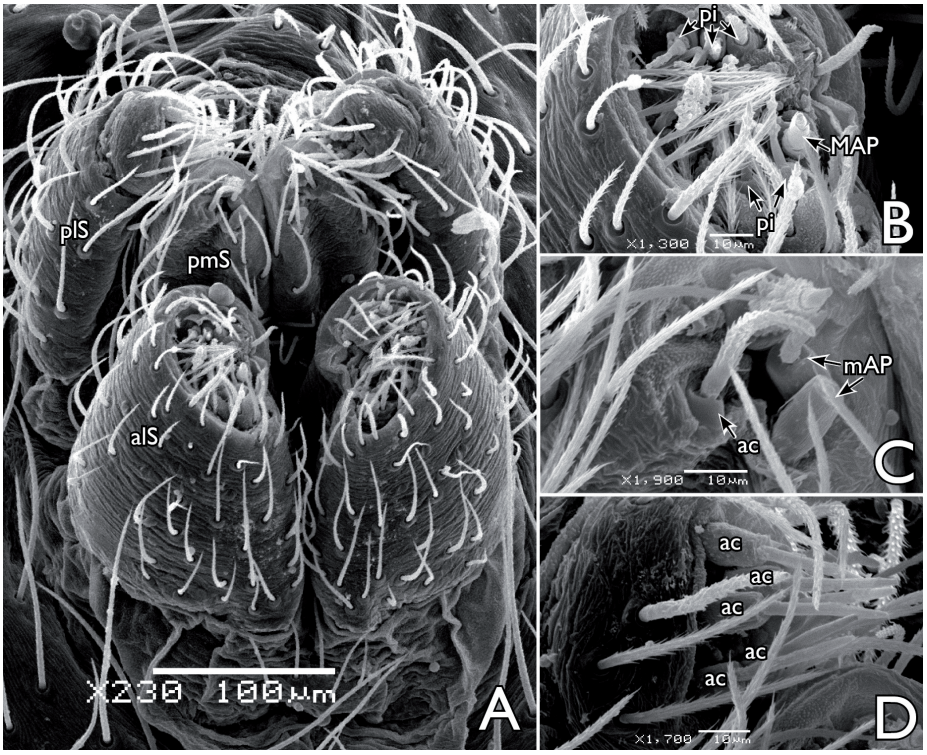

Fig. 12. *Sarinda sombraluminosa* Hagopián, Laborda & Simó sp. nov., paratype, ♀ (FCE-Ar 5896), SEM of spinnerets. **A**. General view. **B**. Anterior lateral spinneret. **C**. Posterior median spinneret. **D**. Posterior lateral spinneret. Abbreviations: ac = aciniform gland; alS = anterior lateral spinneret; mAP = minor ampullate gland; MAP = major ampullate gland; pi = piriform spigot ; plS = posterior lateral spinneret; pmS = posterior medial spinneret.

Taxonomic remarks

This species is mentioned as "*Sarinda* sp.1" in Hagopián & Laborda (2020), who recorded it as a host of mantispid larvae. Also, this species was misidentified as *S. capibarae* in Pompozzi *et al.* (2022: table s1 in supplementary material).

Distribution

Known from Uruguay (Durazno, Flores, Montevideo, Río Negro and Rivera) (Fig. 33).

Sarinda contraluz Hagopián & Bustamante sp. nov.
urn:lsid:zoobank.org:act:A57C501C-8E3E-4D0B-B47A-8FF1C8DBF1DA
Figs 13–24, 33

Diagnosis

Among *Sarinda* with shorter embolus (less than 2T compared with *S. armata* Peckham & Peckham, l892, *S. hentzi* (Banks, 1903), *S. cutleri* (Richman, 1965), *S. imitans* Galiano, 1965), males of *S. contraluz* Hagopián & Bustamante sp. nov. resemble those of *S. imitans* by having a mastidion on the male chelicera (see Fig. 22A) and by the shape of the RTA (Figs 17C, 18B, 18D), but can be distinguished from those of *S. imitans* by having a developed RvTA and a shorter pedipalp tibia, a longer embolus that arises at 5:30 (8:30 in *S. imitans*, see Galiano 1967: 30, fig. 11), by having a more rounded tegulum (Figs 16–18), and for the retromarginal teeth more developed, not so close to each other, and with the

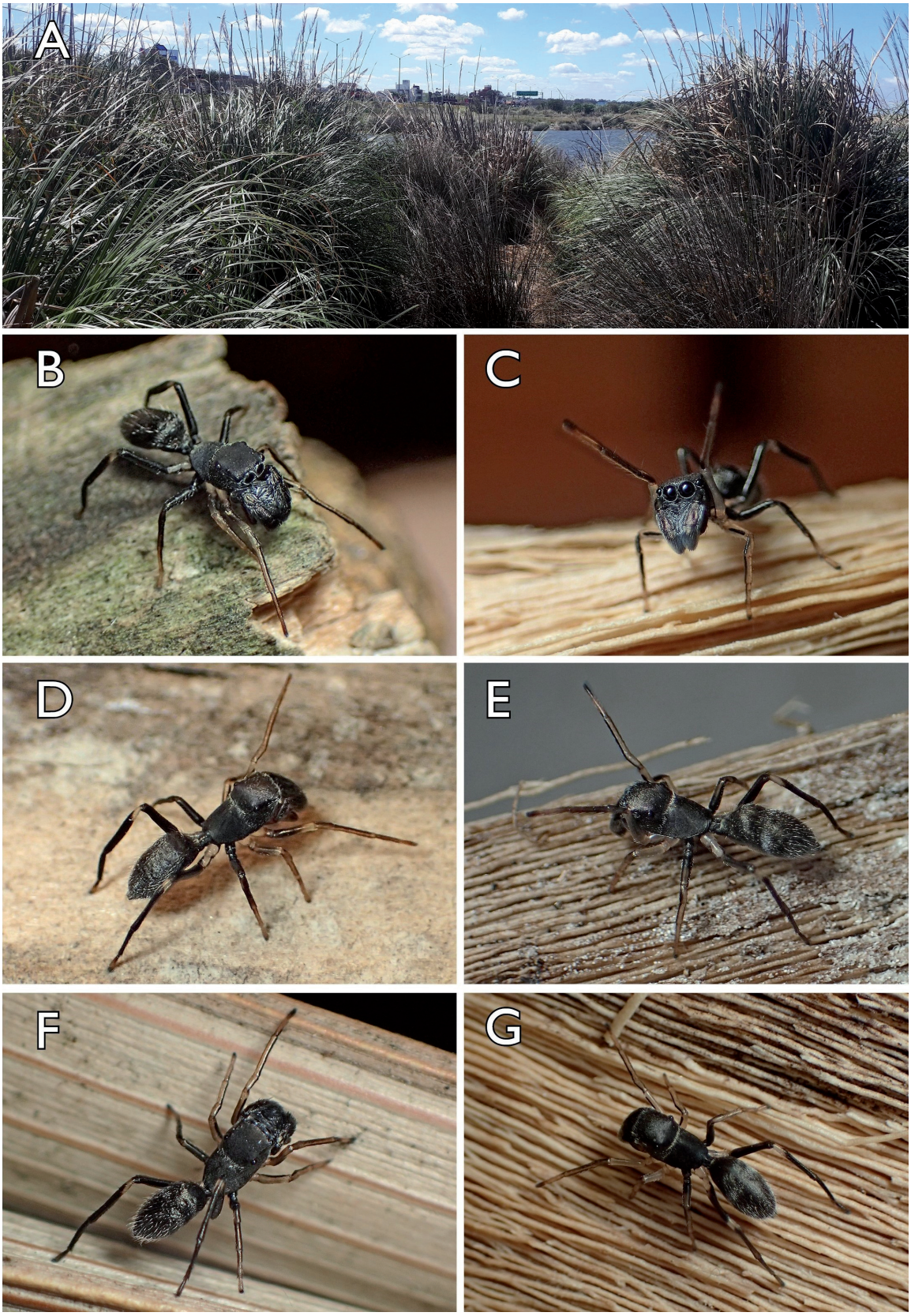

Fig. 13. *Sarinda contraluz* Hagopián & Bustamante sp. nov., photographs in vivo **A**. Site where the species was collected. **B**, **D**, **F**. Male. **C**, **E**, **G**. Female.

distal one larger than the others (compare Fig 15C with Galiano 1967: fig. 12). Among *Sarinda* with two pairs of spermathecae, females of *S. contraluz* resemble those of *S. imitans* by having a membranous portion of the copulatory ducts with less than three turns (two to three in *S. imitans*, see Galiano 1965: 289, fig. 8; two turns in *S. contraluz*), but can be distinguished by having more developed and longer copulatory ducts and the internal duct connecting the secondary spermatheca with the primary is less spiraled (two to three in *S. imitans*, see Galiano 1965: 294, fig. 3; two in *S. contraluz* see Figs 16–17, 19).

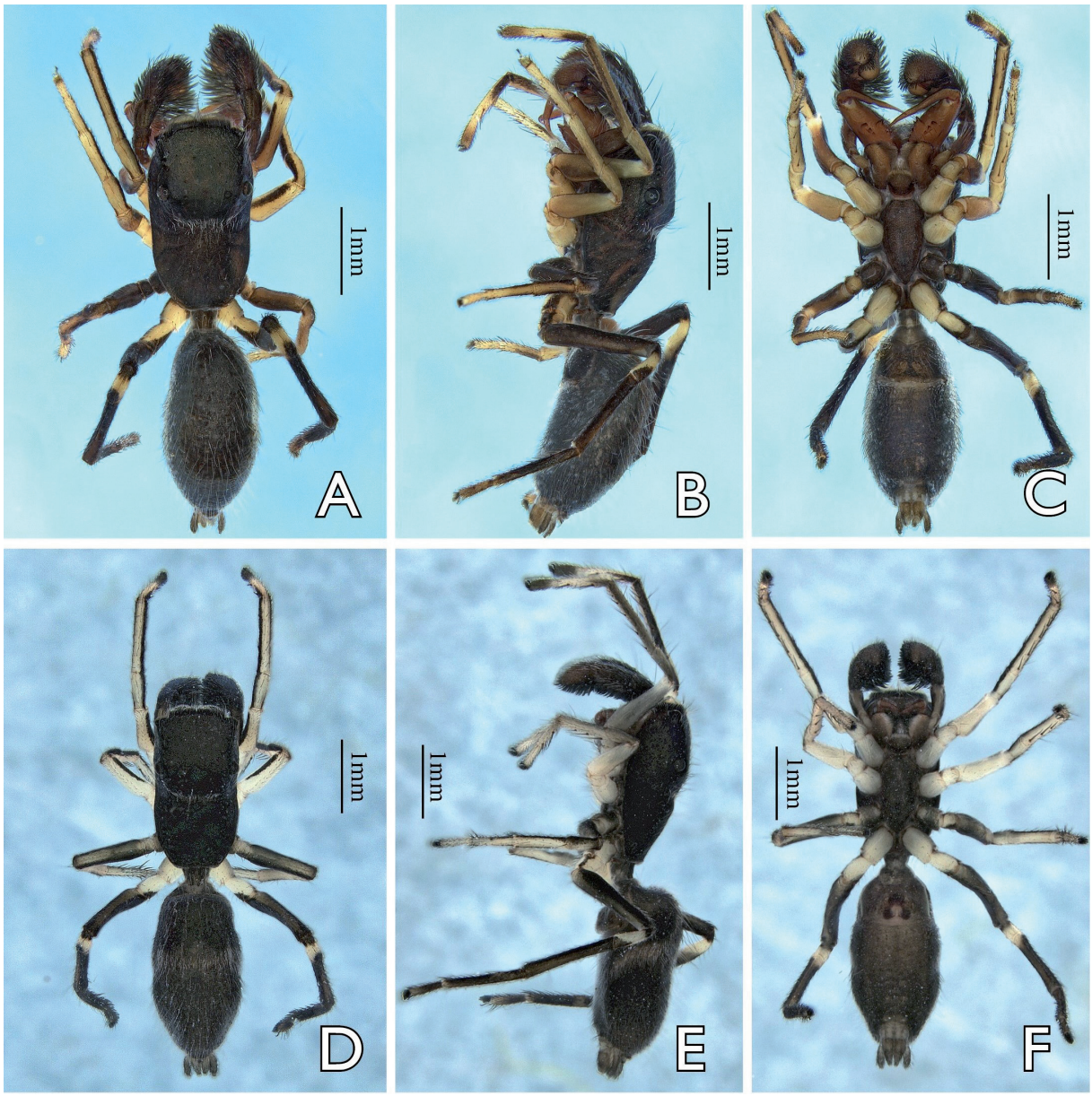

Fig. 14. *Sarinda contraluz* Hagopián & Bustamante sp. nov., habitus. **A–C**. Holotype, ♂ (FCE-Ar 10509). **D–F**. Paratype, ♀ (FCE-Ar 13968). **A, D**. Dorsal view. **B, E**. Lateral view. **C, F**. Ventral view.

Etymology

The specific name is a compound noun in apposition that means 'backlighting' in Spanish, because of the presence of the thin transparent-white setae on the abdomen of the species, which can be observed more clearly at backlighting.

Type material

Holotype

URUGUAY • ♂; Montevideo, Melilla; 34.73250° S, 56.32083° W; 5 Nov. 2022; D. Hagopián and A. Mailhos leg.; collected with G-Vac vacuum in *Cortaderia selloana* (Schult. & Schult.f.) Asch. & Graebn. (Poaceae); FCE-Ar 10509.

Paratype

URUGUAY • 1 ♀; same collection data as for holotype; FCE-Ar 13968.

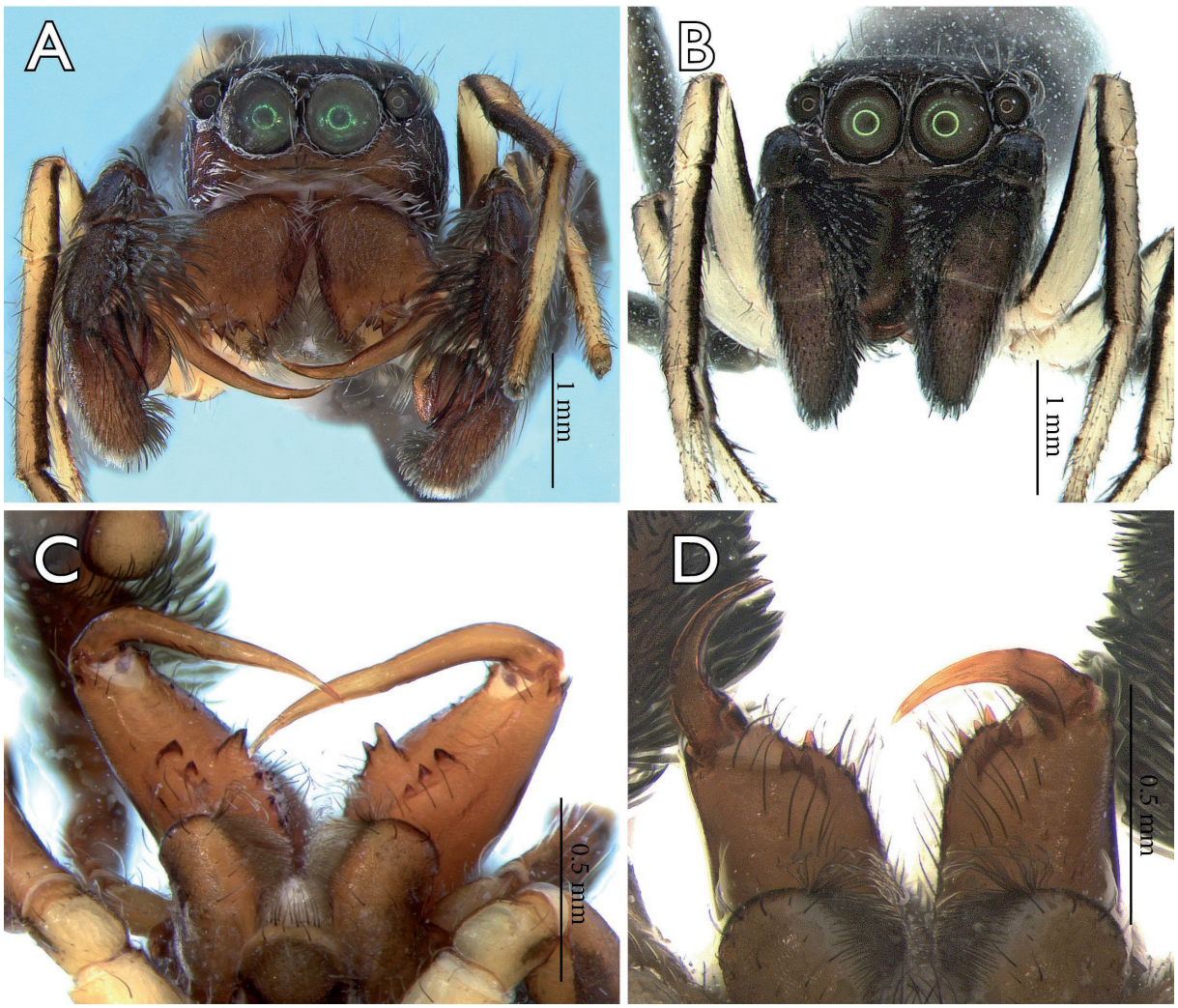

Fig. 15. *Sarinda contraluz* Hagopián & Bustamante sp. nov., face and chelicera. **A, C**. Holotype, ♂ (FCE-Ar 10509). **B, D**. Paratype, ♀ (FCE-Ar 13968). **A–B**. Face. **C–D**. Chelicera.

Other material examined

URUGUAY. – **Canelones** • 1 ♂, 2 ♀♀; Barra de Carrasco; 34.87700° S, 56.02278° W: 10 Dec. 2005; Maddison, Ruiz, Simó, Rodriguez and Laborda leg.; WPM#05-049; UBCZ. – **Lavalleja** • 1 ♀; Sierra de Minas, Parque de Vacaciones; 34.42583° S, 55.19500° W; 5–8 Dec. 2005; W. Maddison, G. Ruiz, M. Simó and M.E. Rodriguez leg.; WPM#05-046; UBCZ. – **Montevideo** • 1 ♂; Carrasco; 34.87972° S, 56.03056° W; 9 Oct. 2022; D. Hagopián and A. Mailhos leg.; FCE-Ar 13925 • 3 ♀♀, 2 ♂♂; same locality as for preceding; 19 Nov. 2022; A. Mailhos leg; FCE-Ar 13981 • 8 ♂♂, 2 ♀♀; same collection data as for holotype; FCE-Ar 13968 • 1 ♂ same locality as for holotype; 20 Nov. 2022; D. Hagopián leg.; FCE-Ar 11414. – **Rivera** • 1 ♂; Cofusa; 30.99861° S, 55.67500° W; 23 Nov. 2021; A. Mailhos leg.; in *Paspalum* sp. (Poaceae) on a truncated hill; FCE-Ar 13791.

Description

Male (holotype FCE-Ar 10509)

Color. Carapace black with scales on back of cephalic constriction, abdomen as carapace, with thin transparent-white setae all over (Fig. 13B, D, F). Ventrally black, sternum shown in Fig. 21D. Spinnerets

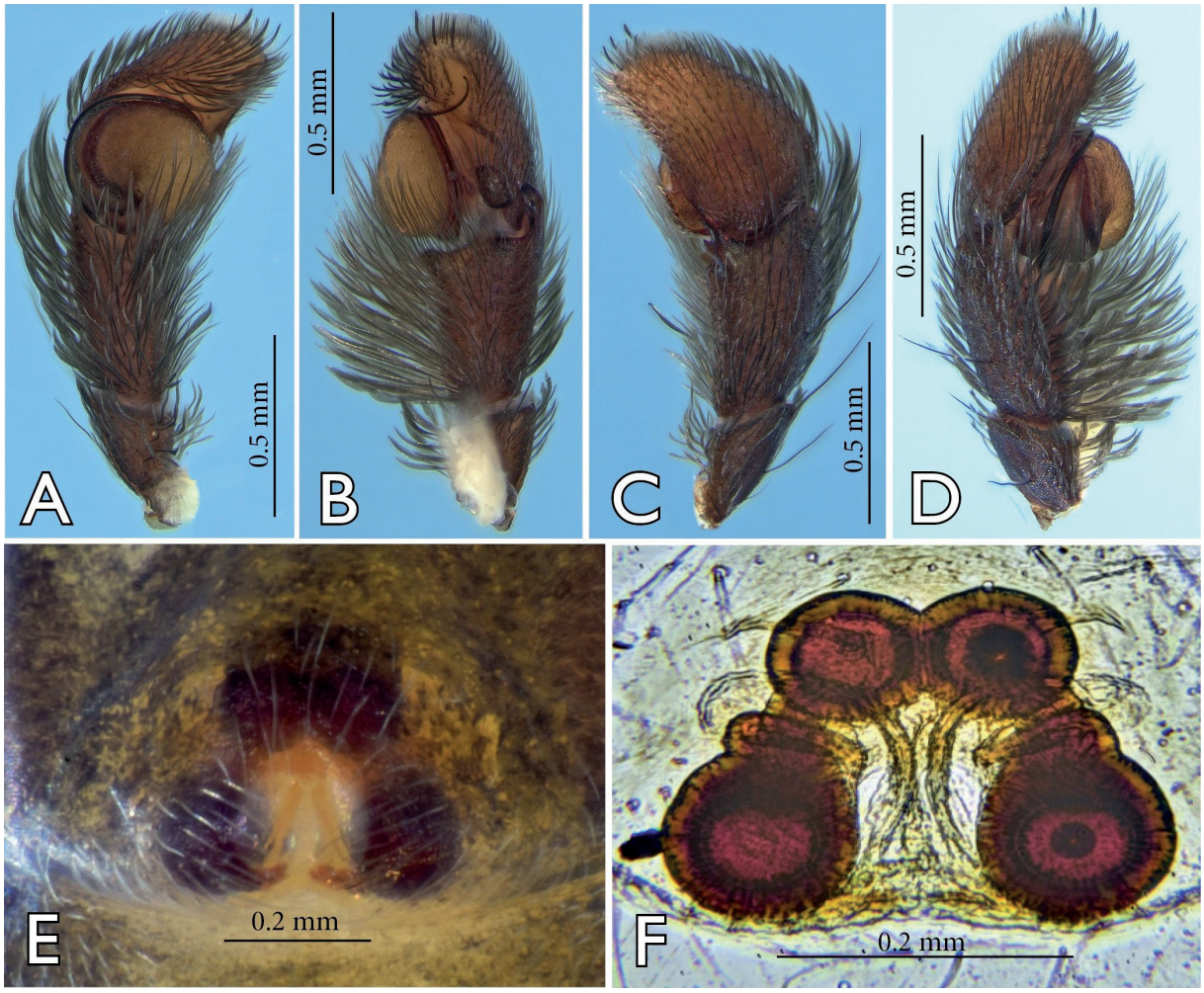

Fig. 16. *Sarinda contraluz* Hagopián Bustamante sp. nov., photographs of genitalia. **A–D**. Holotype, ♂ (FCE-Ar 10509), pedipalp. **A**. Ventral view. **B**. Retrolateral view. **C**. Dorsal view. **D**. Prolateral view. **E–F**. Paratype, ♀ (FCE-Ar 13968), epigynum. **E**. Ventral view. **F**. Dorsal view.

dark brown. Palps brown. Legs I ventrally and dorsally yellowish, with lateral sides brown. Legs II as legs I, being brown only in prolateral side. Legs III with coxae, trochanter, femur and patella brown, tibiae, metatarsus and tarsus as legs I. Leg IV darker, with yellowish coxa, trochanter and patella, rest of articles dark brown (Figs 13B, D, F, 14A–C, 15A). Trichobothria present in metatarsus of leg I as shown in Fig. 21E.

Measurements. Total length 4.460. Carapace length 2.156, width 1.168, height 0.869. AME diameter 0.352. Ocular quadrangle length 1.00. Anterior eye row width 1.062. Posterior eye row width 1.106. Abdomen length 2.079. Chelicera paturon light brown with four promarginal teeth (distal one being bigger) and three retromarginal teeth (distal one being bigger) (Figs 15A, C, 22). Dorsal mastidion at middle of base of claw (Fig. 22A). Setae white and scarce, being mostly at base of paturon (Figs 15A, 22).

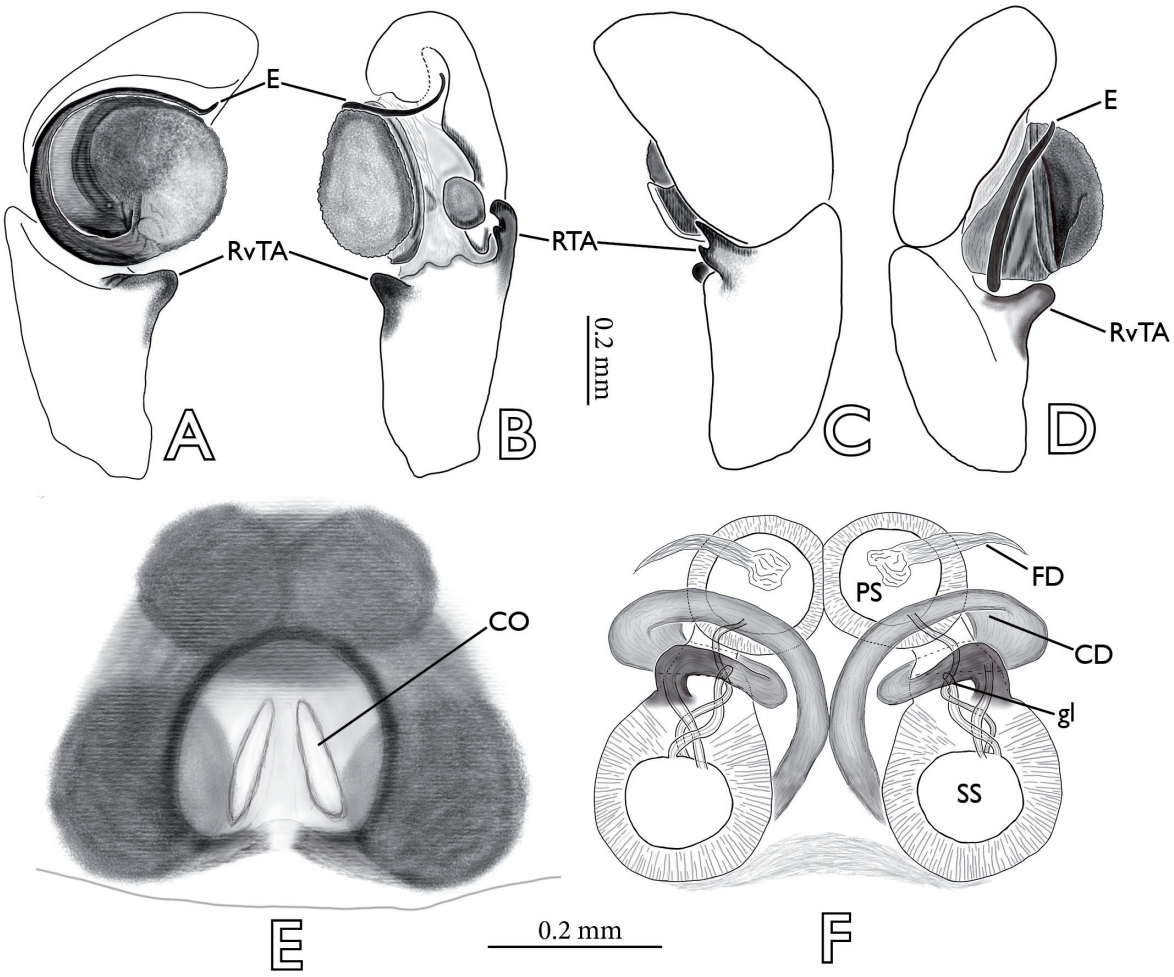

Fig. 17. *Sarinda contraluz* Hagopi□n □ Bustamante sp. nov., drawings of genitalia. **A–D**. Holotype, □ (FCE□Arl0509), pedipalp. **A**. Ventral view. **B**. □etrolateral view. **C**. Dorsal view. **D**. Prolateral view. **E–F**. Paratype, □ (FCE□Ar 13968), epigynum. **E**. Ventral view. **F**. Dorsal view. Abbreviations□CD □ copulatory duct□CO □ copulatory opening□E □ embolus□FD □ fertili□ation duct□gl □ gland□PS □ primary spermatheca□□TA □ retrolateral tibial apophysis□□vTA □ retroventral tibial apophysis□S □ spermatheca□ SS □ secondary spermatheca.

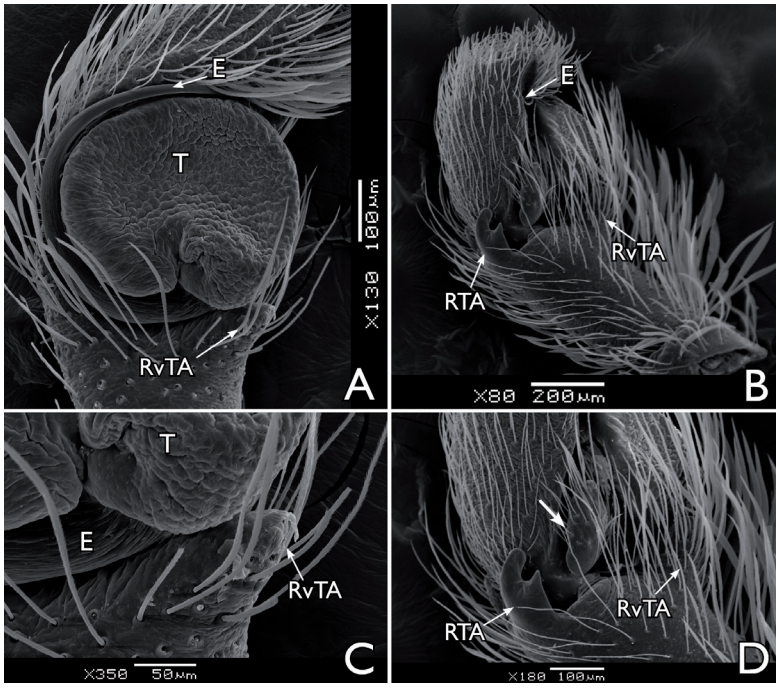

Fig. 18. *Sarinda contraluz* Hagopián & Bustamante sp. nov., non-type specimen, ♂ (FCE-Ar 13968), SEM of male pedipalp. **A**. Ventral view. **B**. Retrolateral view. **C**. RvTA, ventral view. **D**. Retrolateral view, white arrow showing the paracymbium. Abbreviations: E = embolus; RTA = retrolateral tibial apophysis; RvTA = retroventral tibial apophysis; T = tegulum.

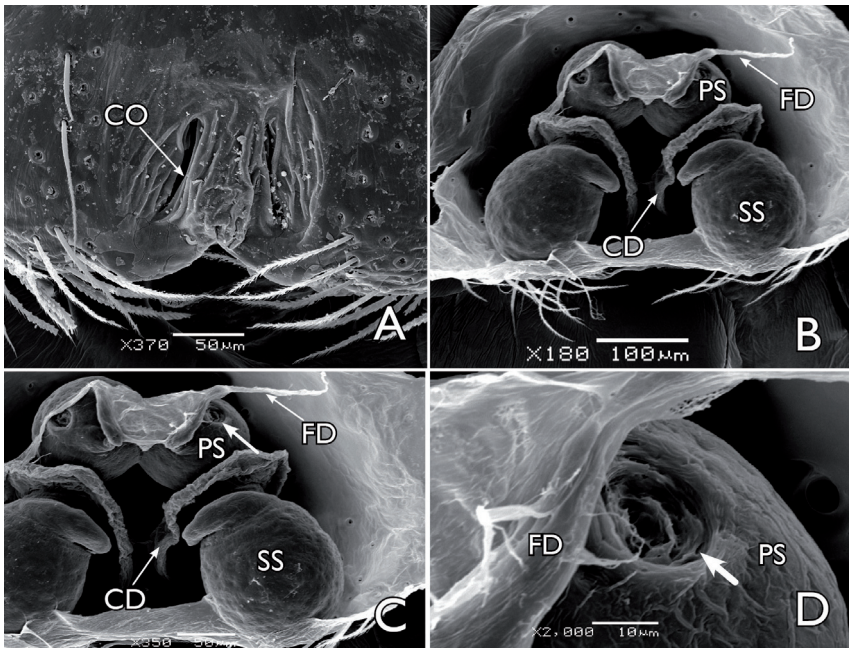

Fig. 19. *Sarinda contraluz* Hagopián & Bustamante sp. nov., paratype, ♀ (FCE-Ar 13968), SEM of genitalia. **A–C**. Epigynum. **A**. Ventral view. **B**. Dorsal view. **C**. Dorsal view, white arrow pointing to the pore of the gland. **D**. Spermatheca, white arrow pointing to the pore of the bennet gland. Abbreviations: CD = copulatory duct; CO = copulatory opening; FD = fertilization duct; PS = primary spermatheca; S = spermatheca; SS = secondary spermatheca.

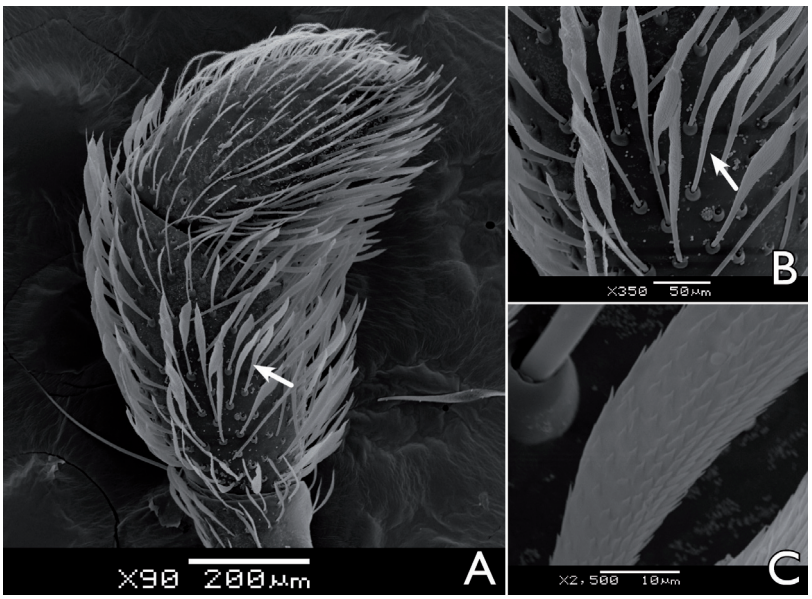

Fig. 20. *Sarinda contraluz* Hagopián & Bustamante sp. nov., paratype, ♀ (FCE-Ar 13968), SEM of palp. **A**. General view, white arrow pointing to the abundance of setae in the tibia. **B–C**. Saber-shaped macrosetae details.

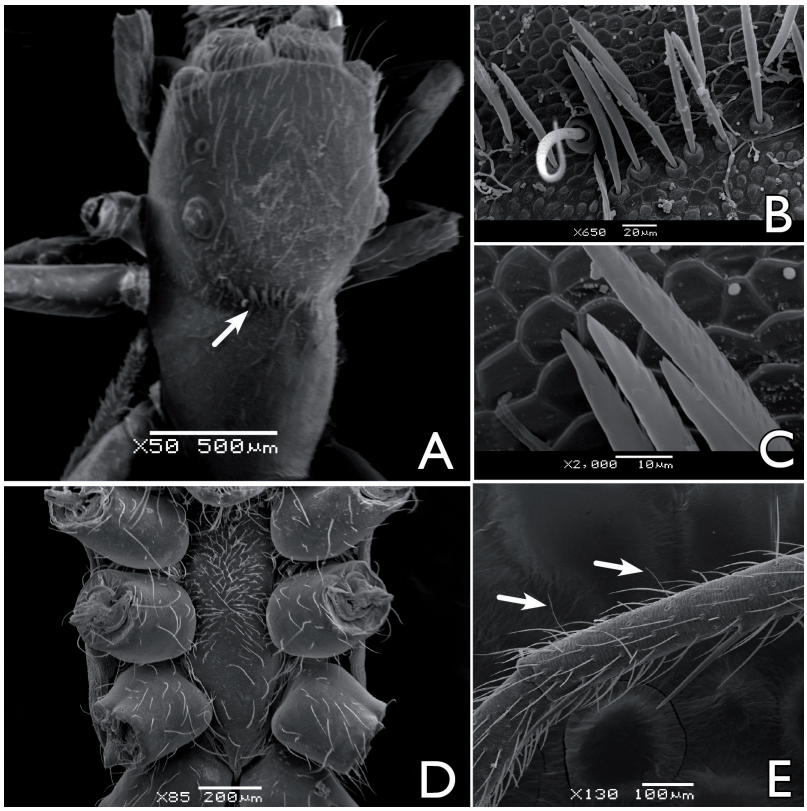

Fig. 21. *Sarinda contraluz* Hagopián & Bustamante sp. nov., SEM. **A–C**. Paratype, ♀ (FCE-Ar 13968). **A**. Prosoma general view, arrow pointing to scales in the constriction between cephalic and thoracic regions. **B–C**. Arrangement and details of macrosetae. **D–E**. Non-type specimen, ♂ (FCE-Ar 13968). **D**. Sternum. **E**. Metatarsus, arrows pointing to trichobothria.

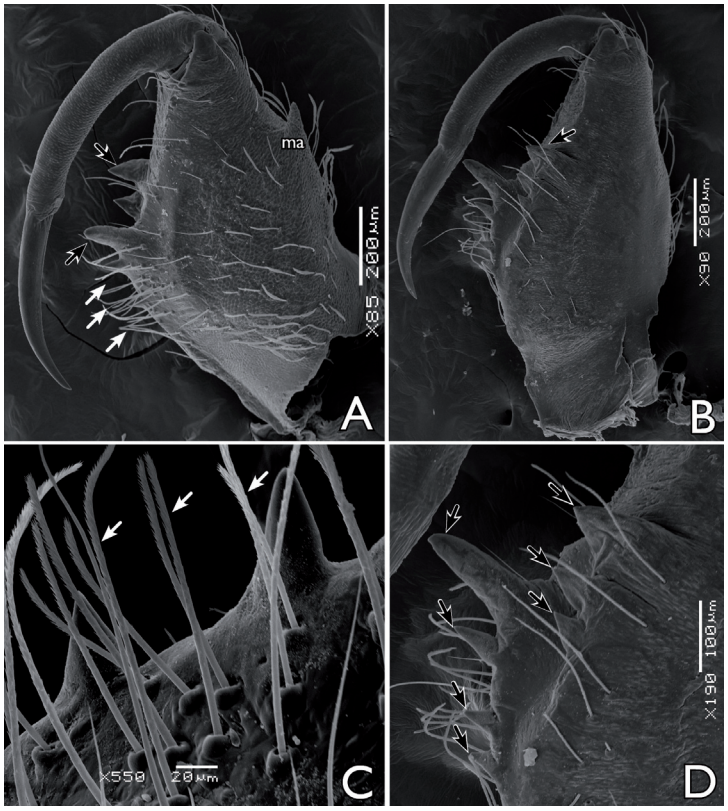

Fig. 22. *Sarinda contraluz* Hagopián & Bustamante sp. nov., non-type specimen, ♂ (FCE-Ar 13968), SEM of chelicerae. **A**. Chelicerae dorsal view, black arrows pointing to the teeth of the promargin and retromargin, white arrows pointing to macrosetae. **B**. Chelicerae ventral view, black arrow pointing to the retromargin teeth. **C**. Macrosetae details. **D**. Teeth of the promargin and retromargin.

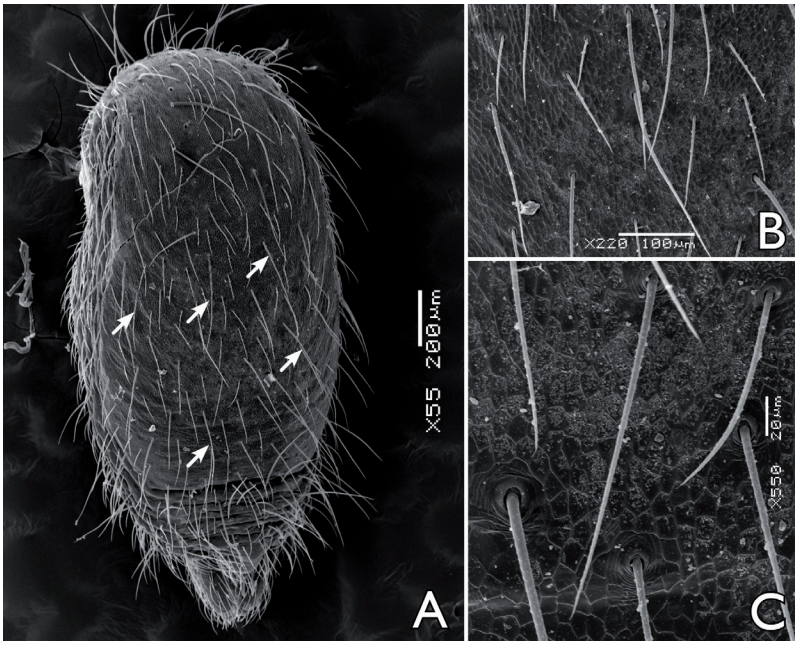

Fig. 23. *Sarinda contraluz* Hagopián & Bustamante sp. nov., non-type specimen, ♂ (FCE-Ar 13968); SEM of opisthosoma . **A**. General view, white arrows pointing to macrosetae. **B–D**. Setae details.

LEGS. □eg I□femur 1.□2□, pa□e□□a □.□□□, □i□ia 1.1□2, me□a□arsus □.□□□, □arsus □.□□□□II□fe □.□□□, pa □.□1□, □i□.□□□m, □□.□□□1, □a□.22□III□fe □.□□□, pa □.□□□, □i□.□□2, m□□.□□□□, □a□.□□□I□□fe 1.□□□, pa □.□□2, □i□1.1□2, m□1.□□□□, □a□.□2□□.eg formu□a□1□2.□eg macrose□ae femur an□pa□e□I□a□l□□□, p□, r□, □□□ □i□ia □2□2□2□2□2, II □1r□1r□1r□1r, III □2ap, p□□1□□, I□ □2ap□me□a□arsus I□II □2□2, III □2□2□□, p 2ap, r 1□□2ap□ I□□2□2, p 1ap, r 1□□□□1.

PALP. Ti□ia □onger □□an wi□e□□TA □ifurca□e□, cur□e□□en□ra□□y, □onger □□an □□TA. □□TA □i□e a □ump, em□o□us simp□e, e□□□o □egu□um, arising □en□ra□□y (□□□□) (2□□□) (□igs 1□A□D, 1□).

Female (para□ype □□□□Ar 1□□□□□)

COLOR. As in ma□e (□igs 1□□, □, G, 1□D□, 1□□). □o□i□e□ sca□es presen□ on cons□ric□ion □e□ween cep□a□ic an□ □□oracic regions (□ig. 21A□□).

MEASUREMENTS. To□a□ □eng□□ □.□□. □arapace □eng□□ 2.1□, wi□□□ 1.□□, □eig□□□.□□. an□erior me□ian eye □iame□er □.□□. Ocu□ar □ua□rang□e □eng□□□.□□. An□erior eye row wi□□□1.□□. Pos□erior eye row wi□□□1.□□□. A□□omen □eng□□ 2.□2.

LEGS. □eg I□femur 1.1□, pa□e□□a □.□□, □i□ia 1.□□, me□a□arsus □.□□, □arsus □.□□. II□fe □.□□, pa □.□1, □i □.□□, m□□.□□□, □a□.□1 III□fe □.□□, pa □.□□□, □i□.□□, m□□.□□□, □a□.□□□I.□□fe 1.1□, pa □.□□, □i 1.21, m□1.□□, □a□.□□□.eg formu□a□1□2.□eg macrose□ae femur an□pa□e□I□a□l□□□, p□, r□, □□□i□ia I □2□2□2□2□2, II □1r□1r□1r, III □□, p□, □□, I□ □2ap□me□a□arsus I□II □2□2, III □2ap□1p, p 1ap, r 1ap□I□ □□□□2, p 1ap, r 2ap.

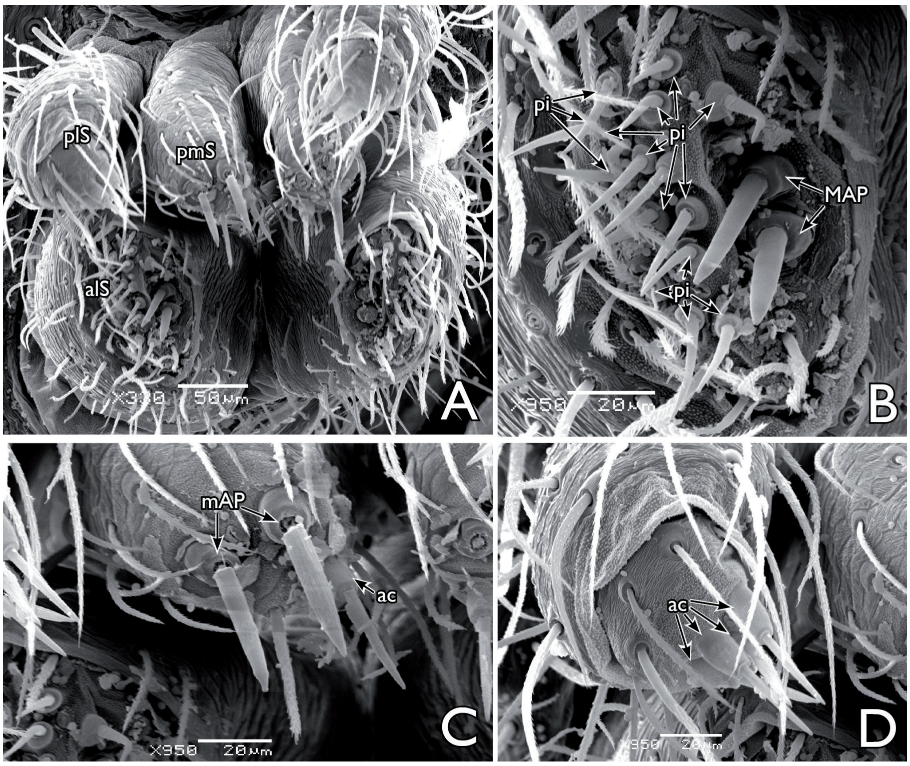

Fig. 24. *Sarinda contraluz* Hagopi□n □ □us□aman□e sp. no□., para□ype, □ (□□□□Ar 1□□□□), □□□ of spinnere□s. **A**. Genera□ □iew. **B**. An□erior □a□era□ spinnere□. **C**. Pos□erior me□ian spinnere□. **D**. Pos□erior □a□era□ spinnere□. A□□re□ia□ions: ac □ aciniform g□an□□; a□□ □ an□erior □a□era□ spinnere□; mAP □ minor ampu□□a□e spigo□; MAP □ ma□or ampu□□a□e spigo□; pi □ piriform g□an□; p□□ □ pos□erior □a□era□ spinnere□; pm□ □ pos□erior me□ian spinnere□.

PALP. [illegible] ([illegible] 20) [illegible] ([illegible] 15 [illegible]).

EPIGYNE. [illegible] ([illegible] 1 [illegible] 1 [illegible] 19 [illegible]) [illegible] ([illegible] 1 [illegible] 19 [illegible]–[illegible]).

SPINNERETS. [illegible] ([illegible] 24).

Variation

Males ([illegible] 10)
[illegible] (3 [illegible]–4 [illegible] 91) [illegible] (1 [illegible]–2 [illegible] 4 [illegible]) [illegible] (1 [illegible] 9–2 [illegible] 45) [illegible] (3 [illegible] 14–4 [illegible] 11) [illegible] (1 [illegible] 99–2 [illegible] 2) [illegible] (2 [illegible] 23–2 [illegible] 4) [illegible] (3 [illegible] 4 [illegible]–4 [illegible]) [illegible]: [illegible] ([illegible]) [illegible] ([illegible] 1) [illegible] ([illegible]) [illegible] ([illegible] 1).

Females ([illegible] 4)
[illegible] (4 [illegible] 21–4 [illegible] 43) [illegible] (2 [illegible] 0 [illegible]–2 [illegible] 20) [illegible] (2 [illegible] 09–2 [illegible] 23) [illegible] (2 [illegible] 1–3 [illegible] 40) [illegible] (2 [illegible] 12–2 [illegible] 5) [illegible] (2 [illegible] 35–2 [illegible] 3) [illegible] (4 [illegible] 04–4 [illegible] 4 [illegible]) [illegible]: [illegible] ([illegible] 2) [illegible] ([illegible] 1) [illegible] ([illegible] 1).

Natural history

[illegible] *Cortaderia selloana* ([illegible]) [illegible] *Camponotus termitarius* [illegible] *Drosophila* [illegible] ([illegible]: [illegible] 509 [illegible] 4 [illegible]) [illegible] ([illegible]: [illegible] 0 [illegible]) [illegible] ([illegible]: [illegible] 44 [illegible]).

Distribution

[illegible] ([illegible]) ([illegible]

Sarinda marcosi [illegible] 193 [illegible]
[illegible] 25–2 [illegible] 33

Sarinda marcosi [illegible] 193 [illegible]: 309 [illegible] 1 [illegible] 1–2 ([illegible]).
Sarinda australis [illegible] 1944 [illegible] 53 ([illegible] 19 [illegible] 5: 292).

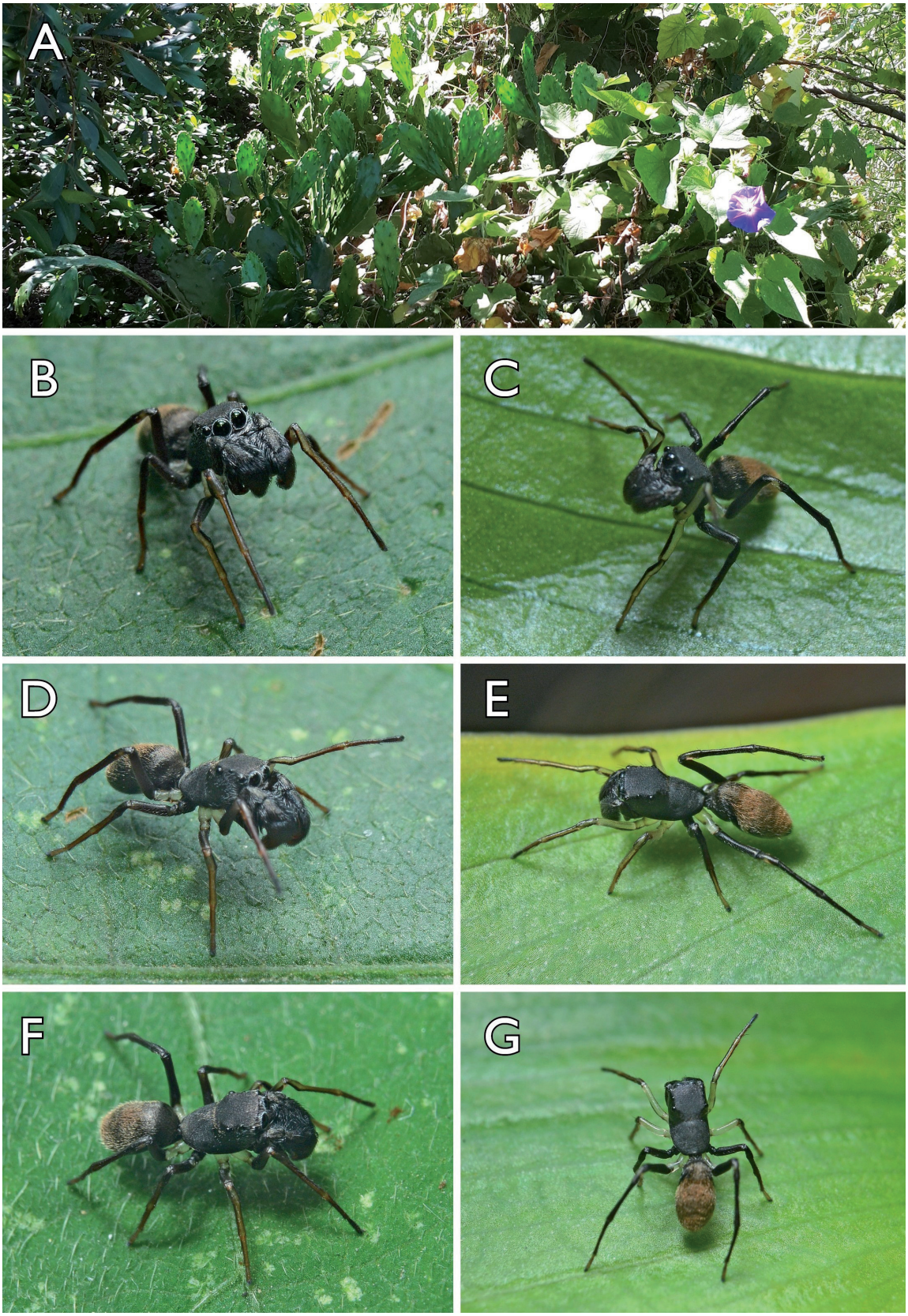

Fig. 25. *Sarinda marcosi* Piza, 1937, photographs in vivo. **A**. Site where the species was collected. **B**, **D**, **F**. Male. **C**, **E**, **G**. Female.

Sarinda marcosi – Galiano 1965: 292, pl. II figs 1–7, pl. III fig. 4, pl. IV fig. 3, pl. V fig. 6, pl. VI fig. 3, pl. VIII figs 1, 4. — Jackowska & Prószýnski 1975: 42, fig. 4h. — Hagopián *et al.* 2021: 264, figs 1a–j, 3b–e, 4a–d, 5a–h. — Pett *et al.* 2021: 927, fig. 7a, c–d. — World Spider Catalog 2023.

Diagnosis and description

See Galiano (1965) and Hagopián *et al.* (2021). Here, we include new color photographs of preserved and living specimens from Uruguay (Figs 25–28).

New records

URUGUAY – **Cerro Largo** • 4 ♂♂; Arévalo; 32.48422° S, 55.13208° W; 31 Oct. 2019; D. Hagopián leg.; FCE-Ar 10511 • 1 ♀; Paso Arriera, Paraje Palleros; 32.00528° S, 54.49000° W; 5–6 Nov. 2020; M. Simó leg.; FCE-Ar 12532. – **Durazno** • 2 ♂♂; La Paloma; 32.72722° S, 55.57806° W; 25 Oct. 2021;

Fig. 26. *Sarinda marcosi* Piza, 1937, habitus **A–C**. Male (FCE-Ar 14321). **D–F**. Female (FCE-Ar 14321). **A, D**. Dorsal view. **B, E**. Lateral view. **C, F**. Ventral view.

D. Hagopián and Á. Laborda leg.; FCE-Ar 13261 • 1 ♂; same locality as for preceding; 20 Oct. 2022; D. Hagopián leg.; FCE-Ar 14323 • 1 ♂ 1 ♀; near La Paloma; 32.67472° S, 55.67272° W; 20 Oct. 2022; D. Hagopián leg.; FCE-Ar 14321 • 2 ♂♂; La Paloma, Gruta "La Llorona"; 32.72944° S, 55.57583° W; 20 Oct. 2022; D. Hagopián and A. Laborda leg.; FCE-Ar 13922. – **Lavalleja** • 1 ♂; Sierra de Minas, Parque de Vacaciones; 34.42600° S, 55.19500° W; 5–8 Dec. 2005; W. Maddison, G. Ruiz, M. Simó and M.E. Rodriguez leg.; WPM#05-046; UBCZ. – **Montevideo** • 1 ♂; Malvín, Instituto de Investigaciones Biológicas Clemente Estable (IIBCE); 34.88750° S, 56.14250° W; 13 Mar. 2020; D. Hagopián leg.; FCE-Ar 12198 • 2 ♂♂; Parque Lecocq; 34.79278° S, 56.33167° W; 7 Dec. 2020; D. Hagopián and A. Mailhos leg.; beating-sheet on a palm; FCE-Ar 12216. – **Río Negro** • 2 ♀♀; Ruta 24 Km 85 Estancia "Las Cadenas"; 32.52007° S, 58.03604° W; 8–14 Jan. 2021; D. Hagopián and A. Mailhos leg.; beating-sheet in riparian forest; FCE-Ar 13790. – **Rocha** • 1 ♀; La Ribiera; 34.54500° S, 54.32306° W; 25 Mar. 2023; D. Hagopián leg.; on *Eucalyptus* bark in the grass; FCE-Ar 14060.

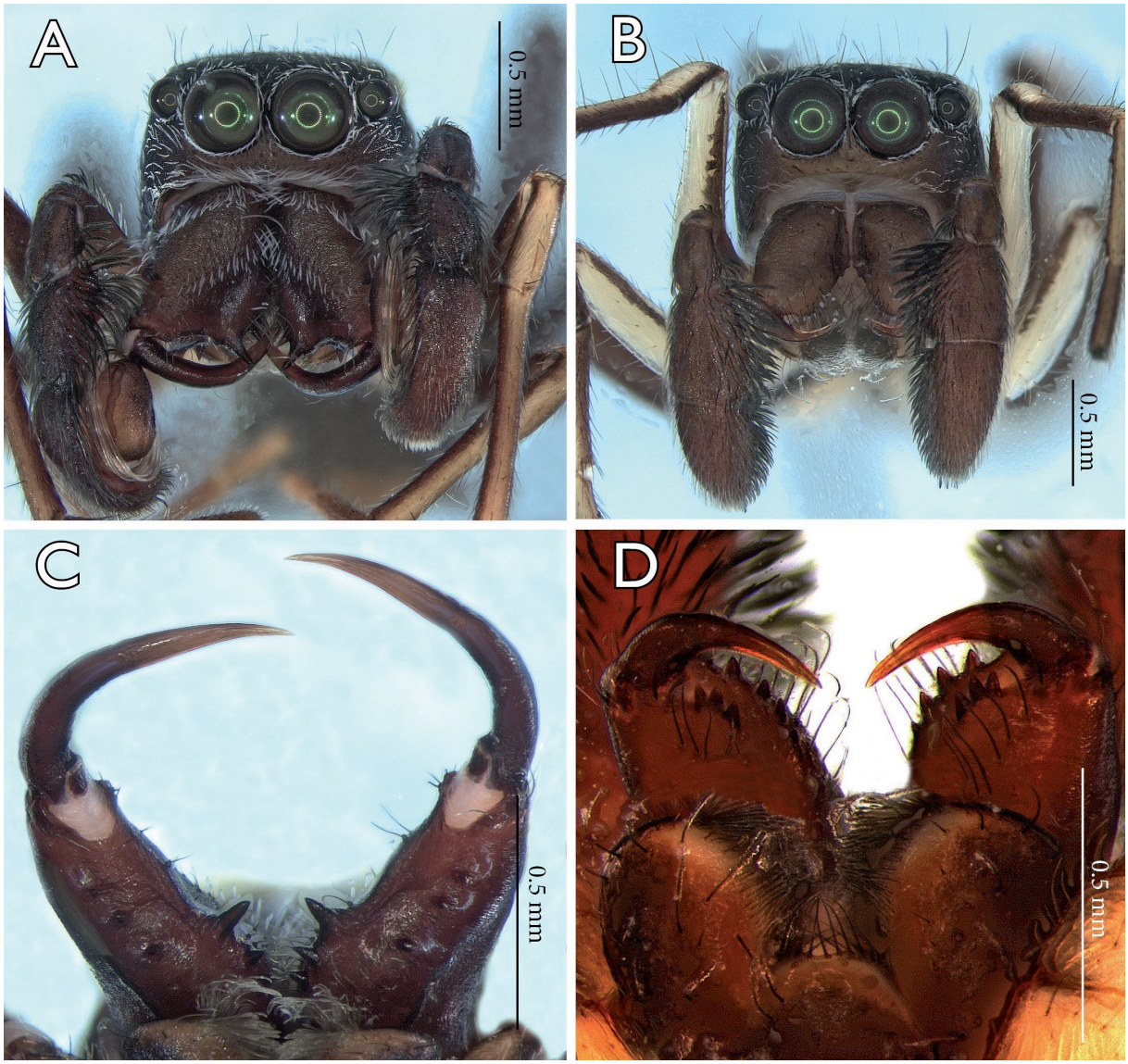

Fig. 27. *Sarinda marcosi* Piza, 1937, face and chelicerae. **A, C**. Male (FCE-Ar 14321). **B, D**. Female (FCE-Ar 14321). **A–B**. Face. **C–D**. Chelicera.

Variation

Males (n = 10)

Total length (3.55–4.73), prosoma (1.63–2.47), abdomen (1.80–2.26), leg I (3.12–3.92), leg II (2.15–3.31), leg III (2.27–3.23), leg IV (3.88–5.42). Cheliceral teeth variation: four teeth in the promargin, one in retromargin (n = 5); four teeth in the promargin, one in the retromargin of right chelicera and two in the left (n = 1); five teeth in the promargin (apical tooth bifurcated), one in retromargin (n = 3); five teeth in the promargin of the right chelicera and four in the left, one in retromargin (n = 1).

Females (n = 5)

Total length (4.30–4.85), prosoma (2.00–2.31), abdomen (2.18–2.58), leg I (3.23–3.60), leg II (2.44–2.78), leg III (2.53–2.93), leg IV (3.78–4.65). Cheliceral teeth variation: four teeth in the promargin of the right chelicera and five in the left, one in retromargin (n = 4); four teeth in promargin, one in retromargin (n = 1).

Distribution

Known from Brazil (São Paulo), Argentina (Santa Fe, Chaco, Salta, Tucumán and Buenos Aires), Paraguay (Asunción). In Uruguay, it was found in Canelones, Cerro Largo, Durazno, Lavalleja, Maldonado, Montevideo, Río Negro, Rocha and Tacuarembó (Piza 1937; Galiano 1965; Hagopián *et al.* 2021; Pett *et al.* 2021; World Spider Catalog 2023) (Fig. 33).

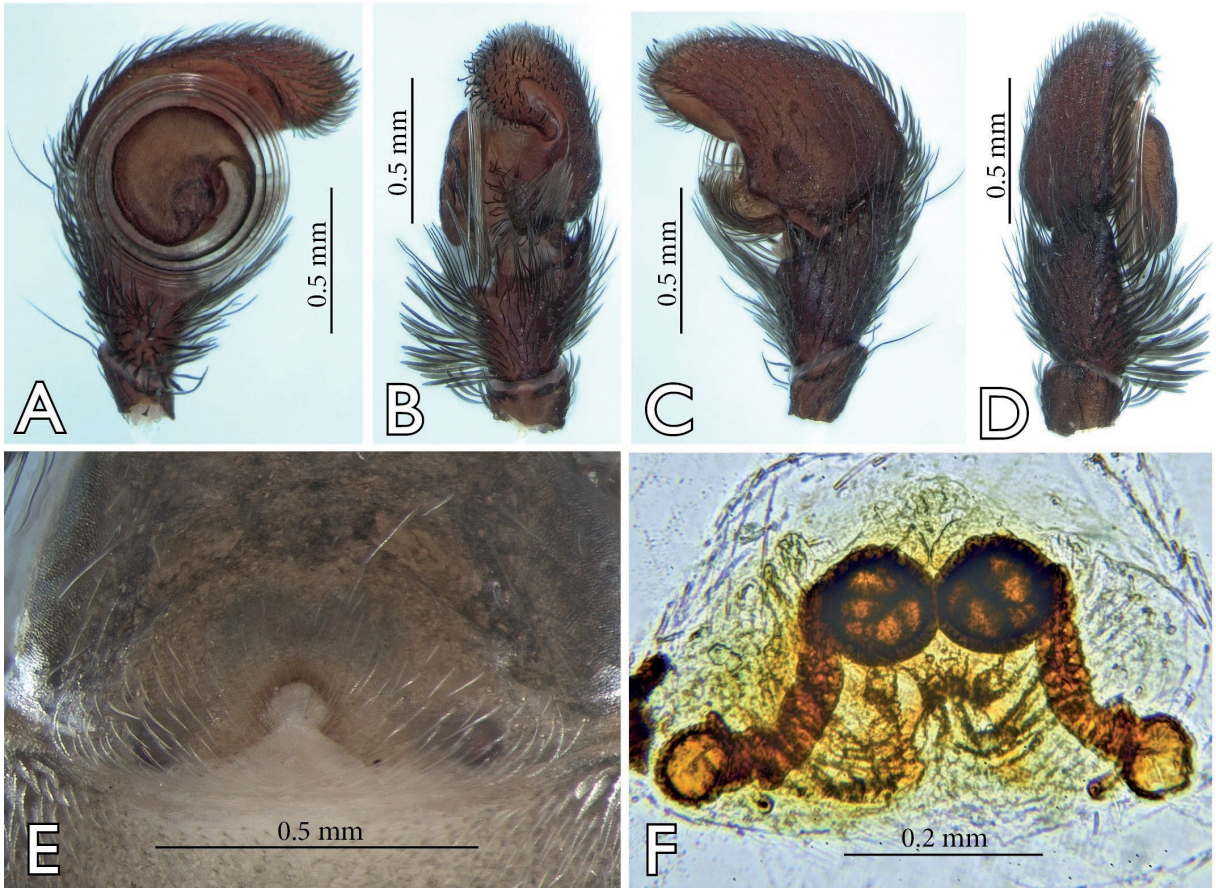

Fig. 28. *Sarinda marcosi* Piza, 1937, photographs of genitalia. **A–D**. Male pedipalp (FCE-Ar 14321). **A**. Ventral view. **B**. Retrolateral view. **C**. Dorsal view. **D**. Prolateral view. **E–F**. Epigynum (FCE-Ar 14321). **E**. Ventral view. **F**. Dorsal view.

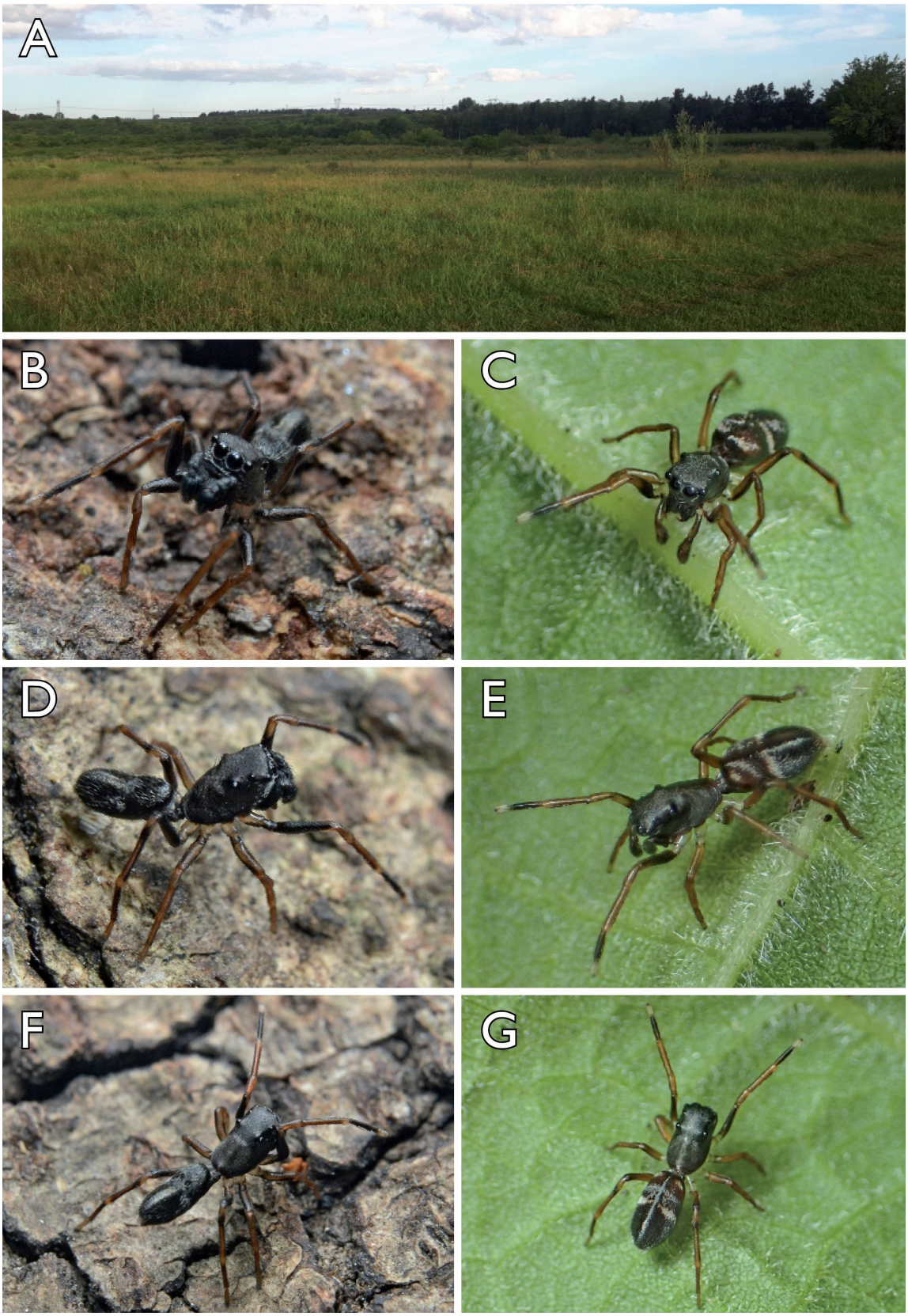

Fig. 29. *Parafluda banksi* Chickering, 1946, photographs in vivo. **A**. Site where the species was collected. **B**, **D**, **F**. Male. **C**, **E**, **G**. Female.

Genus ***Parafluda*** Chickering, 1946

Type species

Parafluda banksi Chickering, 1946.

Parafluda banksi Chickering, 1946
Figs 29–33

Parafluda banksi Chickering, 1946: 456 (male holotype from Panama, El Valle [Valle de Antón], [8°37′12″ N, 80°07′48″ W], deposited in the Museum of Comparative Zoology (MCZ), USA, not examined).

Fig. 30. *Parafluda banksi* Chickering, 1946, habitus. **A–C**. Male (FCE-Ar 11094). **D–F**. Female (FCE-Ar 9542). **A, D**. Dorsal view. **B, E**. Lateral view. **C, F**. Ventral view.

Sarinda albianus Mello-Leitão, 1947: 29 (male holotype from Carmo do Rio Claro, Minas Gerais, Brazil deposited in MNRJ 2185, destroyed by the fire, not examined. Synonymized by Galiano 1965: 292).

Parafluda banksi – Prószyński 2017: 61, fig. 27v. — Pett *et al.* 2021: 927, fig. 7h–i. — World Spider Catalog 2023.

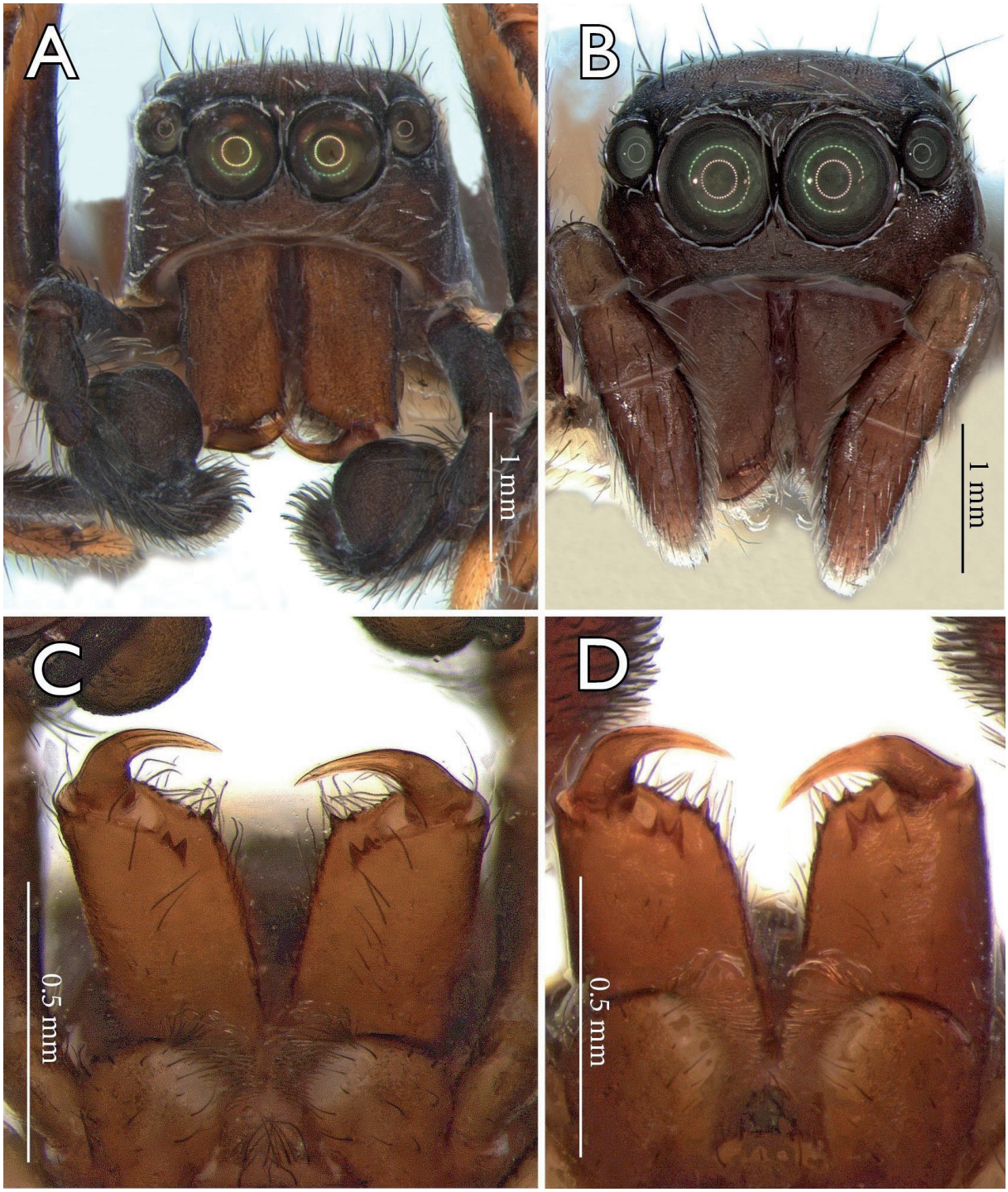

Fig. 31. *Parafluda banksi* Chickering, 1946, face and chelicerae. **A, C**. Male (FCE-Ar 11094). **B, D**. Female (FCE-Ar 9542). **A–B**. Face. **C–D**. Chelicera.

Diagnosis and description

See Chickering (1946) and Galiano (1971). Here, we include color photographs of preserved and living specimens to complement the descriptions (Figs 29–32).

New records

URUGUAY – **Canelones** • 1 ♂; INIA, Las Brujas; 34.66236° S, 56.33886° W; 2 Feb. 2005; M. Simó leg.; FCE-Ar 3080 • 1 ♂; same locality as for preceding; 27 Dec. 2004; M. Simó leg.; FCE-Ar 3147 • 1 ♂; San Ramón; 34.29007° S, 55.95536° W; 21 Oct. 2018; R. Lauría leg.; in dry grass; FCE-Ar 9563 • 1 ♂; Las Toscas; 34.76639° S, 55.73972° W; 3 Nov. 2019; P. Martínez leg.; inside house; FCE-Ar 10513. – **Cerro Largo** • 1 ♀; Arévalo, Oficina UPM; 32.63611° S, 55.07194° W; 1 Nov. 2019; D. Hagopián and Á. Laborda leg.; in fallen bark in grassland; FCE-Ar 12125. – **Durazno** • 1 ♀; Santa Bernardina; 33.35164° S, 56.51121° W; D. Hagopián leg.; under cardboard in the grass; FCE-Ar 9509 • 1 ♂; La Paloma; 32.72745° S, 55.57797° W; 24 Oct. 2021; Á. Laborda leg.; under piece of wood in

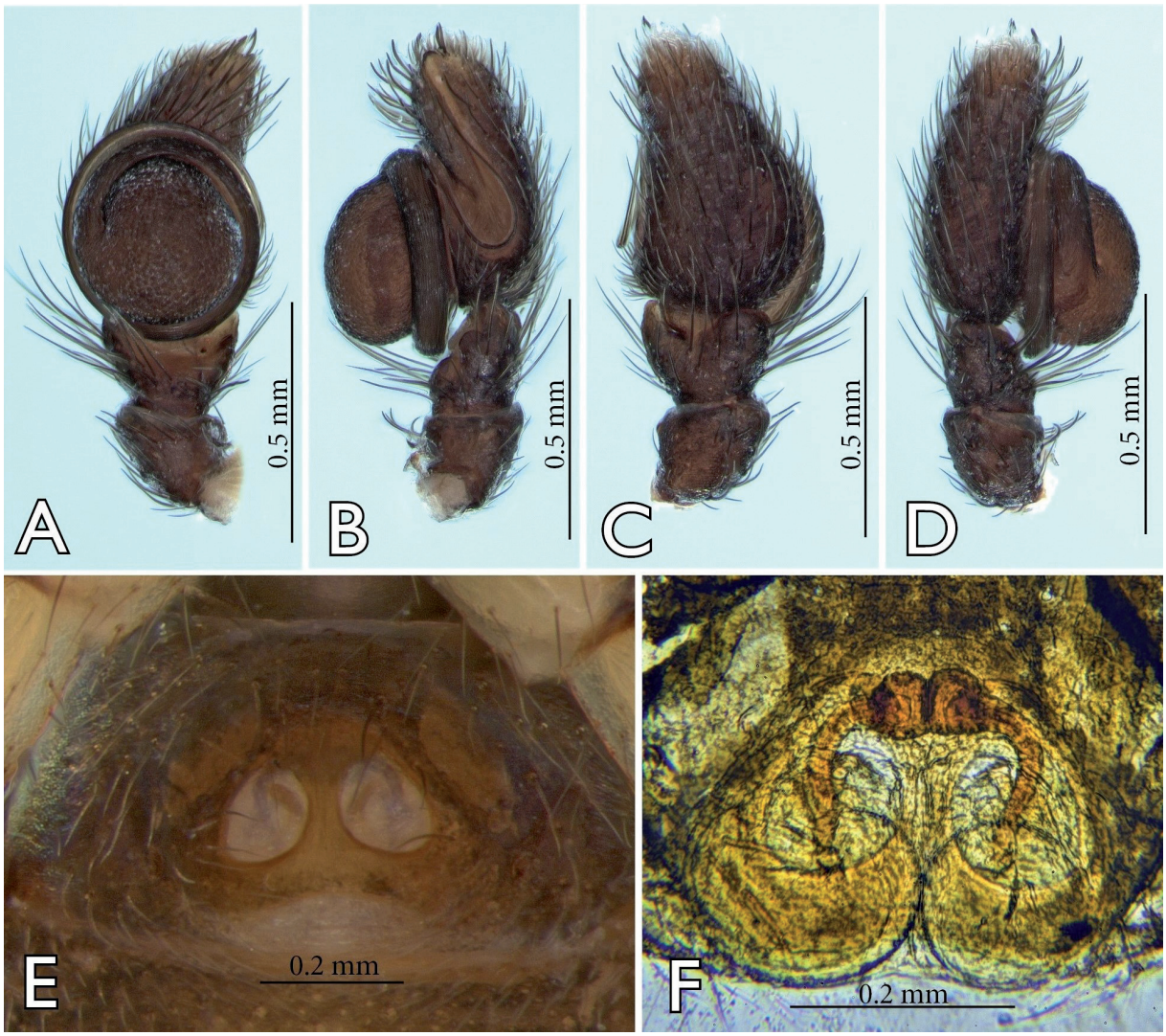

Fig. 32. Photographs of *Parafluda banksi* Chickering, 1946, genitalia. **A–D** Male pedipalp (FCE-Ar 11094). **A**. Ventral view. **B**. Retrolateral view. **C**. Dorsal view. **D**. Prolateral view. **E–F**. Epigynum (FCE-Ar 9542). **E**. Ventral view. **F**. Dorsal view.

garden; FCE-Ar 11094. – **Lavalleja** • 1 ♂; Cerro de los Cuervos; 34.27125° S, 55.24791° W; 22 Dec. 2003; Simó and Pérez-Miles leg.; FCE-Ar 9713. – **Maldonado** • 1 ♂; Punta Negra; 34.88267° S, 55.22058° W; 5 Nov. 2018; R. Roibal leg.; FCE-Ar 9614. – **Montevideo** • 1 ♂; Barrio Malvín Norte, Facultad de Ciencias; 34.88239° S, 56.11824° W; 4 Oct. 2008, M. Simó leg; pitfall; FCE-Ar 4640 • 1 ♂; Cerro de Montevideo; 34.88869° S, 56.26094° W; 23 Nov. 1998; Sección Entomología leg.; FCE-Ar 7897 • 1 ♀; same locality as for preceding; 20 Dec. 1997; Sección Entomología leg.; FCE-Ar 5945 • 1 ♂; Melilla; 34.73261° S, 56.32110° W; 17 Nov. 2017; D. Hagopián leg.; FCE-Ar 9575; • 1 ♂; same locality as for preceding; 11 Aug. 2018; D. Hagopián leg.; under metal tank in grass; FCE-Ar 9377 • 1 ♀; same locality as for preceding; 30 Sep. 2018; D. Hagopián leg.; under metal tank in grass; FCE-Ar 9558. – **Paysandú** • 1 ♀; Rincón de Pérez; 32.17530° S, 57.51699° W; 18 Mar. 2004; Á. Laborda and M. Castro leg.; entomological net in grassland; FCE-Ar 4833. – **Rocha** • 1 ♀; 12 km from Castillos; 34.09417° S, 53.87166° W; 6 Apr. 2017; Á. Laborda leg.; in *Eryngium* sp.; FCE-Ar 9542.

Distribution

Known from Argentina (Buenos Aires), Brazil (Minas Gerais), Panamá (El Valle) and Paraguay (Ñeembucú) (Chickering 1946; Galiano 1965, 1971; Pett *et al.* 2021; World Spider Catalog 2023). Here, we report the first records of the species from Uruguay (Canelones, Cerro Largo, Durazno, Maldonado, Montevideo, Paysandú and Rocha) (Fig. 33).

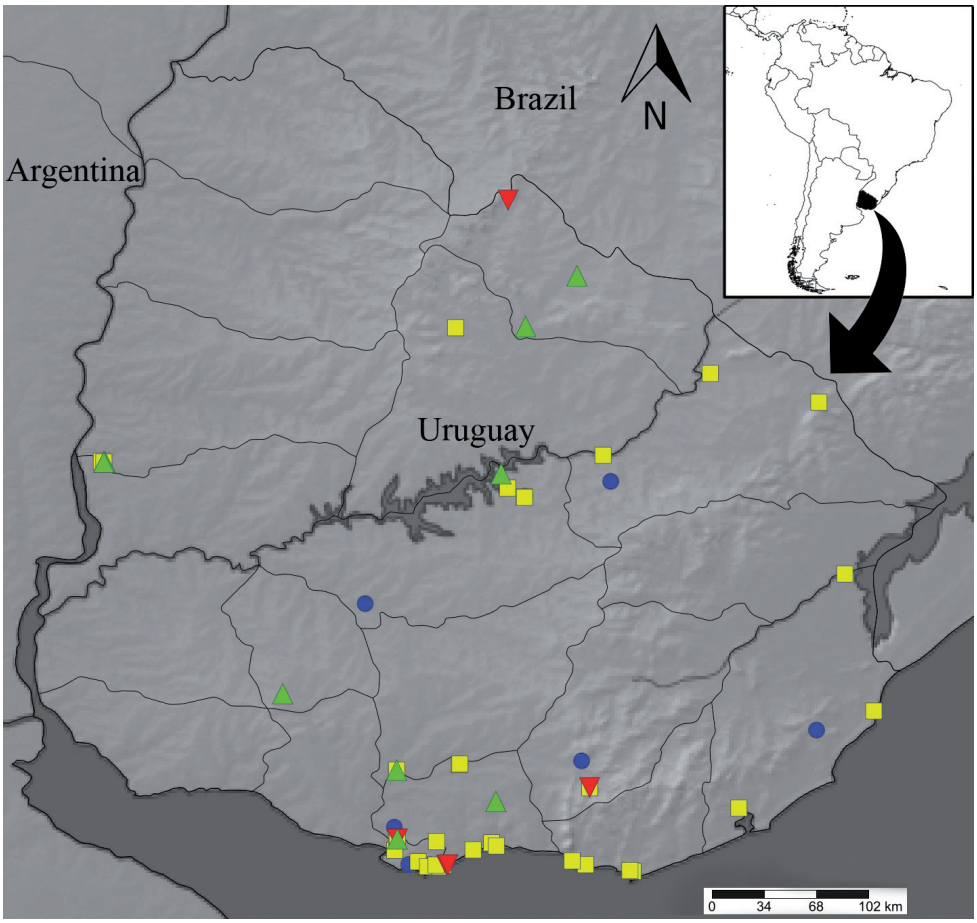

Fig. 33. Distribution map with records in Uruguay of *Parafluda banksi* Chickering, 1946 (blue circles), *Sarinda marcosi* Piza, 1937 (yellow squares), *Sarinda contraluz* Hagopián & Bustamante sp. nov. (red inverted triangles) and *Sarinda sombraluminosa* Hagopián, Laborda & Simó sp. nov. (green triangles).

Discussion

The two new species are currently known only from Uruguay and both were observed in grasslands. *Sarinda sombraluminosa* sp. nov. was observed in livestock farms in natural grasslands (Pompozzi *et al.* 2022). *Sarinda contraluz* sp. nov. was mainly observed on *Cortaderia selloana,* known as "Pampa grass". Although this grass was introduced in several countries in the world, it is native to South America (ranging from southern Brazil to Argentina). These results suggest that both species are associated with the Pampa biome so it is expected that their distributions also should extend to other countries such as southern Brazil and part of Argentina.

Several studies mention that representatives of *Sarinda* mimic ant species of the genus *Camponotus* (Galiano 1965, 1967; Maddison 2015; Hagopián *et al.* 2021). The new species here described share their habitat with the ant *Camponotus termitarius*, but behavioral studies are needed to determine the type of mimicry for these species. Also, the walking behavior is similar to that recorded for *S. marcosi* (Hagopián *et al.* 2021), in which the spider moves up and down the first pair of legs, the pedipalps and the abdomen while walking. Galiano (1971) mentions that *P. banksi* lifts the first pair of the legs while walking, as the antennae of ants, but the ant model and the mimicry type of this species remain unknown.

Sexual behavior was already described for the genus *Martella* (Galiano 1996), but here, we record the courtship and mating for the genus *Sarinda* for the first time. Galiano (1996) mentions that copulation took place on the walls of the recipient, outside the nest, as seen in *S. contraluz* sp. nov., but she did not describe any courtship behavior. Additional studies are needed to characterize the courtship and mating behaviors of the species of this genus.

Parafluda banksi shows a Neotropical distribution from Panama to Argentina (World Spider Catalog 2023). The species was found in synanthropic sites such as buildings or gardens but also in grasslands, as mentioned by Galiano (1971). *Sarinda marcosi* is known from southern South America (World Spider Catalog 2023) and, as *P. banksi*, the species inhabits a variety of habitats. The new records here reported are from native riparian forests, native ravine forests but also in synanthropic sites such as urban parks, gardens and *Eucalyptus* L'Hér. plantations.

This study presents different kinds of information, such as in-alcohol and live photography, SEM, natural history, distribution records, and behavioral videos. All this information complements the descriptions of the new taxa, and in turn, opens the way for future taxonomic and biogeographic studies, as well as mimetic and sexual behaviors.

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