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RESEARCH ARTICLE

# Eight new species of funnel-web spiders from Colombia (Araneae: Dipluridae) Восемь новых видов мигаломорфных пауков-тенетников из Колумбии (Araneae: Dipluridae)

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Abstract. Eight new species of the family Dipluridae from the genera *Masteria* L. Koch, 1873, *Striamea* Raven, 1981 and *Linothele* Karsch, 1879 are diagnosed and described from the western central region of Colombia: *Masteria verdum* sp. nov. (both sexes), *M. luisi* sp. nov. (both sexes), *Striamea kimbanai* sp. nov. (both sexes), *Linothele sanuk* sp. nov. (both sexes), *L. montana* sp. nov. (both sexes), *L. hunahpui* sp. nov. (both sexes), *L. ixbalanquei* sp. nov. (female), and *L. guarato* sp. nov. (female). Additionally, *L. tsachilas* Dupérré et Tapia, 2015 and *L. archidona* Dupérré et Tapia, 2023 are reported in Colombia for the first time. The above-mentioned species were found in the departments of Risaralda, Tolima, Quindío, Valle del Cauca, and Putumayo of Colombia.

**Резюме.** В статье описаны восемь новых видов из родов *Masteria* L. Koch, 1873, *Striamea* Raven, 1981 и *Linothele* Karsch, 1879 (семейство Dipluridae), по сборам с запада центрального региона Колумбии: *Masteria verdum* **sp. nov.** (оба пола), *M. luisi* **sp. nov.** (оба пола), *Striamea kimbanai* **sp. nov.** (оба пола), *Linothele sanuk* **sp. nov.** (оба пола), *L. montana* **sp. nov.** (оба пола), *L. hunahpui* **sp. nov.** (оба пола), *L. ixbalanquei* **sp. nov.** (самка) и *L. guarato* **sp. nov.** (самка). Кроме того, впервые для Колумбии отмечены виды *L. tsachilas* Dupérré et Tapia, 2015 и *L. archidona* Dupérré et Tapia, 2023. Виды, перечисленные выше, были обнаружены в колумбийских департаментах Рисаральда, Толима, Киндио, Валье-дель-Каука и Путумайо.

Key words: taxonomy, South America, Aranei, Mygalomorphae, Dipluridae, *Linothele, Masteria, Striamea*, new species, new records

Ключевые слова: таксономия, Южная Америка, Aranei, Mygalomorphae, Dipluridae, *Linothele*, *Masteria, Striamea*, новые виды, новые находки

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## Introduction

The family Dipluridae Simon, 1889 currently contains 143 species in eight genera (World..., 2025), namely, *Diplura* C.L. Koch, 1850, *Harmo*- nicon F.O. Pickard-Cambridge, 1896, Harpathele Wermelinger Moreira, Pedroso, Castanheira et Baptista, 2024, Linothele Karsch, 1879, Masteria L. Koch, 1873, Siremata Passanha et Brescovit, 2018, Striamea Raven, 1981, and Trechona C.L. Koch, 1850. In Colombia, the genera *Masteria*, *Striamea*, *Diplura*, and *Linothele* have been recognised (Passanha & Brescovit, 2018; World..., 2025). To date, the members of *Masteria*, *Striamea* and *Diplura* have been described and reported from northern Colombia, specifically from the departments of Magdalena and Bolívar, whereas *Linothele* species have been found from both the northern and central parts of the country (Fig. 1).

The Colombian departments such as Quindío, Tolima and Risaralda remain poorly studied for the diplurids, providing great potential for both discovering new species and clarifying the distribution of already known ones. The aims of this paper are (1) to diagnose, describe and illustrate eight new species of diplurids and (2) to report the findings of two *Linothele* species which were originally described from Ecuador in Colombia for the first time.

## **Material and methods**

Specimens were collected from the departments shown in Fig. 1, preserved in 96% ethanol and deposited in the insect collection of the University of Quindío (Armenia, Quindío, Colombia).

The holotype and one paratype of different sex (if available) were described in detail. To take into account the characters of the other specimens included in the type series, we mainly relied on the shape of the palps, spermathecae and general measurements where greater variability is observed, such as the length of the carapace along its length and the total length. In the case where there was more than one male, exclusive characters beyond the palp were evaluated, such as the shape and location of the processes of tibia 1 in *Masteria* and the protuberances on metatarsus 1 in *Linothele*.

To photograph and study the spermathecae, a ZEISS Primo Star HD microscope with an integrated 5MP camera was used, and the images were processed with the ZEN 3.8 program. To study and photograph other structures, a Carl Zeiss Stemi 2000-C stereoscope with an integrated AxioCam ERc 5s camera was used. Measurements were taken in millimetres (mm) using a micrometer and ImageJ. All measurements were made from dorsal, ventral, prolateral, and retrolateral views; the spination pattern follows Dupérré & Tapia (2015). Lactic acid was applied to expose the spermathecae, and pancreatin enzyme was used to clear the structures, following the protocol by Álvares-Padilla & Hormiga (2007).

The abbreviations for morphological terms used are as follows: a, apical; AL, abdomen length; ALE, anterior lateral eyes; AME, anterior median eyes; AS, apical segment; AW, abdomen width; BS, basal segment; BSp, basal spine; CL, carapace length; CW, carapace width; d, dorsal; F, femur; MS, middle segment; Mt, metatarsus; P, patella; p, prolateral; P1, process one; P2, process two; P3, process three; PLE, posterior lateral eyes; PLS, posterior lateral spinnerets; PME, posterior median eyes; PMS, posterior median spinnerets; r, retrolateral; T, tibia; Ta, tarsus; v, ventral.

## Results

Order Araneae

Family Dipluridae Simon, 1889

Subfamily Masteriinae Simon, 1889

Genus Masteria L. Koch, 1873

Type species: *Masteria hirsuta* L. Koch, 1873, by monotypy.

Remarks. Small mygalomorph spiders, with a total body length of 2.50-6.06. Coloration of carapace (in dorsal view), chelicerae and legs varies from whitish to dark brown, with tints of yellow, orange and light brown. Labium and sternum light brown to whitish. Abdomen whitish or light yellow, without microsetae at the ocular region; the eves are ovoid. Some Masteria species, e.g. M. barona (Chickering, 1967), may possess notably reduced or no AMEs. There is a crescent-shaped tissue called australotheline on the basal segments of spinnerets (Passanha & Brescovit, 2018). The genus Masteria comprises 40 species, mostly known from the Pacific Islands, the Caribbean, Central and South Americas, of which two species, M. colombiensis Raven, 1981 and M. tayrona Passanha et Brescovit, 2018, have been reported from Colombia (the Department of Magdalena).

## Masteria verdum sp. nov.

(Figs 2–5)

Holotype. Male, **Colombia**, *Risaralda Department*, La Celia Municipality, El Verdum Regional Natural



**Fig. 1.** Map of Colombia showing the departments where previous records of the family Dipluridae have been made (orange) and the departments where the material used in this article has been collected (yellow).

Park, 5°00'37.7"N 75°57'22.6"W, 1623 m a.s.l., 24.I.2024, L. Delgado-Santa leg. (CIUQ-025254).

*Paratypes.* 3 females (CIUQ-025253, CIUQ-025308, CIUQ-025309) and 1 male (CIUQ-025307), collected together with holotype.

**Description.** *Male* (holotype). Body predominantly yellowish, abdomen more reddish yellow (Fig. 2B), with greater presence of light brown setae on legs and spinnerets. Total length 4.30; CL 2.32, CW 1.83; fovea 0.14 long (Fig. 2A). Eyes: six, posterior row recurved; ocular tubercle 0.19 long, 0.30 wide; ALE 0.12, PME 0.04, PLE 0.10 (Fig. 2C). Clypeus narrow, 0.03 high. Chelicera with 13 promarginal teeth; sternum heart-shaped, 1.44 long, 1.10 wide (Fig. 2E); endites and labium as in Fig. 2F. Abdomen: AL 1.98, AW 1.10 (Fig. 2B); PMS 0.25 long; PLS: BS 0.61, MS 0.64, AS

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0.62, total length 1.87 (Fig. 2D). Palp: 4.19 (1.46, 0.81, 1.22, 0.70), leg I: 6.05 (1.30, 0.81, 1.66, 1.36, 0.92), leg II: 5.26 (1.16, 0.76, 1.26, 1.15, 0.93), leg III: 5.61 (1.29, 0.75, 1.30, 1.32, 0.95), leg IV: 7.36 (1.81, 0.73, 2.09, 1.61, 1.15). Spination pattern: I, F: d1-1-2-2-2, p2, v2; P: v1; T: d2, v1-1; Mt: d1-1-1; II, F: d1-1-1-1, v2-2-2; P: d1, v2; T: d1-1-2, v1-1; Mt: d1-1-1, v1-1-1, p1; III, F: d1-1-2, v2-2-2, p1-1-1, r1; P: d2-2, v1-2; T: v1-1, p1; Mt: v1-1, p1, r1-2; IV, F: d1-1-1, v1-1-1, r1; P: d1, v1-1; T: d1-1-1, v1-1-1, p1; Mt: d1-1-1-1, v1-1, r1, p1-2. T I: P2 robust, with rounded spur at normal base tip above P3, more pronounced towards tip, P1 absent. Mt I with oval BSp (Fig. 10A). Palp: cymbium longer than wide, with four apical spines; tegulum and embolus long, subequal in length; embolus tapering, slightly curved (Fig. 3A–F).



**Fig. 2.** *Masteria verdum* **sp. nov.**, male (holotype). **A**, carapace, dorsal view; **B**, abdomen, dorsal view; **C**, eyes, dorsal view; **D**, spinnerets, ventral view; **E**, labium and sternum, ventral view; **F**, labium and endites, ventral view. Scale bars: 0.5 mm.



**Fig. 3.** *Masteria verdum* **sp. nov.**, male (holotype). **A**, left palp, retrolateral view; **B**, left palp, prolateral view; **C**, bulb, prolateral view; **D**, bulb, retrolateral view. Scale bars: 1 mm (A, B), 0.2 mm (C, D).

*Female* (paratype CIUQ-025253). Carapace whitish yellow (Fig. 4A); abdomen paler (Fig. 4B), covered with light brown setae being more abundant on legs and spinnerets. Total length 3.66; CL 1.81, CW 1.31; fovea 0.1 long (Fig. 4A). Eyes: six, posterior row recurved; ocular tubercle 0.12 long, 0.16 wide; ALE 0.06, PME 0.02, PLE 0.06 (Fig. 4C). Clypeus narrow, 0.02 high. Chelicera with 13 promarginal teeth; sternum heart-shaped, 0.93 long, 0.78 wide, without visible setae (Fig. 4E); endites and labium as in Fig. 4F. Abdomen: AL 1.85, AW 1.13 (Fig. 4B); PMS 0.26 long;

PLS: BS 0.4, MS 0.3, AS 0.5, total length 1.12 (Fig. 4D). Palp: 2.14 (0.79, 0.35, 0.57, 0.43), leg I: 4.15 (1.09, 0.55, 1.02, 0.79, 0.70), leg II: 3.03 (0.89, 0.40, 0.74, 0.53, 0.47), leg III: 3.16 (0.78, 0.47, 0.74, 0.58, 0.59), leg IV: 5.86 (1.66, 0.61, 1.44, 1.26, 0.89). Spination pattern: I, F: d1-1-1-1, v1-1-1, r1-1-1, p1-1-1-1; P: d1-1-1, v1-1-1, r1, p2-1-2; T: d1-1-1, v1-1-3, p1-1-1-1; Mt: d1-1-1, v1-1-1-3, r1-1-1-1, p1-1-1-1; II, F: d1-1-1-1, v2-2-2; P: d1, v1-1-1, p2-1, r1-; T: d1-1-1-1, v1-1-2, p1-1-1-1, r1-1-1-1-1; Mt: d1-2-2, v1-1-1, p1-1-1-1, r1-1-1; III, F: d1-1-1-1, v2-2-2, r1-1; P: d1-2-1, v2, p1; T: d1-1-1-1, v1-1-2, r1, p1-1-1; Mt: d1-1-2-2, v1-1, r1-1, p1-1-1; IV, P: p1; T: d1-1-1, v1-1, r1-1, p1-1-1; Mt: d1-1, v2-2-2, r1-1-1-1, p1-1-1. Spermathecae bilobulated, with ectal lobes slightly longer and larger than ental ones, bifurcating from bases; lobes pear-shaped, converging outward in a small curve (Fig. 5A).

*Variability*. Male paratype: CL 1.40, total length 3.00. Females: CL 1.13–1.81, total length 2.54–3.66.

**Comparison.** The position of the processes in *M. verdum* **sp. nov.** is similar to those of *M. petrunkevitchi* (Chickering, 1965), *M. amarumayu* Passanha et Brescovit, 2018, *M. mutum* Passanha et Brescovit, 2018, and *M. manauara* Bertani, Cruz et Oliveira, 2013, but it differs from the species listed in the position of P2 and P3 (Fig. 10A). In having the pear-shaped bulb, the new species is similar to *M. yacambu* Passanha et Brescovit, 2018, *M. jatunsacha* Dupérré et Tapia, 2021, *M. boggildi* Lissner, 2023, and *M. colombiensis*, from which it can be distinguished by the shape



**Fig. 4.** *Masteria verdum* **sp. nov.**, female (paratype CIUQ-025253). **A**, carapace, dorsal view; **B**, abdomen, dorsal view; **C**, eyes, dorsal view; **D**, spinnerets, ventral view; **E**, labium and sternum, ventral view; **F**, labium and endites, ventral view. Scale bars: 0.5 mm.

of the tegulum and the tapering embolus (Figs 3A-C). The female of M. verdum sp. nov. differs from those of M. petrunkevitchi, M. manauara and M. sabrinae Passanha et Brescovit. 2018 in having the bilobulated spermathecae which are not significantly spaced apart. In having the bilobulated spermathecae, the new species is similar to M. barona, M. lewisi (Chickering, 1965), M. lucifuga (Simon, 1889), M. aimeae (Alavón, 1995), and M. golovatchi Alayón, 1995, but differs from them in the different sizes and shapes of the ectal and ental lobes; these also have a similar height (Fig. 5A).



**Fig. 5.** *Masteria verdum* **sp. nov.**, female (paratype CIUQ-025253). **A**, spermathecae, dorsal view; **B**, spermathecae (drawing), dorsal view. Scale bar: 0.1 mm.

**Etymology.** The specific epithet is a noun in apposition taken from the Verdum Regional Natural Park in the Municipality of La Celia, Department of Risaralda, Colombia, from where the type series of this species was collected.

**Distribution and habitat.** *Masteria verdum* **sp. nov.** is currently known from the Verdum Regional Natural Park (Fig. 18), occurring on the ground covered with leaf litter, near the water body called Quebrada Monos.

### Masteria luisi sp. nov.

(Figs 6-9)

Holotype. Male, **Colombia**, Tolima Department, Cajamarca Municipality, Las Perlas Vill., Combeima Canyon, 4°33'21.7"N 75°19'19.4"W, 1859 m a.s.l., 26.I.2024, Luis Fernando García leg. (CIUQ-025255).

*Paratypes.* 2 females, collected together with holotype (CIUQ-025256, CIUQ-025310).

**Description.** *Male* (holotype). Carapace orange-yellow, with darker eye area and radial grooves across entire dorsal area of carapace, and with dark brown setae arranged haphazardly over carapace (Fig. 6A); sternum slightly lighter. Abdomen light grey, with more abundant dark grey setae (Fig. 6B). Total length 5.58; CL 2.70, CW 2.10; fovea 0.17 long (Fig. 6A). Eyes: eight, posterior row recurved; ocular tubercle 0.30 long, 0.51 wide; AME 0.03, ALE 0.19, PME 0.10, PLE 0.15 (Fig. 6C). Clypeus not prominent: 0.02. Chelicerae with 11 promarginal teeth, sternum heart-shaped, longer than wide, 1.59 long, 1.30 wide, with six visible sigilla (Fig. 6E); endites and labium as in Fig. 7F. Abdomen: AL 2.88, AW 1.60 (Fig. 6B); PMS 0.44 long; PLS: BS 0.90, MS 0.79, AS 0.75, total length 2.34 (Fig. 6D). Palp: 5.05 (1.55, 0.87, 1.45, 1.18), leg I: 8.21 (2.21, 0.94, 2.15, 1.50, 1.41), leg II: 6.51 (1.98, 0.70, 1.39, 1.27, 1.17), leg III: 6.52 (1.84, 0.50, 1.58, 1.38, 1.22), leg IV: 8.72 (2.60, 0.75, 2.10, 1.89, 1.38). Spination pattern: I, F: d 1-1-1-1-1; P: r1-1; T: v1-1, p1, r1; Mt: v1-1; II: F: v1, p1, d1; P: v2, p1; T: v1-1-1, p1-1; Mt: v1-1-1, p1, r1; III, F: v1, d1-1, r1; P: d1-1, p1; T: v1-1-1, p1-1, r1-1-1; Mt: v1-1-1, r1; IV: F: p1; P: p1, r1; T: d2-2-2, v2-1-1, p1-1-1; Mt: d1-1, v2-1, p1-1, r1-1. Tibia I: P1 robust with pointed tip; P2 slender and elongated, below P1; P3 less robust than P1 with distal narrowing from middle to tip; Mt I with BSp elongated and rounded at tip (Fig. 10B). Palp: tibia with eight or nine retrolateral rows of short, thick spines (Fig. 7B); cymbium



**Fig. 6.** *Masteria luisi* **sp. nov.**, male (holotype). **A**, carapace, dorsal view; **B**, abdomen, dorsal view; **C**, eyes, dorsal view; **D**, spinnerets, ventral view; **E**, labium and sternum, ventral view; **F**, labium and endites, ventral view. Scale bars: 0.5 mm.

wider than long, with four apical spines; bulb pearshaped; tegulum stretched; embolus elongated, over one-quarter of tegulum, with median internal keel having spatulate tip (Fig. 7A). *Female* (paratype CIUQ-025256). Carapace reddish yellow (Fig. 8A), with dark brown setae scattered throughout it; sternum, labium, and endites more yellow. Abdomen light grey, with dark



**Fig. 7.** *Masteria luisi* **sp. nov.**, male (holotype). **A**, left palp, retrolateral view; **B**, left palp, protoventral view (intermediate between prolateral and ventral view); **C**, bulb, retrolateral view; **D**, bulb, prolateral view. Scale bars: 1 mm (A, B), 0.2 mm (C, D).

grey setae being more abundant dorsally than ventrally (Fig. 8B). Total length 7.39; CL 3.47, CW 2.72; fovea 0.22 long (Fig. 8A). Eyes: eight, posterior row recurved; ocular tubercle 0.40 long, 0.59 wide; AME 0.04, ALE 0.24, PME 0.16, PLE 0.13 (Fig. 8C). Clypeus not prominent, 0.14 wide. Chelicerae with 10 promarginal teeth; sternum heart-shaped, 1.94 long, 1.56 wide, with six visible sigilla; endites and labium as in Fig. 10F. Abdomen: AL 3.92, AW 2.47 (Fig. 10B); PMS 0.51 long; PLS: BS 1.13, MS 0.88, AS 0.98, total length

2.99 (Fig. 8D). Palp: 4.65 (1.71, 0.45, 1.23, 1.26), leg I: 8.31 (2.54, 0.77, 2.12, 1.62, 1.26), leg II: 6.43 (2.33, 0.60, 1.49, 1.03, 0.98), leg III: 7.29 (2.40, 0.92, 1.45, 1.40, 1.12), leg IV: 8.81 (2.61, 1.29, 2.15, 1.60, 1.15). Spination pattern: II, T: v1-1-1, p1; Mt: v1-1-1, p1, r1; III, F: v1, d1-1, r1; P: d1-1, p1; T: v1-2, d1-1-1, r1-2, p1-1-1; Mt: v1-1-1, p1-1-2, d1-1-1, r2-1; IV, P: v1; T: v2-1-2, d1, p1-1-1-1, r1-1; Mt: v2-1-2, d1-2-1-1, p1-1, r1-1. Spermathecae bilobulate, with ectal lobe somewhat more globose than ental one: ental lobe globose and arranged horizontally, with extensive granular region covered with large granules (Fig. 9A).

*Variability*. Female paratype CIUQ-025310: CL 2.60, total length 4.54.

**Comparison.** In the presence of short and strong retrolateral spines on palpal tibia arranged in 6–7

rows (Fig. 7A, B), the male of *M. luisi* **sp. nov.** resembles that of *M. tayrona*, but differs from it in the position of tibial processes: P2 is further away from P1 and P3 (Fig. 10B). The male of *M. luisi* **sp. nov.** has the laminar embolus similar to that of *M. jatunsacha*, but being longer and not twisted. The female of *M. luisi* **sp. nov.** is distinguished from those of other *Masteria* species by the shape of the bilobulated spermathecae, possessing an extensive granular region that conceals the base of the lobes (Fig. 9A).



**Fig. 8.** *Masteria luisi* **sp. nov.**, female (paratype CIUQ-025256). **A**, carapace, dorsal view; **B**, abdomen, dorsal view; **C**, eyes, dorsal view; **D**, spinnerets, ventral view; **E**, labium and sternum, ventral view; **F**, labium and endites, ventral view. Scale bars: 0.5 mm.

**Etymology.** The species is named after Dr Luis Fernando García Hérnandez, who, in addition to our admiration for him, was the first to collect this species.

**Distribution and habitat.** The new species was found in Tolima Department close to the border with the Quindío Department (Fig. 18), mainly between Calarcá and Cajamarca, occurring on sloping areas with vegetation.



Fig. 9. *Masteria luisi* sp. nov., female (paratype CIUQ-025256). A, spermathecae, dorsal view; B, spermathecae (drawing), dorsal view. Scale bar: 0.1 mm.

### Genus Striamea Raven, 1981

Type species: *Striamea gertschi* Raven, 1981, by original designation.

**Remarks.** Striamea differs from other genera of the Masteriinae in having a colour pattern on the carapace and abdomen, an elevated ocular tubercle, a row of trichobothria on metatarsi, a lower tarsal claw teeth emerging from the projected base, and in the absence of an australotelina crescent at the base of the basal segment of spinnerets (see Passanha & Brescovit, 2018: fig. 35A–D). The genus *Striamea* is endemic to Colombia, currently comprising only two species, *S. gertschi* Raven, 1981 and *S. magna* Raven, 1981, which are restricted to Sierra Nevada de Santa Marta, Magdalena, Colombia (Fig. 18).

### Striamea kimbanai sp. nov.

(Figs 11-17)

Holotype. Male, **Colombia**, *Quindío Department*, Calarcá Municipality, La Virginia Corregimiento, Peñas Blancas Ecopark, 4°28'48.5"N 75°37'38.1"W, 2400 m a.s.l., 22.I.2024, L. Delgado Santa, G. Rodríguez Castro & E. Rodríguez leg. (CIUQ-025257).

*Paratypes.* 4 females, collected together with holotype (CIUQ-025258, CIUQ-025311, CIUQ-025312, CIUQ-025313).

**Description.** *Male* (holotype). Carapace light yellow, with darker diffusely coloured mar-

gins and ocular tubercle (Fig. 13A). Abdomen reddish brown, with abundant black setae, with no colour pattern (Fig. 13B). Endites and labium as in Fig. 12F. Total length 6.76; CL 3.32, CW 2.69; fovea 0.16 long (Fig. 12A). Eyes: eight, posterior row recurved; ocular tubercle 0.51 long, 0.61 wide; AME 0.08, ALE 0.12, PME 0.10, PLE 0.24 (Fig. 12C). Clypeus not prominent, 0.04 wide. Chelicerae with 13 promarginal teeth; sternum heart-shaped, 1.88 long, 1.48 wide; with six visible sigilla (Fig. 12E). Abdomen: AL 3.44, AW 2.40 (Fig. 12B); PMS 0.61 long; PLS: BS 0.73, MS 0.47, AS 0.93, total length 2.13 (Fig. 12D). Palp: 4.13 (1.42, 0.42, 1.26, 1.03), leg I: 8.21 (2.18, 0.70, 2.13, 1.82, 1.38), leg II: 7.55 (2.34, 0.65, 1.95, 1.58, 1.03), leg III: 7.01 (1.90, 0.73, 1.65, 1.46, 1.27), leg IV: 10.20 (2.62, 1.05, 2.57, 2.47, 1.49). Spination pattern: I, F: v1-1-1, d1-1-1; P: v1-1; T: v1-2; Mt: v1-2; II, F: d1-1-2-1; P: v1; T: d v2-1-1, p1-1, r1-1; Mt: v1-2, p1, r1; III, F: v2-2-2, d1-1-2; P: v2, d1-2; T: v1-1-1-2, d1-2-1, p1, r1-1; Mt: v1-1-1-2, d2-1, p1; IV, P: d1, p1; T: d1-1-1, p1, r1-1; Mt: v1-1-2, d1-1-1. Palp: palpal tibia with six retrolateral apical spines arranged in a semi-vertical row (Fig. 13A, B); cymbium longer than wide; bulb conical; tegulum wide horizontally; embolus slightly larger than tegulum, curved with distal narrowing (Fig. 14A–C).



Fig. 10. *Masteria* spp., male (holotypes), apical part of tibia I and basal part of metatarsus I. A, *M. verdum* sp. nov., protoventral view (intermediate between prolateral and ventral view); **B**, *M. luisi* sp. nov., lateral view. For abbreviations, see Material and methods. Scale bars: 0.5 mm.

*Female* (paratype CIUQ-025258). Coloration (Fig. 16A, B) as in male, but with a light yellow circular spot on dorsum (Fig. 16B). Total length 6.89; CL 3.32, CW 2.61; fovea 0.41 long (Fig. 16A). Eyes: eight, posterior row recurved; ocular tubercle 0.41 long, 0.63 wide; AME 0.04, ALE 0.25, PME 0.12, PLE 0.20 (Fig. 16C). Clypeus not prominent: 0.05 wide. Chelicerae with 16 promarginal teeth; sternum heart-shaped, 2.93 long, 2.22 wide, with six visible sigilla (Fig. 16E); endites and labium as in Fig. 16F. Abdomen: AL 3.44, AW 2.40 (Fig. 16B); PMS 1.17 long; PLS: BS 1.55, MS 0.90, AS 1.71, total length 4.16 (Fig. 16D). Palp: 4.27 (1.70, 0.48, 0.89, 1.20), leg I: 9.06 (2.56, 1.15, 2.16, 1.82, 1.37), leg II: 7.35 (2.19, 1.02, 1.53, 1.51, 1.10), leg III: 6.07 (1.65, 0.91, 1.43, 1.10, 0.98), leg IV: 9.61 (2.76, 1.05, 2.34, 2.25, 1.21). Spination pattern: I, F: v1-1-1, d1-1-1; P: v1, p1; T: v1-2-1, d1-1, p1-1-1, r1; Mt: v2-1-2, p1, r1; II, F: v2-2-2, d1-1-1; P: v2; T: v1-1-1-2, p1-1, r1; Mt: v1-1-1-2, p1, r1; III, F: v2-2-2, d1-1-1-1; P: v1-2, d1, p1, r1-1; T: v2-2, d1-1-1-1, p1-1-1-1, r1-1-1; Mt: v2-2-2, d2-1-2, p1-1-1, r2; IV, P: d1, p1; T: d11-1, p1, r1-1; Mt: v1-1-2, d1-1-1. Palp with prominent tarsal claw. Each spermatheca consisting of a pair of large globose ectal lobes possessing vesicles with glands at their bases, and reddish granular area extending throughout lower part (Fig. 17A).

*Variability*. Females: CL 2.76–3.32, total length 4.81–6.89.

**Comparison.** The male of *S. kimbanai* **sp. nov.** (Fig. 11A, B) is distinct by the absence of megaspine on Mt I and by the presence a colour pattern of carapace (Fig. 12A), which is absent from the dorsum (Fig. 12B). In having apical spines on palpal tibia (Fig. 13B), the male of *S. kimbanai* **sp. nov.** is similar to that of *S. gertschi*, but its apical spines are arranged in a descending row rather than more horizontally, as in *S. gertschi* (cf. Passanha & Brescovit, 2018: fig. 37C). The female of *S. kimbanai* **sp. nov.** (Fig. 15A, B) can be distinguished from other congeners by the spermathecal conformation (Fig. 17) and by the presence of colour pattern on the carapace (Fig. 16A), which is absent from dorsum.



Fig. 11. *Striamea kimbanai* sp. nov., male (holotype). A, habitus, dorsal view; B, carapace and abdomen, dorsal view; C, collection site. Scale bars: 1 mm.

**Etymology.** This species is dedicated to Kimbana, also known as Calarcá, the legendary chief of the Calarcá people of Quindío Department in Colombia during pre-Columbian times (Ospina, 2001). This chief is of historic significance to the local community and is associated with the legend relating to the area where the new species was found.

**Distribution and habitat.** The new species was found in Quindío (Fig. 18). Most specimens were collected from walls inside a very wet cave, but some were found close to the cave entrance, suggesting that the species is not restricted to this site. Probably, this species is associated with a particular type of lichen (Figs 11C, 15C). There is no evidence of sympatry with other spider species.

## Subfamily Diplurinae Simon, 1889

### Genus Linothele Karsch, 1879

Type species: *Linothele curvitarsis* Karsch, 1879, by monotypy.

**Remarks.** The genus *Linothele* is distinguished from the others by having the widely divided scopula (not in all species), by the absence of a maxillary lyra (Raven, 1985), and by the presence of pseudosegmented tarsi in both sexes (Drolshagen & Bäckstam, 2021). The genus comprises seven Neotropical species (World..., 2025), of which the following have been recorded from Colombia: *Linothele agelenoides* Bäckstam, Drolshagen et Seiter, 2023, *L. curvitarsis*, *L. gaboi* Osorio, Benavides, Sherwood, Drolshagen et Seiter, 2023,



**Fig. 12.** *Striamea kimbanai* **sp. nov.**, male (holotype). **A**, carapace, dorsal view; **B**, abdomen, dorsal view; **C**, eyes, dorsal view; **D**, spinnerets, ventral view; **E**, labium and sternum, ventral view; **F**, labium and endites, ventral view. Scale bars: 1 mm.

L. macrothelifera Strand, 1908, L. megatheloides Paz et Raven, 1990, L. sericata Paz et Raven, 1990, and L. wiwa Osorio, Benavides, Sherwood, Drolshagen et Seiter, 2023. All these species are known from the northern and northwestern regions of Colombia.



Fig. 14. Striamea kimbanai sp. nov., male (holotype), left palp. A, prolateral view; B, proventral view; C, retrolateral view. Scale bar: 1 mm.





Fig. 15. *Striamea kimbanai* sp. nov., female (paratype CIUQ-025258). A, habitus, dorsal view; B, carapace and abdomen, dorsal view; C, collection site. Scale bars: 1 mm.

## Linothele sanuk sp. nov.

(Figs 19-25)

Holotype. Male, **Colombia**, *Quindío Department*, Armenia Municipality, San Juan Vill., 4°35′55.2″N 7°37′33″W, 1700 m a.s.l., 24.III.2022, G. Rodríguez Castro & E. Rodríguez leg. (CIUQ-025259).

*Paratypes.* 2 females (CIUQ-025260, CIUQ-025314) and 1 male (CIUQ-025315), all collected together with holotype.

Adittional material examined. Colombia, 2 females, *Quindío Department*, Circasia Municipality, La Arenosa sector, 4°62'99.86"N 75°63'41"W, 1780 m a.s.l., 24.III.2022, G. Rodríguez Castro & E. Rodríguez leg. (CIUQ-025316, CIUQ-025317).

**Description.** *Male* (holotype). Body and legs mostly brown, with abundant golden setae on carapace, accompanied with few black setae (Fig. 19A). Sternum dark yellow, with erect black setae (Fig. 19E). Dorsum with chevron-like colour pat-

tern, posteriorly composed of amorphous opaque vellow spots interconnecting towards centre, with sparse erected black setae (Fig. 19B). Total length 18.62; CL 9.16, CW 8.31; fovea 0.63 long (Fig. 19A). Eyes: eight, posterior row slightly recurved; ocular tubercle 1.14 long, 2.03 wide; AME 0.39, ALE 0.55, PME 0.27, PLE 0.46 (Fig. 19C). Clypeus not prominent, 0.11 wide. Chelicerae with 12–13 promarginal teeth, fangs aserrate; labium with one cuspule, endites each with 41-43 cuspules (Fig. 19F); sternum oval, slightly longer than wide, 3.95 long, 3.22 wide, with six elongated oval sigilla (Fig. 20E). Abdomen: AL 9.46, AW 4.98 (Fig. 20B); PMS 1.30 long; PLS: BS 3.06, MS 2.90, AS 2.21, total length 8.17 (Fig. 19D). Palp: 12.71 (3.95, 2.71, 3.54, 2.50), leg I: 25.68 (6.70, 3.41, 5.78, 5.22, 4.57), leg II: 21.89 (6.61, 2.89, 5.03, 3.64, 3.72), leg III: 24.30 (6.53, 3.36,

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**Fig. 16.** *Striamea kimbanai* **sp. nov.**, female (paratype CIUQ-025258). **A**, carapace, dorsal view; **B**, abdomen, dorsal view; **C**, eyes, dorsal view; **D**, spinnerets, ventral view; **E**, labium and sternum, ventral view; **F**, labium and endites, ventral view. Scale bars: 1 mm.

5.96, 4.47, 3.98), leg IV: 30.09 (8.03, 3.46, 5.89, 8.96, 3.75). Spination pattern: I, F: d1-1-1-1, p1, r1; P: p1, r1; T: v1-2, p1-1, r1-1; Mt: v1-1-1-2, p1-1-1-1,

r1-1-1-1; II, F: d1-1-1, p1, r1-1; P: r1; T: v1-1-2, p1, r1-1; Mt: v2-2-2, p1-1, r1-1; III, F: d2-2-1, r2-1; P: p2; T: v2-2-2, d1, p1, r2-1-1; Mt: v2-2-2, d2-1, p1,



**Fig. 17.** *Striamea kimbanai* **sp. nov.**, female (paratype CIUQ-025258). **A**, spermathecae, dorsal view; **B**, spermathecae (drawing), dorsal view. Scale bar: 0.1 mm.

r1-1; IV, F: d2-2-2-1, r1-2; P: p1; T: v2-2-2, p1-1, r1-1; Mt: v2-2-3, d1-2, p1, r1-1-1. All leg tarsi with pseudosegments. Scopula on Ta I and IV composed of abundant scopiform setae, divided, absent on distal Mt, absent on Ta II and III. Paired tarsal claws with two rows of teeth; leg I: 7 right, 6 left; leg II: 6 right, 6 left; leg III: 6 right, 5 left; leg IV: 7 right, 6 left. Mt I with small triangular protuberance; T I with prominent copulatory spur (Fig. 20A–C). Palp: palpal tibia with ventral and prolateral spines; cymbium longer than wide (Fig. 21A, B); bulb pear-shaped, longer than wide, its size less than one-quarter of tibia length; tegulum globose, less than half of bulb; embolus slightly curved, with distal constriction and pointed tip (Fig. 22A–C).

*Female* (paratype CIUQ-025260). Coloration as in male, with smaller number of golden setae on carapace (Fig. 23A); dorsum with chevron-like pattern more prominent due to absence of erect black setae (Fig. 23B). Total length 21.07; CL 9.66, CW 8.14; fovea recurved, 0.88 long (Fig. 23A). Eyes: eight, posterior row slightly recurved; ocular tubercle 1.23 long, 2.54 wide; AME 0.42, ALE 0.59, PME 0.36, PLE 0.47 (Fig. 23C). Clypeus not prominent, 0.10 wide. Chelicera with 15 promarginal teeth, fangs aserrate; labium with two cuspules; endites with 24-34 cuspules each (Fig. 23F); sternum oval, 4.42 long, 3.81 wide, with six elongated oval sigilla (Fig. 23E). Abdomen: AL 11.41, AW 7.23 (Fig. 23B); PMS 2.53 long; PLS: BS 3.33, MS 2.49, AS 3.86, total length 9.68 (Fig. 23D). Palp: 12 (4.15, 2.23, 3.59, 2.03); leg I: 22.26 (5.80, 2.72, 5.34, 4.86, 3.54), leg II: 23.39 (5.95, 3.38, 4.98, 5.30, 3.78), leg III: 20.95 (5.11, 2.72, 3.75, 5.31, 4.06), leg IV: 28.24 (6.52, 4.11,

6.57, 7.03, 4.01). Spination pattern: I, F: d1-1-1-1; T: v1-1, r1; Mt: 1-1-2-2, r1; II, F: d1-1-1-1; T: v2-2-2, p1-1; Mt: v2-2-3, r1-1; III, F: d2-1-1-1; P: p1, r1; T: v2-2-2, p1-1-1, r1-1; Mt: v2-2-2, d1-1-1, r1-1; IV, F: d1-1-2-2; P: p1, r1; T: v2-2-2, d1, p1-1, r1-1; Mt: d2-2-2, v2-2-3, p1-1-1, r1-1-1. All leg tarsi with pseudosegments. Scopula on Ta I composed of numerous scopiform setae, not divided, absent on Ta II, III and IV. Paired tarsal claws with two rows of teeth; leg I: 8 right, 9 left; leg II: 6 right, 6 left; leg III: 6 right, 7 left; leg IV: 5 right, 6 left. Each spermatheca consisting of two short stems rounded at their tips, with globose apical vesicles (Fig. 24D).

Variability. Male paratype: CL 8.70, total length 16.80. Females: CL 8.03-13.65, total length 20.69-26.66.

**Remarks.** In *L. sanuk* **sp. nov.**, the sexual dimorphism is evident: in the females, the chelicerae are larger and more prominent and the ocular tubercle is situated more posterodistally (Fig. 23A–C), as compared to the males.

**Comparison.** In the absence of grooming combs and having the divided scopula of Ta I and a triangular protuberance on Mt I (Fig. 20A–C), the male of *L. sanuk* **sp. nov.** is similar to those



Fig. 18. Map showing the collecting localities of the new species of Masteria and Striamea.

of *L. tsachilas*, *L. zaia* Dupérré et Tapia, 2015, *L. costenita* Dupérré et Tapia, 2023 and *L. peguche* Dupérré et Tapia, 2023. It can be distinguished from these species by the pear-shaped shape and relatively smaller size of the bulb. In the female of *L. sanuk* **sp. nov.**, the scopula of Ta I is also divided (Fig. 24A). In having the separated stems and vesicle groups, the spermathecae of *L. sanuk* **sp. nov.** are similar to those of *L. macrothelifera* and *L. agelenoides*, from which it differs in the inward convergence of stems, having less of a V shape, and not tapering towards their tips (Fig. 24D).

**Etymology.** The specific name is a noun in apposition taken from the cosmogony of Quimbayas, the pre-Columbian tribe from the Quindío Department. According to Rendón & Gelemur (2016), the word "sanuk" means "sun". We have used this word to honour the indigenous people of the region where the new species was found.

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**Distribution and habitat.** According to our field observations, the species is probably wide-spread in the Quindío Department (Fig. 48), preferring the habitats along road and path edges (Fig. 25), where it can form extensive colonies.

## Linothele montana sp. nov.

### (Figs 26-31)

Holotype. Male, **Colombia**, *Quindío Department*, Armenia Municipality, Universidad of Quindío, Cedro Rosado arboretum, 4°33'13.7"N 75°39'39.1"W, 1600 m a.s.l., 25.III.2023, G. Rodríguez Castro & E. Rodríguez leg. (CIUQ-025263).

*Paratypes.* 1 male, collected together with holotype (CIUQ-025264); 2 females, same locality and date, Germán Gallego leg. (CIUQ-025265, CIUQ-025318).

**Description.** *Male* (holotype). Much of body and legs dark reddish brown, densely covered



**Fig. 19.** *Linothele sanuk* **sp. nov.**, male (holotype). **A**, carapace, dorsal view; **B**, abdomen, dorsal view; **C**, eyes, dorsal view; **D**, spinnerets, ventral view; **E**, labium and sternum, ventral view; **F**, labium and endites, ventral view. Scale bars: 2 mm.

with black setae dorsally and sparsely with golden setae, which are more numerous on coxae and chelicerae (Fig. 26A). Abdomen covered with thick protruding black setae (Fig. 26B). Total length 15.12; CL 9.00, CW 7.92; fovea deep and recurved, 0.72 long (Fig. 26A). Eyes: eight,



**Fig. 20.** *Linothele sanuk* **sp. nov.**, male (holotype). **A**, **B**, apical part of tibia I with mating spur and basal part of metatarsus I with prominent triangular protuberance (A, lateral view; B, ventral view); **C**, prominent triangular protuberance (magnified), ventral view. Scale bars: 1 mm (A, B), 0.5 mm (C).



Fig. 21. Linothele sanuk sp. nov., male (holotype), left palp. A, retrolateral view; B, prolateral view. Scale bar: 1 mm.



**Fig. 22.** *Linothele sanuk* **sp. nov.**, male (holotype), left bulb. **A**, prolateral view; **B**, ventral view; **C**, retrolateral view. Scale bar: 0.5 mm.

posterior row slightly recurved; ocular tubercle 0.89 long, 1.73 wide; AME 0.25, ALE 0.41, PME 0.34, PLE 0.37 (Fig. 26C). Clypeus not prominent, 0.05 wide. Chelicerae with 10-11 teeth. fangs aserrate; labium with two cuspules, endites with 36–37 cuspules each (Fig. 26F); lyra absent; sternum oval, much longer than wide, 3.56 long, 1.88 wide, with six oval sigilla (Fig. 26E). Abdomen: AL 6.12, AW 3.40 (Fig. 26B); PMS 0.97 long; PLS: BS 1.65, MS 1.16, AS 0.95, total length 8.13 (Fig. 26D). Palp: 12.09 (3.81, 2.16, 4.32, 1.80), leg I: 29.37 (6.33, 3.57, 5.94, 7.99, 5.54), leg II: 28.58 (6.26, 4.07, 5.93, 7.13, 5.19), leg III: 22.13 (6.43, 2.12, 4.07, 5.45, 4.06), leg IV: 31.41 (7.86, 4.30, 5.80, 8.80, 4.65). Spination pattern: I, F: d1-1-1, r1-1-1; P: v2; T: p1-1, r1-1-1; Mt: v1-1-1; II, F: d1-1-1; P: v1; T: v1-1-1, p1; Mt: v1-1-1-2, p1; III, F: d1-1-1-2, p1; P: r1; T: v1-1-1-1-2, d1, p1-1, r1-1; Mt: v1-1-1-1, d1-1-1-1, p1-1-1-1, r1-1; IV, F: d2-1-1-1-2-1; P: r1; T: d1, p1-1, r1-1; Mt: v1-1-1-3, d2-1-1-1-1, p1. All leg tarsi with pseudosegments but without scopula; paired tarsal claws with two rows of teeth; leg I: 11 right, 10 left; leg II: 10 right, 10 left; leg III: 10 right, 11 left; leg IV: 10 right, 10 left. Mt I with small rounded protuberance (Fig. 27A-C). Palp: palpal tibia with set of ventral and prolateral mac-

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rosetae; cymbium longer than wide (Fig. 28A, B); bulb also longer than wide, and longer than one-fourth of palpal tibia, with globose base; embolus with distal curve and pointed tip (Fig. 29A–C).

Female (paratype CIUQ-025265). Overall body coloration reddish brown, similar to that in male, with a few golden setae on carapace (Fig. 30A). Abdomen with weakly developed chevron-like colour pattern composed of rounded vellow spots, with brown and black setae (Fig. 30B). Total length 23.16; CL 9.07, CW 7.62; fovea deep and recurved, 0.53 long (Fig. 30A). Eyes: eight, posterior row slightly recurved; ocular tubercle 0.84 long, 2.07 wide; AME 0.35,

ALE 0.49, PME 0.28, PLE 0.42 (Fig. 30C). Clypeus not prominent, 0.10 wide. Chelicerae with 11-12 promarginal teeth; labium with two cuspules; endites with 36–45 cuspules each (Fig. 30F); lyra absent; sternum round, 4.92 long, 4.16 wide, with six elongated oval sigilla (Fig. 30E). Abdomen: AL 14.09, AW 8.90 (Fig. 30B); PMS 2.12 long; PLS: BS 3.71, MS 3.59, AS 3.89, total length 11.19 (Fig. 30D). Palp: 12.78 (4.29, 2.33, 4.31, 1.85), leg I: 27.98 (7.07, 4.61, 6.55, 5.21, 4.54), leg II: 25.98 (6.90, 3.20, 6.17, 5.65, 4.06), leg III: 22.29 (5.82, 3.36, 4.82, 4.33, 3.96), leg IV: 31.23 (8.88, 4.23, 7.01, 7.09, 4.02). Spination pattern: I, F: d1-1-1-1; T: v1-1-2; Mt: v2-2-2; II, F: d1-1-1-1; P: v1; T: v1-1-2; Mt: v2-2-2; III, F: d1-1-2-1-1-2; T: v2-1-1-2, p2, r2; Mt: d2-1-1-1-2, v1-1-1-3; IV, F: d1-1-1-2-2; T: v1-1-1-2, p2, r2; Mt: d1-1-1-v1-1-2-4. All leg tarsi with pseudosegments. Scopula on Ta I and IV composed of dense scopiform setae, not divided, absent on distal metatarsus, absent on Ta II and III. Paired tarsal claws with two rows of teeth; leg I: 6 right, 6 left; leg II: 6 right, 6 left; leg III: 6 right, 5 left; leg IV: 5 right, 5 left. Spermatheca with two elongated stems slightly curved and converged inward, rounded at their tips, with one to three vesicles located almost terminally (Fig. 31D).

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**Fig. 23.** *Linothele sanuk* **sp. nov.**, female (paratype CIUQ-025260). **A**, carapace, dorsal view; **B**, abdomen, dorsal view; **C**, eyes, dorsal view; **D**, spinnerets, ventral view; **E**, labium and sternum, ventral view; **F**, labium and endites, ventral view. Scale bars: 2 mm.

Variability. Male paratype: CL 8.76, total length 16.32. Females: CL 8.78–10.03, total length 22.14–23.16.

**Comparison.** In the body coloration, the male of *L. montana* **sp. nov.** is similar to those of *L. wiwa* and *L. rionegro* Dupérré et Tapia 2023,



**Fig. 24.** *Linothele sanuk* **sp. nov.**, female (paratype CIUQ-025260). **A**, tarsus I with divided scopula, ventral view; **B**, tarsus IV with divided scopula, ventral view; **C**, tarsus IV, lateral view; **D**, spermathecae, dorsal view; **E**, spermathecae (drawing), dorsal view. Scale bars: 1 mm (A–C), 0.25 mm (D, E).

from which it can be distinguished by the globose bulb and the embolus having a distal curvature, as well as by the presence of a triangular protuberance on Mt I. Although in its body coloration the female of *L. montana* **sp. nov.** is similar to those of *L. pukachumpi* Dupérré et Tapia, 2015, *L. pristirana* Dupérré et Tapia, 2023, *L. molleturo* Dupérré et Tapia, 2023, *L. milleri* Dupérré et Tapia, 2023, *L. uvalino* Dupérré et Tapia, 2023, and *L. rionegro*, its spermathecae resemble those of *L. agelenoides*, *L. spinosa*, *L. tsachilas*, and *L. costenita*. The spermathecae of the new species are distinctive by the short and thickened stems and the globular rather than elongated vesicles.

Both in the body coloration and the spermathecal conformation, the female of *L. montana* **sp. nov.** is most similar to that of *L. costenita*. It also has the divided scopula on Ta I and thickened setae on Ta IV. However, *L. costenita* lacks the abdominal colour pattern and its spermathecal stems diverge outward and are slightly thicker and longer than in *L. montana* **sp. nov.** Finally, *L. costenita* is restrict-



Fig. 25. Linothele sanuk sp. nov., female in the natural habitat.

ed to the northern coast of Ecuador, preferring the elevations 120-250 m, whereas *L. montana* **sp. nov.** has been found exclusively in the type locality in Colombia at the elevation of 1600 m.

**Etymology.** The specific epithet originates from the Latin name of the pink cedar tree (*Cedrela montana*), which is the emblem and namesake of the arboretum at the Universidad del Quindío, where this species was found. It is a Latin adjective meaning 'mountainous'.

**Distribution and habitat.** To date, *L. montana* **sp. nov.** has been found only in the Cedro Rosado arboretum at the Universidad del Quindío, which is a small, moderately disturbed forest patch (Fig. 48). It seems to be associated with tree roots that protrude along paths or with crevices in ravines (Fig. 32).

# *Linothele hunahpui* sp. nov. (Figs 33–40)

Holotype. Male, **Colombia**, *Quindío Department*, Calarcá Municipality, La Virginia District, Peñas Blancas Ecopark, 4°28′48.5″N 75°37′38.1″W, 2359 m a.s.l., 22.I.2024, G. Rodríguez Castro & E. Rodríguez leg. (CIUQ-025262).

Paratypes. 3 females, **Colombia**, *Quindío Department*, Circasia Municipality, El Roble Vill., 4°40'27.0"N 75°36'16.4"W, 2150 m a.s.l., 19.IV.2023, G. Rodríguez Castro & E. Rodríguez leg. (CIUQ-024314, CIUQ-024315, CIUQ-024316).

Adittional material examined. 1 subadult and 2 juveniles, collected together with paratypes (CIUQ-026055, CIUQ-026054, CIUQ-026053).

**Description.** *Male* (holotype). Body and legs uniformly and intensely dark brown. Dorsal side of chelicerae, coxae and trochanters sparsely covered



**Fig. 26.** *Linothele montana* **sp. nov.**, male (holotype). **A**, carapace, dorsal view; **B**, abdomen, dorsal view; **C**, eyes, dorsal view; **D**, spinnerets, ventral view; **E**, labium and sternum, ventral view; **F**, labium and endites, ventral view. Scale bars: 2 mm.



**Fig. 27.** *Linothele montana* **sp. nov.**, male (holotype). **A**, **B**, apical part of tibia I with mating spur and basal part of metatarsus I with prominent triangular protuberance (A, lateral view; B, ventral view); **C**, prominent triangular protuberance (magnified), ventral view. Scale bars: 1 mm (A, B), 0.5 mm (C).



**Fig. 28.** *Linothele montana* **sp. nov.**, male (holotype), left palp. **A**, retrolateral view; **B**, prolateral view. Scale bar: 1 mm.



**Fig. 29.** *Linothele montana* **sp. nov.**, male (holotype), left bulb. **A**, prolateral view; **B**, ventral view; **C**, retrolateral view. Scale bar: 1 mm.

with few dark brown setae (Fig. 33A). Abdomen darker, uniformly blackish brown (Fig. 33B). Total length 18.28; CL 9.21, CW 8.47; fovea 0.86 long (Fig. 33A). Eyes: eight, posterior row slightly recurved; ocular tubercle 0.91 long, 1.94 wide; AME 0.37, ALE 0.53, PME 0.33, PLE 0.47 (Fig. 33C). Clypeus not prominent, 0.10 wide. Chelicerae with 11–12 promarginal teeth, fangs aserrate; labium lacks cuspules, endites with 43-47 cuspules each (Fig. 33F); sternum oval, 4.72 long, 3.82 wide, with six elongated oval sigilla (Fig. 34E). Abdomen: AL 9.07, AW 5.45 (Fig. 33B); PMS 1.86 long; PLS: BS 3.02, MS 2.47, AS 2.08, total length 7.57 (Fig. 33D). Palp: 12.21 (4.44, 2.33, 4.31, 1.12), leg I: 26.24 (7.15, 3.45, 4.76, 6.27, 4.61), leg II: 27.52 (7.13, 3.60, 5.48, 6.83, 4.48), leg III: 23.68 (5.65, 3.88, 4.24, 6.23, 3.68), leg IV: 34.34 (7.16, 3.27, 8.07, 12.10, 3.74). Spination pattern: I, F: d1-1-1-1, p1, r1; T: v2-2-2, d1-1-1, p1-1, r1-1; Mt: v1-2-2, d1-1, r1-1, p1-1-1; II, F: d1-2-2-1-1, r1-1; T: v2-2-2; Mt: v2-2, r1, p1; III, F: d2-2, p1; P: r1; T: v2-2-2, r2-1-1; Mt: v2-2-3, d2-2-2, p1-1-1-1; IV, F: d1-1-1-1, p1; P: p1, r1; T: v1-2-1-1-2-2; Mt: d2-2-2, v2-2-2-2, p1-1-1-1, r1-1-1. All leg tarsi with pseudosegments; Mt I with prominent ventral triangular protrusion (Fig. 34A–C); paired tarsal claws with two rows

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minal ends (Fig. 40D).

three prolateral spines; cymbium wider than long (Fig. 35A, B); bulb pear-shaped, longer than wide, approximately half as long as tibia; base slightly globose; embolus straight, with subapical curve and pointed tip (Fig. 36A-C). Female (paratype CIUO-024314) (Fig. 37A, B). Coloration as in male. Total length 25.94; CL 13.78, CW 9.75; fovea 0.87 long (Fig. 39A). Eyes: eight, with posterior row slightly recurved: ocular tubercle

1.06 long, 1.99 wide; AME 0.38, ALE 0.48, PME 0.25,

PLE 0.43 (Fig. 39C). Clypeus not prominent, 0.15

wide. Chelicerae with 12 promarginal teeth; fangs

smooth; endites with 41–42 cuspules (Fig. 39F);

sternum oval, 4.65 long and 4.10 wide, with six

elongated oval sigilla (Fig. 39E). Abdomen: AL

12.16, AW 7.80 (Fig. 39B); PMS 2.33 long; PLS:

BS 4.60, MS 4.28, AS 4.06, total length 11.60

(Fig. 39D). Palp: 20.98 (8.33, 2.77, 4.69, 5.19), leg

I: 34.25 (9.30, 4.90, 7.00, 7.50, 5.55), leg II: 32.92

(9.20, 4.88, 6.92, 6.72, 5.20), leg III: 34.11 (9.93,

4.40, 6.52, 7.46, 5.80), leg IV: 41.40 (11.83, 5.50,

8.24, 10.10, 5.37); Spination pattern: I, F: d1-1-

1, T: v1-1-2, Mt: v2-2-2; II, F: d1-1-1-1, P: v1, T:

v1-1-2, Mt: v2-2-2; III, F: d1-1-2-1-1-2, T: v2-1-1-2-

p2-r2, Mt: d2-1-1-1-2, v1-1-1-3; IV, F: d1-1-1-2-2,

T: v1-1-1-2, p2, r2, Mt: d1-1-1-v1-1-2-4. All leg

tarsi with pseudosegments. Scopula on Ta I and

IV composed of dense scopiform setae, not divid-

ed (Fig. 40A-C), absent distally on Mt, absent on

Ta II and III; paired tarsal claws with two rows of teeth; leg I: 6 right, 6 left; leg II: 6 right, 6 left; leg

III: 6 right, 5 left; leg IV: 5 right, 5 left. Spermathe-

cae consisting of two elongated stalks slightly con-

verging inward in a small curve, rounded towards

their tips, possessing one vesicle situated near ter-

of teeth; leg I: 6 right, 6 left;

leg II: 6 right, 6 left; leg III: 6 right, 5 left; leg IV: 5 right, 5 left. Palp: palpal tibia with

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**Fig. 30.** *Linothele montana* **sp. nov.**, female (paratype CIUQ-025265). **A**, carapace, dorsal view; **B**, abdomen, dorsal view; **C**, eyes, dorsal view; **D**, spinnerets, ventral view; **E**, labium and sternum, ventral view; **F**, labium and endites, ventral view. Scale bars: 2 mm.



Fig. 32. Habitat of Linothele montana sp. nov.

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**Fig. 33.** *Linothele hunahpui* **sp. nov.**, male (holotype). **A**, carapace, dorsal view; **B**, abdomen, dorsal view; **C**, eyes, dorsal view; **D**, spinnerets, ventral view; **E**, labium and sternum, ventral view; **F**, labium and endites, ventral view. Scale bars: 2 mm.



**Fig. 34.** *Linothele hunahpui* **sp. nov.**, male (holotype). **A**, **B**, apical part of tibia I with mating spur and metatarsus I with prominent triangular protuberance (A, lateral view; B, ventral view); **C**, prominent triangular protuberance (magnified), ventral view. Scale bars: 1 mm (A, B), 0.5 mm (C).



**Fig. 35.** *Linothele hundhpui* **sp. nov.**, male (holotype), left palp. **A**, retrolateral view; **B**, prolateral view. Scale bar: 1 mm.



**Fig. 36.** *Linothele hunahpui* **sp. nov.**, male (holotype), left bulb. **A**, prolateral view; **B**, ventral view; **C**, retrolateral view. Scale bar: 1 mm.

*Variability.* Females: CL 10.04–13.78, total length 20.48–25.94.

**Remarks.** Juveniles and subadults show a chevron colour pattern on dorsum, which is lost during ontogeny (Fig. 38A–D). One of the collected females belonging to this species laid eggs; hence we were able to observe the growth of juveniles and to determine that the collected juveniles corresponded exactly to this species.

**Comparison.** In the body coloration, the male of *L. hunahpui* **sp. nov.** is similar to those of *L. angamarca* Dupérré et Tapia, 2023, *L. banos* Dupérré et Tapia, 2023, *L. longicauda* (Ausserer, 1871), *L. peguche, L. pukachumpi, L. sigchila* Dupérré et Tapia, 2023, and *L. yanachanka* Dupérré et Tapia, 2023, and *L. yanachanka* Dupérré et Tapia, 2015, but it differs in having the pyriform bulb and the straight embolus (Fig. 36A–C). The female of *L. hunahpui* **sp. nov.** possesses the metatarsal grooming combs and undivided scopula of Ta I (Fig. 40A). In the body coloration, the female of *L. hunahpui* **sp. nov.** is similar to those of *L. alausi, L. banos, L. cayambe* Dupérré et Tapia, 2023, *L. ilinizas, L. lloa* Dupérré et Tapia, 2023, *L. ilinizas, L. lloa* 

L. longicauda, L. peguche, L. pukachumpi, and L. troncal Dupérré et Tapia, 2023, from which it differs in the spermathecae consisting of two narrow elongated stalks and vesicles being situated laterally, near their tips (Fig. 40D).

**Etymology.** The species is named after one of the twin gods Hunahpú and Ixbalanqué from the Quiché Maya mythology (Murawski, 1984).

**Distribution and habitat.** To date, *L. hunahpui* **sp. nov.** was found in the Quindío Department of the Calarcá Municipality (Fig. 48), occurring in ravines along roads at the elevations above 2000 m a.s.l. According to our field observations, this species

can form extensive colonies. Apparently, it often co-exists sympatrically with *L. ixbalanquei* **sp. nov.** (Fig. 37C).

# *Linothele ixbalanquei* sp. nov. (Figs 41–43)

Holotype. Female, **Colombia**, *Quindío Depart*ment, Salento Municipality, El Roble Vill., 4°41'24.0"N 75°35'05.4"W, 2193 m a.s.l., 22.I.2024, G. Rodríguez Castro & E. Rodríguez leg. (CIUQ-24317).

*Paratypes*. 3 females, collected together with holotype (CIUQ-024318, CIUQ-024319, CIUQ-025320).

**Description.** *Female* (holotype) (Fig. 41A, B). Much of body and legs intensely blackish brown, with coppery setae on coxae and trochanters (Fig. 42A); abdomen with black and partially iridescent setae being denser on dorsum (Fig. 42B). Total length 23.70; CL 11.94, CW 7.76; fovea 0.65 long (Fig. 42A). Eyes: eight, posterior row slightly recurved; ocular tubercle 1.49 long, 2.90 wide; AME 0.56, ALE 0.70, PME 0.49, PLE 0.59 (Fig. 42C). Clypeus non-prominent, 0.25 wide. Chelicerae each with 11 promarginal teeth, fangs aserrate; labium without cuspules; endites



Fig. 37. *Linothele hunahpui* sp. nov., female (paratype CIUQ-024314). A, habitus, dorsal view; B, carapace and abdomen, dorsal view; C, collection site. Scale bars: 1 cm.

with 41-47 cuspules each (Fig. 42F); sternum oval, 4.02 long, 3.46 wide, with six elongated oval sigilla (Fig. 42E). Abdomen: AL 11.76, AW 6.56 (Fig. 42B); PMS 2.42 long; PLS: BS 3.18, MS 2.72, AS 3.00, total length 8.9 (Fig. 42D). Palp: 18.44 (6.44, 3.40, 4.05, 4.55), leg I: 30.81 (8.37, 4.68, 6.76, 5.95, 5.05), leg II: 28.39 (8.27, 4.11, 5.99, 5.71, 4.31), leg III: 28.05 (7.80, 3.93, 4.97, 6.82, 4.54), leg IV: 36.82 (9.34, 4.21, 7.26, 10.09, 5.92). Spination pattern: I, F: d1-1-1-1, T: v1-1-2, Mt: v2-1-2; II, F: d1-1-1, T: v1-1-2, Mt: v2-2-2; III, F: d1-1-1, T: v2-1-2, p1, Mt: v1-1-1-2, p2, r2; IV, F: d1, T: v2-1-1-2, p1, r2, Mt: d1-1-1-1, v2-2-3; All leg tarsi with pseudosegments. Scopula on Ta I and IV composed of dense scopiform setae, divided on Ta I and undivided on Ta IV

(Fig. 43A–C), absent distally on Mt, absent on Ta II and III; paired tarsal claws with two rows of teeth; leg I: 9 right, 7 left; leg II: 7 right, 6 left; leg III: 6 right, 7 left; leg IV: 5 right, 6 left. Spermathecae V-shaped, composed of two elongated stems, cane-like, with rounded tips prominently converging outward, forming arcs in middle; arcs joining at bases; vesicles 3–4, situated laterally (Fig. 43D).

#### Male unknown.

*Variability*. Females: CL 7.64–11.94, total length 18.04–23.70.

**Comparison.** In the body coloration, the female of *L. ixbalanquei* **sp. nov.** is similar to those of *L. alausi*, *L. banos*, *L. cayambe*, *L. costenita*, *L. ilinizas*, *L. lloa*, *L. longicauda*, *L. peguche*,



**Fig. 38.** *Linothele hunahpui* **sp. nov. A**, **B**, juveniles (specimens CIUQ-026053, CIUQ-026054), dorsal view; **C**, subadult (specimen CIUQ-026055), dorsal view; **D**, adult female (paratype CIUQ-024314), dorsal view. Scale bars: 1 mm.

L. pukachumpi, L. troncal, L. wiwa, and L. yunguilla Dupérré et Tapia, 2023, but can be distinguished from all of them by the spermathecae consisting of two elongated stalks with vesicles situated laterally. In the spermathecal conformation, L. hunahpu **sp. nov.** is most similar to the female of L. hunahpu **sp. nov.**, from which it differs in the stems converging strongly outwards and forming an arch in the middle, and also in the number of vesicles, 2–3 per stem (Fig. 43D), vs. one in L. hunahpui **sp. nov.** 

**Etymology.** The species is named after one of the twin gods Hunahpú and Ixbalanqué from the Quiché Maya mythology (Murawski, 1984).

**Distribution and habitat.** This species is known only from the type locality (Figs 41C, 48). It seems to co-exist sympatrically with *L. hunahpui* **sp. nov.** 

## Linothele guarato sp. nov.

(Figs 44, 45)

Holotype. Female, **Colombia**, *Risaralda Department*, Santa Cecilia Municipality, Guarato Vill., 5°17′45″N 76°12′4″W, 450 m a.s.l., 11.VIII.2022, G. Rodríguez Castro & E. Rodríguez leg. (CIUQ-025261).

**Description.** *Female.* Entire body and legs dark brown, covered with short golden setae being more abundant on carapace and chelicerae; chelicerae dark brown (Fig. 44A). Abdomen with circular yellow spots forming chevron-like dorsal pattern and covered with protruding black setae (Fig. 44B). Total length 24.96; CL 11.40, CW 10.29; fovea 1.10 long (Fig. 44A). Eyes: eight, posterior row recurved; ocular tubercle 1.34 long, 2.51 wide; AME 0.40, ALE 0.52, PME 0.29, PLE 0.47 (Fig. 44C). Clypeus non-prominent, 0.16



**Fig. 39.** *Linothele hunahpui* **sp. nov.**, female (paratype CIUQ-024314). **A**, carapace, dorsal view; **B**, abdomen, dorsal view; **C**, eyes, dorsal view; **D**, spinnerets, ventral view; **E**, labium and sternum, ventral view; **F**, labium and endites, ventral view. Scale bars: 2 mm.



**Fig. 40.** *Linothele hundhpui* **sp. nov.**, female (paratype CIUQ-024314). **A**, tarsus I with undivided scopula, ventral view; **B**, tarsus IV with undivided scopula, ventral view; **C**, tarsus IV, lateral view; **D**, spermathecae, dorsal view; **E**, spermathecae (drawing), dorsal view. Scale bars: 1 mm (A– C), 0.5 mm (D).

wide. Chelicerae with 11–12 promarginal teeth, fangs aserrate; labium with five cuspules, endites with (Fig. 44F); sternum oval, 5.21 long, 4.40 wide, with six elongated oval sigilla (Fig. 44E). Abdomen: AL 13.56, AW 8.32 (Fig. 44B); PMS 2.60 long; PLS: BS 3.94, MS 4.80, AS 4.89, total length 13.63 (Fig. 44D). Palp: 14.52 (4.20, 2.82, 3.99, 3.51), leg I: 29.64 (8.49, 3.75, 6.78, 6.55, 4.07), leg II: 27.84 (7.42, 3.54, 6.48, 6.12, 4.28), leg III: 24.73 (6.50, 2.64, 5.21, 6.72, 3.66), leg IV: 31.13 (8.69, 4.42, 6.86, 6.62, 4.54). Spination pat-

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tern: I, F: d1, T: p1, Mt: v2-1-1-2, p1; II, F: d1-1-1-1, T: v1-1-1, p2, Mt: v2-2-2, r1; III, F: d2-1-1-1, P: d2, T: v1-1-2, p1-1, r1-1, Mt: v2-2-2, d2-2-2, r1-1-1; IV, F: d1-1-1-1, p1, P: v2-2-2, p1, r1-1, T: d1-1, p1, Mt: v2-2-2-, d2-2-2, p1, r1. All leg tarsi with pseudosegments. Scopula on Ta I and IV composed of dense scopiform setae, undivided on Ta I and IV (Fig. 45A–C), absent on distal Mt, absent on Ta II and III; paired tarsal claws with two rows of teeth; leg I: 7 right, 6 left; leg II: 7 right, 5 left; leg III: 6 right, 8 left; leg IV: 6 right, 6 left. Spermathecae



Fig. 41. *Linothele ixbalanquei* sp. nov., female (holotype). A, habitus, dorsal view; B, carapace and abdomen, dorsal view; C, collection site. Scale bars: 1 cm.

V-shaped, composed of two short stems with elongated bases converging outwards, with rounded tips; vesicles different in size (larger and irregular on the right; Fig. 45D).

*Male* unknown.

**Comparison.** In the body coloration, the female of *L. guarato* **sp. nov.** is similar to those of *L. ireneae* Dupérré et Tapia, 2023, *L. javieri* Dupérré et Tapia, 2023, *L. sigchila*, and *L. victoria* Dupérré et Tapia, 2023. In the spermathecal conformation, the female of *L. guarato* **sp. nov.** is similar to those of *L. amazonica* Dupérré et Tapia, 2023, *L. banos*, *L. milleri*, and *L. spinosa* Drolshagen et Bäckstam, 2021, from which it differs in having an elongated and larger vesicle (Fig. 45D). **Etymology.** The specific epithet is a noun in apposition taken from Guarato Village in the Municipality of Santa Cecilia in the Risaralda Department of Colombia, where this species was found.

**Distribution and habitat.** The new species is known only from the type locality (Fig. 48). It was found in cracks on a limestone slope along the road edge, indicating that the species appears to coexist sympatrically with *L. sericata*.

# *Linothele tsachilas* Dupérré et Tapia, 2015 (Fig. 46)

Type material (not examined). Holotype. Female, Ecuador, Santo Domingo de Las Tsáchilas, Parroquia San José de Alluriquín, La Florida, 0°15'9.144"S G. Rodríguez-Castro et al. Eight new species of Dipluridae from Colombia



**Fig. 42.** *Linothele ixbalanquei* **sp. nov.**, female (holotype). **A**, carapace, dorsal view; **B**, abdomen, dorsal view; **C**, eyes, dorsal view; **D**, spinnerets, ventral view; **E**, labium and sternum, ventral view; **F**, labium and endites, ventral view. Scale bars: 2 mm.



**Fig. 43.** *Linothele ixbalanquei* **sp. nov.**, female (holotype). **A**, tarsus I with divided scopula, ventral view; **B**, tarsus IV with undivided scopula, ventral view; **C**, tarsus IV, lateral view; **D**, spermathecae, dorsal view; **E**, spermathecae (drawing), dorsal view. Scale bars: 1 mm (A– C), 0.5 mm (D, E).

79°1′49.547″W, 884 m a.s.l., 7.XII.2014, E. Tapia leg. (Museum of Invertebrates, Pontificia Universidad Católica, Quito, Ecuador; QCAZ). *Paratypes*. 1 female, **Ecuador**, with same data as for holotype, 30.X.2014 (QCAZ).

Material examined. Colombia, 1 female, Valle del Cauca Department, Cali, Vereda El Pato, within jurisdiction of Los Farallones National Natural Park, 3°32'87.11"N 76°63'93"W, 1800 m a.s.l., VI.1990, no collector name (Arachnology Collection of the Universidad del Valle; MUSENUV-Ar 000185; identified by N. Dupérré).

**Brief redescription.** *Female.* Carapace light brown, featuring coppery setae and scattered black setae (Fig. 46A). Abdomen dark brown, with erect black setae and yellowish spots

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**Fig. 44.** *Linothele guarato* **sp. nov.**, female (holotype). **A**, carapace, dorsal view; **B**, abdomen, dorsal view; **C**, eyes, dorsal view; **D**, spinnerets, ventral view; **E**, labium and sternum, ventral view; **F**, labium and endites, ventral view. Scale bars: 2 mm.



**Fig. 45.** *Linothele guarato* **sp. nov.**, female (holotype). **A**, tarsus I with undivided scopula, ventral view; **B**, tarsus IV with undivided scopula, ventral view; **C**, tarsus IV, lateral view; **D**, spermathecae, dorsal view; **E**, spermathecae (drawing), dorsal view. Scale bars: 1 mm (A–C), 0.5 mm (D, E).

forming dorsal pattern (Fig. 46B). Total length 17.43; CL 7.01, CW 5.81 (Fig. 46A); AL 10.42, AW 7.34 (Fig. 46B). Scopula on tarsus I and IV divided. Leg pattern: 4123 (Fig. 46C, D). Each of paired spermathecae consisting of two short, wide stalks with sharp edges and several vesicles (Fig. 46F). See Dupérré & Tapia (2015) and Dupérré et al. (2023) for more detailed descriptions.

**Comparison.** The Colombian specimen of *L. tsachilas* is lighter than the females from Ecuador. This may have been resulted from long (30

years) preservation in ethanol. Its spermathecae are similar to those of *L. lloa*, *L. otoyacu* (Dupérré et Tapia, 2023) and *L. zaia*, but can be distinguished by the elongated and pointed stems and the position of vesicles.

# *Linothele archidona* Dupérré et Tapia, 2023 (Fig. 47)

*Type material* (not examined). *Holotype*. Female, **Ecuador**, *Napo Prov.*, Archidona, Comunidad San Pablo, 0°56'11.00"S 77°46'00.40"W, 616 m a.s.1., 11.VI.2018, in web on ground near small stream, E. Tapia leg.,

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**Fig. 46.** *Linothele tsachilas* Dupérré et Tapia, 2015, female (MUSENUV-Ar 000185). **A**, carapace, dorsal view; **B**, abdomen, dorsal view; **C**, tarsus I with divided scopula, ventral view; **D**, tarsus IV with undivided scopula, ventral view; **E**, tarsus IV, lateral view; **F**, spermathecae, dorsal view. Scale bars: 2 mm (A, B), 1 mm (C–E), 0.25 mm (F).

ECFN 9156 (QCAZ). *Paratypes*. Ecuador: 1 female, same data as holotype, ECFN 8920 (QCAZ); 1 female, *Sucumbíos*, Rio Aguarico, 0°03'59.29"S 76°54'24.30"W, 350 m a.s.1., 15.II.2016, in web on ground, E. Tapia, N. Dupérré & A. Tapia leg., ECFN 9157 (QCAZ); 1 female, with same data, ECFN 9158 (Zoological Museum Hamburg, Germany; ZMHA0014344).

Material examined. Colombia, 1 female, Putumayo Department, Orito Municipality, El Líbano vereda, Isla Escondida Natural Reserve, 0°39'15.19"N 77°04'25.65"W, 850 m a.s.l., 23.VII.2019, Nicolás Hazzi leg. (Arachnology Collection of the Universidad del Valle; MUSENUV-Ar 3322; identified by N. Dupérré).

**Brief redescription.** *Female.* Carapace dark brown, sparsely covered with black setae (Fig.

47A). Abdomen dark brown, with dorsal colour pattern consisting of interconnected rectangular yellow spots being denser laterally, and with a few protruding black setae (Fig. 48B). Total length 15.64; CL 6.65, CW 5.94 (Fig. 47A); AL 8.98, AW 5.98 (Fig. 47B). Scopula on Ta I and II divided and on Ta III and IV undivided. Leg pattern: 4123 (Fig. 47C, D). Each of paired spermathecae with two elongated stalks converging strongly outward with apically situated vesicles (Fig. 47F). See Dupérré et al. (2023) for a more detailed description.

**Comparison.** In the body coloration, the Colombian female of *L. archidona* is identical to the



**Fig. 47.** *Linothele archidona* Dupérré et Tapia, 2023, female (MUSENUV-Ar3322). **A**, carapace, dorsal view; **B**, abdomen, dorsal view; **C**, tarsus I with divided scopula, ventral view; **D**, tarsus IV with divided scopula, ventral view; **E**, tarsus IV, lateral view; **F**, spermathecae, dorsal view. Scale bars: 2 mm (A, B), 1 mm (C–E), 0.5 mm (F).

specimens from Ecuador, namely, in the coppery and black setae covering the carapace, a deep, straight fovea (Fig. 47A) and the dorsum with the same colour pattern (Fig. 47B). Its spermathecae resemble those of *L. amazonica*, from which this species can be distinguished by the long stems, becoming highly curved towards their apical ends. Yet, this species has divided scopula on Ta I and II, with the presence of thick setae (Fig. 47C, D). However, the most reliable diagnostic feature is the presence of two elongated and curved stalks having the identical number of vesicles (Fig. 47F).

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Fig. 48. Map showing the collecting localities of the new species of *Linothele*.

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