



The Southeast Asian genus *Stedocys* Ono, 1995 (Araneae: Scytodidae): first descriptions of female genitalia and a new species from China

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Abstract

The genus *Stedocys* was known only from males. Here we describe the first females of the genus. *Stedocys* genitalia are atypical for Scytodidae. Males are distinguished by having the palpal tarsus subequal or smaller than the tegulum, not prolonged apically, without prolateral blunt macrosetae; the tegulum long, inserted apically on the tarsus; embolus slightly shorter than bulb, aciculate distally, and females by lacking fovea or positioning ridges below the epigastric furrow, and by having an anterior epigynal pouch. In this contribution, we describe the female and redescribe the male of *Stedocys leopoldi* (Giltay, 1935), and describe male and female of *Stedocys pagodas* new species from China (Yunnan). The lack of a projection on the male palpal tarsus suggests that *Stedocys* is the sister group of all other genera of Scytodidae.

Key words: Araneae, Scytodoidea, taxonomy, morphology, Thailand, spider

Introduction

The genus *Stedocys* (Scytodidae) was established in 1995 by Ono, based on males of *Stedocys uenorum* Ono, 1995 and *Stedocys leopoldi* (Giltay, 1935). So far this genus comprises only these two species (Platnick 2009). Ono (1995) distinguished *Stedocys* from *Scytodes* Latreille, 1804 by having a peculiar male palp atypical for the family: a tarsus smaller than the copulatory bulb, not prolonged distally, the apical implantation of the copulatory bulb, and a slender, aciculate embolus. Before the establishment of *Stedocys*, Lehtinen (1986: 156) had already suggested that *Scytodes leopoldi* should be placed in a new subfamily and a new genus (see Discussion below). Here we provide illustrations and a discussion on the distribution of the characters mentioned by Lehtinen that support such arrangement.

Stedocys females and their genitalia are here described for the first time. Details of the anatomy of the female genitalia provide additional characters to diagnose the genus. In addition, we redescribe the male of *S. leopoldi*, and describe *Stedocys pagodas* **n. sp.** from Yunnan Province, in China.

Material and methods

The material examined belongs to the following institutions (abbreviation and curator in parenthesis): California Academy of Sciences, San Francisco (CAS, C. Griswold); George Washington University, Washington DC (GWU, G. Hormiga); National Museum of Natural History, Smithsonian Institution,

Washington DC (USNM, J. Coddington); Museo Argentino de Ciencias Naturales “Bernardino Rivadavia”, Buenos Aires (MACN-Ar, C.L. Scioscia); Zoological Museum, University of Copenhagen (ZMUC, N. Scharff). Light microscopy images were made with a digital camera Nikon DXM1200 mounted on a stereoscopic microscope Nikon SMZ1500. Images with differing focal planes were montaged with Helicon Focus 3.10.3 and 4.01 Pro (Khmelik *et al.* 2006). Measurements were taken with a micrometric ocular mounted on a Wild M5 stereomicroscope and are given in millimeters. For scanning electron microscope (SEM) examination, the samples were critical point dried and coated with Au-Pd. To prepare the female internal genitalia for SEM we followed the protocol of Álvarez-Padilla & Hormiga (2008): the dissected epigyne was left overnight in a pancreatin solution, at 37–40°C, and cleaned afterwards with a fine brush. All SEM images were made with a FEI XL30 TMP in the Museo Argentino de Ciencias Naturales “Bernardino Rivadavia”.

Taxonomy

Family Scytodidae Blackwall, 1864

Genus *Stedocys* Ono, 1995

Stedocys Ono 1995: 132. Type species by original designation: *Stedocys uenorum* Ono, 1995. Platnick 2009.

Diagnosis. Males of *Stedocys* are distinguished from those of the other genera of Scytodidae by having the papal tarsus subequal or smaller than the tegulum, not prolonged apically, without prolateral blunt macrosetae; the tegulum long, inserted apically on the tarsus; embolus slightly shorter than bulb, aciculate distally (Figs. 10–11, 29). Females are distinguished by the presence of epigynal pouch anterior to the epigastric furrow and by lacking foveae and positioning ridges below it (Figs. 9, 39).

Description. Total length (males and females) 9.09–14.3. Prosoma longer than wide, posteriorly bulging. Six eyes arranged in three diads, lateral eyes on a tubercle (Figs. 1–4). PLE subequal or larger than ALE; PME smaller. Chelicerae with an acute lamina separated from paturon by deep depression (Figs. 17–18) with retromarginal gland area beside it (Fig. 18); three to four large, well spaced ectal stridulatory ridges (Fig. 19); a membranous promarginal lobe between lamina and base of fang (Fig. 16); venom outlet slit-shaped, at base of relatively short fang (Fig. 42). Endites elongated, converging anteriorly, with membranous apical edge. Labium fused to sternum, longer than wide in males, wider than long in females. Sternum longer than wide in both sexes with marked borders (Figs. 5–8). Leg formula I-II-IV-III. Tarsi with well developed onychium (Figs. 21–24). Superior claws of legs I and II with two rows of teeth on proclaws and a single row on retroclaws (Figs. 21–22), in both cases reaching the tip of the claw. Superior claws of legs III and IV with a single row of teeth, not reaching the tip of the claw (Figs. 23–24). Inferior claws with a single tooth (Figs. 21–24). Tarsal organ exposed (Fig. 25). Proximal plate of trichobothrial socket smooth (Fig. 26). Female palps with a central apical lobe (perhaps a relict of claw), a pair of apical prolateral blunt macrosetae (Fig. 27) and femoral stridulatory thorn (Fig. 28). Abdomen elongated, posteriorly acute. Male epiandrous spigots scattered along the margin of the epigastric furrow (Fig. 20). Tracheal system with a unique median apodemal lobe (Fig. 12). Spinnerets similar in males and females (Fig. 31). Anterior lateral spinnerets (ALS) with two major ampullate gland spigots (MAP) (Figs. 32–33, 35). Piriform gland spigots (PI) field somewhat isolated from MAP field by a slight depression (Figs. 32–33, 35). Posterior median spinnerets (PMS) tetrahedral, with a single aciniform gland spigot (AC), and a projecting median lamina bearing a field of spicules (Figs. 34, 36). Posterior lateral spinnerets (PLS) conical with a blunt AC (Figs. 34, 36). Colulus well defined (Fig. 31), with developed posterior projection (Fig. 44, 46).

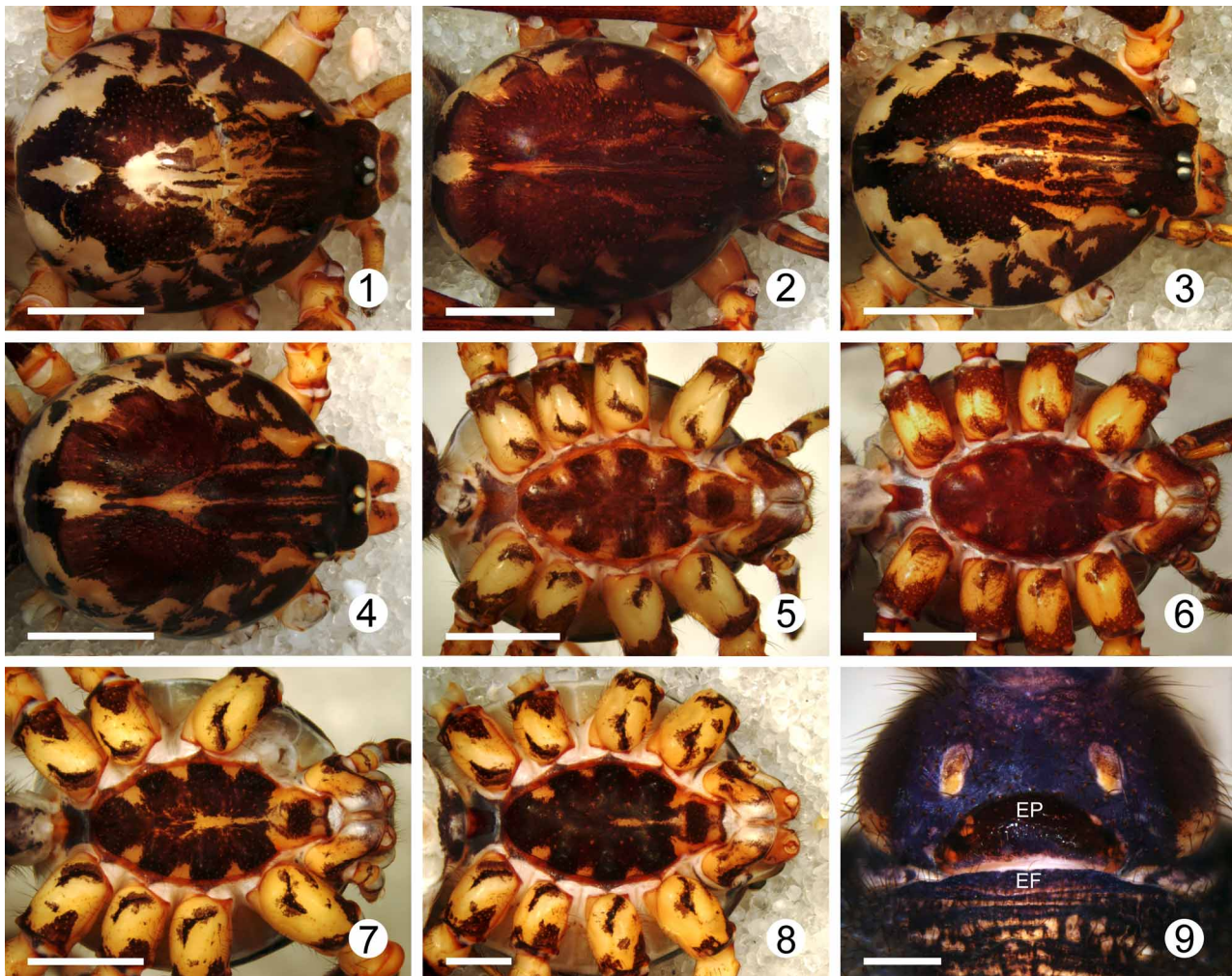
Male palp: Atypical for Scytodidae, tarsus subequal or smaller than tegulum, not prolonged apically, without prolateral blunt macrosetae which do occur in females (Fig. 27); tegulum long inserted apically on the

tarsus with coiled spermatic duct; embolus long, slightly shorter than bulb, aciculate distally; embolus outlet on retromargin (Figs. 10—11, 29).

Female genitalia: Also atypical for the family, by lacking foveae and positioning ridges below the epigastric furrow, but with an epigynal pouch anterior to it, like in most Scytodidae (Figs. 9, 39). Vulva with two pairs of rounded, thick spermathecae arising from the epigastric furrow (Figs. 13—14, 37—41). Inner spermathecae twice as large as outer. Spermathecae with gland ductules well spaced or in patches of two to many glands (Fig. 41).

Natural history. A male specimen was found under a log, hanging on its web (M. Ramírez, personal observation).

Distribution. Southeast Asia (Thailand, Malaysia, South of China)



FIGURES 1–9. Preserved specimens. *Stedocys leopoldi* (Giltay). Male (1, 5 MACN-Ar 23713, MR0484). Female (2, 6 MACN-Ar, TP0979; 9 MACN-Ar 23714, MR0486). *Stedocys pagodas* n. sp. Male (3, 7 type, CASENT 9021385). Female (4, 8 paratype, CASENT 9021385). 1–8 Prosoma (1–4 dorsal view, 5–8 ventral view). 9. External genitalia (EP, epigynal pouch; EF, epigastric furrow). Scale bars: 1–7, 2 mm; 8, 1 mm; 9, 0.5 mm.

***Stedocys leopoldi* (Giltay, 1935)**

(Figs. 1–2, 5–6, 9–10, 12–13, 15–29, 31–42, 44, 46)

Scytodes leopoldi Giltay 1935: 6, fig. 3 (description ♂; holotype ♂, Malaysia, Fraser’s Hill). Platnick 2009.

Material examined. THAILAND: Chiang Mai: Doi Chiang Dao WS, Amphem Chiangdao, Mae Ta Man forest, field station, N 19°19’13.2”, E 98°49’47.0”, 1500 m, 1.X.2003, ATOL Expedition 2003, Martín Ramírez leg., 1 ♀

(MACN-Ar 23714; MR0486; ARAMR000637; preparations FML 191–195, 217–218, 224–225, 240), 1♀ and 1 immature (MR0513; ZMUC), 1♀ and 6 immature (MR0515; SI USNM); same data, Gustavo Hormiga leg., 1♀ (GH0469; GWU); same locality, below guest house along road, 2.X.2003, Gustavo Hormiga leg., 7 immatures (GWU); Doi Inthanon National Park, nr. intersect. rd. to Mae Chaem and checkpoint, wet primary forest, N 18°31'33.2", E 98°29'57.7", ca. 1800 m, 3.X.2003, ATOL Expedition 2003, Martín Ramírez col., 1♂ (MACN-Ar 23713; MR0484; ARAMR000199, preparations FML 226, 241–242), 2 immatures (MR0485), 1♀ and 1 immature (MACN-Ar 23712; MR0487); same locality, 1 hectare inventory, ca. 500 m from checkpoint at intersection of roads to summit and to Mae Chaem, wet primary forest, N 18°31'47.9", E 98°30'9.0", ca. 1800 m, 6–7.X.2003, Thai-Plot team 2003, 1♀ (MACN-Ar 23718; TP0979). Immatures were tentatively identified to species when collected at the same locality as adults and show similar color pattern.

Diagnosis. Males are distinguished from the congeneric species by having a palpal tibia and femur relatively large; tegulum longer than tarsus; spermatic duct retrolaterally coiled one and a half times; embolus implanted prolaterally, extending ventrally, apically acute (Figs. 10, 29). Females are distinguished by the slight separation between inner and outer spermathecae (Fig. 13) and by carapace chestnut brown with brown markings, and sternum reddish, chestnut brown next to coxae (Figs. 2, 6).

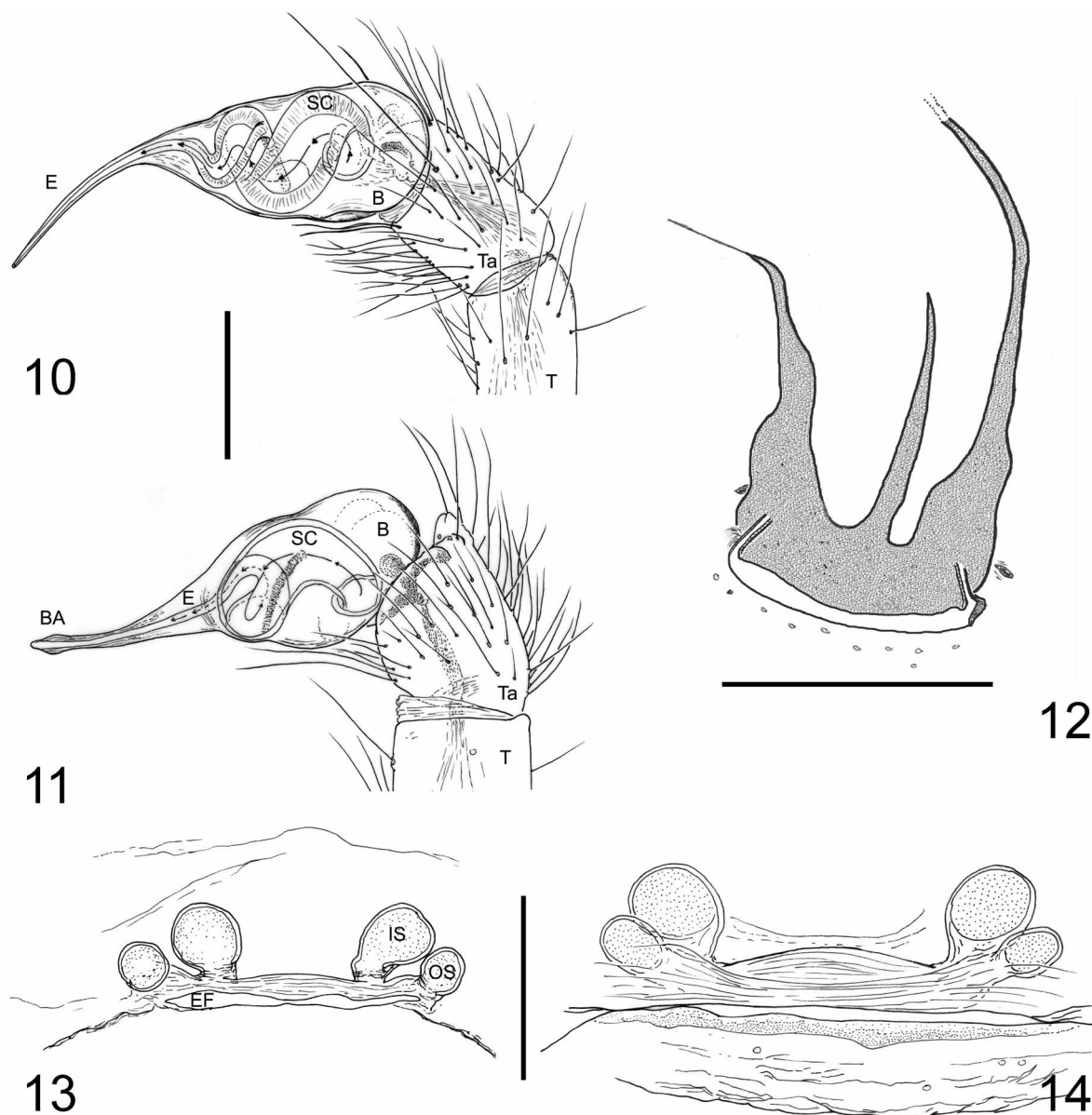
Redescription of male (MACN-Ar 23713; MR0484). Carapace pale yellow, color patterns brown. Eye area entirely dark. Thoracic area pattern forming a procurved “U”, united posteriorly with a procurved “V”; each arm of the “U” with three looping markings extending toward the margins and three longitudinal lines anteriorly prolonged (Fig. 1). Anterior margins darker than posterior. Chelicerae pale yellow, slightly darker anteriorly. Endites and labium brown, margins lighter. Sternum brown, pale yellow between coxae (Fig. 5). Legs pale yellow with longitudinal brown bands, except on tarsi. Abdomen dorsally yellowish, the first half with pale brown patterns and five chevrons at base. Total length 12.12. Cephalothorax 6.06 long, 4.77 wide, posteriorly bulging. Eye diameters: PME 0.24, ALE 0.26, PLE 0.28. Lateral eyes on a tubercle. Chelicerae follows generic pattern, with three large stridulatory ridges. Endites elongated, converging anteriorly, with membranous apical edge. Labium 1.26 long, 1.14 wide, fused to sternum. Sternum 3.32 long, 2.00 wide, with marked borders. Leg and palp measurements: total length (femur/patella/tibia/metatarsus/tarsus): I 62.17 (17.77/1.60/18.09/21.19/3.52), II 51.71 (15.16/1.68/14.51/17.28/3.08), III 37.7 (13.37/1.60/9.29/10.92/2.52), IV 43.97 (13.37/1.68/12.71/13.37/2.84), palp 8.50 (3.84/1.08/2.96/---/0.62). Legs and claws follow generic pattern. Palp with tegulum longer than tarsus; spermatic duct retrolaterally coiled one and a half times; embolus implanted prolaterally, extending ventrally, apically acute; embolus outlet towards retromargin (Figs. 10, 24). Opisthosoma oval, 6.06 long, 3.72 wide. Spinnerets follow generic pattern.

Description of female (MACN-Ar 23718; TP0979). Carapace chestnut brown, color patterns similar to male but procurved “U” arms fully coloured, separated from each other by a reddish middle line; margins dark (Fig. 2). Chelicerae as in male. Endites and labium chestnut brown, margins lighter. Sternum reddish, chestnut brown next to coxae (Fig. 6). Legs reddish with longitudinal brown bands, except on tarsi. Abdomen gray. Total length 13.74. Cephalothorax 6.14 long, 4.85 wide, posteriorly bulging. Eye diameters: PME 0.24, ALE 0.26, PLE 0.26. Lateral eyes on a tubercle. Chelicerae follow generic pattern, with four large stridulatory ridges. Endites and labium as in male. Labium 1.34 long, 1.20 wide, fused to sternum. Sternum 3.08 long, 1.96 wide with marked borders. Legs and palp measurements: total length (femur/patella/tibia/metatarsus/tarsus): I 44.71 (12.39/1.52/12.39/15.45/2.96), II 36.42 (10.43/1.58/10.11/11.90/2.40), III 25.99 (7.68/1.46/6.71/8.16/1.98), IV 33.16 (9.78/1.54/9.45/10.11/2.28), palp 4.86 (1.78/0.66/1.12/---/1.30). Legs and claws follow generic pattern. Opisthosoma oval, 7.60 long, 4.56 wide. Tracheal system and spinnerets follow generic pattern. External genitalia with a epigynal pouch anterior to the epigastric furrow, without foveae and positioning ridges (Fig. 9, 39). Vulva with two pairs of rounded, thick spermathecae arising from the epigastric fold (Fig. 13, 37–41). Inner spermathecae twice as large as outer. Spermathecae with gland ductules well spaced or in patches of two to many glands (Fig. 41).

Variation. Six females. Total length 9.09–13.74. Carapace 4.69–6.14 long, 3.72–4.85 wide. Femur I: 9.78–12.39.

Natural history. A male specimen was found under a log, hanging on its web (M. Ramírez, personal observation).

Distribution. Known from Thailand and Malaysia.

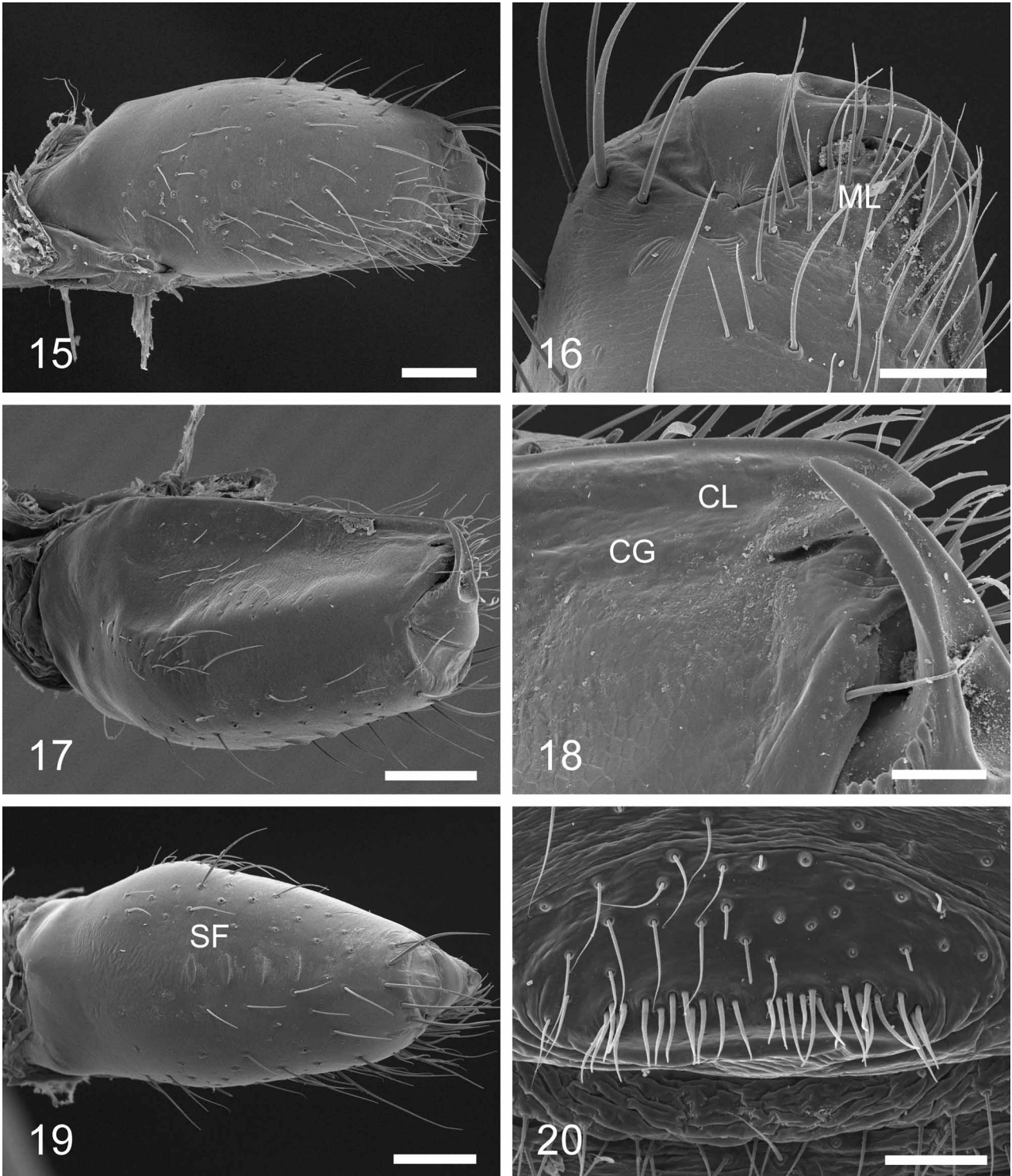


FIGURES 10–14. Genitalia and tracheal system. *Stedocys leopoldi* (Giltay) (10 MACN-Ar 23713, MR0484; 12–13 MACN-Ar 23718, TP0979). *Stedocys pagodas* n. sp. (11 holotype, CASENT 9021385; 14 paratype, CASENT 9021385). 10–11 Male palp, retrolateral view (10 right -image inverted-, 11 left). 12 Female tracheae dorsal view. 13–14 Female vulva dorsal view. (E, embolus; SC, spermathecal canal; B, bulb; T, tibia; Ta, tarsus; BA, blunt apically; EF, epigastric furrow; IS, inner spermathecae; OS, outer spermathecae). Scale bars: 10–14, 500 μ m.

***Stedocys pagodas* n. sp.**

(Figs. 3–4, 7–8, 11, 14)

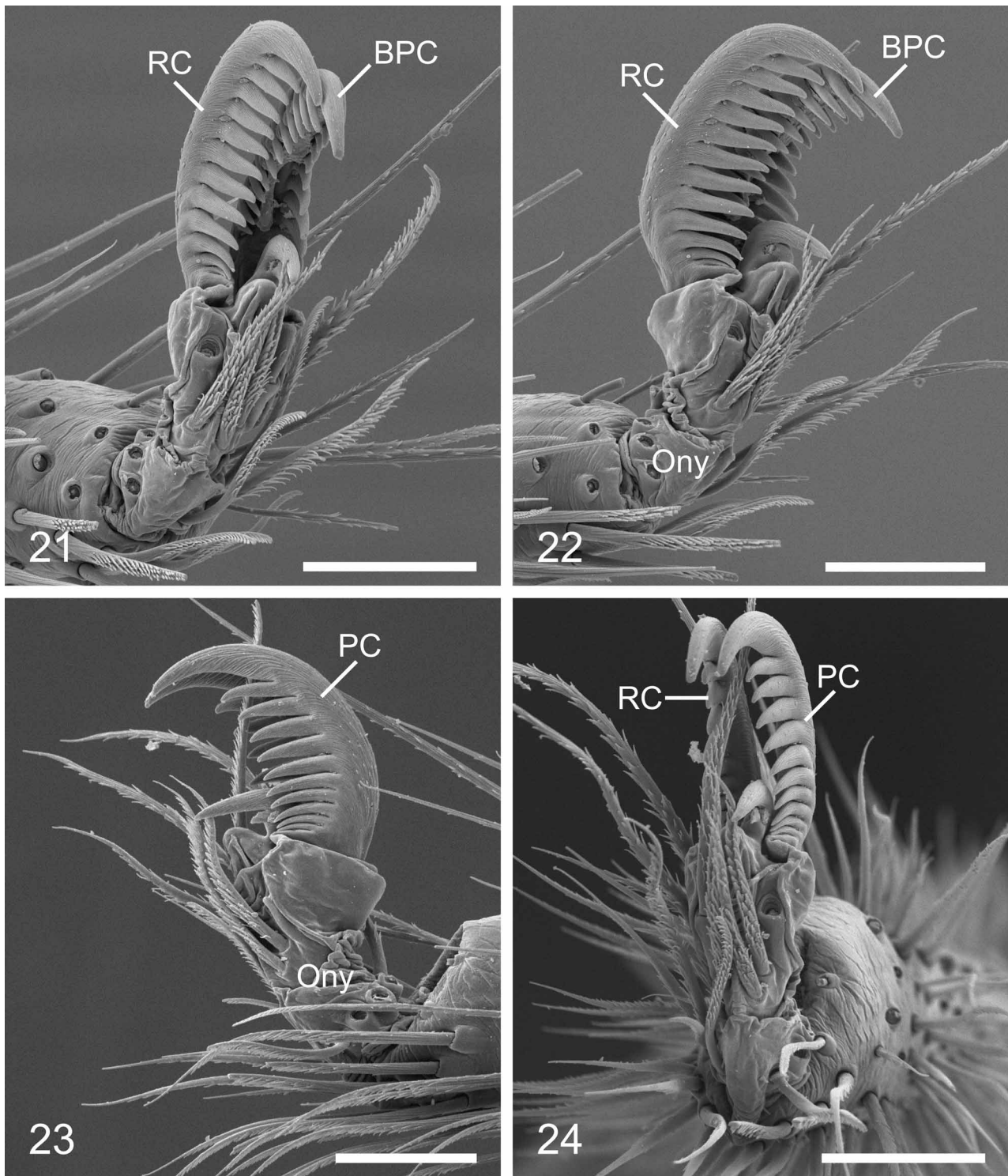
Types. Male holotype and female paratype (CASENT 9021385) from China, Yunnan Province, Longyang Co., Bawan District., Nankang Yakou, elevation 2180 m, N 24°49'54.41", E 98°45'52.99", 25 May 2005, C. Griswold and D. Kavanaugh legs. (CGY123), deposited in Hunan Normal University, Changsha, China.



FIGURES 15–20. *Stedocys leopoldi* (Giltay) (15–19 MACN-Ar 23714, MR0486; 20 MACN-Ar 23713, MR0484). 15–19 Female left chelicerae (15 anterior, 16 promargin, 17 posterior, 18 retromargin, 19 ectal view). 20. Male epiandrum, ventral view (ML, membranous lobe; CG, cheliceral gland; CL, cheliceral lamina; SF, stridulatory field). Scale bars: 15, 17, 19 200 μ m; 16, 20 100 μ m; 18 50 μ m.

Etymology. The specific name is a noun in apposition that honors the “Three Pagodas”, an ensemble of three independent pagodas arranged on the corners of a symmetric triangle, near the town of Dali (Yunnan Province, China) dating from the time of the Nanzhao Kingdom and Kingdom of Dali. According to local legends, Dali was once a swamp inhabited by breeding dragons before the humans arrived. As the dragons,

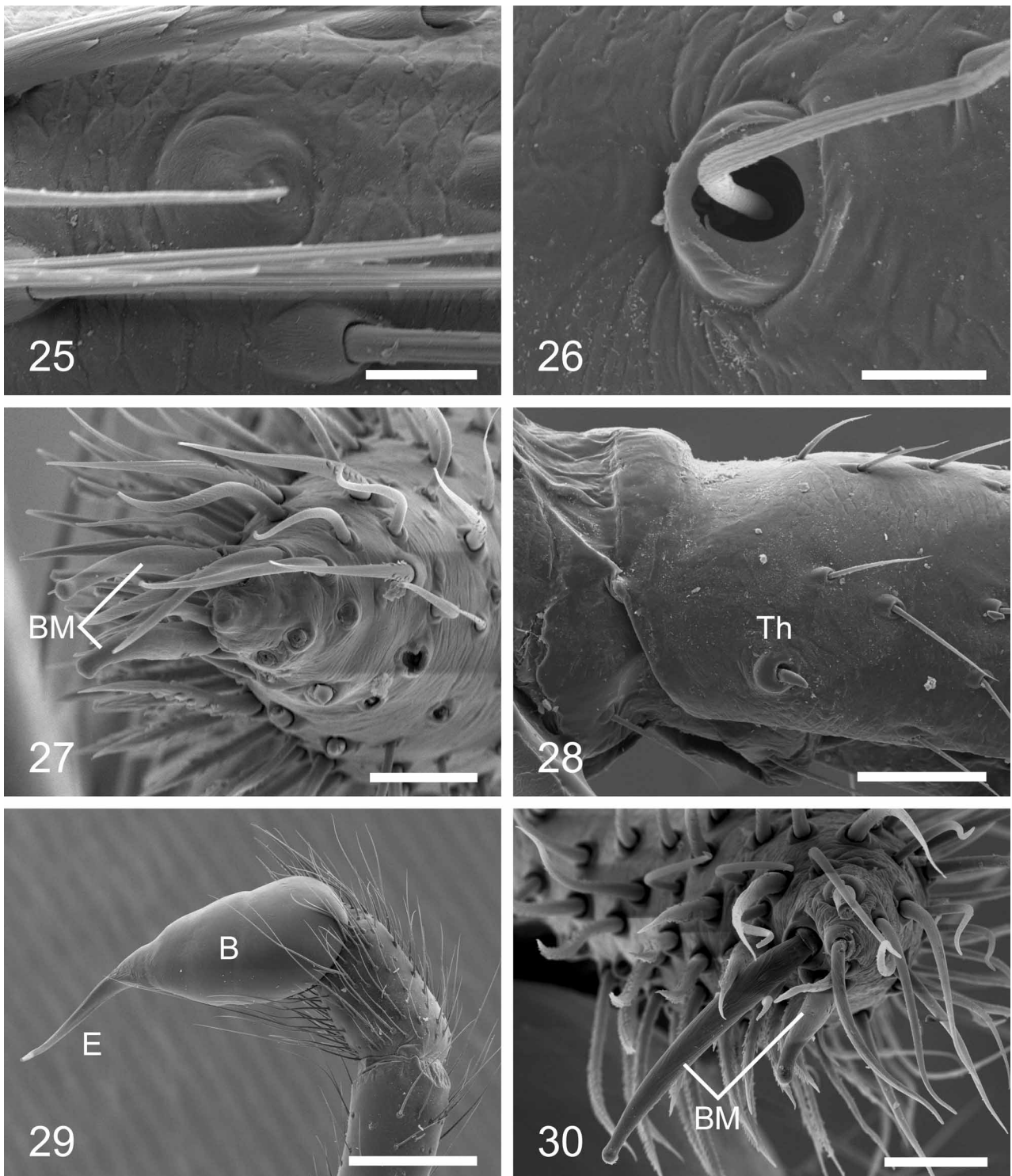
which were believed to deliberately create natural disasters to dispel human intruders, revered pagodas, the “Three Pagodas” were built to deter the dragons (Wikipedia 2009).



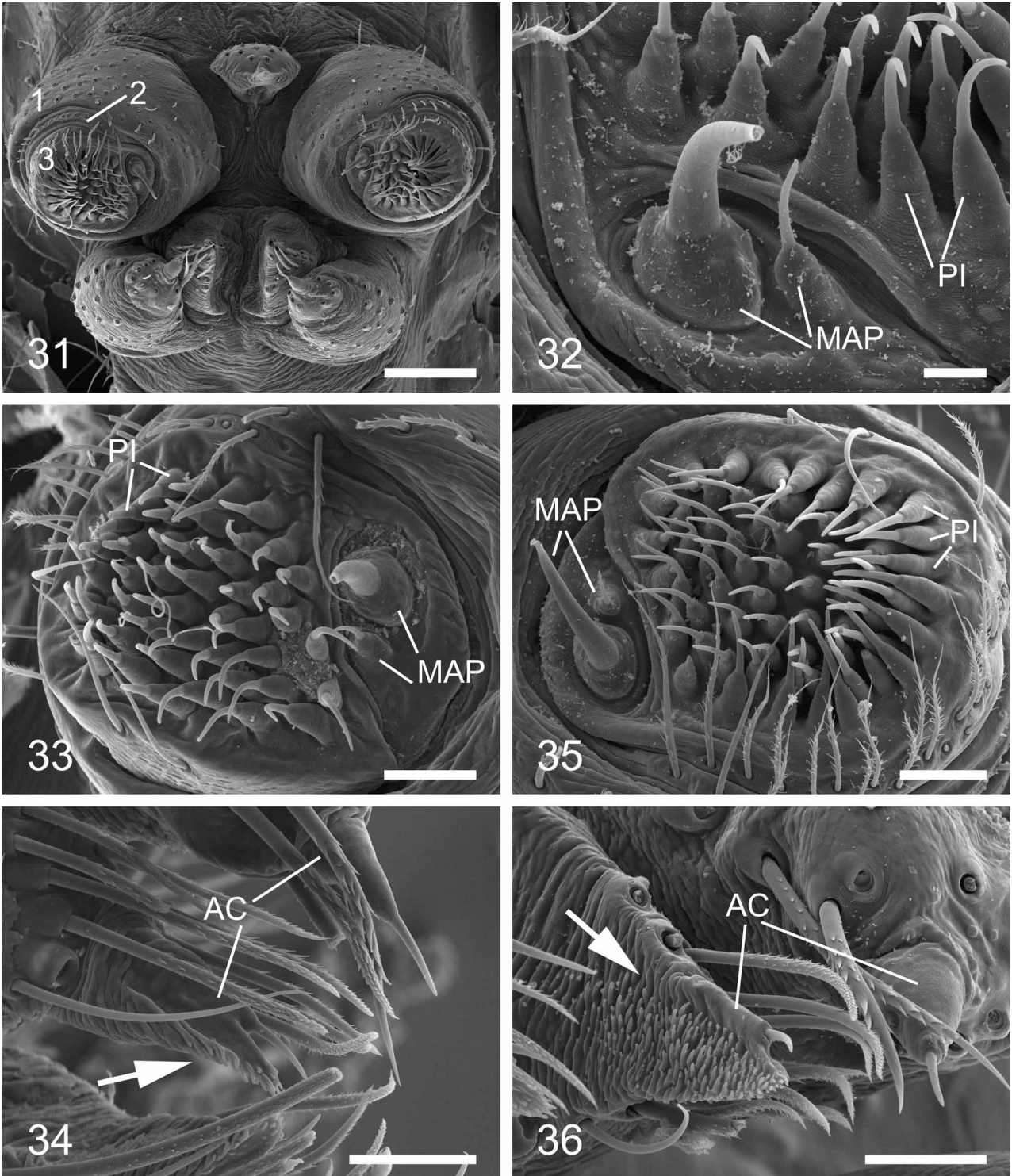
FIGURES 21–24. *Stedocys leopoldi* (Giltay) (MACN-Ar 23714, MR0486), female right legs. 21–22. Claws I (21 retrolateral-apical, 22 retrolateral view). 23–24 Claws IV (23 retrolateral-apical, 24 apical view) (BPC, bipectinated proclaw; Ony, onychium; PC, proclaw; RC, retroclaw). Scale bars: 21–24 100 μ m.

Diagnosis. Males are distinguished from the congeneric species by having a small palpal tibia and femur; tegulum subequal to tarsus; spermatic duct retrolaterally coiled one half time; embolus implanted prolaterally, extending straight, apically blunt (Fig. 11). Females are distinguished by the slight overlap between inner and

outer spermathecae (Fig. 14) and by carapace pale yellow, markings brown and sternum brown, pale yellow at center with a median yellow strip restricted to the anterior half and between coxae (Fig. 4, 8).

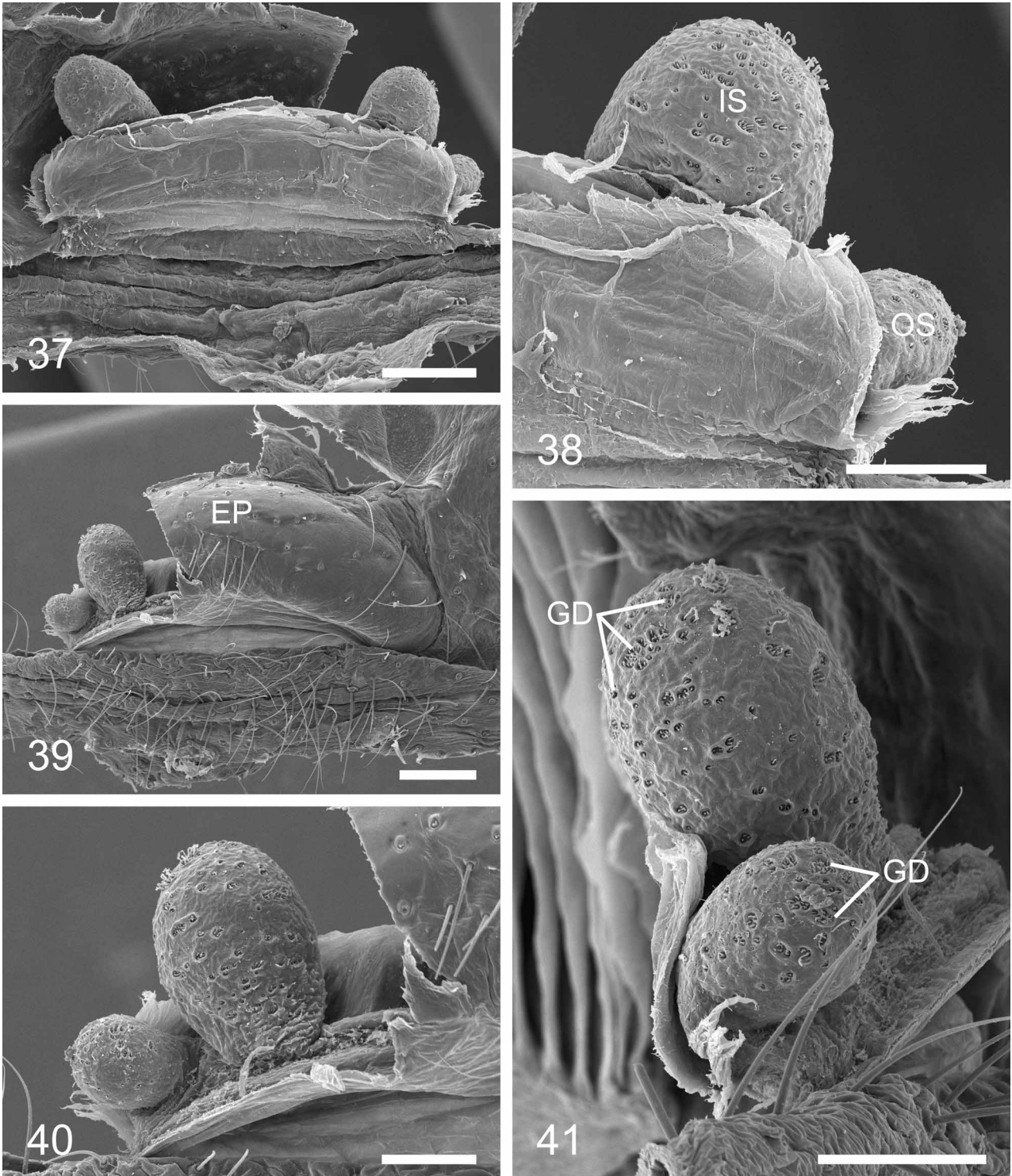


FIGURES 25–30. 25–29. *Stedocys leopoldi* (Giltay) (25–28 Female MACN-Ar 23714, MR0486, 29 MACN-Ar, MR0484). 30. *Scytodes globula* Nicolet (MACN-Ar, ARAMR000558). 25. Left tarsal organ IV. 26. Right metatarsal I trichobothria. 27–28. Left palp (27 tarsus apical, 28 femur pro-lateral). 29–30. Male left palp (29 retrolateral, 30 apical) (Th, thorn; BM, blunt macrosetae; E, embolus; B, bulb). Scale bars: 29–30, 500 μ m; 28, 100 μ m; 25, 50 μ m; 25–26, 20 μ m.



FIGURES 31–36. *Stedocys leopoldi* (Giltay) (31–34 Male MACN-Ar 23713, MR0484, 35–36 Female MACN-Ar 23714, MR0486). 31 Spinnerets field, posterior-ventral view. 32, 33, 35. ALS (32 left, MAP detail, 33, 35 right field) 34, 36. PMS-PLS (34 right, mesal view, 36 Left field) (MAP, major ampullate gland spigot; PI, piriform gland spigot; AC, aciniform gland spigot; numbers, ALS articles; arrows, PMS spicules). Scale bars: 31 200 μ m; 33–36, 50 μ m; 32 20 μ m.

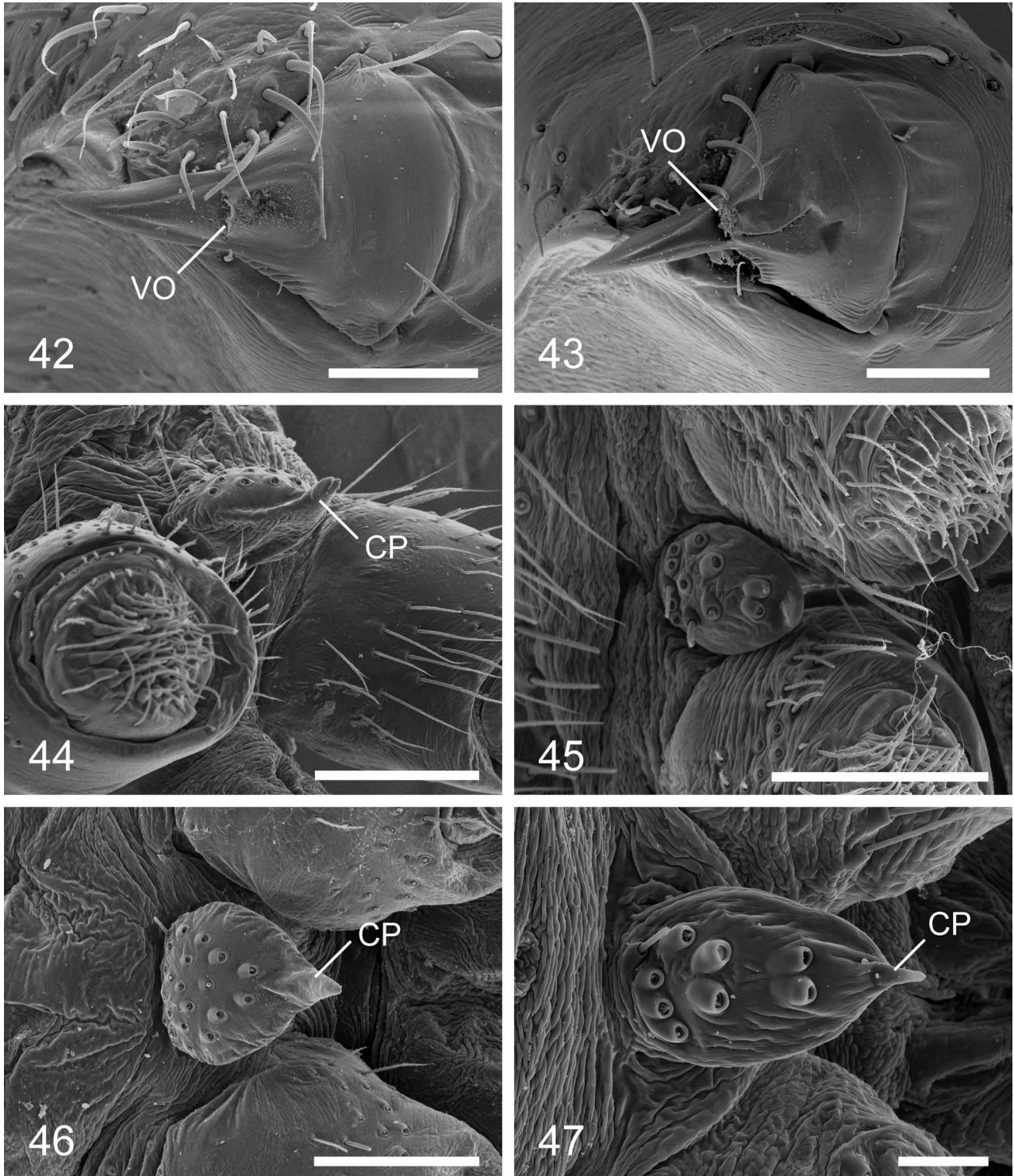
Description male (CASENT 9021385). Carapace pale yellow, markings distribution similar to *S. leopoldi*, but procurved “U” and “V” shapes acute (Fig. 3). Chelicerae pale yellow, slightly darker anteriorly. Endites pale, darker at outer margins. Labium brown, margins light. Sternum brown, pale yellow at center and between coxae (Fig. 7). Legs pale yellow with longitudinal brown bands, except on tarsi. Abdomen yellowish,



FIGURES 37–41. *Stedocys leopoldi* (Giltay) (MACN-Ar 23714, MR0486). 37, 39. Vulva. (37 dorsal, 39 ventral view). 38, 40–41. Right spermathecae close. (38 dorsal, 40 ventral, 41 pore detail, lateral view) (EP, epyginal pouch, GD, gland ductules; IS, inner spermathecae; OS, outer spermathecae). Scale bars: 37, 39 200 μm ; 38, 40–41 100 μm .

the first half with pale brown patterns and five chevrons distally. Total length 12.36. Cephalothorax 6.38 long, 4.93 wide, posteriorly bulging. Eyes diameter: PME 0.30, ALE 0.28, PLE 0.28. Lateral eyes on a tubercle. Chelicerae follow generic pattern, with three large stridulatory ridges. Endites and labium as in *S. leopoldi*. Labium 1.30 long, 1.22 wide, fused to sternum. Sternum 3.24 long, 2.02 wide, with marked borders. Leg and palp measurements: total length (femur/patella/tibia/metatarsus/tarsus): I 48.76 (14.34/1.80/14.34/15.16/

3.12), II 42.89 (11.90/1.70/12.88/13.69/2.72), III 27.53 (8.24/1.58/7.19/8.32/2.20), IV 35.89 (1.80/1.54/10.27/10.92/2.40), palp 4.34 (1.80/0.82/1.32/---/0.40). Legs and claws follow generic pattern. Palp with tegulum subequal to tarsus; spermatic duct retrolaterally coiled one half time; embolus implanted prolaterally, extending straight, apically blunt, retrolateral embolus outlet (Fig. 11). Opisthosoma oval, 5.98 long, 4.08 wide. Spinneret follows generic pattern.



FIGURES 42–47. *Stedocys leopoldi* (Giltay) (42, 44 Female MACN-Ar 23714, MR0486; 46 Male MACN-Ar 23713, MR0484). *Scytodes globula* Nicolet (43, 45 Female MACN-Ar 10789, 47 male MACN-Ar, ARAMR000558). 42–43 Left chelicerae, apical view. 44–47 Colulus (44 right lateral, 45 ventral-posterior, 46, 47 ventral) (VO, venom outlet; CP, colulus projection). Scale bars: 44–46 200 μ m; 42–43 100 μ m; 47 50 μ m.

Female (CASENT 9021385). Coloration as in male, except carapace "U" arms relatively larger (Fig. 4) and abdomen gray. Total length 14.30. Cephalothorax 5.74 long, 4.68 wide, posteriorly bulging. Eye diameters: PME 0.24, ALE 0.24, PLE 0.28. Lateral eyes on tubercle. Chelicerae follow generic pattern, with four large stridulatory ridges. Endites and labium as in male. Labium 1.06 long, 1.12 wide, fused to sternum. Sternum 2.84 long, 1.80 wide, coloration as in male with marked borders (Fig. 8). Legs and palp measurements: total length (femur/patella/tibia/metatarsus/tarsus): I 32.10 (9.29/1.50/8.16/10.59/2.56), II 26.73 (7.92/1.40/7.27/7.84/2.30), III 18.62 (5.49/1.22/4.64/5.41/1.86), IV 24.37 (7.19/1.28/6.71/7.11/2.08), palp 3.94 (1.22/0.64/0.86/---/1.22). Legs and claws follow generic pattern. Opisthosoma oval, 8.56 long, 5.98 wide. Spinnerets and external genitalia as follow generic pattern. Vulva with two pairs of rounded, thick spermathecae arising from the epigastric furrow, inner spermathecae twice as large as outer (Fig. 14).

Other Scytodidae species examined

Scytodes globula Nicolet, 1849: 1 ♀ (MACN-Ar 10789) from Argentina, Buenos Aires, Villa Madero, in a house, 13 October 2006, C. Scioscia leg.; 1 ♂ (MACN-Ar ##; ARAMR000558) from Argentina, Buenos Aires, Isla Martín García, 4 January 2006, A. Ojanguren and J. Barneche legs. Preparations FML 105–117, 132–134, 245, 246

Dictis sp.: 1 ♂ (CASENT9029794) from India, Rajasthan, 5 mi W Beawar, 7 January 1962, E. S. Ross and E. Q. Cavagnaro legs.; 1 ♀, 1 eggsac (CASENT9029795) from India, Rajasthan, 3 mi SE Sirohi, 450m, 9 January 1962, E. S. Ross E. Q. Cavagnaro legs.

Discussion

As a member of Scytodidae, *Stedocys* shares with the related families Drymusidae and Periegopidae (see Forster 1995; Labarque & Ramírez 2007a, b) the presence of bipectinate prolateral claws on both legs I and II (Figs. 21–22), PMS with projecting median lamina bearing a field of spicules (Figs. 34, 36, see also Platnick *et al.* 1991) and tracheal system with a unique median apodemal lobe (Fig. 14, see also Platnick *et al.* 1991; Forster 1995; Ramírez 2000). Giltay (1937) was the first to mention the bipectinate dentition on the anterior claw of the first leg of *S. leopoldi*, but he mistakenly reported it on the retroclaw.

Lehtinen (1986: 156) suggested a division of Scytodidae in two main groups, Scytodinae, and an unnamed subfamily including *Scytodes leopoldi* (currently *Stedocys*) plus two undescribed genera. According to Lehtinen, such unnamed subfamily would be supported by one synapomorphy, the pointed projection of the colulus (Figs. 44, 46), while retaining plesiomorphic conditions for other character systems, namely male palp configuration, branched vulva, circular cheliceral spitting orifice, lack of female copulatory pockets, and type of web. The lack of male palpal tarsus extension seems unproblematically plesiomorphic, as it has never been reported in the closely related families (Sicariidae, Drymusidae, Periegopidae; Platnick *et al.* 1991, Forster 1995). The venom outlet, also functioning as fang spitting orifice, is simple, slit-shaped in *Stedocys leopoldi* (Fig. 42) while it is prolonged in a basal incision in the *Scytodes* species illustrated so far (Fig. 43; Suter & Straton 2005: fig. 11).

The remaining characters mentioned by Lehtinen need further consideration. The lack of a pair of female copulatory pockets behind the epigastric furrow may or may not be plesiomorphic, as they are present in several *Drymusa* species (Valerio 1971: fig. 5; Bonaldo *et al.* 2006: fig. 5), a putative sister group of Scytodidae (Platnick *et al.* 1991), while *Soeuria* have only squamous areas (Saaristo 1997). The pointed colulus also occur in *Scytodes globula* Nicolet, 1849 (Fig. 45, 47). Recent progress on the taxonomy of *Scytodes* revealed wide variability in internal female genitalia, including configurations quite similar to those found in *Stedocys* species (e.g., Rheims *et al.*, 1997: fig. 63; Brescovit and Rheims 2001: fig. 30). And last, the web of *Stedocys* species has not been described in any detail.

Our diagnosis of *Stedocys* is slightly different from the one presented by Ono (1995). He mentioned that the first legs of *Stedocys* were about ten times the length of carapace, but this also occurs in *Scytodes longipes* Lucas, 1844 and *Scytodes globula* (Valerio 1981, Brescovit & Rheims 2000). Along with the male palpal tarsus extension, *Stedocys* males lack the apical blunt macrosetae characteristic of other scytodids (Figs. 10, 12, 29; Giltay 1935, fig. 3; Lehtinen 1986, fig. 7; Ono 1995, fig. 4). These macrosetae were illustrated in *Scytodes* (Fig. 30; Rheims & Brescovit 2000–2001, 2004; Rheims *et al.* 2005, 2007) and *Dictis* L. Koch, 1872 (M. Ramírez personal observation; see also suggestive drawings on Paik 1978, fig. 93 4; Schenkel 1963, fig. 10). We were not able to examine the other two genera *Soeuria* Saaristo, 1997 and *Scyloxes* Dunin, 1992 and the literature is not conclusive on this (Saaristo 1997). Other diagnostic characters are in *Stedocys* female genitalia, which is described and illustrated here for the first time.

In summary, the extension of the male palpal tarsus bearing blunt macrosetae points to the monophyly of all Scytodidae except *Stedocys*. The remaining characters have a more complex distribution or are poorly known, but they are overall compatible with a placement of *Stedocys* as the sister group of all other genera of Scytodidae.

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