Pholcus lingulatus Gao, Gao & Zhu, 2002

Gao, Y. Q., Gao, J. C., Zhu, M. S. 2002. Two new species of the genus *Pholcus* from China (Araneae: Pholcidae). Acta zootaxon. sin. 27(1): 74-77.

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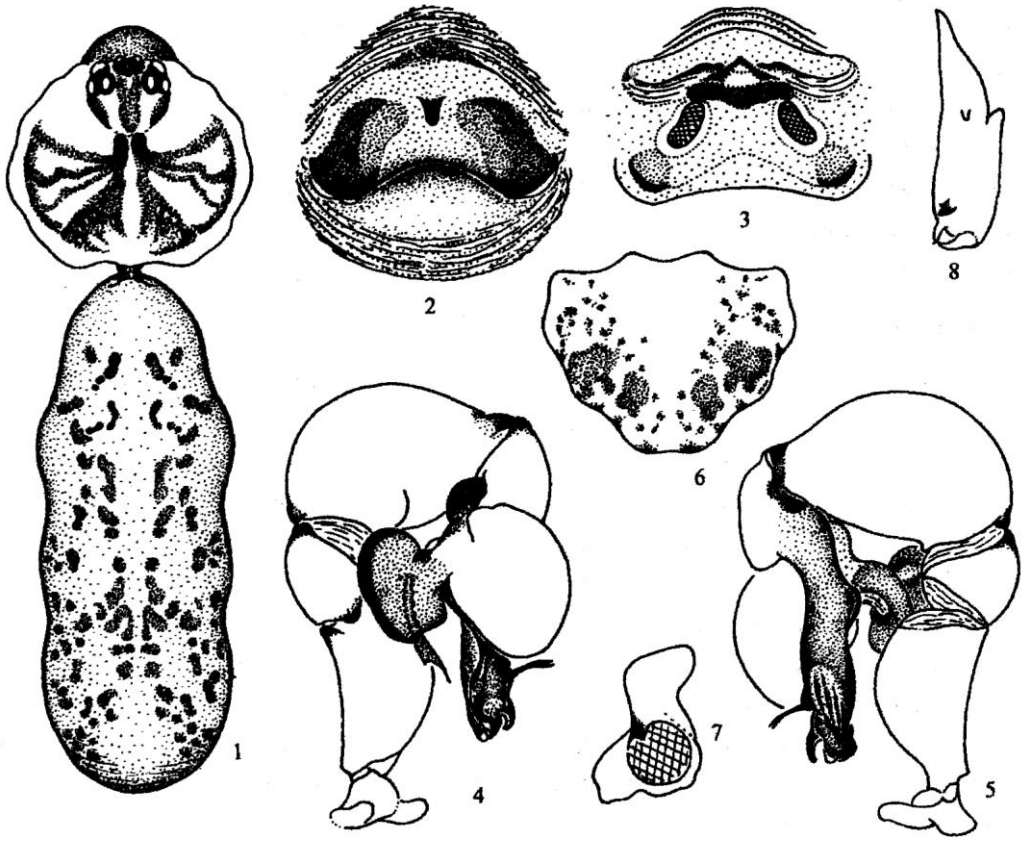
Pholcus lingulatus sp. nov. (Figs. 1-8)



Figs. 1-8 Pholcus lingulatus sp. nov.
1. female, dorsal view 2. female genitalia, ventral view 3. do., dorsal view 4. left palp of the male, endo-lateral view 5. do., exo-lateral view 6. sternum of the female 7. trochanter of left male palp 8. left chelicera of the male, dorsal view

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Holotype ♀, Weisha River (127°12'N, 42°48'E), Huadian City, Jilin Province, Aug. 1973; paratypes 2 ♂♂,2 ♀♀, same data as in holotype.

Etymology. The specific name is due to the shape of the prolateral projection on protarsus of male palpal organ.

Diagnosis. The new species resembles Pholcus clavimaculatus Zhu et Song, 1999 in the shape of uncus of male palpal organ, but it differs from the latter by: 1) spur of trochanter of male palp curved-finger-shaped; 2) protarsus of male palpal organ with a forked-tongue-shaped projection prolaterally.

Female. Total length 5.17. Cephalothorax 1.43 long, 1.67 wide; abdomen 3.40 long, 1.32 wide. Carapace yellow with yellow brown pattern. Both eye rows recurved. AME 0.10, ALE 0.15, PME 0.11, PLE 0.14; AME-AME 0.04, AME-ALE 0.05; MOA 0.33 long, front width 0.21, back width 0.43. Labium and endites yellow. Sternum yellow with irregular yellowish brown patches. Femor, patellae and tibiae yellow with yellowish brown patches, metatarsi and tarsi yellowish brown. Measurements of legs: Ⅰ 33.21 (8.73 + 9.00 + 13.23 + 2.25); Ⅱ 23.13 (6.39 + 6.39 + 8.91 + 1.44); Ⅲ17.00 (4.95 + 4.77 + 6.25 + 1.03); Ⅳ23.67 (6.84 + 6.48 + 8.91 + 1.44). Leg formula 1, 4, 2, 3. Abdomen yellow, dorsum with many small black brown spots. Epigynum with a short scapus. Upper edge of the epigastric fold "W" shaped.

Male. Total length 5.03. Cephalothorax 1.53, long, 1.70 wide; abdomen 3.50 long, 1.42 wide. Both eye rows recurved. AME 0.10, ALE 0.16, PME 0.11, PLE 0.14; AME-AME 0.04, AME-ALE 0.05; MOA 0.33 long, front width 0.28, back width 0.50. Chelicera yellow, with 3 processes at the anterior surface and one tooth on retromargin. Measurements of legs: Ⅰ 49.68 (12.51 + 13.77 + 20.88 + 2.52); Ⅱ31.68 (9.27 + 9.00 + 11.70 + 1.71); Ⅲ21.42 (6.75 + 5.40 + 8.19 + 1.08); Ⅳ30.42 (8.91 + 8.37 + 11.61 + 1.53). Leg formula 1, 2, 4, 3. Uncus of male palpal organ almost oval, protarsus of male palpal organ with a forked-tongue-shaped projection prolaterally, spur of trochanter of male palp curved-finger-shaped.

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舌幽灵蛛,新种 Pholcus lingulatus sp. nov. (图 1～8)

正模 ♀,副模 2 ♂♂,2 ♀♀,吉林省桦甸市苇沙河,1973 年 8 月 13 日。

鉴别特征 新种雄性触肢器的钩状突形状近似于 Pholcus clavimaculatus Zhu et Song, 1999,但有如下 2 点不同:1)雄性触肢转节距呈弯指状,2)跗前突具一蛇舌状突起。

新种的种名根据雄性触肢器跗前突、前侧突起的形状而拟定。

Zhang, F., Zhu, M.S. 2009. A review of the genus *Pholcus* (Araneae: Pholcidae) from China. Zootaxa 2037: 1-114.

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***Pholcus lingulatus* Gao, Gao & Zhu, 2002**
(Fig. 24)

Pholcus lingulatus Gao, Gao & Zhu 2002: 74, f. 1–8.

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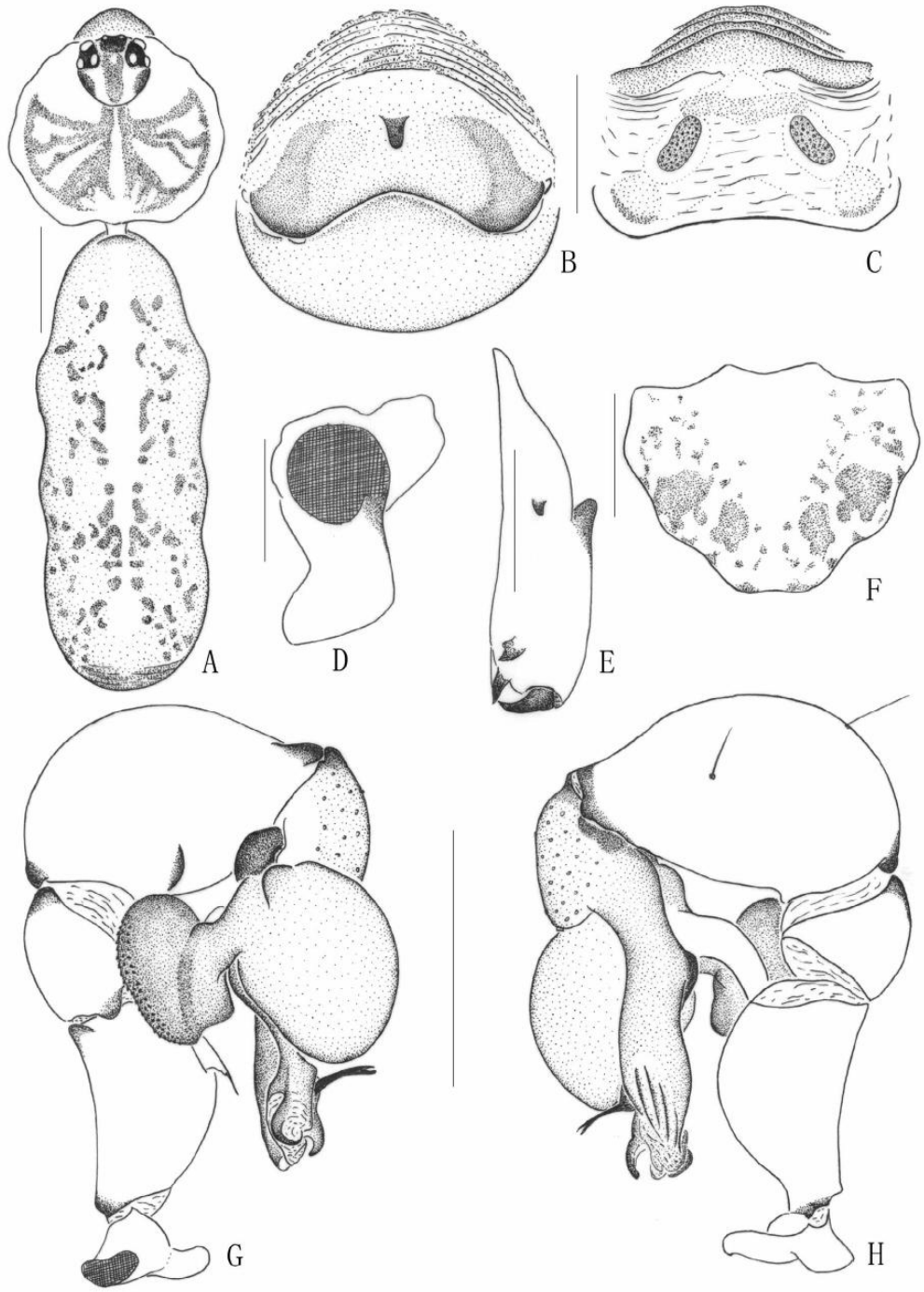

FIGURE 24. *Pholcus lingulatus* Gao, Gao & Zhu, 2002 (illustrations modified from Gao, Gao & Zhu 2002). A. female body, dorsal view. B. epigynum, ventral view. C. same, dorsal view. D. trochanter of male left palp, retrolaterodorsal view. E. male left chelicera, frontal view. F. male sternum, ventral view. G. left palp, prolateral view. H. same, retrolateral view. Scale lines: 1.0mm (A), 0.5mm (B, C, E–I), 0.2mm (D).

Diagnosis. This species resembles *P. sublingulatus* **sp. nov.** in the shapes of the palpal bulbs and epigyna, both with a forked-tongue-shaped procursus apophysis and both without appendices, and with knob-shaped epigynal apophysis. It can be distinguished from the latter by the shape of the procursus tip (Figs. 24 G–H), by the relatively widely separated pore plates of the epigynum (Fig. 24C), and by the sternum markings (Fig. 24F).

Redescription. Male: A paratype measured, total length 5.0: cephalothorax 1.6 long, 1.7 wide; abdomen 3.4 long, 1.5 wide. Leg I: 49.7 (12.5+0.9+12.9+20.9+2.5), tibia II: 8.3, tibia III: 4.8, tibia IV: 7.7; tibia I L/D: 75. Carapace short, broad and almost circular, ochre, with pair of brown marks broadly connecting to ocular area. Cephalic region raised, with brown stripe centrally, ocular area dark yellow. Clypeus 0.50, slightly ochre, without marks. Distance AME–AME 0.04. Diameter AME 0.10, ALE 0.16, PME 0.11, PLE 0.14. Chelicerae as in Fig. 24E, with pair of black serrated apophyses distally, pair of unsclerotized thumb-shaped apophyses proximolaterally and pair of small unsclerotized rounded apophyses proximocentrally. Labium and endites light yellow. Sternum slightly ochre, with some regular brown marks as in Fig. 24F. Femora, patellae and tibiae ochre, with dark rings, metatarsi and tarsi brown. Palps as in Figs. 24G and 24H, bulb with ear-shaped uncus and transparent embolus, without appendix, tibia of palp with a slight bulge prolaterally.

Variation. Tibia I in other paratype: 12.3. Body length in other paratype: 4.6.

Female: in general very similar to male. Total length of bodies 4.5–5.0. A specimen measured (holotype), total length 5.0: cephalothorax 1.5 long, 1.7 wide; abdomen 3.5 long, 1.4 wide. Tibia I: 8.3. Prosoma shape as in Fig. 24A. Distance AME–AME 0.04. Diameter AME 0.10, ALE 0.15, PME 0.11, PLE 0.14. Abdomen cylindrical, pale ochre, dorsum with numerous brown spots as in Fig. 24A. Venter pale brown, without marks. Epigynum roughly semicircular as in Fig. 24B, with a knob-shaped apophysis on the top. Dorsal view as in Fig. 24C, with a wavy sclerotized arch anteriorly and a pair of shoe-shaped pore plates.

Distribution. Known from type locality only.

Material examined. CHINA: **Jilin,** Huadian City, August 13, 1973, collector unknown, female holotype, 2♂, 2♀ paratypes (MHBU).

Huber, B. A. 2011. Revision and cladistic analysis of *Pholcus* and closely related taxa (Araneae, Pholcidae). Bonner zool. Monographien 58: 1-510.

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2147, 2148. *Ph. lingulatus*, female abdomen, ventral view; male prosoma, dorsal view.
2159, 2160. *Ph. lingulatus*.

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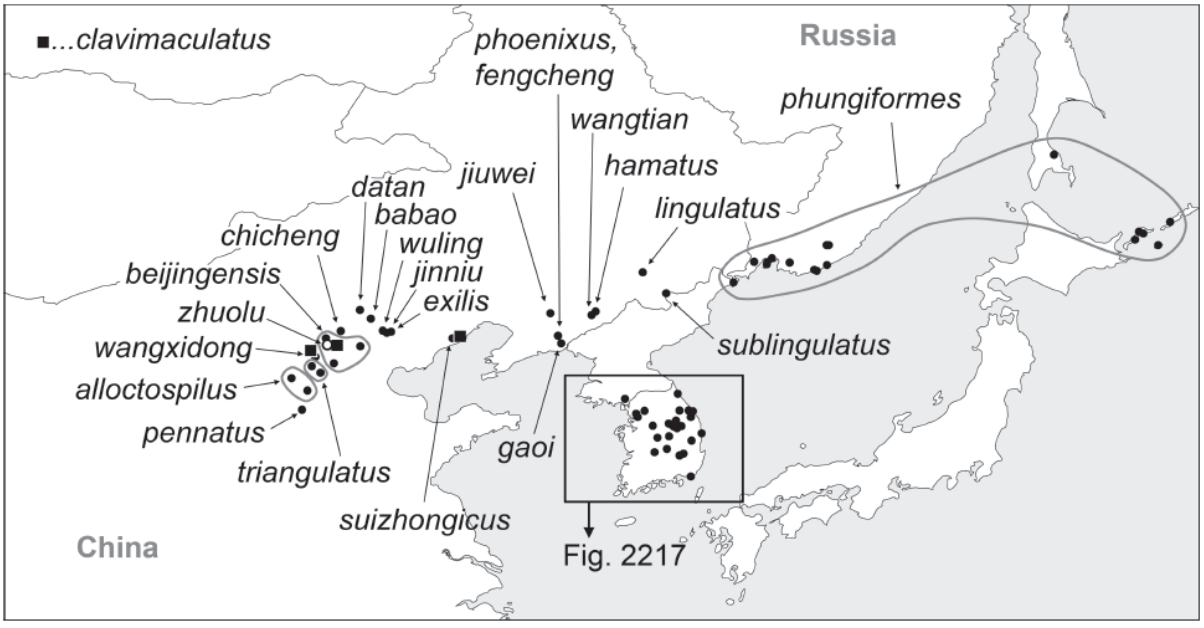

FIG. 2216. Known distribution of the *Pholcus phungiformes* species group. For Korean species, see Fig. 2217.

Pholcus lingulatus Gao, Gao & Zhu, 2002

Figs. 2147, 2148, 2159, 2160, 2243-2247

Pholcus lingulatus Gao, Gao & Zhu 2002: 74-75, 77, figs. 1-8. Zhang & Zhu 2009a: 47-50, figs. 24a-h (copied from Gao *et al.* 2002).

Types. Female holotype, 2♂2♀ paratypes from China, Jilin Prov., Huadian City, Weisha River (42°48'N, 127°12'E), 13.viii.1973 (collector not given), in MHBU (1♂1♀ paratypes examined).

Diagnosis. Easily distinguished from most congeners by strong and long spines dorsally on procursus (Figs. 2244, 2245); from very similar *Ph. sublingulatus* by female internal genitalia (pore plates wider apart; cf. fig. 48b in Zhang & Zhu 2009a) and details of male procursus shape (cf. figs. 48h-j in Zhang & Zhu 2009a); from *Ph. phungiformes* also by absence of ventral spines on procursus and by female genitalia (Figs. 2159, 2247).

Male (paratype). Carapace width 1.6, abdomen missing. Leg 1: 41.4 (10.6 + 0.7 + 10.4 + 17.2 + 2.5), tibia 2: 7.0, tibia 3: 4.8, tibia 4: 6.5; tibia 1 L/d: 71. Habitus similar to *Ph. pennatus* (cf. Figs. 2152, 2153). Carapace pale ochre-yellow with distinct brown pattern (Fig. 2148), ocular area with median brown mark, clypeus light brown, sternum pale ochre-yellow with light brown marks near coxae 2-4, legs very pale but with indistinct rings apparently as in *Ph. phungiformes*: on femora subdistally, tibiae proximally and subdistally, marks proximo-ventrally on femora. Distance PME-PME 250 µm, diameter PME 135 µm, distance PME-ALE 45 µm, distance AME-AME 45 µm, diameter AME 105 µm. Ocular area moderately elevated, stronger hairs posteriorly. No thoracic furrow; clypeus unmodified. Chelicerae as in *Ph. phungiformes* (cf. Fig. 2251). Sternum wider than long (1.00/0.75), unmodified. Palps as in Figs. 2243 and 2244, coxa unmodified, trochanter with short retrolateral apophysis curving towards ventral, femur with very indistinct proximal hump dorsally, widening ventrally, tibia with sclerotized area on prolatero-ventral side, procursus with three distinctive strong dorsal spines, with light hinge-like area retrolaterally (similar to *Ph. phungiformes*), bulb with large uncus, weakly sclerotized embolus, without appendix. Legs without spines and curved hairs, few vertical hairs (most hairs missing); retrolateral trichobothrium on tibia 1 at 5%; prolateral trichobothrium absent on tibia 1, present on other tibiae. Tarsal pseudosegments indistinct, only distally a few visible in dissecting microscope.

Female. In general similar to male, triads closer together (distance PME-PME 185 µm); sternum more uniformly light brown, abdomen dorsally with many dark spots (cf. *Ph. pennatus*, Fig. 2152). Tibia 1 missing in specimen examined. Epigynum large, weakly elevated, large weakly sclerotized anterior and posterior plates, median plate with sclerotized 'knob' less triangular than in *Ph. phungiformes* (Figs. 2159, 2246), internal genitalia as in Figs. 2160 and 2247.

Distribution. Known from type locality only (Fig. 2216).

Material examined. CHINA: *Jilin Prov.*: Huadian City: 1♂1♀ paratypes above.

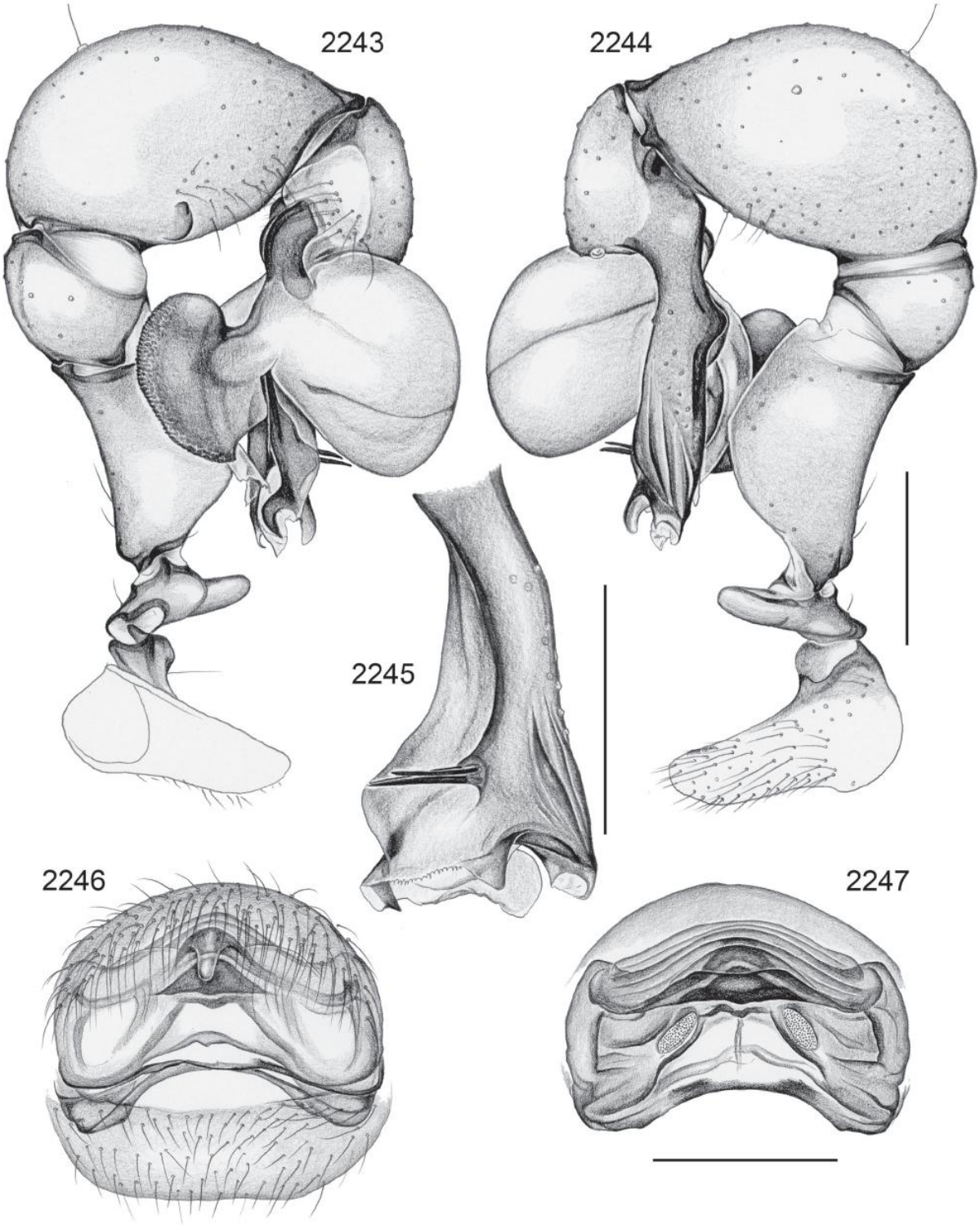

FIG. 2243-2247. *Pholcus lingulatus*. 2243, 2244. Left male palp, prolateral and retrolateral views. 2245. Left procursus, dorsal (slightly retrolateral) view. 2246, 2247. Cleared female genitalia, ventral and dorsal views. Scale lines: 0.5.