

***Pholcus alloctospilus* Zhu & Gong, 1991**

**Zhu, M.S. & Gong, L-S. 1991.** Four new species of the genus *Pholcus* from China. *Acta Zootaxonomica Sinica* 16(1): 18-26.

p. 18

**杂斑幽灵蛛,新种 *Pholcus alloctospilus* sp. nov. (图 2)**

正模♂,配模♀,副模 5♂♂ 6♀♀,河北灵寿县,1986 年 5 月 26 日,朱明生采。

雄蛛体长 4.24—4.28。头部隆起。头胸部黄色,头部中央有 1 纵向棒状褐色斑,后中眼后面各有 1 个醒目的褐色圆点,头区隆起的两侧近边缘各有 1 褐色带,胸部中线两侧各有 1 块褐色花斑。额长而向前倾斜,中央有 1 对连接在一起的褐色斑,前缘黄色。从背面观察,两眼列均后凹。前中眼间距等于前中侧眼间距,中眼区后边大于前边 (0.24:0.05),宽大于长(0.24:0.07)。各眼直径之比为: 前中眼<后侧眼<前侧眼=后中眼(0.08:0.13:0.14:0.14)。螯肢前、后齿堤各有 1 齿,前面近中部有 2 个突起。胸板黄色。步足黄色,有褐色环纹。腹部长卵形,灰黄色,有黑灰色斑。触肢器如图。

正模测量 体长 4.28。头胸部 1.18 × 1.54,腹部 3.10 × 1.60。足式为 I > II > IV >

p. 19

III; 各足长度为:

|     | 腿 节<br>femur | 膝、胫节<br>patella, tibia | 后跗节<br>metatarsus | 跗 节<br>tarsus | 全 长<br>total length |
|-----|--------------|------------------------|-------------------|---------------|---------------------|
| I   | 9.15         | 9.98                   | 14.62             | 2.30          | 36.05               |
| II  | 6.91         | 7.10                   | 9.98              | 1.49          | 25.48               |
| III | 4.86         | 4.70                   | 6.56              | 1.09          | 17.21               |
| IV  | 6.72         | 6.30                   | 8.96              | 1.31          | 23.29               |

雌蛛体长 5.21—5.28。特征似雄蛛。

配模测量 体长 5.28。头胸部 1.44 × 1.44,腹部 3.84 × 2.40。足式为 I > II > IV >

III; 各足长度为:

|     | 腿 节<br>femur | 膝、胫节<br>patella, tibia | 后跗节<br>metatarsus | 跗 节<br>tarsus | 全 长<br>total length |
|-----|--------------|------------------------|-------------------|---------------|---------------------|
| I   | 8.32         | 8.80                   | 8.70              | 2.31          | 28.13               |
| II  | 6.24         | 6.49                   | 8.48              | 1.41          | 22.62               |
| III | 4.48         | 4.35                   | 5.95              | 1.02          | 15.80               |
| IV  | 6.40         | 6.08                   | 8.32              | 1.31          | 22.11               |

本新种头胸部斑纹与 *Pholcus jixianensis* Zhu et Yu(1983: 136) 很相似,但触肢器和外雌器构造两者有很大差别,雄性触肢转节形状及螯肢前面突起也不一样。

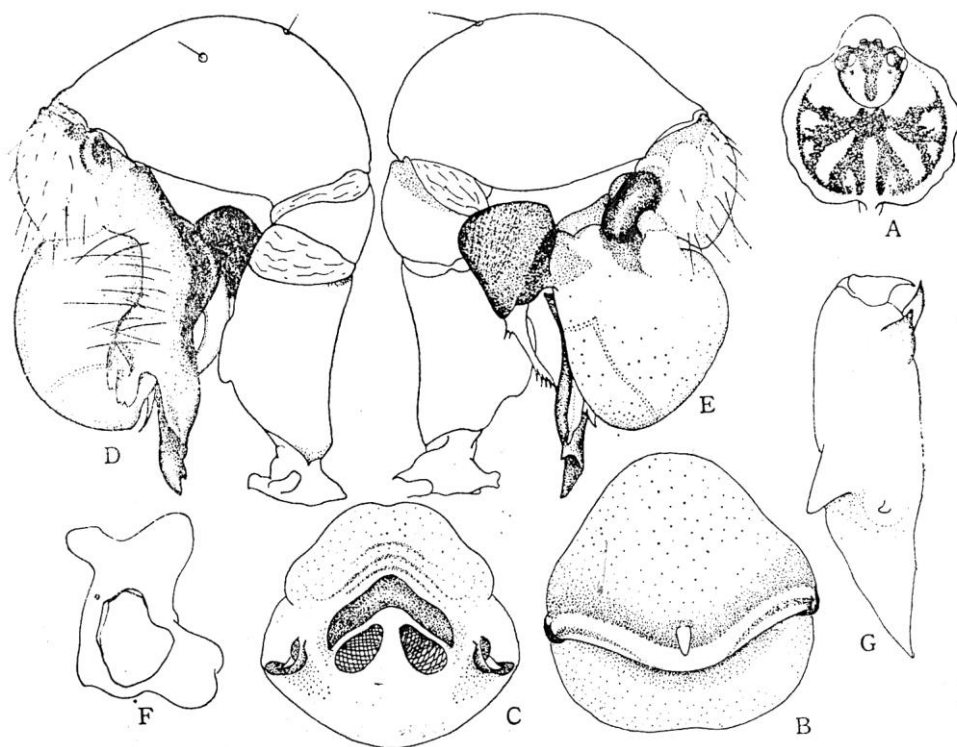


图2 杂斑幽灵蛛,新种 *Pholcus alloctospilus* sp. nov.

- A. 头胸部背面 (cephalothorax, dorsal view) B. 外雌器外面 (epigynum, external view)  
C. 同上,内面 (do., vulva) D. 雄蛛左触肢外侧面 (♂left palpal organ, exo-lateral view)  
E. 同上,内侧面 (do., endo-lateral view) F. 雄蛛触肢转节 (♂trochanter of palp)  
G. 雄蛛螯肢 (♂chelicera)

## 2. *Pholcus alloctospilis* sp. nov. (fig. 2)

Holotype ♂, allotype ♀, paratypes 5 ♂♂ 6 ♀♀, Lingshou County, Hebei Province (28°20'N, 114°30'E), May 26, 1986.

Male (Holotype) total length 4.28 mm, cephalothorax 1.18×1.54 mm. abdomen 3.10×1.60 mm. Female (Allotype): total length 5.28 mm, cephalothorax 1.44×1.44 mm, abdomen 3.84×2.40 mm.

The dorsal pattern of the cephalothorax of the new species is similar to that of *P. jixianensis*, but differs from the latter in the following points: 1. the uncus of the new species is triangular, but it is stick-like in *P. jixianensis*; 2. the tip of protarsus is pointed, but it is broad in *P. jixianensis*; 3. the structure of epigynum and vulva, and shape of spur trochanter of the male are also different.

**Song, D., Zhu, M., and Chen, J. 1999.** The Spiders of China. Hebei Science and Technology Publishing House. 640 pp., 4 plates.

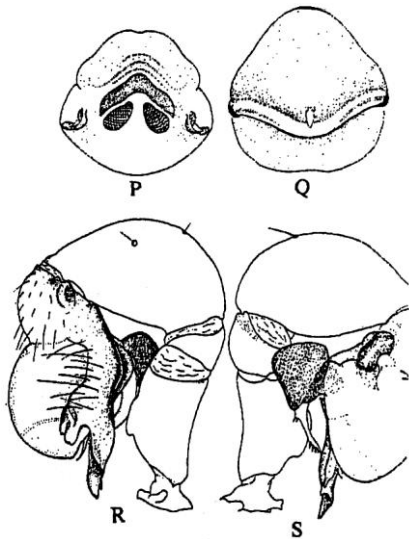
p. 52

***Pholcus alloctospilus* Zhu et Gong, 1991 (fig.22P—S)**

*Pholcus alloctospilus* Zhu & Gong, 1991: 18, f. 2.

Distribution: Hebei (Lingshou County).

p. 60



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

p. 11

***Pholcus alloctospilus* Zhu & Gong, 1991**

(Fig. 1)

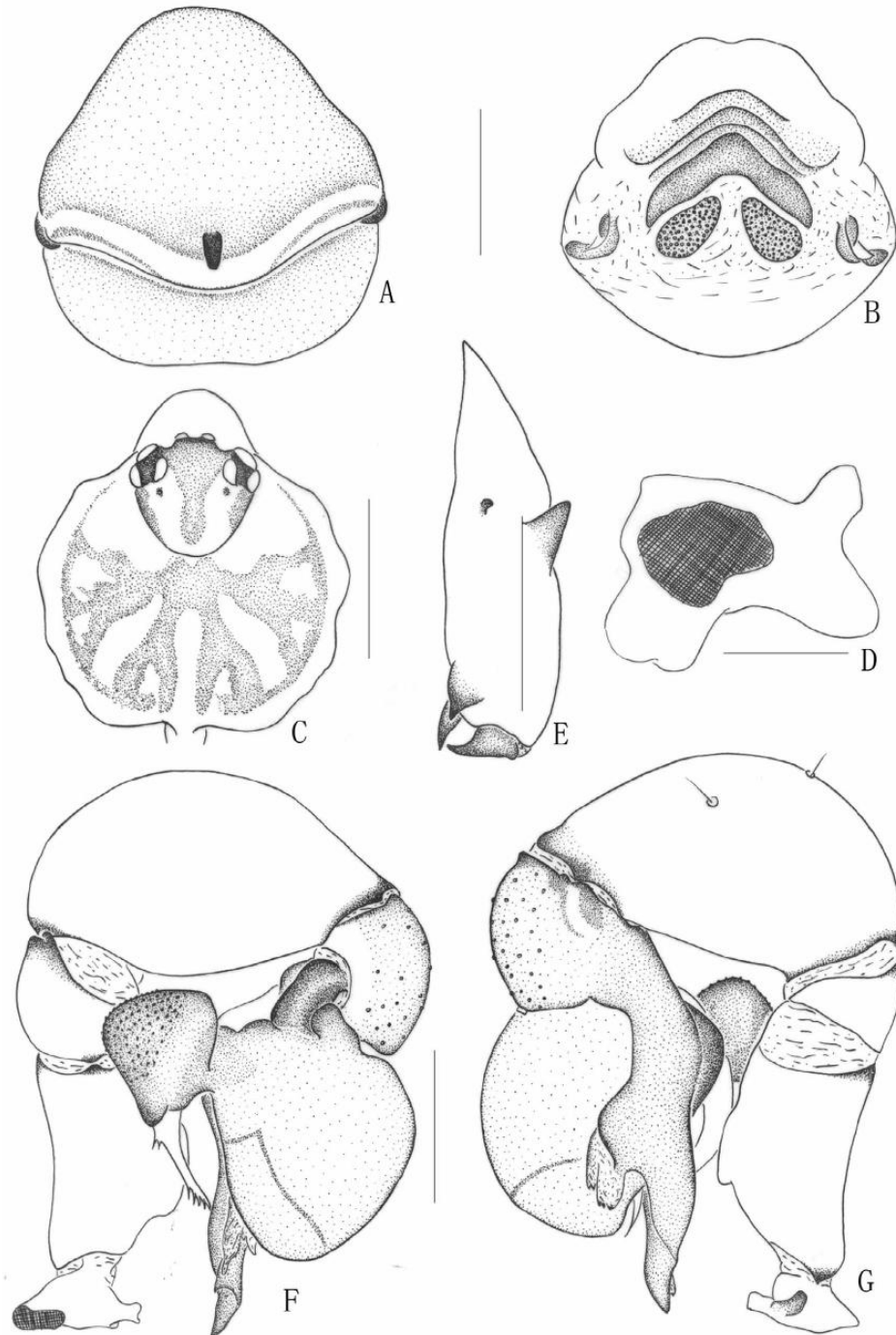
*Pholcus alloctospilus* Zhu & Gong 1991: 18, f. 2A–G. Song, Zhu & Chen 1999: 52, f. 22P–S. Song, Zhu & Chen 2001: 72, f. 29A–G.

**Diagnosis.** This species resembles *P. fengcheng* **sp. nov.** in the shapes of the palpal bulb and epigynum, both without appendices, and both with a knob-shaped epigynal apophysis. It can be distinguished from it by the smaller epigynal pore plates and shape of the anterior sclerotized arch of epigynum in dorsal view (Fig. 1B), by the shape of the uncus of the palpal bulb (Fig. 1F), and by the shape of the tip of the procurus (Figs. 1F–G).

**Redescription.** Male (holotype), total length 4.3: cephalothorax 1.2 long, 1.5 wide; abdomen 3.1 long, 1.6 wide. Leg I: 36.1 (9.2+0.6+9.4+14.6+2.3), tibia II: 6.6, tibia III: 4.3, tibia IV: 5.8; Tibia I L/D: 59. Prosoma shape as in Fig. 1C. Carapace short, broad and almost circular, ochre, with pair of brown marks broadly connecting to ocular area. Cephalic region raised, with brown stripe centrally and a pair of spots laterally, ocular area dark yellow. Clypeus 0.46, unmodified, slightly ochre, with brown marks. Distance AME–AME 0.06. Diameter AME 0.08, ALE 0.14, PME 0.14, PLE 0.13. Chelicerae as in Fig. 1E, with pair of black apophyses distally, pair of unsclerotized thumb-shaped apophyses proximolaterally and pair of small unsclerotized rounded apophyses proximocentrally. Labium dark yellow. Sternum wider than long, ochre, with some irregular small yellow marks on it. Femora, patellae and tibiae ochre, with dark rings, metatarsi and tarsi brown. Abdomen cylindrical, pale ochre, dorsum with numerous brown spots. Venter pale brown. Palps as in Figs. 1F and 1G, tip of procurus simple and pointed; bulb with cap-shaped uncus and transparent embolus, without appendix; trochanter with short ventral and retrolateral apophyses.

**Variation.** Total body length 4.0–4.4. Tibia I in six other males: 9.2–9.9 (mean: 9.5).

Female: in general very similar to male. Female ('allotype'), total length 5.3: cephalothorax 1.4 long, 1.4 wide; abdomen 3.9 long, 2.4 wide. Distance AME–AME 0.05. Diameter AME 0.08, ALE 0.16, PME 0.14, PLE 0.15. Tibia I in five females: 7.3, 5.2, 6.7, 6.5, 5.8. Epigynum roughly oval as in Fig. 1A, with a small knob-shaped apophysis on the top of it, margin of anterior plate recurved. Dorsal view as in Fig. 1B, with a V-shaped sclerotized arch anteriorly and a pair of tear-drop-shaped pore plates.



**FIGURE 1.** *Pholcus alloctospilus* Zhu & Gong, 1991 (illustrations modified from Zhu & Gong 1991). A. epigynum, ventral view. B. same, dorsal view. C. male prosoma, dorsal view. D. trochanter of male left palp, retrolaterodorsal view. E. male left chelicera, frontal view. F. left palp, prolateral view. G. same, retrolateral view. Scale lines: 1.0mm (C), 0.5mm (A, B, E–G), 0.2mm (D).

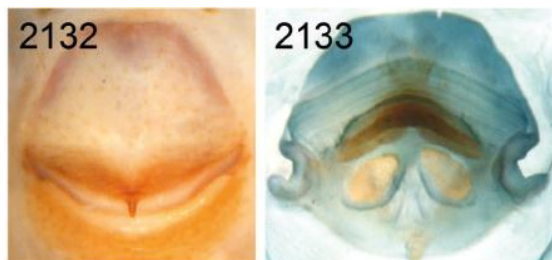
**Huber, B. A. 2011.** Revision and cladistic analysis of *Pholcus* and closely related taxa (Araneae, Pholcidae). Bonner zool. Monographien 58: 1-510.

p. 445



sal view. 2105-2107. *Ph. linzhou*, male, dorsal and lateral views; female abdomen, ventral view. 2108-2110. *Ph. allectospilus*. male, dorsal and lateral views; female abdomen, ventral view.

p. 446



2132, 2133. *Ph. allectospilus*.

p. 262

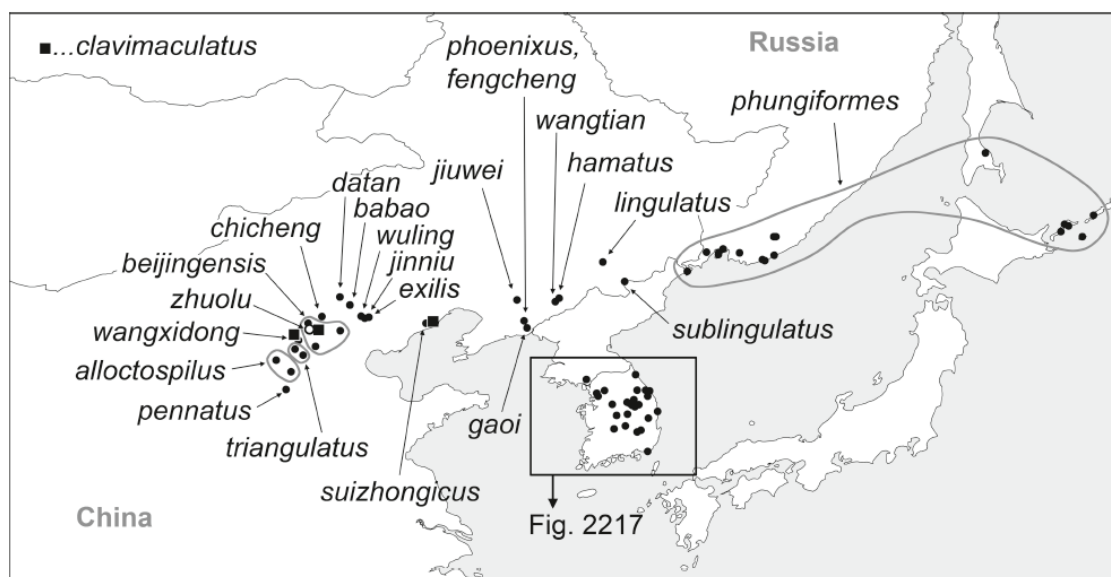


FIG. 2216. Known distribution of the *Pholcus phungiformes* species group. For Korean species, see Fig. 2217.

*Pholcus alloctospilus* Zhu & Gong, 1991

Figs. 2108-2110, 2132, 2133, 2218-2223

*Pholcus alloctospilus* Zhu & Gong 1991: 18-20, 25, figs. 2a-g. Song *et al.* 1999: 52, figs. 22p-s (copied from Zhu & Gong 1991). Zhang & Zhu 2009a: 11-13, figs. 1a-g (copied from Zhu & Gong 1991).

*Types.* Male holotype, female “allotype”, 5♂6♀ paratypes from China, Hebei Prov., Lingshou County, Mt. Manshan [38°20'N, 114°30'E] (not 28°20'N as in Zhu & Gong 1991), 26.v.1986 (M. Zhu), in MHBUS (1♂1♀ paratypes examined).

*Diagnosis.* Distinguished from congeners without appendix by distinctive shapes of procurus (Figs. 2219, 2220; long ventral process distally) and female genitalia (Figs. 2132, 2223; distinctive epigynum and internal structures).

*Male* (paratype). Total body length 4.8, carapace width 1.6. Legs 1 and 2 missing, tibia 3: 5.0, tibia 4: 6.9. Habitus as in Figs. 2108 and 2109. Carapace pale ochre-yellow with distinct brown pattern, ocular area with lateral and median brown marks, clypeus slightly darkened, sternum mostly ochre-yellow but margins light brown, legs pale ochre-yellow, indistinct darker rings on femora subdistally, in patella area, and on tibiae subdistally, some marks proximally on femora, abdomen gray, many dark spots dorsally and laterally, ventrally only genital area brown (cf. female, Fig. 2110). Distance PME-PME 230 µm, diameter PME 125 µm, distance PME-ALE 45 µm, distance AME-AME 55 µm, diameter AME 95 µm. Ocular area moderately elevated, few stronger hairs posteriorly. No thoracic furrow; clypeus unmodified. Chelicerae as in Fig. 2221, apparently with two tiny modified hairs on each distal apophysis. Sternum wider than long (1.15/0.80), unmodified. Palps as in Figs. 2218 and 2219, coxa unmodified, trochanter with ventral apophysis with short retro-lateral branch, femur with very indistinct dorsal hump and larger ventral hump, tibia with sclerotized area slightly projecting on prolatero-ventral side, procurus with distinctive long distal sclerite ventrally and complex membranous structures, with two small dorsal spines (Fig. 2220), bulb with uncus, weakly sclerotized embolus, without appendix (reduced to small transparent projection). Legs without spines, with curved hairs on tibiae and metatarsi, few vertical hairs (most hairs missing).

*Female.* In general similar to male, triads closer together (distance PME-PME 185 µm), clypeus darker; tibia 1 missing in female examined. Epigynum with large, weakly sclerotized anterior plate with sclerotized ‘knob’, large posterior plate (Figs. 2132, 2222); internal genitalia as in Figs. 2133 and 2223. *Distribution.* Known from two localities in Hebei Province, China (type locality and Mt. Tuoliang [~38°46'N, 113°54'E], Zhang & Zhu 2009a) (Fig. 2216).

*Material examined.* CHINA: Hebei Prov.: Lingshou County, Mt. Manshan: 1♂1♀ paratypes above.



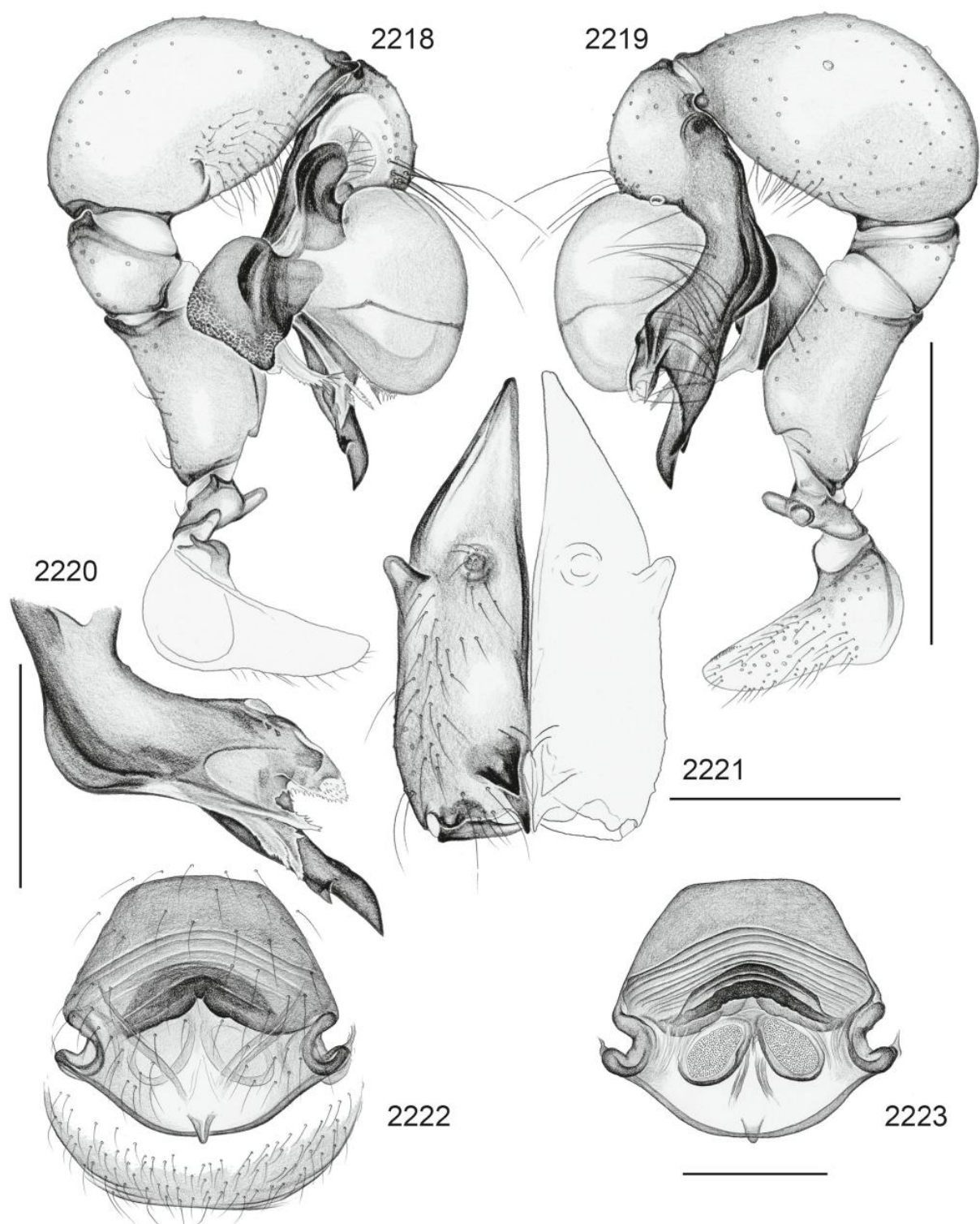


FIG. 2218-2223. *Pholcus alloctospilus*. 2218, 2219. Left male palp, prolateral and retrolateral views. 2220. Left procurus, prolateral view. 2221. Male chelicerae, frontal view. 2222, 2223. Cleared female genitalia, ventral and dorsal views. Scale lines: 1.0 (2218, 2219), 0.5 (2220-2223).