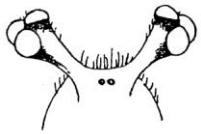
Leptopholcus podophthalmus Simon, 1893

Simon, E. 1893. Histoire Naturelle des Araignées. 2e edit, 1(2): 256-488. Paris.

p. 460

Les mâles se distinguent très souvent des femelles par des caractères sexuels secondaires portant sur la forme du céphalothorax (*Physocyclus*), l'armature du front (*Pholcus bicornutus* E. Sim., etc.), la longueur des pédicules oculaires (*Pholcus podophthalmus* E. Sim.), le bandeau (*Leptopholcus, Hedypsilus*),

p. 466



456

Front et yeux vus en avant. — Fig. 456. *Pholcus podophthalmus* E. Sim. ♂. Id.

p. 468

deux petits tubercules disjoints ; le mâle du *Pholcus podophthalmus* E. Sim. est remarquable par la longueur extraordinaire de ses pédoncules oculaires (fig. 456). Dans le *Physocyclus globosus* Tacz., c'est, au contraire, le céphalo-

p. 469

qui est cependant une espèce agreste, a été signalé en Europe et en Chine ; le genre *Pholcus* est représenté dans l'Inde (*P. ceylonicus* Cambr., *podophthalmus Polei* E. Sim.), en Malaisie et en Australie (*P. ancoralis* L. Koch, *gracillimus*

Simon, E. 1901. On the Arachnida collected during the "Skeat Expedition" to the Malay Peninsula, 1899-1900. Proc. Zool. Soc. London 1901(2): 45-84.

[description of ***Pholcus diopsis*****]**

p. 50

A *P. podophthalmo* E. Sim. (ex ins. Taprobane), cui sat affinis est, imprimis differt, tuberculis oculiferis apice minute ampliatis haud truncatis sed minute et acute mucronatis, tarso pedum-maxillarium apice acuminato, haud truncato, etc.

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

p. 58

***Pholcus podophthalmus* Simon**, 1893 (**fig.24O—V**) **New record**

Pholcus podophthalmus Simon, 1893: 468, f. 456.

Length of female 5.60—6.06mm. Cephalothorax 1.32—1.35 long, 1.49—1.52 wide; abdomen 4.20—4.71 long, 1.22—1.32 wide. Carapace yellow, both sides of carapace each

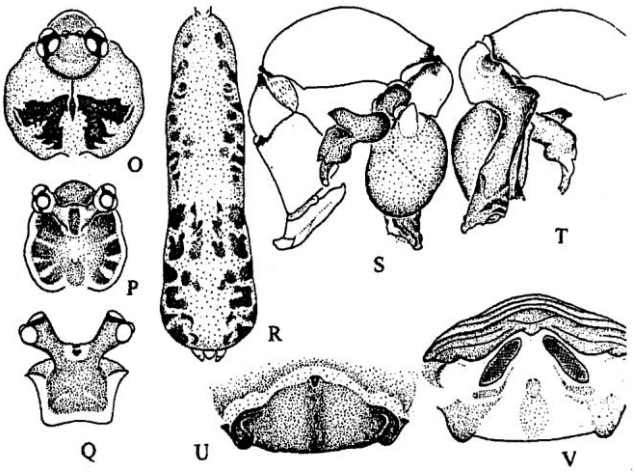
p. 59

with a butterfly-like, brown spot. Except AME, other six eyes in two groups, each group on a slightly elevated tubercle. AME-AME 0.04, AME-ALE 0.08, PME.PME 0.23, PME-PLE 0.03. Labium and endites yellowish brown. Sternum light brown. Legs yellow, with dark rings. Leg formula: 1243. Abdomen yellow, posterior end bending upwards. Dorsum of abdomen with yellowish brown spots, venter with a light brown, longitudinal stripe. Epugyne brown, scapus short and small.

Length of male 3.92mm. Cephalothorax 0.75 long, 0.99 wide; abdomen3.14 long, 0.92 wide. Carapace domed, color and marking as in male. AME very small, other six eyes in two group, each group on the top of a relatively longer eye stalk, The structure of palp as shown in figure.

Specimens examined: 2 males, 5 females, Mt Daming, Guangxi Province, date unknown, by Wang, J. F.

p. 62



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

p. 71

***Pholcus podophthalmus* Simon, 1893**
(Fig. 39)

Pholcus podophthalmus Simon 1893: 468, f. 456. Song, Zhu & Chen 1999: 58, f. 24O–V (ad part., only male).

Diagnosis. This species differs distinctly from all congeners, with AME reduced to pigment specks and the triad of eyes on a longer eye-stalk (Fig. 39B), the uncus small and pointed (Fig. 39C), and the abdomen longer (Fig. 39A).

Redescription. Male (Mt. Daming), total length 3.9: cephalothorax 0.8 long, 1.0. wide; abdomen 3.1 long, 0.9 wide. Leg I: 40.0 (9.7+0.8+9.2+18.6+1.7), tibia II: 5.9, tibia III: 3.3, tibia IV: 5.0; tibia I L/D: 61. Prosoma shape as in Fig. 39A. Carapace short, broad and almost circular, ochre, without brown mark broadly connecting to ocular area. Cephalic region raised, with brown marks centrally, ocular area dark yellow. Clypeus 0.38, dark ochre. AME much reduced with only a pair of pigment specks, without lenses; other six eyes in two triads, each on the top of a relatively longer eye-stalk (Fig. 39B). Chelicerae without pair of black distal apophyses as always found in congeners, also totally lacking apophyses proximolaterally, while

p. 72

equipped with a pair of distal, unsclerotized apophyses near lateral margin. Labium and endites light yellow. Sternum light yellow, without brown marks. Abdomen vermiform, pale ochre, dorsum with brown patterns as in Fig. 39A. Venter pale gray, without mark. Palps as in Figs. 39C and 39D.

Variation. Tibia I in five males (one male with Leg I missing): 8.8–9.3. Body length in six males 3.3–3.6.

Material. Types. According to Huber, the type material is deposited in MNHN, not examined.

Material examined. CHINA: **Guangxi**, Wuming County, Mt. Daming, date unknown, leg. J. F. Wang, 1♂ (MHBU); Pingxiang County, Yingyang Village, August 23, 2004, leg. M. S. Zhu and F. Zhang, 1♂ (MHBU); Ningming County, Tongmian Town, May 17, 2006, leg. M. S. Zhu, 1♂ (MHBU); Fangchenggang City, Banba Town, May 20, 2006, leg. M. S. Zhu, 1♂ (MHBU); Nanning City, June, 1997, leg. Y. Q. Zhang, 1♂ (MHBU). **Yunnan**, Menglong Town, Tashan Village, July 29, 2000, leg. by M. S. Zhu and F. Zhang, 2♂ (MHBU).

Distribution. Guangxi, Yunnan; India.

Remarks. The specimens of *P. podophthalmus* are relatively rare in our collections. It is a very special *Pholcus*-species, not only due to its body and genital structures, but also due to its cryptic habits. It lives on the underside of leaves, where it spends most of the day pressed against the surface. From these points, it may better belong to *Leptopholcus* Simon, 1893.

We re-examined the specimens collected by J. F. Wang, 4♀1♂, (Mt. Daming, Wuming County, Guangxi province, date unknown). These specimens were examined by Song, Zhu & Chen (1999) who recorded them as Chinese species. Current authors believe the male to be *P. podophthalmus* but the females to be not conspecific. Future work remains to be done on this species and these unidentified females.

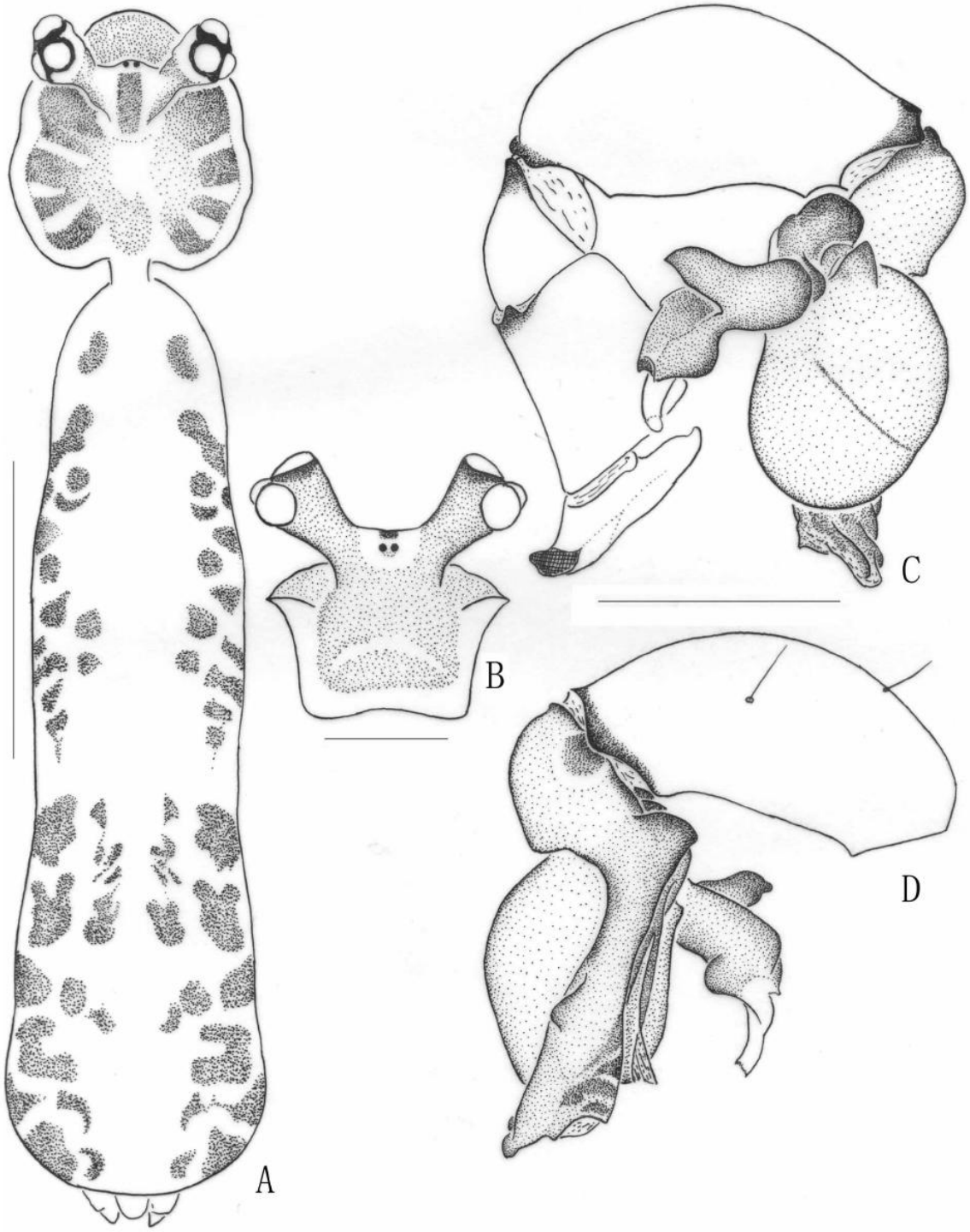


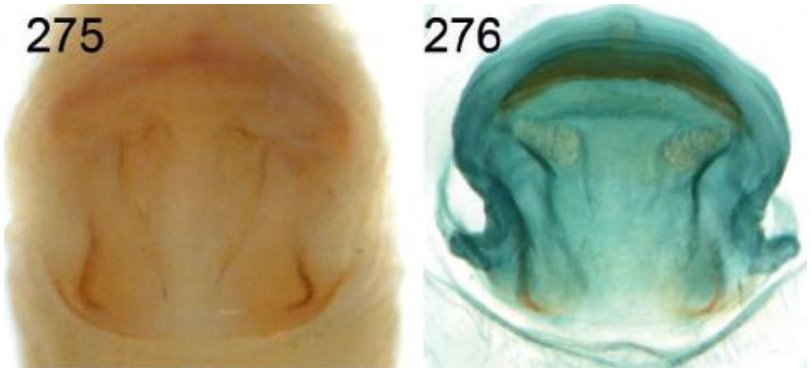
FIGURE 39. *Pholcus podophthalmus* Simon, 1893 (illustrations modified from Song *et al*. 1999). A. male body, dorsal view. B. male prosoma, frontal view. C. left palp, prolateral view. D. same, retrolateral view. Scale lines: 1.0mm (A), 0.5mm (B–D).

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

p. 63

232-235. *L. podophthalmus*, male prosoma, frontal view; male, dorsal and lateral views; female abdomen, ventral view.

p. 65



275, 276. *L. podophthalmus*.

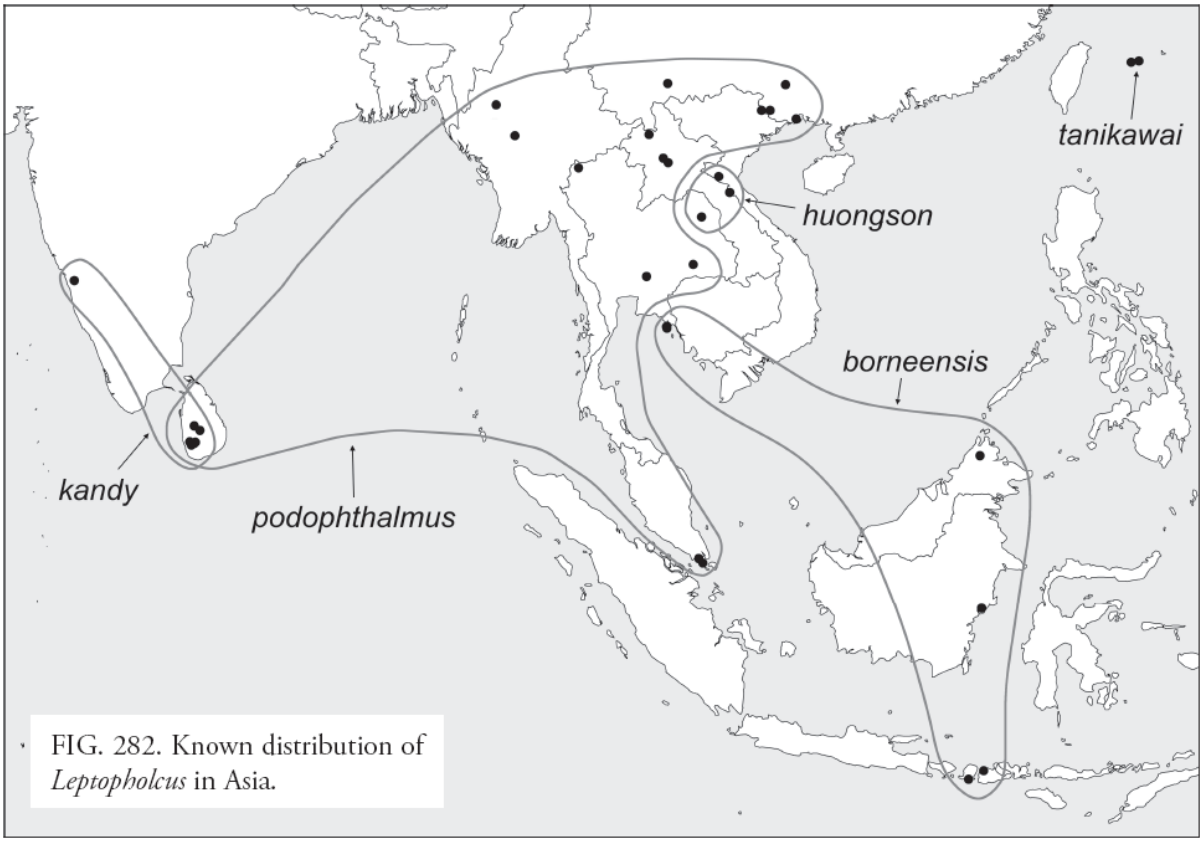


FIG. 282. Known distribution of *Leptopholcus* in Asia.

Leptopholcus podophthalmus (Simon, 1893), n. comb.

Figs. 232-235, 275, 276, 402-417

Pholcus podophthalmus Simon 1893a: 460, 466, 468, 469, fig. 456. Simon 1901: 50. Song *et al.* 1999: 58-59, figs. 24P-T (male only). Zhang & Zhu 2009a: 71-72, figs. 39A-D (copied from Song *et al.* 1999).

Types. One male and one female syntypes (with 2 juveniles) from Sri Lanka, Central Prov., Kandy [7°17'N, 80°38'E], no further data, in MNHN (Ar 10216) (Simon collection number 15152), examined. One palp is detached and kept in a separate vial (MNHN, Ar 10244).

Diagnosis. Distinguished from most congeners by relatively short abdomen (Figs. 233, 234), male eyes on stalks (Figs. 232, 405), and procursus shape (as in *L. tanikawai*; cf. Fig. 396); from the very similar *L. tanikawai* only by morphology of bulbal processes (compare Figs. 401 and 402), and apparently by female genitalia (Figs. 275, 403). For further undescribed similar species see diagnosis of *L. tanikawai* above.

Male (type locality). Total body length 4.3, carapace width 1.1. Leg 1: 41.3 (10.2 + 0.5 + 9.8 + 18.8 + 2.0), tibia 2: 6.4, tibia 3: 3.9, tibia 4: 5.5; tibia 1 L/d: 105. Habitus as in Figs. 233 and 234. Carapace pale ochre-yellow, ocular area and clypeus brown, sternum pale whitish, legs pale ochre-yellow, patellae and tibia-metatarsus joints dark, abdomen ochre-gray with some darker spots dorsally, ventrally monochromous (cf. female, Fig. 235). Distance PME-PME 440 µm, diameter PME 125 µm, distance PME-ALE 35 µm, distance AME-AME 20 µm, diameter AME 25 µm (lenses apparently present). Ocular area elevated, triads on additional stalks (~0.34 long, Figs. 232, 405). No thoracic furrow; clypeus unmodified. Chelicerae as in *L. tanikawai* (cf. Fig. 398). Sternum wider than long (0.65/0.55), unmodified. Palps mostly as in *L. tanikawai* (cf. Figs. 395, 396), tarsal organ capsulate (Fig. 413), procursus slightly larger than in *L. tanikawai* but identical in shape, complex distally (Figs. 406-409), bulb with distinctive processes (Figs. 402, 410), rounded process on putative embolus. Legs without spines and curved hairs, few vertical hairs; retrolateral trichobothrium on tibia 1 at 4%; prolateral trichobothrium absent on tibia 1, present on other tibiae. Tarsal pseudosegments not visible in dissecting microscope. Gonopore with four epiandrous spigots (Fig. 412); ALS with only two spigots each (Fig. 415).

Variation. Marks on abdomen variably distinct. Tibia 1 in 6 other males: 8.9-11.3 (mean 9.8). Eyestalk length in male with longest legs: 0.44. The male syntype is in fairly good condition; tibia 1 missing, tibia 2: 6.0, tibia 3: 3.6, tibia 4: 5.2. Note that the uncus in Fig. 402 is in slightly dorsal view; in perfect prolateral view it appears more slender and slightly pointed.

Female. In general similar to male but ocular area barely elevated, triads not on stalks, closer together

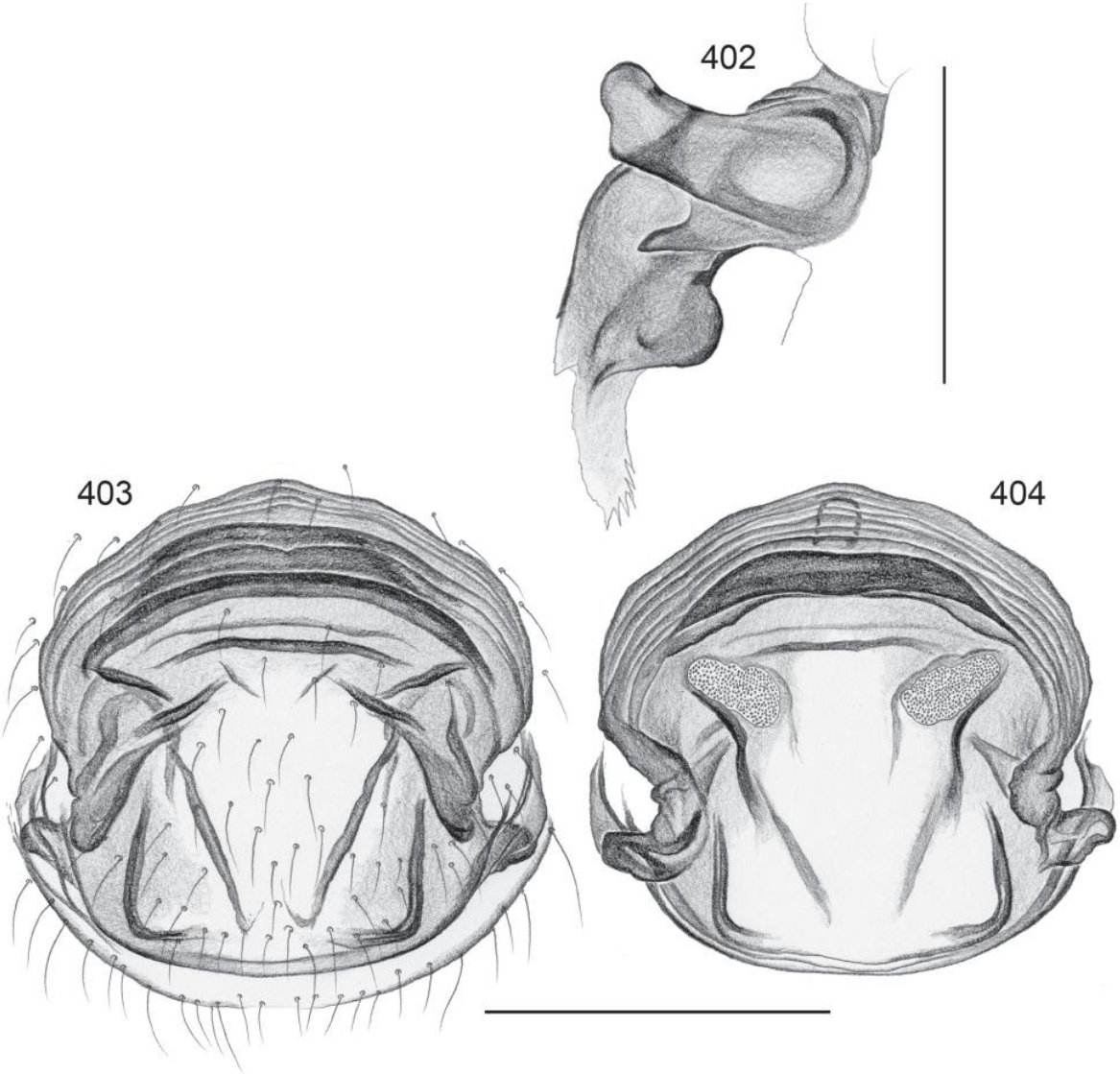


FIG. 401-404. *L. podophthalmus* (402-404). 401, 402. Processes of left bulbs, prolateral views. 403, 404. Cleared female genitalia, ventral and dorsal views. Scale lines: 0.5 (403, 404), 0.3 (401, 402).

(PME-PME distance 205 µm), ocular area and clypeus not darkened. Tibia 1 in 3 females: 6.8 (syntype), 7.3, 7.6 (missing in others); tarsus 4 with single row of comb-hairs (Fig. 414). Epigynum simple plate, distinctive internal structures visible through cuticle (Figs. 275, 403); internal genitalia as in Figs. 276 and 404. ALS with only two spigots each (Fig. 416).

Distribution. Known from Sri Lanka, Myanmar, Thailand, Laos, Singapore, and southern China (Chinese records in Zhang & Zhu 2009a) (Fig. 282).

Material examined. SRI LANKA: *Central Prov.:* Kandy: 1♂1♀ syntypes above; Kandy, on coffee trees under leaves, viii.1981 (C.L. & P.R. Deeleman), 7♂4♀ in RMNH; Kandy, waterworks forest, on leaves, 600 m a.s.l., 7.-11.viii.1981 (C.L. Deeleman-Reinhold), 1♂ (without abdomen), in RMNH. *Western Prov.:* Kalutara Distr., Ingiriya [~6°45'N, 80°10'E], Bodinagala Forest Reserve, hand collecting, 10.xi.2007 (S.P. Benjamin, Z. Jaleel), 1♂ in ZFMK. *North Western Prov.:* Kurunegala Distr., Kurunegala Nikaravatiya [~7°29'N, 80°22'E], hand collecting, 1.-9.xi.2007 (Z. Jaleel), 1♂ in ZFMK. Kurunegala Distr., Kurunegala, Ethagala mountain [7°29.1'N, 80°22.2'E], ca. 300 m a.s.l., hand collecting, 1.-28.xi.2007 (Z. Jaleel), 1♀ in ZFMK.

MYANMAR: *Mandalay Division:* Mt. Popa Wildlife Reservation, 4.63 km 90°E PoPaMyo (20°55.7'N, 95°15.3'E), 2000' a.s.l., ravine in rainforest, 23.

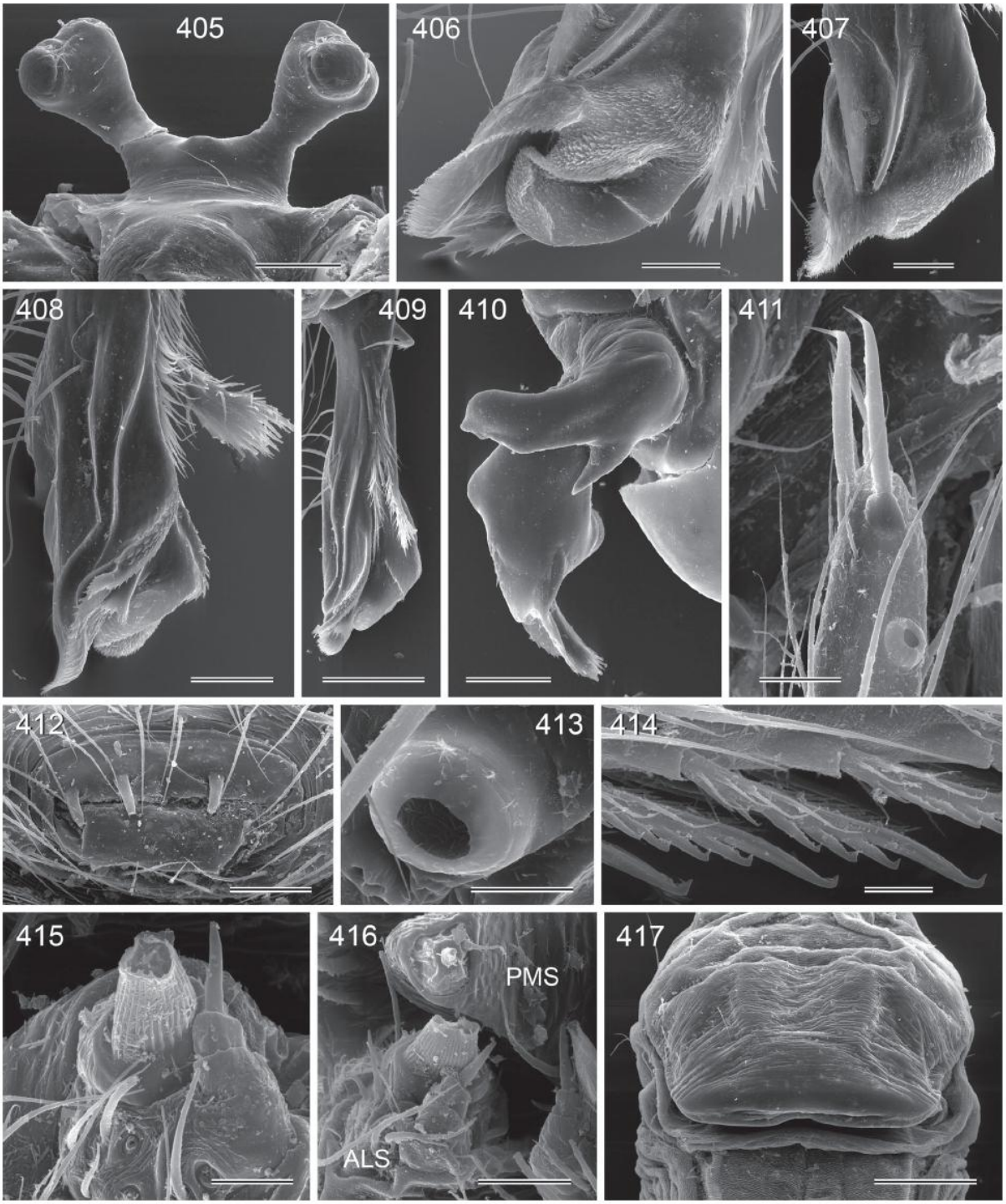


FIG. 405-417. *Leptopholcus podophthalmus*. 405. Male eye stalks, frontal view. 406, 407. Left procursus, distal and retrolateral views. 408, 409. Right procursus, prolateral and ventral views. 410. Processes of left bulb. 411. Tip of female palpal tarsus. 412. Male gonopore (one spigot damaged). 413. Male palpal tarsal organ. 414. Comb-hairs on female tarsus 4. 415. Male ALS. 416. Female ALS and PMS. 417. Epigynum. Scale lines: 200 µm (405, 409, 417), 100 µm (410), 80 µm (408), 60 µm (406, 407), 40 µm (412), 30 µm (411), 20 µm (413, 416), 10 µm (414, 415).

ix.2003 (D. Ubick, C.E. Griswold), 1♂ in CAS. *Sagaing Division:* Alaungdaw Kathapa N.P. (22°19.1'N, 94°28.5'E), log, cabin, night, 20.-25.x.1998 (J. Coddington, R. Baptista), 2♀ in USNM.
THAILAND: *Nakhon Nayok Prov.:* Khao Yai N.P. [~14°24'N, 101°22'E], waterfalls, 26.xii.1988 (C.L. & P.R. Deeleman), 1♂ in RMNH; same data but 25.x.1985 (P.R. Deeleman), 1♂ in RMNH; same locality, 4.xi.1987 (C.L. & P.R. Deeleman), 1♀ in RMNH; same locality, 6.xi.1987 (C.L. & P.R. Deeleman), 1♀ in RMNH. *Surin Prov.:* Surin Distr., behind Ramkamhaeng University campus (14°54.9'N, 103°27.1'E), 150 m a.s.l., earth banks along canal, 6.x.2010 (P. Schwendinger), 1♂ in MHNG. *Trat Prov.:* north side of Ko Chang, Khlong Chao Luam (12°06.5'N, 102°18.0'E), 30-150 m a.s.l., secondary forest, along stream, vegetation, at day, by hand, 3.xi.2009 (P. Jäger, S. Bayer), 1♂ in SMF; Ko Chang, 3 km S Hat Sai Kao (12°04.8'N, 102°16.8'E), 40 m a.s.l., partly empty river bed, sec. forest, by hand, at night, 2.xi.2009 (P. Jäger, S. Bayer), 1♀ in SMF. *Mae Hong Son Prov.:* between Soppong Mae Song Pong Wilderness Lodge and Tham Nam Lang [~19°32'N, 98°16'E], 11.-14.iii.1990 (V. & B. Roth), 1♀ in CAS.
LAOS: *Luang Prabang Prov.:* SE Luang Prabang, Nam Khan, Ban Nong Di (19°41.1'N, 102°21.5'E), 280 m a.s.l., along stream, vegetation, leaf litter, stones, by hand, at night, 21.iii.2007 (P. Jäger), 1♂ in SMF. Phou Si (19°53.4'N, 102°08.1'E), 300 m a.s.l., dry secondary forest in town, at vegetation, at night, by hand, 14.xi.2009 (P. Jäger, S. Bayer), 2♂ in SMF. *Luang Nam Tha Prov.:* Luang Nam Tha, Ban Tavan (1) (20°58,7'N, 101°28.7'E), 580 m a.s.l., valley with stream, vegetation, at night, by hand, 18.xi.2009 (P. Jäger, S. Bayer), 1♀ in SMF; same locality, small secondary forest, leaf litter, close to stream, sieving, 2.iii.2008 (P. Jäger), 1♀ in SMF.
SINGAPORE: Pulau Ubin [1°08.7'N, 103°58.1'E], roadside vegetation, 18.ii.1988 (J. & F. Murphy), 1♂ in CJFM (15411). Bukit Timah [1°20.6'N, 103°46.5'E], Hindhede Drive, 26.vi.1988 (H.K. Lua), 1♀ in RMBR. Clementi Rd. near Clementi Neighbourhood Park [~1°19.6'N, 103°46.7'E], 7.i.2011 (D.J. Court), 1♂ in pure ethanol, in RMBR.