Sihala ceylonica (O. Pickard-Cambridge, 1869)

Pickard-Cambridge, O. 1869. Part I of catalogue of a collection of Ceylon Araneidea lately received from Mr. J. Nietner, with descriptions of new species and characters of a new genus. J. Linn. Soc. London (Zool.) 10: 373-397.

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PHOLCUS CEYLONICUS, n. sp. Pl. XI. figs. 13, 21, 22, 23, 24, 25, 26, 27.

♂ adult, length 3 lines.

Cephalothorax nearly round; the division of caput and thorax, as also the other normal grooves and indentations, very strongly marked; the thoracic portion rather gibbous, and the caput rather elevated and prominent at the eyes; the clypeus is high, impressed below the eyes, and prominent at its lower margin; its colour is pale yellowish; the ocular region, and a large well-defined patch on either side of the thorax, brown.

Eyes in the three groups common to this genus, viz. three large contiguous eyes seated on a tubercle on either side of the upper extremity of the caput; and between these two groups, and in a straight line with the foremost eye of each, is the third group of two very minute eyes.

Legs very long, slender; furnished with long hairs; colour darker yellow than the cephalothorax, suffused with brownish yellow near the extremities of the femora and tibiæ, which terminate in a small portion of a clear pale yellow; this, with the genua being suffused with yellow brown, gives the legs a somewhat banded appearance.

Palpi short, strong, and, like those of others of this genus, very peculiar in structure; the first (or axillary) joint is small and slight, and projects beyond the articulation of the humeral joint; the extremity of

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the projection is furnished with a short, curved, dark red-brown, corneous point; the *humeral* joint is disproportionately large and tumid; the *cubital* is short and strong; the *radial* strong, curved, and tumid; the *digital* somewhat globular at its base, and produced outwards into a long slightly curved projection which has several points at its extremity. The first four of these joints are of a pale yellow colour with a few slight blackish and red-brown markings at their articulations or extreme edges: the digital joint is suffused with red-brown, principally towards its extremity; all the joints are furnished with a few dark hairs. The *palpal organs* are large and highly developed, consisting of a pale yellow, circular, basal corneous lobe, with a long, dark red-brown, tortuous projection of the same nature furnished with a short, strong, curved point on its outer side; between this point and its extremity this corneous projection is fringed with a closely set fringe of reddish-coloured prominent hairs.

Falces small, but strong; conical, vertical; furnished with hairs, and of a dark yellow-brown colour.

Maxillæ rather long, somewhat pointed, and smaller at their extremities than near the base; greatly inclined towards, over, and slightly behind the labium, their extremities being almost in contact. In colour the maxillæ are dark yellow-brown, paler at the extremities.

Labium short, broad, broadest in the middle, narrowest at the base; the apex, which is somewhat rounded, is of a pale yellow colour, the remainder being similar to that of the maxillæ.

Sternum heart-shaped; of a pale yellow colour, with a large, central dark yellow-brown patch of a somewhat similar shape, having circular indentations all round its margin opposite to the articulations of the legs.

Abdomen longish, narrow, oval, abruptly and perpendicularly truncate behind, where it is also rather elevated; *i. e.* it does not slope, as in most spiders, when looked at in profile. Its colour is a dull yellowish whity-brown; a series of three or four largish and irregularly angular brownish patches occupies the medial line of the upperside; these patches are all edged on the outside with a line of silvery white hairs: a broad band of brown similarly edged occupies the entire medial line of the underside. *Spinners* short, dark brown, tinged with reddish.

The adult ♀ resembles the ♂ in colour and markings. Sexual organs prominent; the aperture circular, edged with deep red-brown; and from and within the concavity issues a short, strong, dark reddish brown epigyne, which curves backwards: a patch in front, and connected with the aperture, is of a dark yellow-brown colour.

Four adult specimens (two ♂ and two ♀) were contained in Mr. Nietner's collection.

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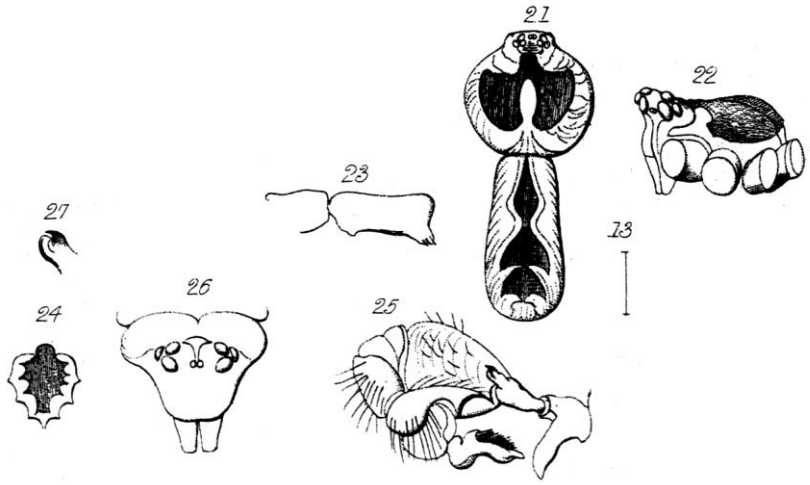
Pholcus Ceylonicus.

Fig. 21. Cephalothorax and abdomen, upperside.
22. Cephalothorax, somewhat in profile.
23. Profile of abdomen.
24. Sternum and labium.
25, 27. Left palpus, with maxilla.
26. Cephalothorax from front, showing relative position of eyes.
18. Natural length of spider.

Pl. XI



Brignoli, P. M. 1972. Ragni di Ceylon I. Missione biospeleologica Aellen-Strinati (1970) (Arachnida, Araneae). Rev. suisse Zool. 79(2): 907-929.

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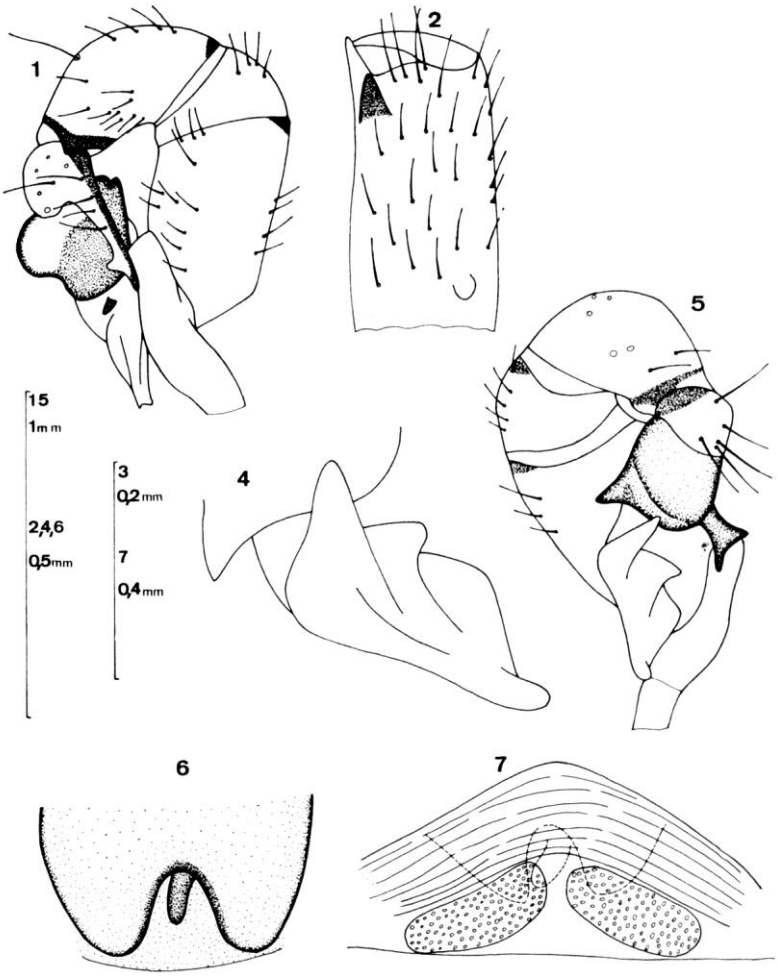

Pholcus ceylonicus
O. Pickard Cambridge — Fig. 1, 5: palpo del ♂; fig. 2: chelicero del ♂; fig. 4: estremità del procursus; fig. 6: epigino; fig. 7: vulva.

Fam. Pholcidae

Pholcus ceylonicus O. Pickard-Cambridge 1869

Grotta di Rawanaella, Ella, 16.1.70, 1 ♀.
Grotta di Istripura, Hanguranketa, 19.1.70, 4 ♂♂, 2 ♀♀, 12 ○○.
Grotta di Lunuge, Nalanda, 25.1.70, 1 ○ (determinazione non certa).

Specie di cui esisteva solo la descrizione originale; ad Oxford, nella collezione O. Pickard-Cambridge, esistevano 4 tubetti di questa specie, accompagnati da 2 cartellini, il primo recante « *Pholcus ceylonicus* Cb. Ceylon », il secondo « *Pholcus* Ceylon Nietner »; 3 dei tubetti contenevano solo 1 individuo (2 ♂♂, 1 ○, con in più, certamente per errore, 1 giovane Uloborida), 1 tubetto invece conteneva 1 ♂ e 2 ♀♀. Nella descrizione originale il PICKARD-CAMBRIDGE cita 2 ♂♂ e 2 ♀♀ raccolte da Nietner; ho preferito quindi considerare solo tipi i 3 individui del quarto tubetto (♂ lectotypus, ♀♀ paralectotypi), visto che è possibile che qualcuno degli altri individui non facesse parte del materiale originariamente utilizzato per la descrizione.

Ridescrizione-♂♀: prosoma normale, regione oculare relativamente elevata, circondata da solchi, fovea toracica indistinta; colore bianchiccio con due ampie zone brune nella zona toracica ai lati della linea mediana. 8 occhi in due file diritte, uguali tra loro, salvo i MA molto più piccoli degli altri (meno della metà); intervallo tra i MA appena inferiore al loro diametro, intervallo MA-LA appena superiore al diametro dei MA, intervallo tra i MP pari a 3/2 del loro diametro, MP accostati ai LP. Sterno con ampia zona scura anteriore, a punta ottusa (separa le IV coxe di meno del loro diametro). Cheliceri del ♂ (v. fig. 2) privi di organo stridulatorio. Palpi del ♂ (v. fig. 1, 5) con trocantere assai sviluppato, procursus breve. Zampe senza peculiarità (femori e tibie bianchicci apicalmente). Opistosoma allungato, isabellino (simile a quello dei *Pholcus* paleartici). Epigino (v. fig. 6) con una fossetta da cui emerge una linguetta; vulva v. fig. 7.
Filiere normali.

Misure di un ♂ (come sopra): prosoma lungo 2,00 (0,50 il clipeo), largo 1,62; opistosoma lungo 4,00. Lunghezza totale: 6,00.

Zampe	Femore	Patella	Tibia	Metatarso	Tarso	Totale
I	11,00	0,60	11,20	19,40	2,40	46,60
II	assenti in tutti i ♂♂					
III	6,30	0,60	5,40	8,70	1,20	22,20
IV	8,30	0,60	7,00	11,80	1,50	29,20

Misure di una ♀ (come sopra): prosoma lungo 1,90 (0,40 il clipeo), largo 1,60; opistosoma lungo 4,00. Lunghezza totale: 5,90.

Zampe	Femore	Patella	Tibia	Metatarso	Tarso	Totale
I	9,90	0,60	10,30	17,30	2,40	40,50
II	7,50	0,60	7,20	11,50	1,60	28,40
III	5,90	0,60	5,20	8,00	1,30	21,00
IV	8,00	0,60	6,80	10,20	1,40	27,00

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Discussione: questa specie è indubbiamente superficialmente simile ai *Pholcus* paleartici, da cui però si distingue per l'alquanto differente conformazione del bulbo (specie per il procursus). E probabile che essa, assieme alla maggioranza dei *Pholcus* orientali debba essere staccata da questo genere. Tornerò in seguito sulla questione, nella mia revisione dei Pholcidae a cui lavoro da qualche tempo. Oscuri sono anche i rapporti tra questa specie e gli altri « *Pholcus* » noti di Ceylon (*Ph. quinquenotatus* Thorell e *Ph. fragillimus* Strand).

Brignoli, P. M. 1975. Über die Gruppe der Haplogynae (Araneae). Proc. 6th Int. Arachn. Congr. (1974): 33-38.

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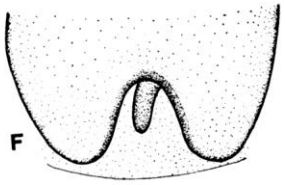

Fig. 2. Scytodoidea. "Epigyne". F, *Pholcus ceylonicus* (O.P.C.).

Huber, B. A., Benjamin, S. 2005. The pholcid spiders from Sri Lanka: redescription of *Pholcus ceylonicus* and description of *Wanniyala* new genus (Araneae: Pholcidae). J. Nat. Hist. 39(37): 3305-3319.

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Pholcus ceylonicus O. Pickard-Cambridge, 1869
(Figures 1–4)

P. ceylonicus O. Pickard-Cambridge 1869, p 378–379; Plate 11, Figures 13, 21–27; Brignoli 1972, p 909–911; Figures 1–2, 4–7; Brignoli 1975, p 36; Figure 2f (copied from Brignoli 1972).

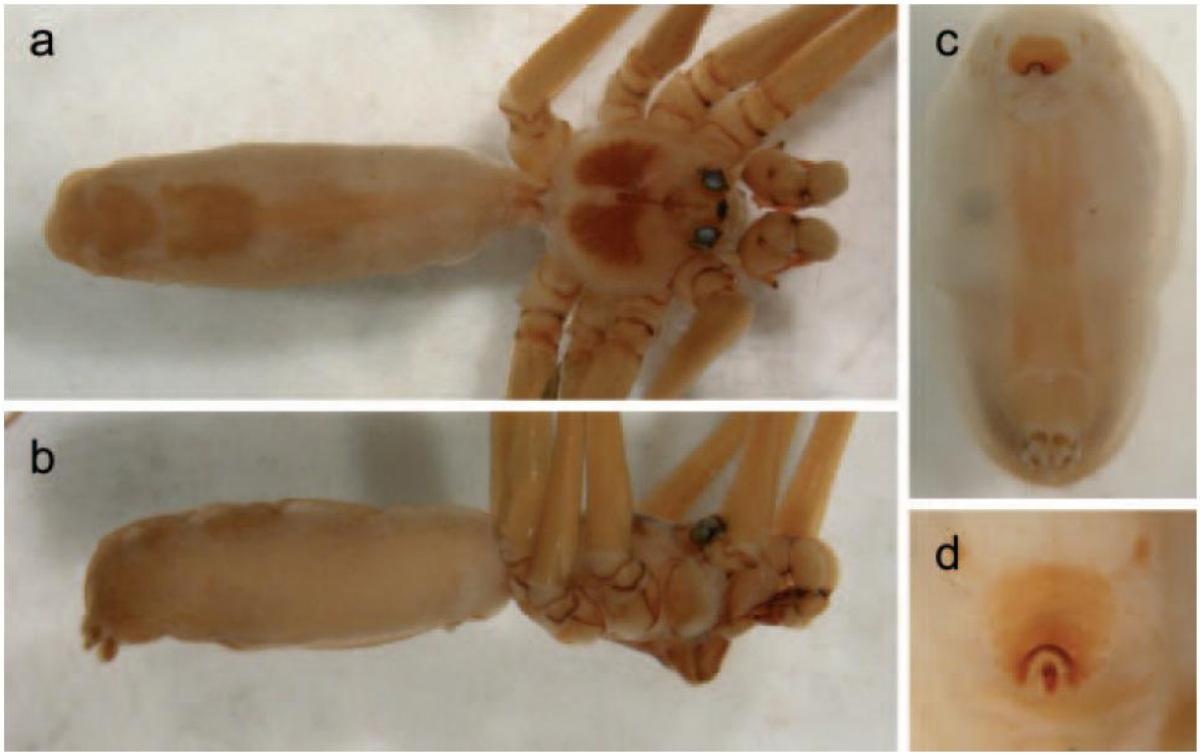

Figure 1. *Pholcus ceylonicus*. (a, b) Male habitus, dorsal and lateral views; (c) female abdomen, ventral view; (d) epigynum, ventral view.

Types

Male lectotype and two female paralectotypes (designated by Brignoli 1972), without locality information except Sri Lanka, in Hope Department of Entomology, Oxford, not examined (see Brignoli 1972 for detailed information on the type material).

Diagnosis

Large eight-eyed pholcid, easily distinguished from all known congeners by the shapes of procursus, bulb, male palpal trochanter apophysis, and epigynum (Figure 2b, e).

Male (Istripura). Total length 7.3, carapace width 2.0. Leg 1: 50.4 (12.2+ 0.9+12.3+21.9+3.1), tibia 2: 8.7, tibia 3 missing, tibia 4: 7.9; tibia 1 L/d: 63. Habitus as in Figure 1a, b. Carapace pale ochre with distinctive brown marks, ocular area also light brown, clypeus pale ochre, sternum pale ochre with light brown median mark, labium light brown; legs light brown, tips of femora and tibiae lighter; abdomen mostly grey, dorsally with distinctive brown pattern (barely visible in Figure 1a), genital area small brown mark, ventrally posteriorly light brown. Ocular area distinctly elevated, lateral triads not on stalks, black median line on carapace but no thoracic furrow; distance PME–PME 290 µm; diameter PME 190 µm; distance PME–ALE 50 µm; distance AME–AME 60 µm, diameter AME 80 µm. Clypeus unmodified. Sternum wider than long (1.3/1.1). Chelicerae as in Figure 2d, with two small modified hairs on each distal apophysis (Figure 4b), proximal apophyses in unusual frontal position (Figure 2d). Palps as in Figures 2a, b, 3a, b; coxa

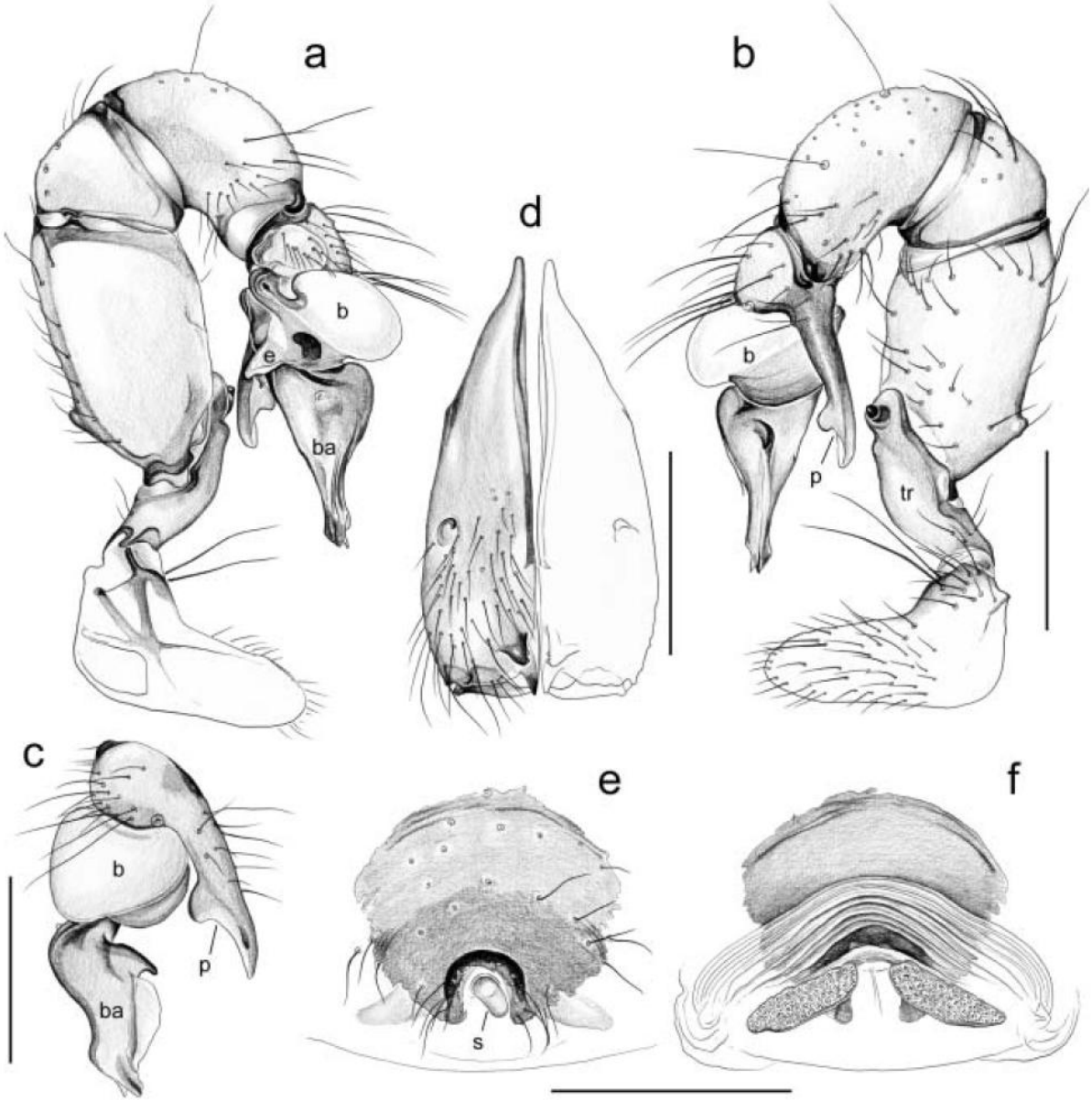

Figure 2. *Pholcus ceylonicus*. (a, b) Left male palp, prolateral and retrolateral views; (c) procursus and genital bulb, dorsal view; (d) male chelicerae, frontal view; (e, f) cleared epigynum, ventral and dorsal views. b, genital bulb; ba, bulbal apophysis; e, embolus; p, procursus; s, scape; tr, trochanter. Scale bars: 0.5 mm.

unmodified, trochanter with large retrolateral apophysis provided distally with strong modified hair (Figure 3e, f), femur large, with dorsal projection, procursus rather small and simple (Figures 2b, 3a, b), bulb with whitish globular part and large apophysis (Figures 2a–c, 3a–d), transparent conical projection prolaterally (embolus?) (Figure 2a). Palpal tarsal organ capsulate (Figure 4c). Retrolateral trichobothrium of tibia 1 at 5%; most hairs on legs missing, but apparently without spines, curved hairs, and vertical hairs; tarsus 1 with >20 pseudosegments, only distally about 10 fairly distinct. Male gonopore apparently with four epiandrous spigots (Figure 4a; note that the gonopore of this specimen is malformed or damaged).

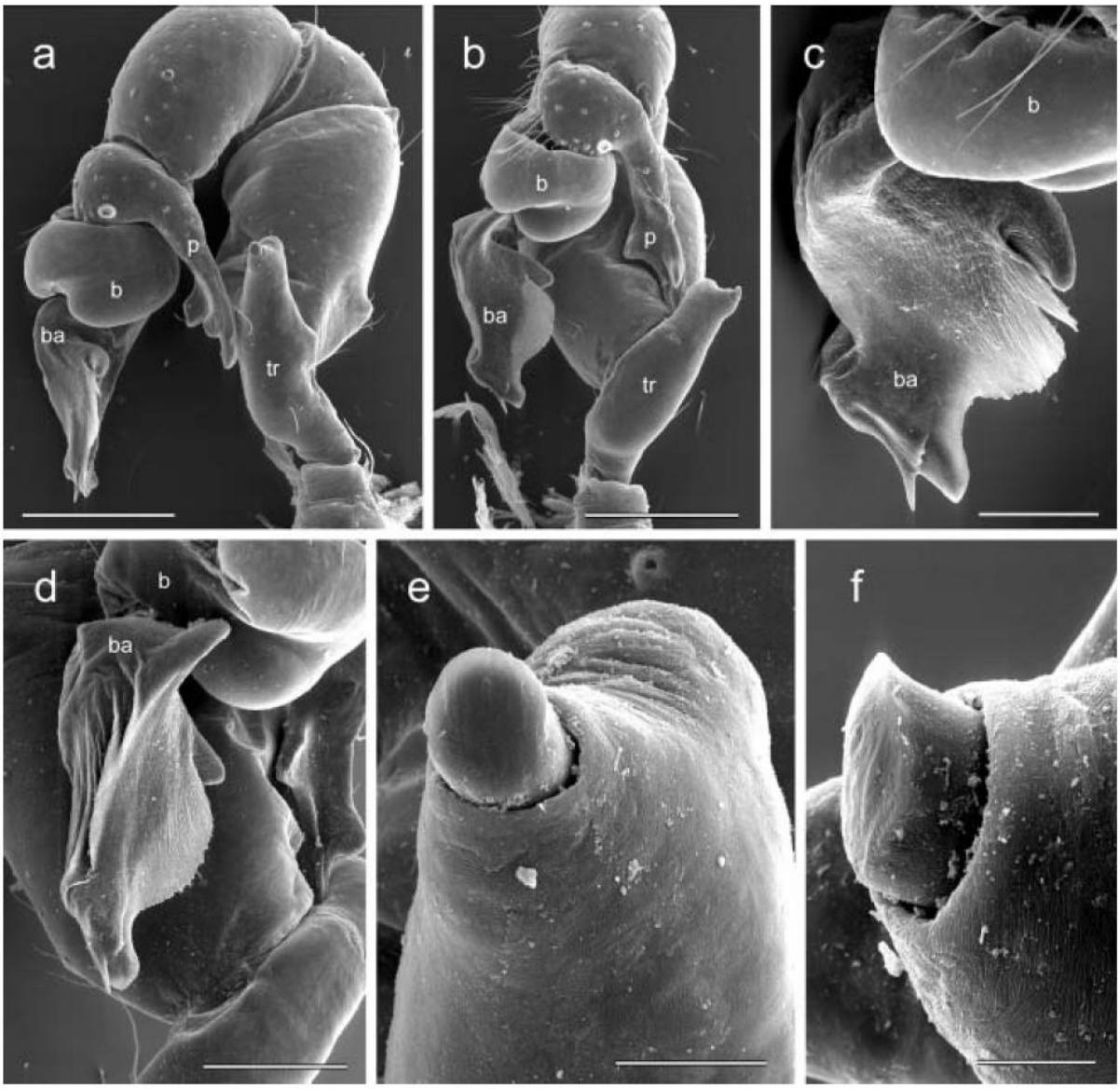

Figure 3. *Pholcus ceylonicus*. (a) Left male palp, retrolateral view; (b) left male palp, dorsal view; (c) bulbal apophysis, dorsal view; (d) bulbal apophysis, ventro-prolateral view; (e, f) modified hair on male palpal trochanter apophysis. b, genital bulb; ba, bulbal apophysis; p, procursus; tr, trochanter. Scale bars: 400 µm (a, b); 100 µm (c); 200 µm (d); 40 µm (e); 20 µm (f).

Variation. Tibia 1 in seven other males: 11.4–12.5 (mean: 12.0).

Female. In general similar to male. Tibia 1 in three females: 9.0, 9.9, 10.3. Epigynum small in relation to abdomen (Figure 1c), with black sclerotized rim and variably sclerotized scape (Figures 1d, 2e, 4d). Dorsal view as in Figure 2f. Anterior lateral spinnerets with one widened, one pointed, and several (about six) cylindrically shaped spigots each (the latter spigots appear all damaged in Figure 4e). Posterior median spinnerets with two spigots each (one broken in Figure 4f).

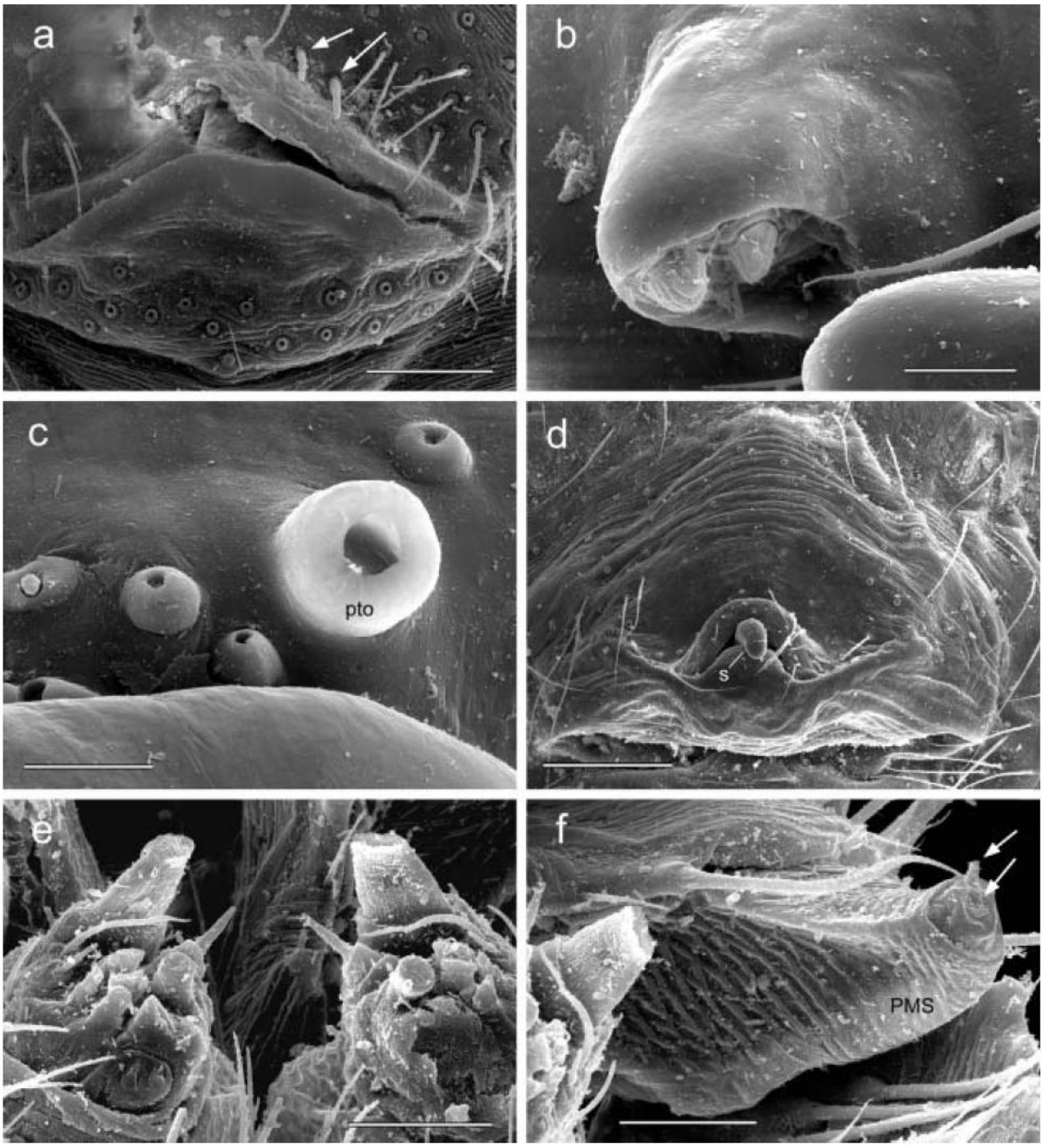

Figure 4. *Pholcus ceylonicus*. (a) Male gonopore; arrows point to epiandrous spigots; (b) male cheliceral apophysis with two modified hairs; (c) palpal tarsal organ; (d) epigynum with scape; (e) female anterior lateral spinnerets; (f) female posterior median spinneret; arrows point to spigots (one of them damaged). PMS, posterior median spinneret; pto, palpal tarsal organ; s, scape. Scale bars: 70 µm (a); 20 µm (b); 30 µm (c); 200 µm (d); 40 µm (e, f).

Distribution

Known from several localities in Sri Lanka (Figure 9).

Material examined

Sri Lanka: "Istripura" [no further data on label; Brignoli 1972: Hanguranketa, (7°10′N, 80°46′E), 19 January 1970, V. Aellen, P. Strinati], 2♂, 2♀, several juveniles (three vials), in

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MHNG. Rawanaella (6°51′N, 81°04′E) [no further data on label; Brignoli 1972: Ella, 16 January 1970, V. Aellen, P. Strinati], 1♀ in MHNG. ''Nuwalupitiya'' (Nawalapitiya: 7°03′N, 80°32′E), no date (E. Simon), ''956 *Pholcus polei* E. S.'' (unpublished name), 5♂, 2♀ in MNHN (AR 10229).

Notes

Brignoli (1972) considered it probable that the present species will have to be removed from *Pholcus*. In fact, the bulb does not show the characteristic sclerites (uncus and appendix) of many other *Pholcus* species including the type species, and the procursus is unusually small and simple. However, male chelicerae and female epigynum agree with the usual pattern, as do general body shape and size. Most importantly, however, no evidence is known to suggest an alternative placement. The species should be left in *Pholcus* until a revision of the genus provides evidence to the contrary.

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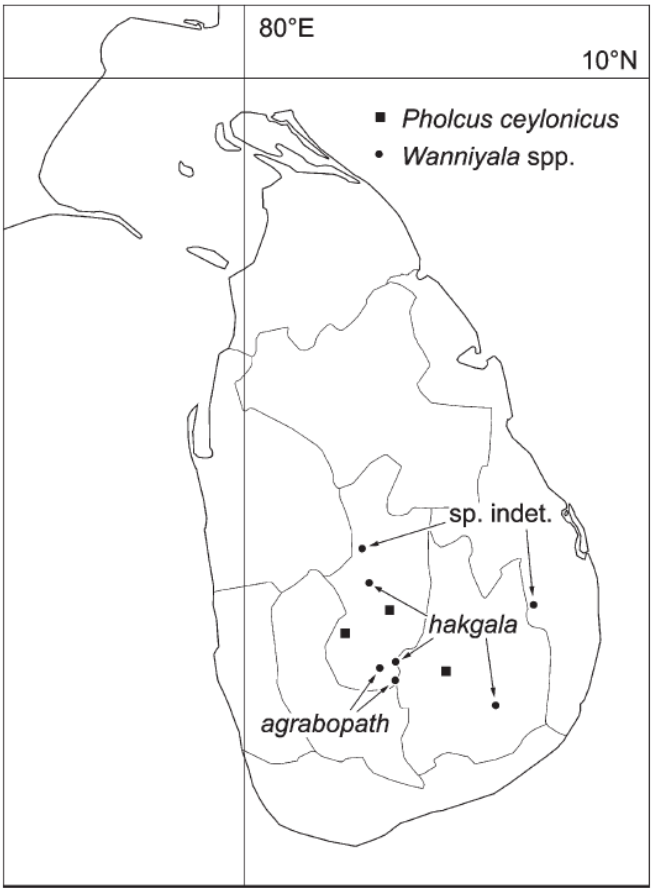


Figure 9. Known geographic distributions of *Pholcus ceylonicus*, *Wanniyala agrabopath*, *W. hakgala*, and an undescribed species of *Wanniyala*.

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

Sihala ceylonica (O. Pickard-Cambridge, 1869) n. comb.

Fig. 145

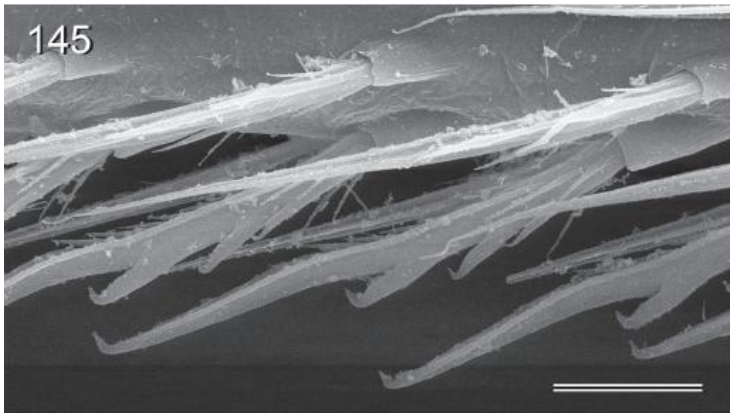
Pholcus ceylonicus O. Pickard-Cambridge 1869: 378-379, pl. 11, figs. 13, 21-27. Brignoli 1972b: 909-911, figs. 1-2, 4-7. Brignoli 1975: 36, fig. 2f (copied from Brignoli 1972b). Huber & Benjamin 2005: 3306-3311, figs. 1-4.

New records. SRI LANKA: Kandy District, Namadegalla (Meda Maha Nuwara) [7°18'N, 80°51'E], in

FIG. 102. Known distribution of *Sihala*. The question mark denotes a *S. ceylonica* specimen that may be mislabeled (see text).

litter and grass by a brook, 23.xi.1972 (P. Lehtinen, I. Oksala), 1♀ in ZMT (AA 3519). Kandy [7°17'N, 80°38'E], 600 m a.s.l., waterworks forest, in hollow tree, 7.-11.viii.1981 (C.L. Deeleman-Reinhold), 2♀ 2 juvs. in RMNH. Ratnapura District, Belihul Oya [6°41'N, 80°46'E], on walls, 18.i.1969 (P. Lehtinen), 2♀ 3 juvs. in ZMT (AA 3516-17). Moneragala District, Diyaluma Falls [6°44'N, 81°02'E], in litter, 19.xi.1972 (P. Lehtinen), 1♀ in ZMT (AA 3518). Badulla District, Istrapura cave, Hanguranketa, x.1980 (collector not given), 2♀ 3 juvs. in RMNH. MALAYSIA: Genting Highlands [3°24.5'N, 101°45.9'E], no date (C.L. & P.R. Deeleman), 1♂1♀ in RMNH.

Note. The Malaysian specimens are in all details indistinguishable from Sri Lankan specimens. The possibility that this is a case of mislabeling should be considered since no further specimens have ever been collected outside Sri Lanka.



145. *Sihala ceylonica*, comb-hairs on female tarsus 4.