Pholcus djelalabad Senglet, 2008

Senglet, A. 2008. New species of *Pholcus* and *Spermophora* (Pholcidae, Araneae) from Iran and Afghanistan, with notes on mating mechanisms. Rev. suisse Zool. 115: 355-376.

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Pholcus djelalabad sp. n. Figs 88-95

MATERIAL EXAMINED: Holotype ♂, AFGHANISTAN, Kabul, North-east of Djelalabad, 34°30'N 70°33'E, 8/8/1975, (1 pedipalp in microvial, legs absent except for left III and right IV). – Paratype, 1 ♀ (vulva in microvial), same locality as holotype. All specimens were collected under stones.

DESCRIPTION: Prosoma marking: Narrow median dorsal band slightly dilated in posterior part. Opisthosoma elongated.

Male (holotype): Total length 4.15. Prosoma 1.14 long, 1.17 wide. Eye sizes and interdistances: AME 0.057, PME 0.128; PME-PME 0.24, PME-ALE 0.01. Ocular group 0.58 wide. Eye tubercle bearing longer horns than in *P. kandahar* (see Fig. 77); base of elevated ocular group occupying 60% of ocular group width. Chelicera

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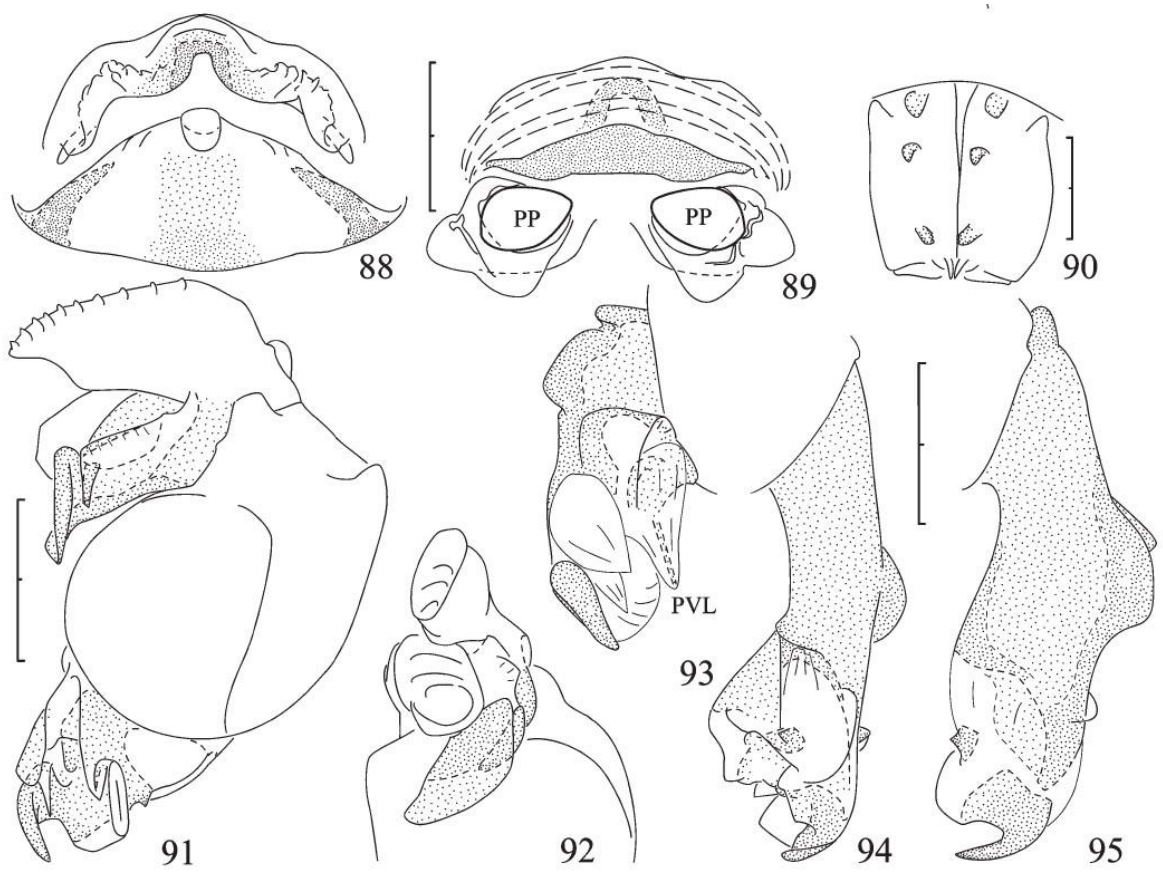

(88-95) *Pholcus djelalabad* sp. n. (88) Female genital plate and vulval ventral sclerite. (89) Vulva, dorsal view. (90) Male chelicerae, retrolateral-anterior view. (91-95) Left male palp. (91) Procursus and bulbus, prolateral view. (92) Bulbal apophyses, ventral view. (93) Procursus, ventral view. (94) Same, dorsal view. (95) Same, retrolateral view. PP = pore-plate. PVL = prolateral ventral lamina. Scales 0.2 mm.

(Fig. 90) with an additional horizontally flattened median apophysis situated closer to anterior basal blunt hook than to prolateral-apical apophysis (with two gripping teeth). Pedipalp (Figs 91, 93-95): Femur like in *P. kandahar* sp. n. (see Fig. 75), carrying a strong ventral bump and a finger-like apophysis; trochanter apophysis shorter than mid-width of femur. Procursus: Large apical sclerite (Figs 94-95) terminating in a cone (tip flattened in *P. kandahar* sp. n., Figs 84-85); short prolateral ventral lamina (PVL) not visible in retrolateral view. Bulbal apophyses (Figs 91-92): Width of appendix larger than half its length in apical view; short retrolateral expansion reaching middle of appendix head.

Female: Total length 4.20. Prosoma 1.16 long, 1.17 wide. Eye sizes and interdistances: AME 0.05, PME 0.128; PME-PME 0.17, PME-ALE 0.01. Ocular group 0.5 wide. Genital plate triangular (Fig. 88), with flexed tubercle apophysis. Vulva (Figs 88-89): Ventral sclerite with a sclerotized median arch; dorsal sclerite narrow.

ETYMOLOGY: The species name, a noun in apposition, refers to the type locality.

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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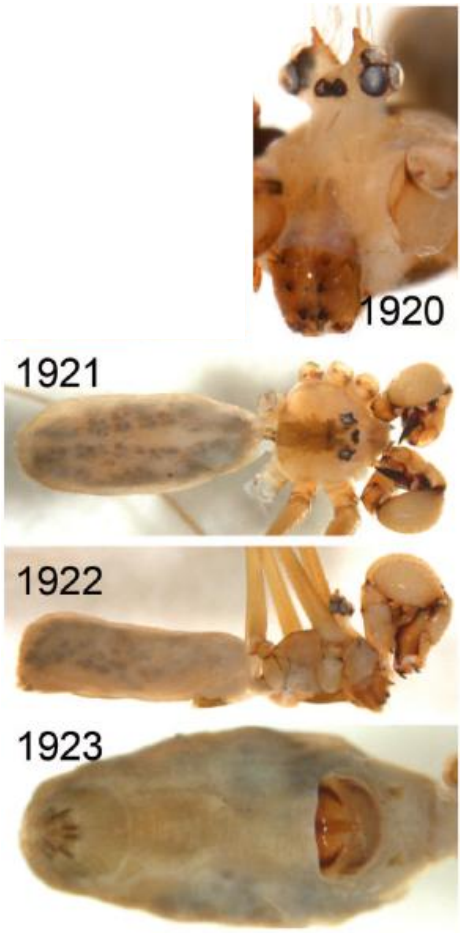

. 1920-1923.
Ph. djelalabad, male prosoma, oblique view; male, dorsal and lateral views; female abdomen, ventral view.

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1951, 1952. *Ph. djelalabad*.

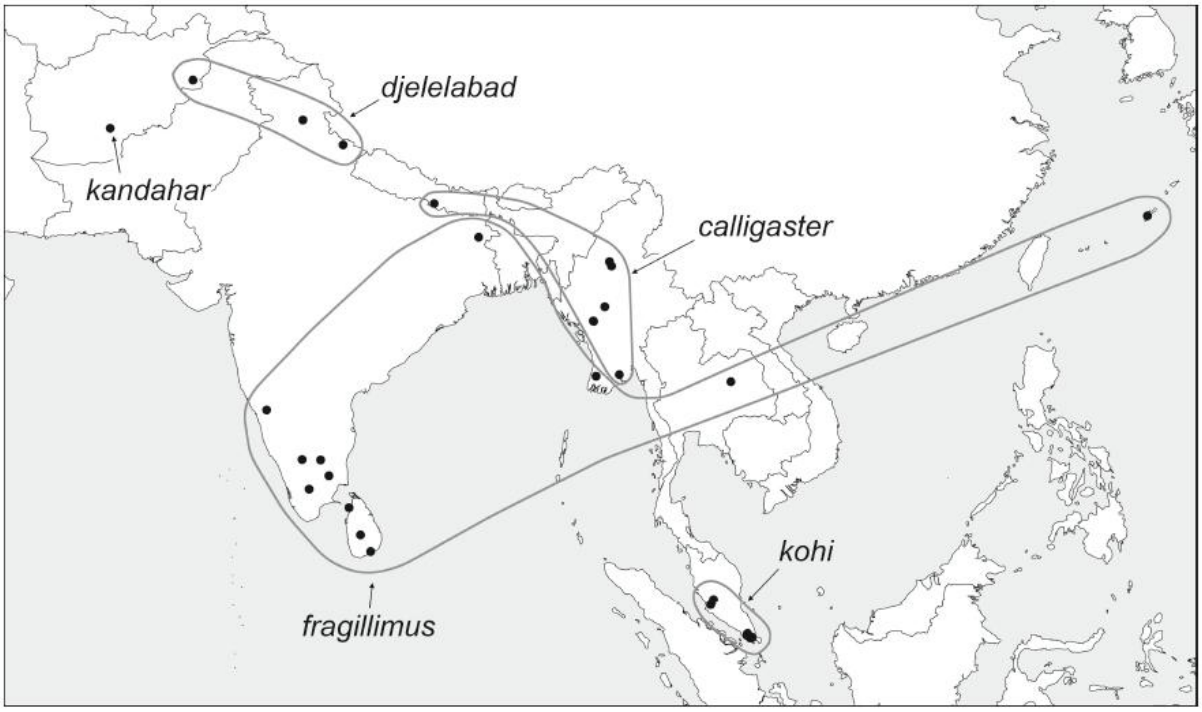

FIG. 1979. Known distribution of the *Pholcus calligaster* species group.

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Figs. 1920-1923, 1951, 1952, 1995-2016

Pholcus djelalabad Senglet 2008: 368-370, figs. 88-95.

Types. Male holotype and 1♀ paratype from Afghanistan, Nangarhar Prov., northeast of Djelalabad [=Jalalabad] (34°30'N, 70°33'E), 8.viii.1975 (A. Senglet), in MHNG, examined.

Diagnosis. Easily distinguished from most congeners by male horns between eye triads (Figs. 1920, 2001-2003) and three pairs of frontal apophyses on male chelicerae (Fig. 1998); from similar species (*Ph. calligaster*, *Ph. kandahar*) by details of male palpal morphology (Figs. 1995, 1996; shapes of procursus and appendix); from *Ph. calligaster* also by epigynum shape and absence of ventral abdominal pattern (Figs. 1923, 1951).

Male (Patlikuhl). Total body length 3.6, carapace width 1.0. Leg 1: 22.9 (5.8 + 0.5 + 5.9 + 8.9 + 1.8), tibia 2: 3.8, tibia 3: 2.6, tibia 4: 3.8; tibia 1 L/d: 58. Habitus as in Figs. 1921 and 1922. Carapace ochre-yellow with large median brown mark, ocular area with brown pattern posteriorly, clypeus not darkened, sternum brown, legs ochre-yellow, tibiae slightly darker, abdomen ochre-gray with irregular pattern of darker spots dorsally and laterally, ventrally no markings (cf. female, Fig. 1923), only genital area light brown. Distance PME-PME 255 µm, diameter PME 105 µm, distance PME-ALE 25 µm, distance AME-AME 50 µm, diameter AME 60 µm. Ocular area elevated, with distinctive horns medially of PME (Figs. 1920, 2001-2003), many stronger hairs on

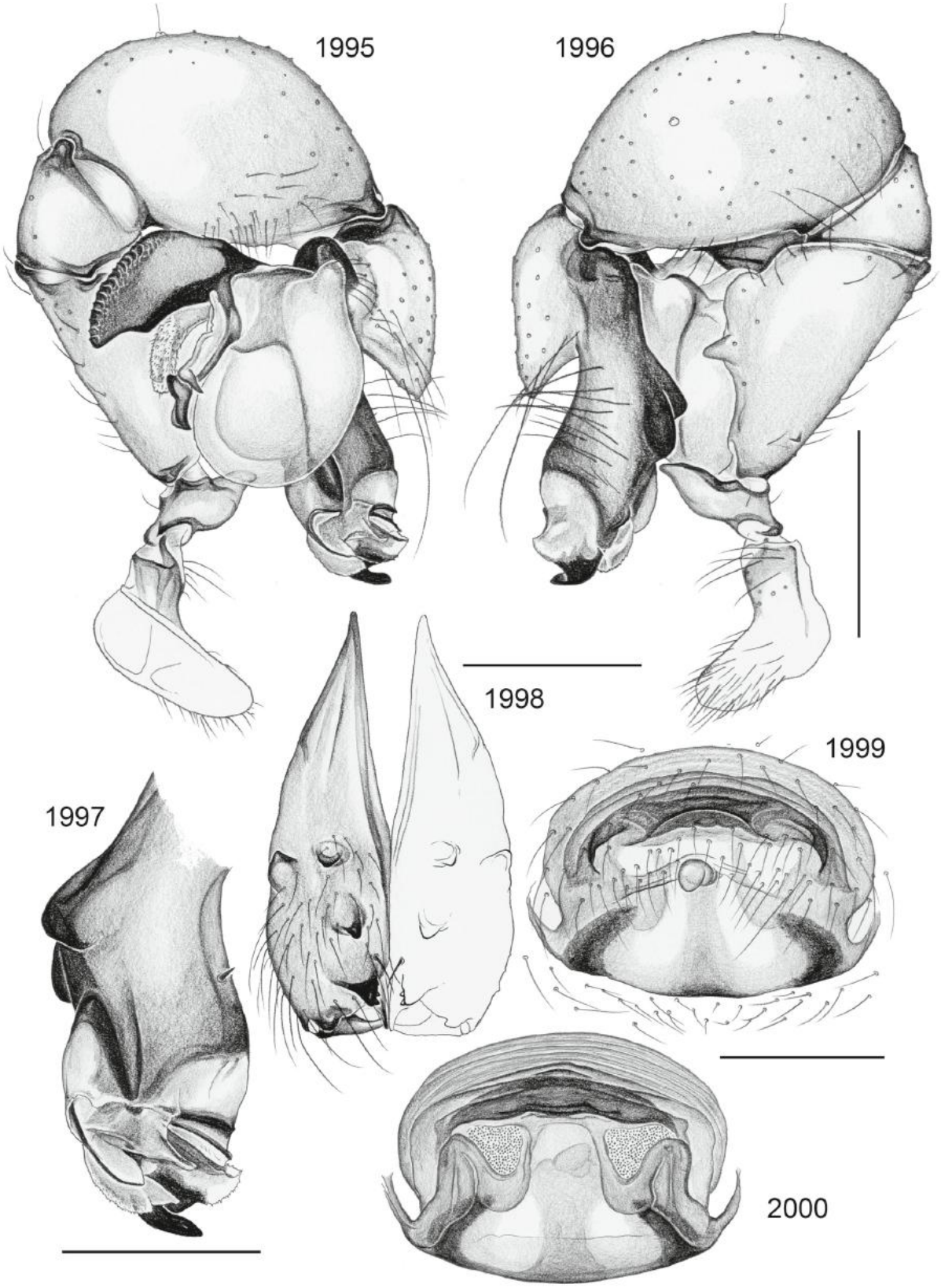

FIG. 1995-2000. *Pholcus djelalabad*. 1995, 1996. Left male palp, prolateral and retrolateral views. 1997. Left procursus, prolateral view. 1998. Male chelicerae, frontal view. 1999, 2000. Cleared female genitalia, ventral and dorsal views. Scale lines: 0.5 (1995, 1996), 0.3 (1997-2000).

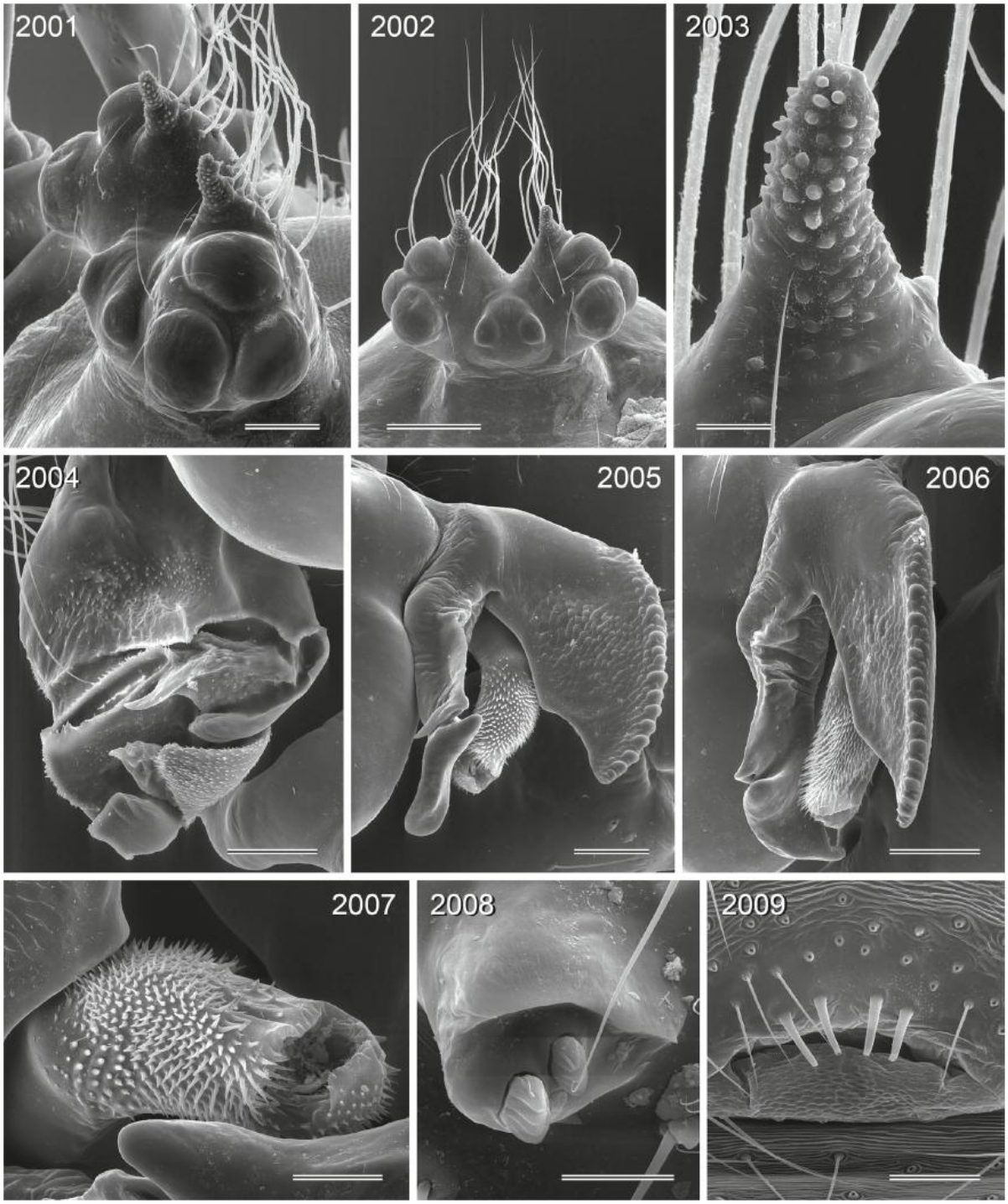

FIG. 2001-2009. *Pholcus djelalabad*. 2001, 2002. Male ocular area, oblique and frontal views. 2003. Projection on male ocular area. 2004. Right procursus, prolateral view. 2005, 2006. Right bulbal processes, prolateral and dorsal views. 2007. Right embolus. 2008. Distal male cheliceral apophysis. 2009. Male gonopore. Scale lines: 200 µm (2002), 100 µm (2001, 2005, 2006), 80 µm (2004), 60 µm (2009), 40 µm (2007), 20 µm (2003, 2008).

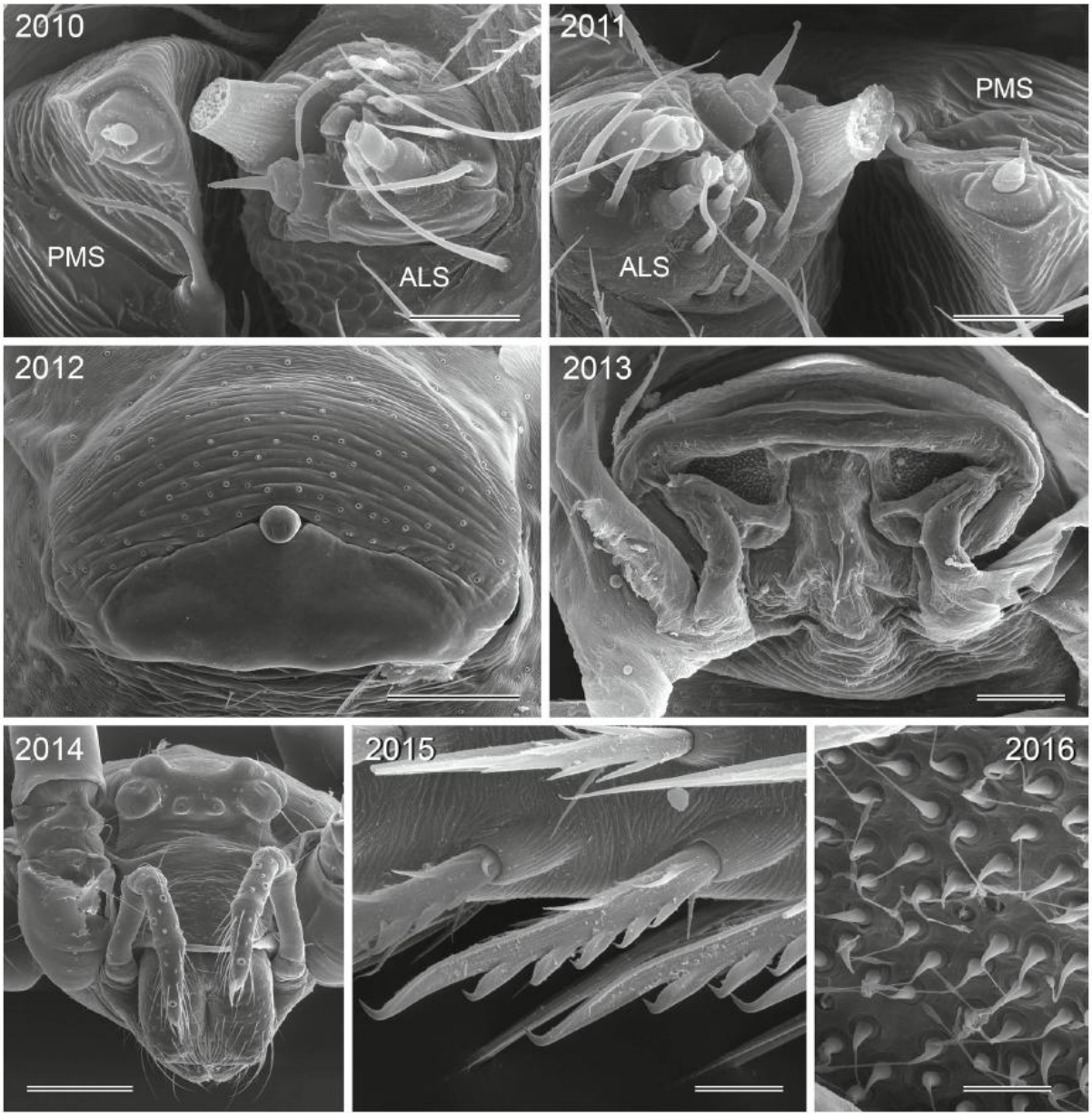

FIG. 2010-2016. *Pholcus djelalabad*. 2010, 2011. Male (2010) and female (2011) ALS and PMS. 2012. Epigynum. 2013. Cleared female genitalia, dorsal view. 2014. Female prosoma, frontal view. 2015. Comb-hairs on right female tarsus 4. 2016. Detail of pore-plate. Scale lines: 300 µm (2014), 200 µm (2012), 100 µm (2013), 20 µm (2010, 2011), 10 µm (2015, 2016).

posterior side. No thoracic furrow; clypeus unmodified. Chelicerae as in Fig. 1998, distal apophyses with two modified hairs each (Fig. 2008), proximally with one pair of lateral and two pairs of frontal apophyses. Sternum wider than long (0.70/0.55), unmodified. Palps as in Figs. 1995 and 1996, coxa unmodified, trochanter with short retrolatero-ventral apophysis, femur with small proximal apophysis retrolatero-dorsally, two larger projections ventrally, procursus very complex distally (Figs. 1997, 2004), with several distinctive membranous and sclerotized elements, with one spine dorsally, bulb with uncus, weakly sclerotized embolus covered with short spines (Fig. 2007), appendix distally pointed and directed retrolaterally, with additional small prolateral process (Figs. 2005, 2006). 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. Gonopore with four epiandrous spigots (Fig. 2009); ALS with eight spigots each (Fig. 2010).

Variation. Tibia 1 in 2 other males: 6.4, 7.2; missing in holotype. Pattern on abdomen variably distinct. Holotype with palp slightly smaller and distal apophysis of procursus slightly less curved.

Female. In general similar to male but ocular area without horns and with few normal hairs, triads closer together (Fig. 2014; distance PME-PME 195 µm). Tibia 1 in 6 females: 5.7-6.5 (mean 6.2); tarsus 4 with single row of comb-hairs (Fig. 2015). Epigynum as in Figs. 1951, 1999, and 2012 (very similar to *Ph. calligaster*); internal genitalia as in Figs. 1952, 2000, and 2013. In the paratype the pore plates are rounder (fig. 89 in Senglet 2008). ALS as in male (eight spigots each; Fig. 2011).

Distribution. Known from eastern Afghanistan and northern India (Fig. 1979).

Material examined. AFGHANISTAN: *Nangarhar Prov.*: NE of Jalalabad: 1♂1♀ types above.

INDIA: *Himachal Pradesh*: Patlikuhl Town (32°07.4'N, 77°08.8'E), 1200 m a.s.l., 17.-23. vi.1999 (Yu.M. Marusik), 5♂8♀ (2 vials) in ZFMK. *Uttar Pradesh*: Gobind Ghat Vill. (30°37.5'N, 79°33.5'E), 1750-1900 m a.s.l., 17.-23.v.1999 (Yu.M. Marusik), 2♂1♀ in ZFMK.