Pholcus ponticus Thorell, 1875

Thorell, T. 1875. Verzeichniss südrussischer Spinnen. St. Petersburg; pp. 1-84.

p. 32

Ph. ponticus n. Cephalothorace pallide testaceo, vitta media longitudinali geminata nigricanti in parte thoracica, hac vitta usque ad partem cephalicam pertinenti; sterno et maxillis pallide testaceis, illo inermi, linea tenui fusca interdum marginato; pedibus inermibus, pallide testaceis, non vel parum expresse fusco-annulatis; abdomine oblongo testaceo-cinereo, dorso immaculato; procursu partis tarsalis palporum in mare apice parum dilatato, truncato, intus emarginato-canaliculato; unco bulbi valde compresso, acie anteriore in medio dentem parvum formanti; reliquis bulbi appendicibus duabus testaceis, anteriore earum laminae basi angustae versus apicem truncatum dilatatae subsimili; vulva triangula, nitida, ferruginea, impressionibus duabus longitudinalibus notata. — ♂♀ ad. Long. 5—6 millim.

Odessa (N.)*; Jekaterinoslaw (N.)*; Sarepta (B.)*.

Thorell, T. 1875. Descriptions of several European and North African spiders. Kongl. Svenska. Vet.-Akad. Handl. 13(5): 1-203.

p. 70

Ph. Ponticus Thor. cephalothorace pallide testaceo, vitta media longitudinali geminata nigricanti in parte thoracica, hac vitta usque ad partem cephalicam pertinenti; sterno et maxillis pallide testaceis, illo inermi, interdum linea tenui fusca marginato; pedibus inermibus, pallide testaceis, non vel parum expresse fusco-annulatis; abdomine oblongo, testaceo-cinereo, dorso immaculato; procursu partis tarsalis palporum in mare apice parum dilatato, truncato, intus emarginato-canaliculato, unco bulbi valde compresso, acie ejus anteriore in medio dentem parvum formanti, reliquis bulbi appendicibus duabus testaceis, anteriore earum laminæ basi angustæ versus apicem truncatum dilatatæ sub-simili; vulva triangula, nitida, ferruginea, impressionibus duabus longitudinalibus notata. — ♂ ♀ *ad.* Long. 5—6 millim.

Syn.: 1875. *Pholcus Ponticus* Thor., Verzeichn. südruss. Spinn., l. c., p. 70.

Femina. — *Cephalothorax* æque latus atque longus, c:a $1^2/_3$ millim., in lateribus fortissime et amplissime rotundatus, parte cephalica parva, impressionibus fortibus limitata; a latere visus dorso inter partem cephalicam et thoracicam fortiter impresso, posteriora versus arcuato-elevato; pilis longioribus fere erectis sat densis sparsus, flavo-testaceus, vitta media longitudinali nigricanti, quæ linea alba geminatur, hac vitta a parte cephalica posteriora versus extensa, interdum parum expressa. Clypei altitudo mandibularum longitudine fere duplo major. *Sternum* cum *labio* coalito triangulo flavo-testaceum, interdum linea tenui fusca marginatum, sparsim pilosum, inerme. *Oculi* 4 anteriores seriem rectam formant; tres utrinque sub-æquales et contingentes; medii antici parvi, inter se proximi, a lateralibus anticis spatio remoti quod horum diametro paullo minus est. *Mandibulæ* cylindrato-ovatæ, tibiis anticis non crassiores, latitudine basali paullo plus duplo longiores, testaceæ, pilosæ, apice intus dente sat forti armato; unguis minutus, debilis. *Maxillæ* angustæ, rectæ, in labium fortiter inclinatæ. *Palpi* breves, tenues, pilosi, parte tarsali sub-cylindrata. *Pedes* longissimi, pilosi et pubescentes, flavo-testacei fere toti, femoribus basi et patellis interdum paullo infuscatis. Pedum prop. 1, 4, 2, 3, 1:mi paris 31, 2:di 23, 3:tii $17^1/_2$, 4:ti 24 millim. longi (in exemplo cujus cephalothorax $1^2/_3$ millim. longus est). *Abdomen* inverse sub-ovatum, in dorso sat alte convexum, subter fere rectum, c:a 4 millim. longum et $3^1/_2$ millim. latum, cum *mamillis* cinereo-testaceum totum, tenuiter pubescens; area *vulvæ* sat magna, fere in conum obtusum elevata, antice linea recurva nigricanti limitata; vulva ex scuto sat magno, plano, sub-triangulo, nitido, ferrugineo, apice anteriora versus directo, impressionibus duabus longitudinalibus parallelis parum profundis notato constat.

Mas. — *Cephalothorax*, *sternum*, *labium* et *maxillæ* ut in femina, eo excepto, quod cephalothorax paullo latior quam longior est (circa $1^3/_4$ millim. latus, paullo plus $1^1/_2$ millim. longus), parte cephalica magis elevata et pilosa. *Mandibulæ* minores quam in femina, ad ipsam basin dorsi, extus, dente obtuso et magis intus ibidem tuberculo parvo instructæ, versus apicem vero, intus, dente sat forti nigricanti armatæ (præter dente in apice intus). *Palpi* testacei; pars trochanteralis spina maxima curvata obtusa testacea in latere exteriore armata est; pars femoralis, basi angusta, dente crasso retro directo testaceo fere in medio subter instructa; pars patellaris

brevissima, cunei-formis fere; pars tibialis crassa, sub-compressa, ovata, æque longa atque pars tarsalis et bulbus conjunctim; pars tarsalis fere latior quam longior, postice truncata, in lateribus et antice rotundata, supra convexa, angulis posticis supra piceis, apice pilosa; bulbus parte tarsali paullo longior et crassior, et, desuper visus, ejus fere formâ; a basi lateris exterioris partis tarsalis procursus vel trabes longus, fortissimus, parte tarsali et bulbo conjunctis longior, fere rectus, piceus, pilosus anteriora versus sese extendit, cum latere exteriore partis tarsalis concretus et bulbo plerumque arcte adjacens; hic procursus apice inæqualiter et paullo tantum dilatatus est, ipso apice truncato et intus canaliculato-emarginato; subter, in medio, dente forti, obtuso, impressione longitudinali sub-bifido munitus est: paullo ante hanc dentem, sub bulbo vel versus eum, spinam fortem, apice curvatam, intus directam emittit, et prope basin dentem alium intus directum. Bulbus subter tres procursus ostendit, unum, ad latus exterius situm, piceum, deorsum directum, valde compressum, unguiformen fere, qui prope basin dentem intus directum habet et in media acie anteriore dente parvo munitus est; ad basin hujus procursus ("unci"), antice, procursus alter, testaceus, laminæ inæquali, latæ, basi angustæ, foras et sursum curvatæ, apice truncatæ sub-similis exit et, magis intus, procursus tertius, testaceus quoque, duplo fere brevior, angustus, subrectus, cum basi procursus prioris foramen quasi vel fissuram limitans; ad ipsam basin bulbi, subter, tuberculum piceum adest. *Pedes* prop. 1, 2, 4, 3; 1:mi paris in specimine, cujus cephalothorax paullo plus $1^1/_2$ millim. longus est, 35 millim., 2:di paris 26, 3:tii paris 20, 4:ti paris 25 millim.; interdum paullo magis evidenter quam in femina fusco-sub-annulati. *Abdomen* magis cylindratum, duplo circiter longius quam latius, præterea ut in ♀.

Patria: Rossia meridionalis. Exempla nonnulla utriusque sexus, in Odessa et in Jekaterinoslaw, in cavis, a Cel. AL. v. NORDMANN collecta examinavi; etiam in Sarepta ab A. BECKER inventa est hæc species. A *Ph. phalangioidi* (FUESSL.), cui ad picturam cephalothoracis sat similis est, facile distinguitur structura palporum maris, et cephalothorace non, ut in illa specie, macula magna sub-postica fusca, linea albicanti geminata notato, sed vitta longitudinali geminata obscura, posteriora versus plerumque angustata. De *Ph. phalangioidi* (FUESSL.) et *Ph. opilionoidi* (SCHRANK) sive *Ph. Pluchii* (SCOP.), vid THOR., Rem. on Syn., p. 145—148.

Kulczyński, M. V. 1913. Arachnoidea. In Velitchkovsky, V. (ed.), Faune du district de Walouyki du gouvernement de Woronège (Russie). Cracovie, 10: 1-30.

11. Ph. ponticus Thor.

Wunderlich, J. 1980. Zur Kenntnis der Gattung *Pholcus* Walckenaer 1805 (Arachnida: Araneae: Pholcidae). Senckenb. biol. 60(3/4): 219-227.

Pholcus ponticus THORELL 1875.
Abb. 8-13.

1875 *Pholcus ponticus* THORELL, Hor. Soc. ent. Ross., **11**: 70.

Material: 4♂ 3♀ 1 juv., Syntypen (Naturhist. Riksmuseet Stockholm), Sowjetunion, Ukraine, Jekaterinoslaw, heute Dnjepropetrowsk.

Diagnose: Das ♂ ist durch den großen Auswuchs des Paracymbium (Procursus) gekennzeichnet (As in Abb. 10), das ♀ durch die recht breite Epigyne (Abb. 12-13).

Beschreibung (♂♀). — Maße (in mm): Gesamt-Länge 5-6, Prosoma-Länge etwa 1·4 (nach THORELL 1875: ♂ bis 1·67), Prosoma-Breite etwa 1·45; Länge von Femur I etwa 8·0.

Färbung und Zeichnung: Beim vorliegenden Alkohol-Material nicht mehr sicher zu erkennen; nach THORELL (1875) besitzt das Prosoma im thoracalen Abschnitt eine mittlere, schwärzliche, doppelte Längsbinde; Sternum und Opisthosoma (dorsal) sind einfarbig, ohne Zeichnung.

Prosoma: Augen und Cheliceren weitgehend mit denjenigen von *opilionoides* (SCHRANK 1781) übereinstimmend, das große Zähnchen medial-distal auf den ♂-Cheliceren steht etwas weiter vor als bei *opilionoides*. Sternum breiter als lang, Länge : Breite = 0·82.

Genital-Organe: ♂-Palpus (Abb. 8-11): Trochanter mit großem Sporn, Femur mit länglichem Auswuchs, Tibia sehr dick, Paracymbium (Procursus) prolateral mit einem Auswuchs (As in Abb. 10), Appendix großflächig, wenig sklerotisiert, gelbbraun; Embolus lang.

Epigyne (Abb. 12-13): „Knöpfchen" wenig vorstehend, Platte der Epigyne fast dreimal so breit wie lang, mit „Knöpfchen" zweimal so breit.

Beziehung: Sie bestehen am ehesten zu *Ph. crassipalpis* SPASSKY 1940; bei *crassipalpis* ist der Appendix distal-dorsal weniger stark umgebogen und

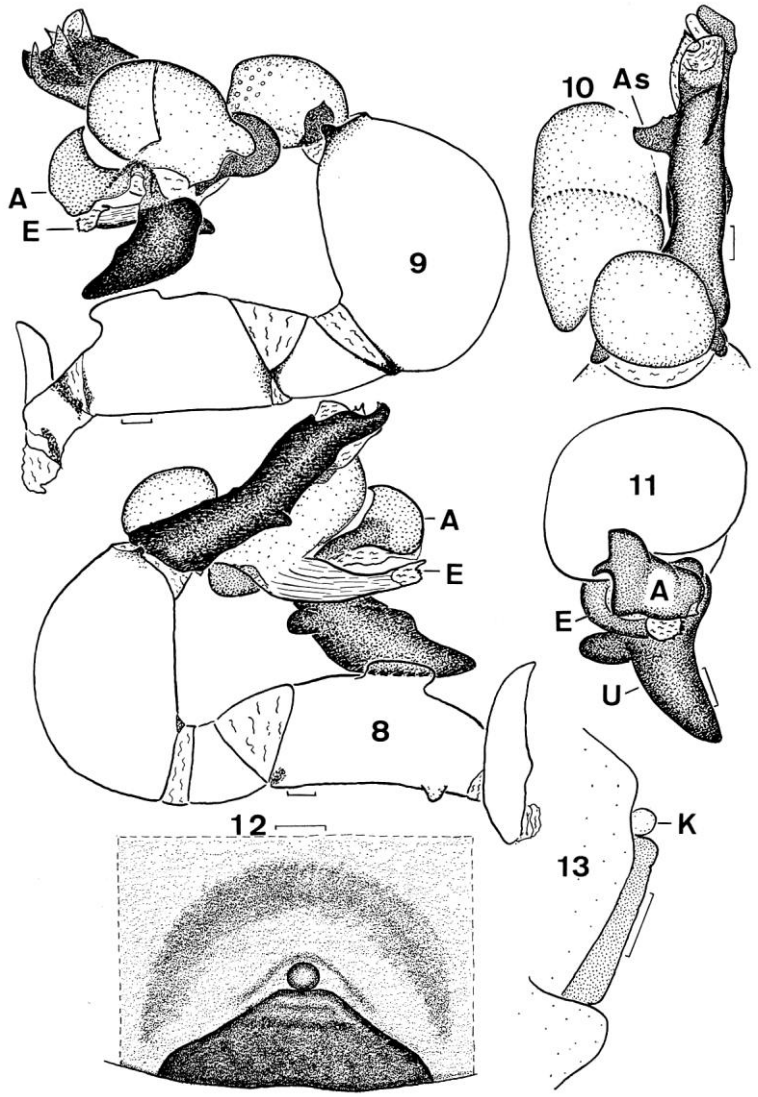


Abb. 8-13. *Pholcus ponticus* THORELL 1875. — 8) rechter ♂-Palpus von retrolateral; 9) rechter ♂-Palpus von prolateral; 10) rechter ♂-Palpus: Paracymbium von dorsal; 11) rechter ♂-Palpus: Uncus, Appendix und Embolus von ventral-distal; 12) ♀, Epigyne von ventral; 13) ♀, Epigyne von lateral. — U = Uncus, A = Appendix, As = Auswuchs des Paracymbium, E = Embolus, K = „Knöpfchen" der Epigyne. — Maßstab = 0·1 mm.

das „Knöpfchen" der Epigyne ist kleiner. Insbesondere nach der Form des Appendix bestehen weiterhin Beziehungen zu *Ph. velitchkovskyi* KULCZYNSKI 1913; bei *velitchkovskyi* ist das Prosoma kürzer (Länge 1·1-1·2 mm), es fehlt der lange Auswuchs prolateral am Paracymbium und das „Knöpfchen" der Epigyne ist kleiner.

Hu, J-L., Wu, W-G. 1989. Spiders from agricultural regions of Xinjiang Uygur Autonomous Region, China (Arachnida: Araneae). Shadong Univ. Publ. House, Jinan. 435 pp.

p. 74

新疆幽灵蛛，新种（*Pholcus xinjiangensis* sp. nov.）（图56，1—8；57，）

p. 75

雌蛛体长4.30—4.70毫米，雄蛛体长3.90—4.20毫米。

正模♀：体长4.70毫米，头胸部（长×宽）1.30毫米×1.10毫米；腹部3.40毫米×2.90毫米。头胸部灰黄色，长略大于宽，颈沟明显，头部隆起，额部长且向前倾斜。胸

p. 76

部中线两侧各有一块褐色纵斑，二者在其后端相互靠近并愈合，另外，在头部后缘之正中线尚有一褐色棒状斑。8眼均位于一个突起的眼丘上，除前中眼外，其余6眼组成两个三角形，各眼皆围有黑环，前中眼，为昼眼，其它6眼大小相等，为夜眼，从背面观察，前眼列稍后曲，并短于后眼列，前中眼间距小于前中侧眼间距，后眼列后曲，后中眼间距大于后中侧眼间距，中眼区梯形，宽大于长，后边大于前边。螯肢棕黄色，前缘多长毛，前齿堤无齿，后齿堤1齿。触肢细弱，呈黄色。颚叶指形，黄色，并向前斜伸，两者呈“八”字形排列。下唇半圆形，灰褐色，宽大于长。胸板棕褐色，后缘钝且在正中线部位有一小凹陷，中央有一黄斑，两侧缘各有4个黄斑。步足细长，黄色，末端具3爪，上爪下各有梳齿11枚，下爪仅有1小齿。足式：1，2，4，3。其量度为：

	腿节	膝、胫节	后跗节	跗节	全长
Ⅰ	7.70毫米	8.30毫米	10.80毫米	2.00毫米	28.80毫米
Ⅱ	5.80毫米	6.00毫米	7.60毫米	1.50毫米	20.90毫米
Ⅲ	4.90毫米	4.90毫米	5.70毫米	1.00毫米	16.50毫米
Ⅳ	6.40毫米	6.00毫米	7.30毫米	1.10毫米	20.80毫米

腹部灰黄色，背部隆起，布有细毛，无斑纹。纺器褐色并朝向腹面。外雌器如图56，5—6。

配模♂：体长4.20毫米，头胸部1.20毫米×1.10毫米，腹部3.00毫米×1.20毫米。头部后缘丛生褐色长刚毛，螯肢前部背面内侧有一黑色粗齿，齿的基部内侧有朝向内侧的小齿，螯肢基部背面近额缘部位外侧和中部各有一突起。触肢转节具1指状突起。触肢器之生殖球如图56，7—8所示。足式：1，2，4，3。各步足自腿节至跗节的量度：

	腿节	膝、胫节	后跗节	跗节	全长
Ⅰ	8.00毫米	8.50毫米	11.80毫米	2.00毫米	30.30毫米
Ⅱ	6.00毫米	6.40毫米	9.00毫米	1.50毫米	22.90毫米
Ⅲ	5.00毫米	4.80毫米	5.90毫米	1.00毫米	16.70毫米
Ⅳ	6.50毫米	6.00毫米	7.30毫米	1.00毫米	20.80毫米

正模♀，配模♂副模3♀♀2♂♂，策勒(1400米)，1982年6月8日（胡金林）；副模2♀♀1♂，乌鲁木齐（900米），1982年7月7日（胡金林）；副模5♀♀，3♂♂，乌苏（600米），1982年7月20日（胡金林）；副模3♀♀1♂，五台（500米），1982年7月8日（吴文贵）；副模6♀♀3♂♂，喀什（1300米），1983年6月10日（李兴正）；6♀♀2♂♂，皮山（1350米），1983年6月1日（李兴正）；另副模2♀♀2♂♂，米泉，1983年7月8日（吴文贵）；4♀♀1♂，塔城（470米），1983年6月20日（傅永平）。

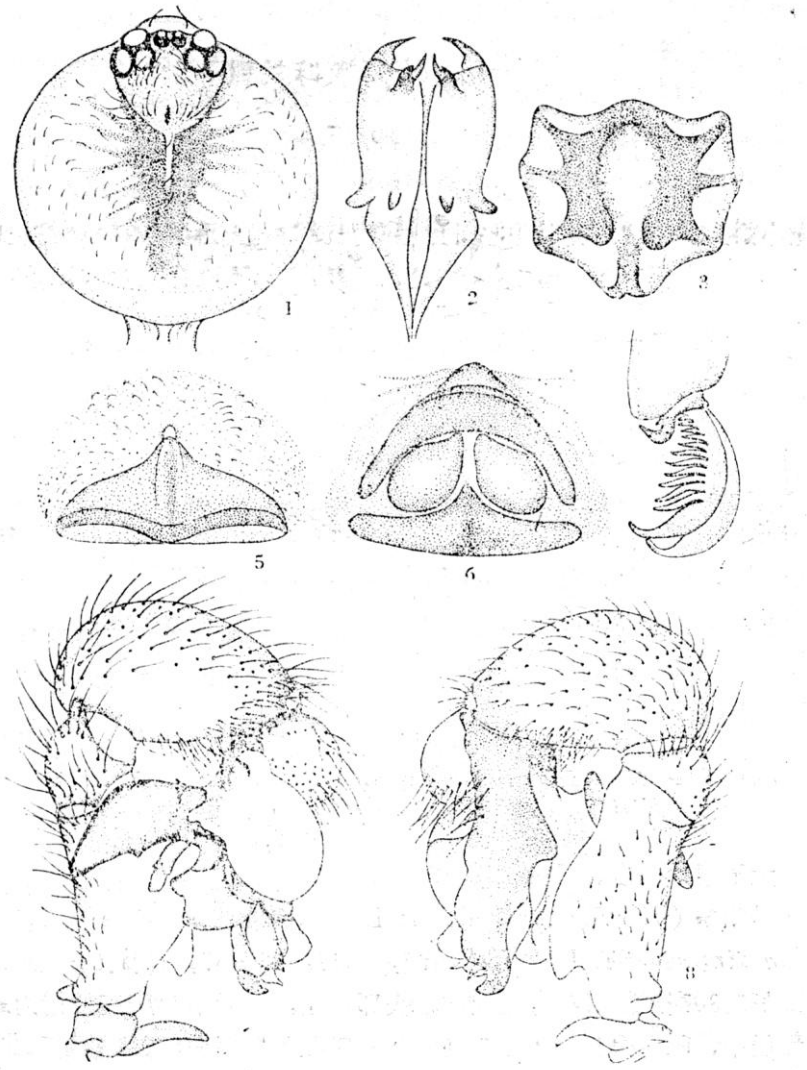


图56　新疆幽灵蛛，新种（*Pholcus xinjiangensis* sp. nov.）

1.雌蛛头胸部背面观　2.雄蛛螯肢之前面观　3.胸板　4.步足之跗爪　5.外雌器外形
6.外雌器内部结构　7.雄蛛左触肢器之内侧观　8.同7，外侧观

3. *Pholcus xinjiangensis* sp.nov.(figs.56,1—8,57)

Total length(mm in unit): ♀: 4.30-4.70; ♂: 3.90-4.20.

Holotype♀: total length 4.70, carapace 1.30 x 1.10; abdomen 3.40 x 2.90. Allotype ♂: total length 4.20, carapace 1.20 x 1.10; abdomen 3.00 x 1.20. Paratype 3♀♀,2♂♂. Cele County, Xinjiang Uygur Autonomous Region, June 8,1982(Hu.J.L.); 2♀♀,1♂. Urumqi City, Xinjiang Uygur Autonomous Region, July 7, 1982(Hu.J.L.); 5♀♀3♂♂, Wusu County, Xinjiang Uygur Autonomous Region, July 20,1982(Hu J.L.); 6♀♀,3♂♂, Kashi City, Xinjiang Uygur Autonomous Region, June 10, 1983 (Li.X.Z.); 3♀♀,1♂, Wutai County, Xinjiang Uygur Autonomous Region, July 18,1982(Wu.W.G); 6♀♀,2♂♂, Pishan County, Xinjiang Uygur Autonomous Region, June 1,1983(Li.X.Z.); 2♀♀,2♂♂, Miquan County, Xinjiang Uygur Autonomous Region, July 8,1983(Wu W.G.).

Female: Carapace grayish yellow in colour, its length slightly longer than the width, cephalic region higher. The eight eyes situated on the cephalic hillock. Anterior median eyes arranged in a group. Other six eyes arranged in two groups and each group including three eyes forming a triangle. Anterior eye row slightly recurved, much shorter than the posterior one. Distance between AME nearer than those between AME and the laterals. Posterior eye row recurved. Distance between PME larger than those between PME and the laterals. The back width of MOQ wider than the front width, the width larger than the length. AME<ALE = PME = PLE. Chelicera yellow, without tooth on the promargin, but with one retromarginal tooth. Legs very long, yellow in colour. Leg formula: 1,2, 4,3. Epigynum and vulva shown as in figs.(56,5-6).

The male palpal organ illustrated in figs.(56,7-8).

The new species resembles *Pholcus phalangioides* (Fuesslin, 1775) but it differs from the latter in the structures of male palp.

Efimik, V. E., S. L. Esyunin & S. F. Kuznetsov. 1997. Remarks on the Ural spider fauna, 7. New data on the fauna of the Orenburg area (Arachnida Aranei). *Arthropoda Selecta* 6(1/2): 85-100.

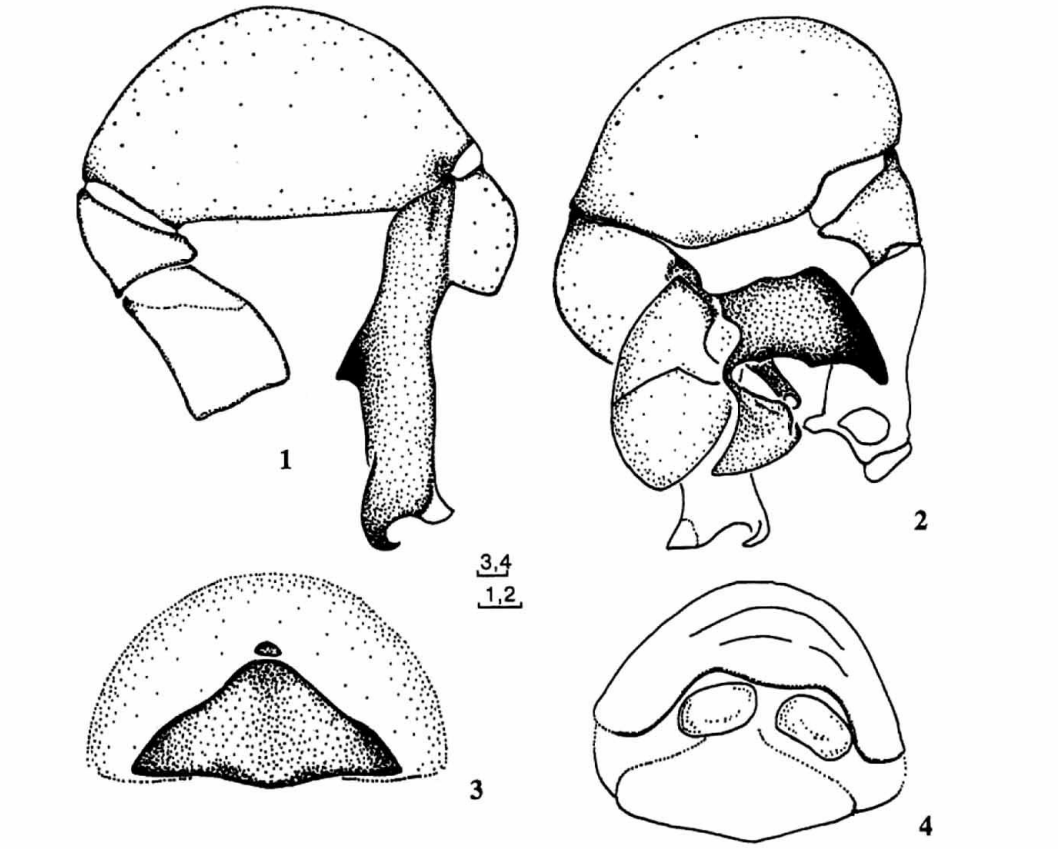
p. 86

Pholcus fagei Spassky, 1940
Figs 1-4.

MATERIAL 1 ♀, Orenburg Distr., Donguz Station, inside a house, 1992, leg. SK; 1 ♂, 5 ♀♀, Orenburgskii Reserve, Aituar, inside a house, V.1996, leg. N. Mazura.

REMARKS. New to the fauna of the Urals, this species was originally described from Kazakhstan [Spassky, 1940] and later recorded in Kalmykia [Minoransky & Ponomarev, 1984].

p. 87



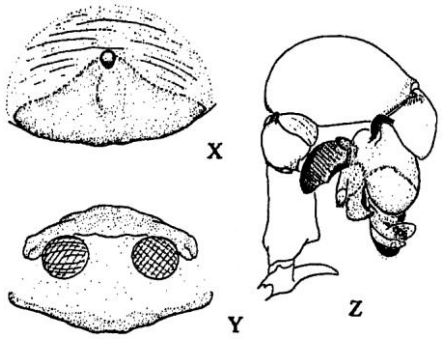
Figs 1-6. Genitalia of *Pholcus fagei* Spassky, 1940 (1-4), *Uloborus plumipes* Lucas, 1846 (5) and *Yllenus vittatus* Thorell, 1875 (6): 1 — femur, patella, tibia, tarsus and paracymbium of male, prolateral; 2 — male palp, retrolateral; 3 & 6 — epigyne; 4 — vulva; 5 — male palp, ventral. — Scale 0.1 mm.

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

p. 63

***Pholcus xinjiangensis* Hu *et* Wu**, 1989 (**fig.25X—Z**)
Pholcus xinjiangensis Hu & Wu, 1989: 74, f. 56.
Distribution: Xinjiang.

p. 64



Fedoriak 2008

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

***Pholcus xinjiangensis* Hu & Wu, 1989**
(Figs. 56–57)

Pholcus xinjiangensis Hu & Wu 1989: 74, f. 56.1–8. Song, Zhu & Chen, 1999: 63, f. 25X–Z

Diagnosis. This species resembles *P. manueli* in the shape of the palpal bulb and the patterns of sternum and carapace, but can be distinguished from it by the broad axe-shaped appendix (Fig. 56H), by the shape of the tip of the procursus (Figs. 56G–I), and by the relatively small pore plates of the epigynum (Fig. 56B).

Redescription. Male: A specimen measured (Turpan City), total length 4.4: cephalothorax 1.3 long, 1.2 wide; abdomen 3.1 long, 1.2 wide. Leg I: 31.5 (8.2+0.8+7.9+12.4+2.2), tibia II: 5.8, tibia III: 4.5, tibia IV: 5.2; tibia I L/D: 53. Prosoma shape as in Fig. 56C. Carapace short, broad and almost circular, ochre, with pair of brown butterfly-shaped marks connecting to ocular area. Cephalic region raised, without brown stripes centrally, ocular area dark yellow. Clypeus 0.55, slightly ochre, without brown marks centrally. Distance AME–AME 0.05. Chelicerae as in Fig. 56E, with pair of black serrated distal apophyses carrying two modified hairs each, with some macrosetae on each side near the apophyses, as in Figs. 57E–F, pair of unsclerotized thumb-shaped apophyses proximolaterally and pair of unsclerotized rounded apophyses proximocentrally. Labium and endites yellowish brown. Sternum blackish brown, with four pairs of yellow marks along margin and a central mark anteriorly as in Fig. 56F. Femora, patellae and tibiae ochre, with dark rings, metatarsi and tarsi brown. Tarsus with several pseudosegmentations as in Fig. 57C. Abdomen cylindrical, pale, dorsum without blackish brown spots as in Fig. 56C. Venter pale, without markings. Male gonopore with four epiandrous spigots as in Fig. 57B. Six spinnerets (Fig. 57G), ALS with six piriform gland spigots (Fig. 57H), PMS with two spigots (Fig. 57I) and PLS without any spigots. Palps as in Figs. 56H–I and 57J, bulb with a triangular uncus and axe-shaped appendix, femur of palp with a dorsal projection retrolaterally. Procursus as in Figs. 56G and 57K. Tarsal organ capsulate.

Female: in general very similar to male. A specimen measured (Turpan City), total length 4.8: cephalothorax 1.4 long, 1.1 wide; abdomen 3.5 long, 1.1 wide. Tibia I: 7.3. Distance AME–AME 0.05. Epigynum roughly volcano-shaped as in Figs. 56A and 57A, with a small knob-shaped apophysis on the top. Dorsal view as in Fig. 56B, with a rainbow-shaped sclerotized arch anteriorly and a pair of oval pore plates.

Distribution. Known from several localities in Xinjiang.

Material. Types. CHINA: **Xinjiang**: Cele County, June 8, 1982, leg. J. L. Hu, female holotype, male 'allotype', 3♂, 3♀ paratypes; Urumqi City, July 7, 1982, leg. J. L. Hu, 1♂, 2♀ paratypes; Wusu County, July 20, 1982, leg. J. L. Hu, 3♂, 5♀ paratypes; Wutai County, July 8, 1982, leg. W. G. Wu, 1♂, 3♀ paratypes; Kashgar City, June 10, 1983, leg. X. Z. Li, 3♂, 6♀ paratypes; Pishan County, June 1, 1983, leg. X. Z. Li, 2♂, 6♀ paratypes; Miquan County, July 8, 1983, leg. W. G. Wu, 2♂, 2♀ paratypes; Tacheng City, June 20, 1983, leg. Y. P. Fu, 1♂, 4♀ paratypes. All type material deposited in SDU, not examined.

Material examined. CHINA: **Xinjiang**: Kuqa City, August 11, 2006, 4♂, 4♀; Hami City, July 24, 2006, 6♂, 23♀; Turpan City, July 26, 2006, 9♂, 11♀; Kashgar City, August 7, 2006, 5♂, 10♀; Xiecheng County, August 5, 2006, 5♂, 10♀; Yining City, August 14, 2006, 2♂, 6♀; Alataw Pass, August 15, 2006, 5♂, 10♀; Kuitun City, August 18, 2006, 3♂, 3♀; Tacheng City, August 19, 2006, 5♂, 10♀; Hefeng County, August 23, 2006, 3♂, 6♀; Urumqi City, Sepember 1, 2006, 1♂; Altai City, August 26, 2006, 4♂, 13♀. All above specimen were collected by F. Zhang (MHBU).

Remarks. We collected many specimens of *Pholcus* at many different places of Xinjiang during the six-week summer expedition of 2006, but only two species of *Pholcus* were found: *P. manueli* and *P. xinjiangensis*. Only these two species of *Pholcus* were recorded from Xinjiang (Hu & Wu 1989; Song *et al*. 1999; Platnick, 2008). Based on this and other data, e. g. individual numbers and habitats, we find that the density and distribution of *P. xinjiangensis* is much greater than that of *P. manueli* in Xinjiang. *P. xinjiangensis* is an endemic species, thus only found in Xinjiang. However, *P. manueli* is a synanthropic species, and is mainly distributed in northeast Asia and the U. S. A., and has been recorded from many regions in China. Further, the patterns of body and structures of palpal organ and epigynum of *P. xinjiangensis* are similar to *P. manueli*. From these points, they may have a close phylogenetic relationship.

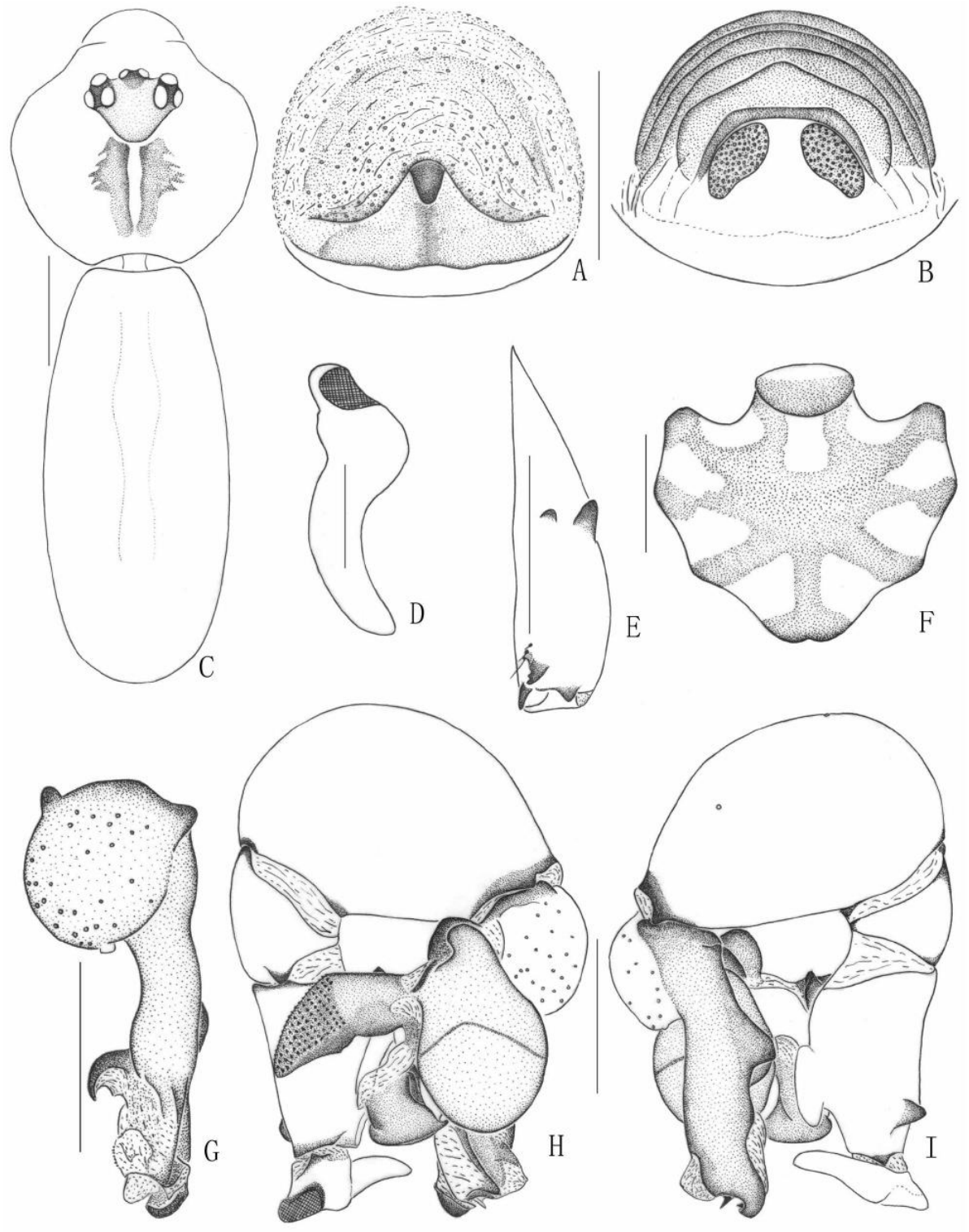


FIGURE 56. *Pholcus xinjiangensis* Hu & Wu, 1989. A. epigynum, ventral view. B. same, dorsal view. C. male body, dorsal view. D. trochanter of male left palp, dorsal view. E. male left chelicera, frontal view. F. male sternum, ventral view. G. left procursus, dorsal view. H. left palp, prolateral view. I. same, retrolateral view. Scale lines: 1.0mm (C), 0.5mm (A, B, E–I), 0.2mm (D).

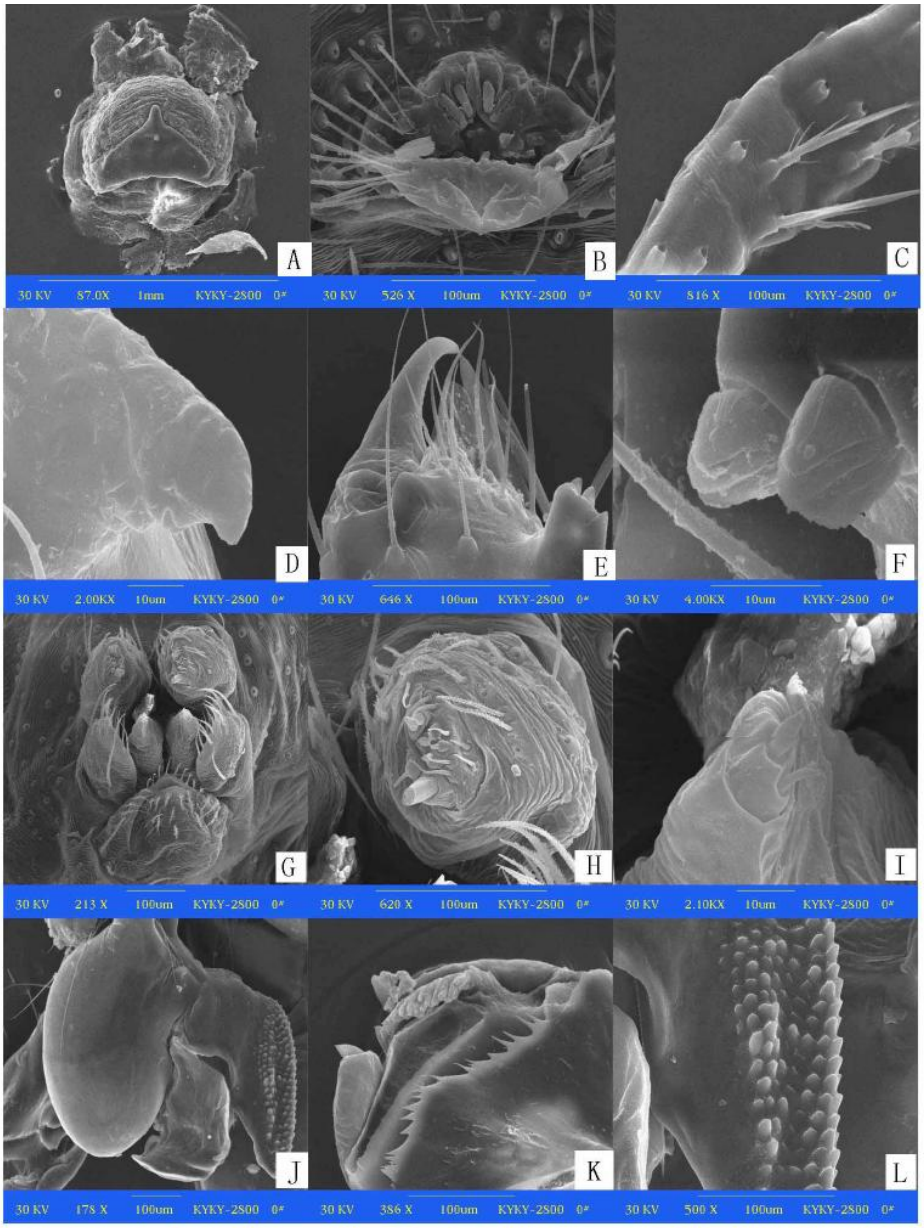
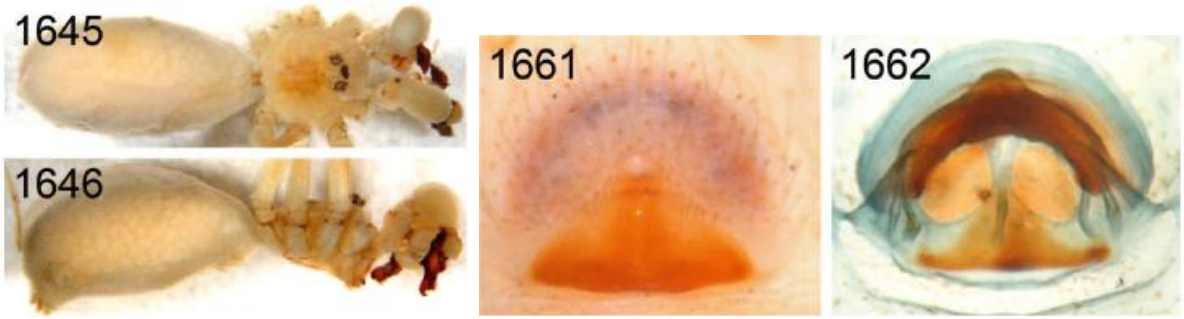


FIGURE 57. *Pholcus xinjiangensis* Hu & Wu, 1989. A. epigynum, ventral view. B. male gonopore, showing four epiandrous spigots. C. pseudosegmentation on male tarsus 1. D. male cheliceral apophyses proximolaterally, frontal view. E. male cheliceral fang and distal cheliceral apophysis, with two modified hairs. F. male distal apophysis, showing two modified hairs. G. male spinnerets, overview. H. male ALS, with several piriform gland spigots. I. male PMS, with two spigots. J. right male bulb, prolateral view. K. tip of male right procursus, prolateral view. L. part of bulb uncus, showing numerous small teeth.

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

p. 343



1645, 1646. *Ph. ponticus*, male, dorsal and lateral views.

1661, 1662. *Ph. ponticus*.

p. 344

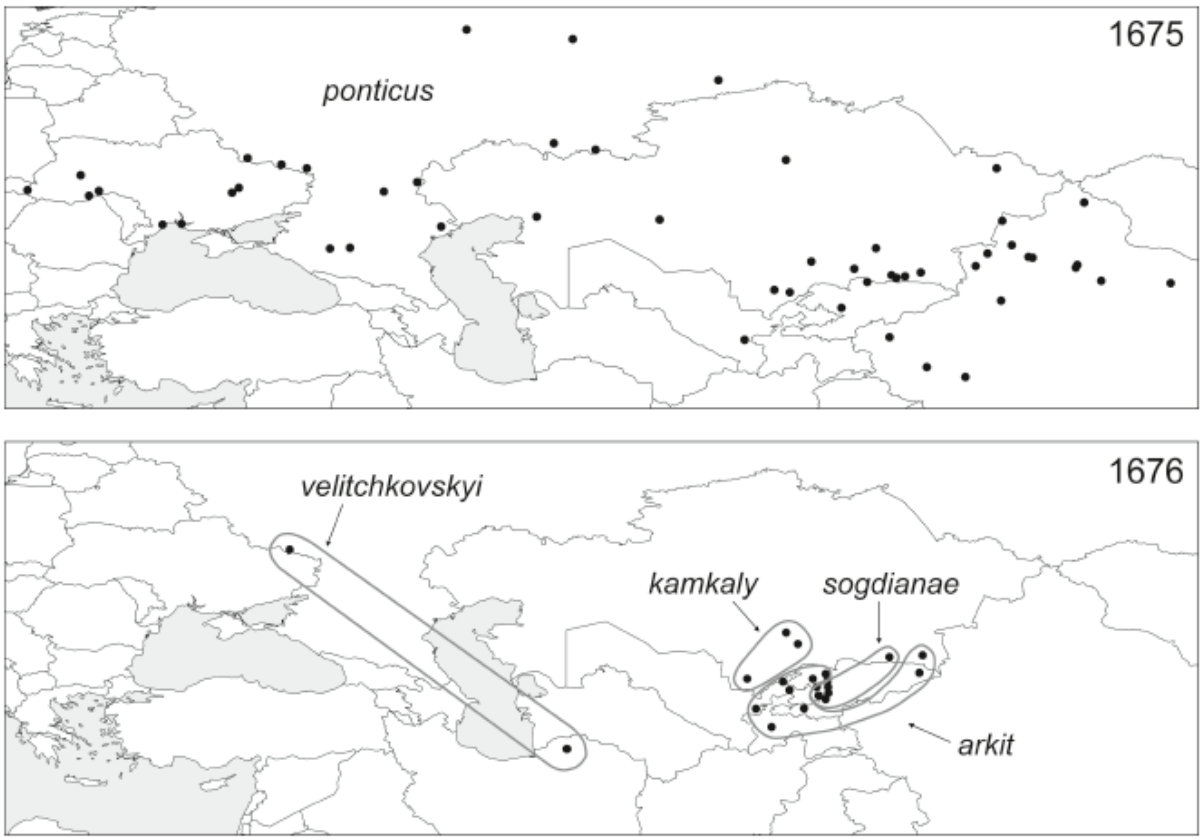


FIG. 1675, 1676. Known distributions of *Pholcus ponticus* and of the other species of the *Ph. ponticus* species group.

Pholcus ponticus Thorell, 1875

Figs. 1645, 1646, 1661, 1662, 1677-1692

Pholcus ponticus Thorell 1875a: 32. Thorell 1875b: 70-71. Kulczyński 1913: 8. Wunderlich 1980: 221-223, figs. 8-13. Fedoriak 2008b: figs. 10-12, 22-24.

"*Pholcus fagei* Spassky, 1940" (misidentification): Efimik *et al.* 1997: 86-87, figs. 1-4.

Pholcus xinjiangensis Hu & Wu 1989: 74-76, 414, figs. 1-8. Song *et al.* 1999: 63, figs. 25x-z. Zhang & Zhu 2009a: 98, figs. 56a-i, 57a-l. New synonymy.

Justification of synonymy. A direct comparison of specimens from Xinjiang and from Ukraine revealed no differences in the relevant male and female characters.

Types. Pholcus ponticus: Four male and three female syntypes from Ukraine, Dnipropetrovsk Oblast, "Jekaterinoslaw" [Dnipropetrovsk, 48°27'N, 35°03'E], date unknown (A. v. Nordmann), in NHRS, examined. The depository of further syntypes from Ukraine, Odessa [46°28'N, 30°43'E] and Russia, Sarepta [48°31.7'N, 44°29.0'E] is unknown (possibly in Museo Civico di Storia Naturale "Giacomo Doria", Genova).

Pholcus xinjiangensis: Male holotype and 3♂3♀ paratypes from China, Xinjiang Autonomous Region, Cele County [37°N, 80°48'E], 8.vi.1982 (J.L. Hu), in Biology Department of Shandong University, China, not examined. For further paratypes, see Hu & Wu (1989).

Diagnosis. Distinguished from congeners by morphology of male palp (Figs. 1677, 1678, 1691, 1692; distinctive processes prolaterally and ventro-distally on procursus, shapes of uncus and appendix); from very similar *Ph. sogdianae* and *Ph. arkit* by eyes less elevated, femur apophysis more complex, and minor genital differences (compare Figs. 1691-1696).

Male (Makarivka). Total body length 4.5, carapace width 1.6. Leg 1: 30.1 (8.0 + 0.7 + 8.0 + 11.4 + 2.0), tibia 2: 5.8, tibia 3: 4.1, tibia 4: 5.6; tibia 1 L/d: 50. Habitus as in Figs. 1645 and 1646. Entire spider mostly pale ochre-yellow, carapace with median brown mark divided by narrow median line, sternum light brown with large whitish marks near bases of coxae 2-4 and behind labium and palpal endites, leg femora proximally slightly darkened (red-brown), especially frontally, abdomen monochromous pale-gray. Distance PME-PME 285 µm, diameter PME 115 µm, distance PME-ALE 25 µm, distance AME-AME 40 µm, diameter AME 70 µm. Ocular area elevated, many stronger hairs posteriorly (Figs. 1681, 1682). No thoracic furrow; clypeus unmodified. Chelicerae as in *Ph. manueli* (cf. Fig. 1731), distal apophyses with two modified hairs each (Fig. 1683). Sternum wider than long (1.15/0.80), unmodified. Palps as in Figs. 1677 and 1678, coxa unmodified, trochanter with retrolatero-ventral apophysis, femur with relatively large dorsal apophysis proximally and distinctive ventral protuberance, procursus rather simple, distally with distinctive curved ventral apophysis and membranous dorsal process (Figs. 1684, 1692), with distinctive prolateral process (Fig. 1685), with dorsal spines, bulb with uncus, short embolus proximally weakly sclerotized, distally transparent, appendix distally widened (Fig. 1691). Legs without spines and curved hairs, few vertical hairs; retrolateral trichobothrium on tibia 1 at 7%; prolateral trichobothrium absent on tibia 1, present on other tibiae; tarsal pseudosegments very indistinct, only distally a few visible in dissecting microscope. Gonopore with epiandrous spigots (Fig. 1687).

Variation. Tibia 1 in 38 other males: 6.4-8.9 (mean 7.9). The red-brown coloration of the femora may be very indistinct or even absent. In some specimens the appendix appears slightly smaller. The four male syntypes are in fair condition; tibia 1: 7.6-8.1.

Female. In general similar to male, triads closer together (distance PME-PME 205 µm). Tibia 1 in 64 females: 5.6-8.7 (mean 7.5) (in three syntypes: 7.2-8.1); tarsus 4 with single row of comb-hairs (Fig. 1688). Epigynum weakly protruding oval area, internal arc visible through cuticle anteriorly, triangular plate with 'knob' (Figs. 1661, 1679, 1690); internal genitalia as in Figs. 1662 and 1680. ALS with eight spigots each (Fig. 1689).

Distribution. Widely distributed from western Ukraine (maybe Bulgaria, see Drensky 1939 in Brignoli 1978) to Xinjiang (China) (Fig. 1675). For Chinese records see Zhang & Zhu (2009a) (under *Pholcus xinjiangensis*).

Material examined. UKRAINE: *Dnipropetrovsk Oblast*: Dnipropetrovsk: 4♂3♀ syntypes above. Novomostovsky District, Andreevka Vill. [Andreyev-

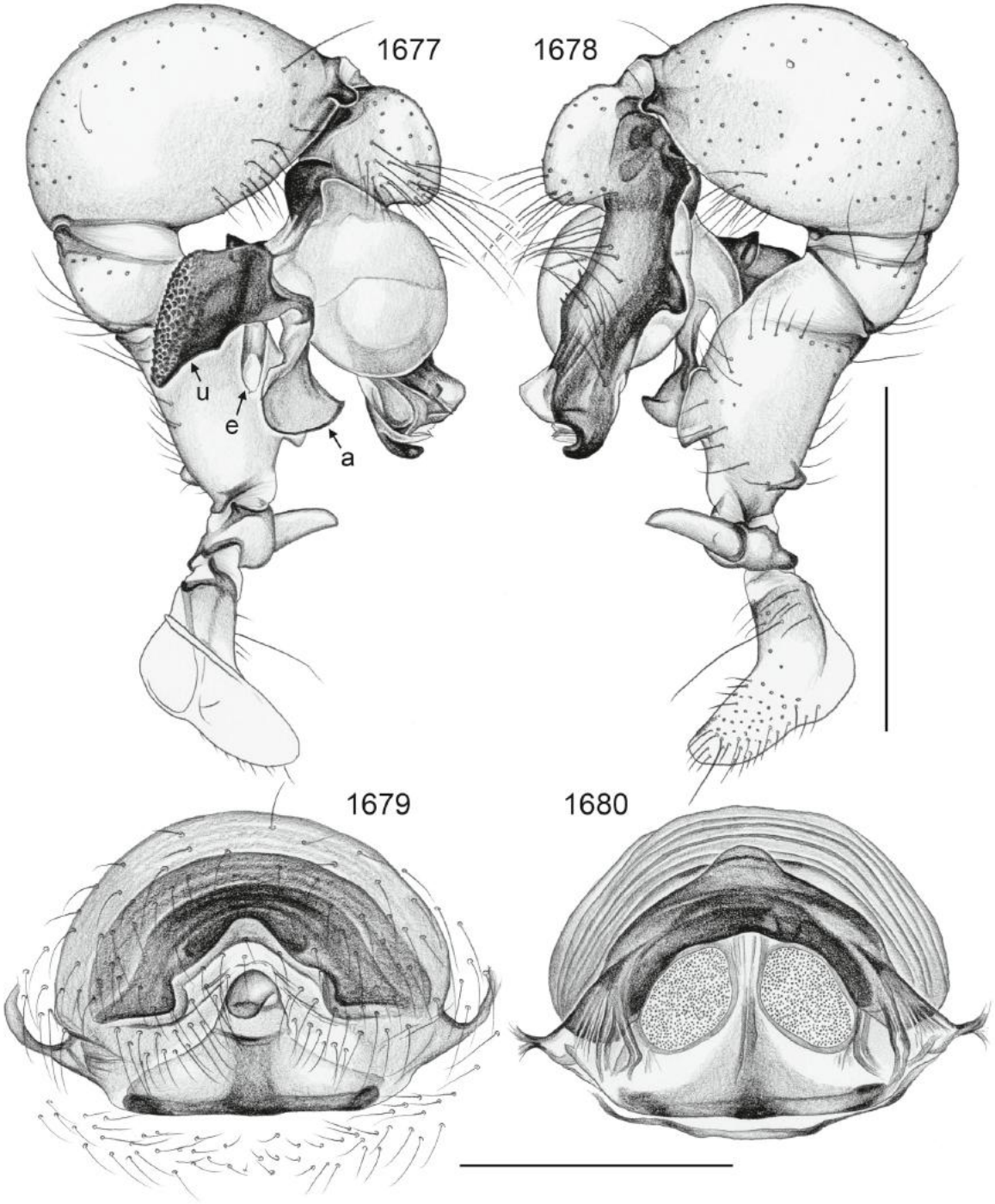


FIG. 1677-1680. *Pholcus ponticus*. 1677, 1678. Left male palp, prolateral and retrolateral views. 1679, 1680. Cleared female genitalia, ventral and dorsal views. Scale lines: 1.0 (1677, 1678), 0.5 (1679, 1680).

ka: 48°46'N, 35°28'E], 6.iv.1975 (A.A. Zyuzin), 1♂2♀ in ZMMU. *Kherson Oblast*: Kherson, Chernomorsky Reserve, Geroiskoe Vil. [Geroyskoye: 46°31'N, 31°54'E], 20.v.1987 (M.Y. Polchaninova), 1♀ in ZMMU. *Chernivtsi Oblast*: Chernivtsi (48°16'N, 26°07'E), in hospital, 4.vii.2007 (M. Fedoriak), 1♂1♀ in ZFMK. Kelmenetsky District, Makarivka Vill. (48°34.8'N, 26°44.4'E), "in/out building", 30.vi.2007 (M. Fedoriak), 2♂3♀ in ZFMK. *Ternopil Oblast*: Ternopil' [49°33'N, 25°36'E], in house, 26.xi.2006 (M. Fedoriak), 1♂ in ZFMK. *Zakarpattia Oblast*: Ujgorod [Uzhhorod, 48°37'N, 22°18'E], in building, 2.iv.2007 (M. Fedoriak), 2♂2♀ in ZFMK.

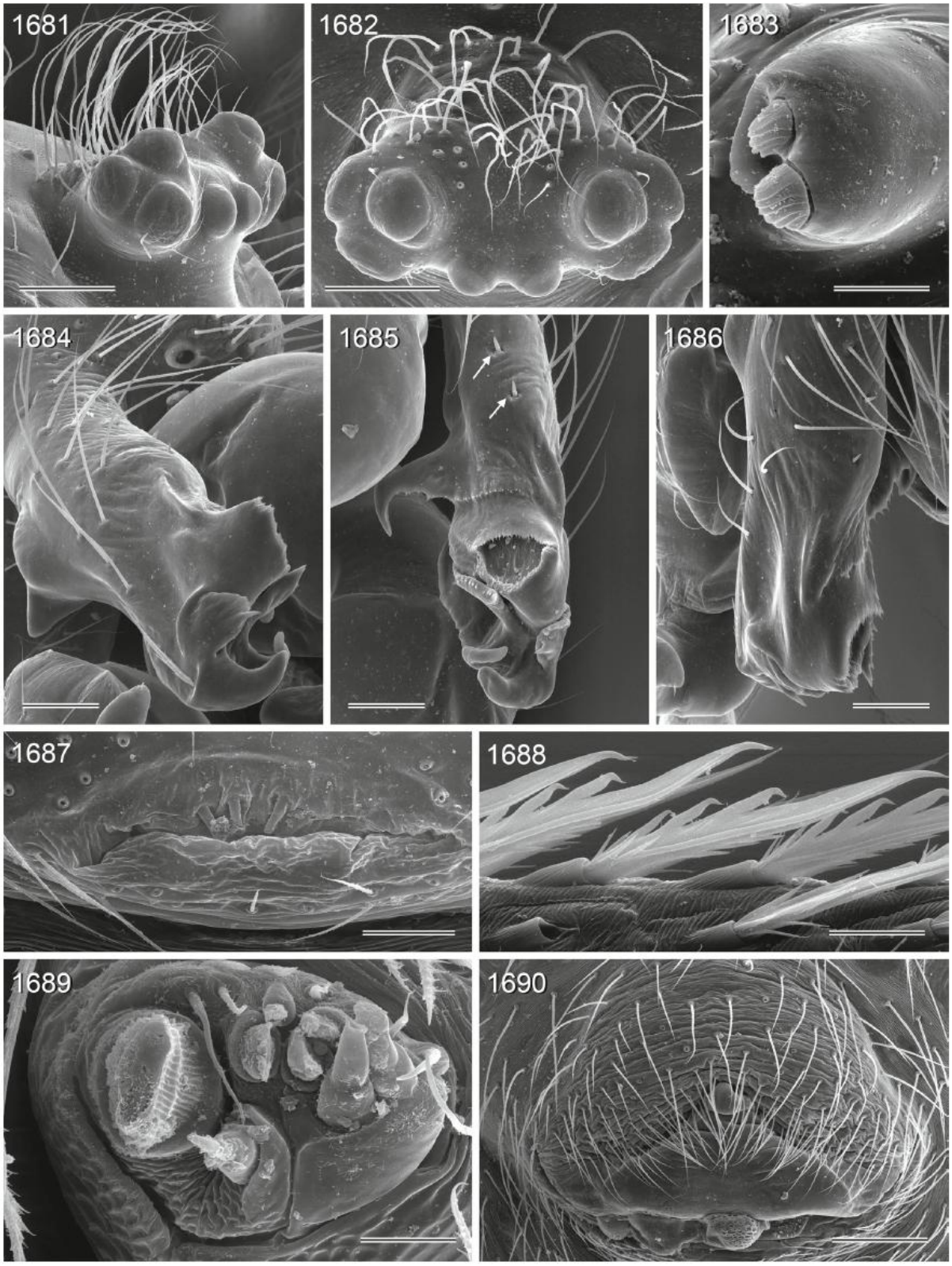


FIG. 1681-1690. *Pholcus ponticus*. 1681, 1682. Male ocular area, oblique and dorsal views. 1683. Distal male cheliceral apophysis. 1684. Right procursus, retrolatero-distal view. 1685. Left procursus, dorsal view (arrows point at spines). 1686. Right procursus, retrolatero-dorsal view. 1687. Male gonopore. 1688. Comb-hairs on female tarsus 4. 1689. Female ALS. 1690. Epigynum. Scale lines: 200 μm (1681, 1682, 1690), 100 μm (1684-1686), 60 μm (1687), 20 μm (1683, 1688, 1689).

RUSSIA: *Rostov Region*: "Veliki", 8.x.1961 (Mitrofanov), 1♀ in ZMMU. *Astrakhan' Region*: Astrakhan' [46°21'N, 48°03'E], 10.ix.1993 (N.A. Rukhlenko), 7♂7♀ in ZMMU. *Stavropol Territory*: ca. 35 km NNE of Stavropol, Beshpagir Vill. [45°01'N, 42°23'E], in buildings, 13.viii.2003 (D.V. Logunov), 7♂4♀ in ZMMU. *Volgograd Region*: Pallasovka Distr., Elton Lake [El'ton 49°07'N, 46°34'E], indoor, 28.v.1993 (P.M. Dunin), 4♂1♀ in ZMMU. *Krasnodar Territory*: Armavir [~44°59'N, 41°07.5'E], Uspenka Vil., 30.iv.1977 (P.M. Dunin), 1♂4♀ in ZMMU. *Voronezh Region*: Kantemirovka Distr., Mitrofanovka Vil. [~49°58'N, 39°42'E], thicket near river, 17.vii.1979 (A.A. Zyuzin), 1♂2♀ in ZMMU. *Belgorod Region*: near Borisovka Vil. [50°36'N, 36°01'E], Les-na-Vorskle Reserve, indoor, 20. viii.1983 (V.E. Krivokhatsky), 2♀ in ZIN. Valuyki [50°12.5'N, 38°06.3'E], 30.x.1897 (Velitchkovsky), 2♀ in NHMW. *Orenburg Region*: Orenburg Natural Reserve, Aytuar village [~51°07'N, 57°40'E], in house, 15.v.1996 (N. Masura), ~8♂10♀ in PSU. *Kirov Region*: Ganino village [58°39'N, 49°33'E], in building, 9.vi.2005 (A. Lyapunov), 2♂ in PSU. *Perm Region*: Perm [58°00'N, 56°15'E], in house, vii.1999 (S. Esyunin), 1♂ in PSU. *Kurgan Region*: Kurgan city [55°27'N, 65°20'E], 17.xi.1992 (S. Tulenev), 3♂5♀ in PSU.

KAZAKHSTAN: Atyrau [=Gur'ev] Region, Emba Distr., near Kulsary [~46°58'N, 54°01'E], 4.vi.1989 (A. Raikhanov, S. Ibraev), 2♀ in ZMMU. Kyzylorda Prov.: Aralsk [46°47'N, 61°40'E], ix.1928 (N.N. Terehov), 12♂ in PSU. South-Kazakhstan Region, 30-35 km E of Shymkent (=Chimkent), Lenger Distr., near Georgievka Vil. [~42°15'N, 69°46'E], indoor, 2.ix.1992 (D.V. Logunov), 6♂20♀ (2 vials) in ZMMU. Arys Town [42°24'N, 68°48'E], indoor, 8.v.1988 (D.V. Logunov), 1♂ in ZMMU. Near Arys Town, clayey ravines, 2.v.1988 (D.V. Logunov), 1♂1♀ in ZMMU. East Kazakhstan Region, Azeh, near Ust'-Kamenogorsk [49°58'N, 82°40'E], 16. ix.1990 (V.K. Zinchenko), 2♀ in ZMMU. Almaty City [43°15'N, 76°57'E], indoor, 10.vii.1995 (Yu.M. Marusik), 2♂3♀ in ZMMU; same locality, 15. ix.1994 (S. Ovchinnikov), 2♂5♀ in ZMMU. "Zailiysky Mt." (=Trans Ili Alatau), Bol. Alma-Atinka, 8.vi.1993 (S. Ovchinnikov), 1♂ in ZMMU. Almaty (Alma-Ata) Region, Zhambyl Distr., Fabrichniy Vil. [~43°09'N, 76°25'E], indoor, 26.xii.1993 (A.A. Zyuzin), 2♂2♀ in ZMMU. Almaty Region, Zhambyl Distr., ca. 50 km W Samsy [43°19'N, 76°06'E], 9.iv.1997 (A.V. Gromov), 4♂2♀ in ZMMU. Almaty Region, Balkhash Distr., ca. 5.5 km ESE Akkol', Karakol (44°59.8'N, 75°44.1'E), 380 m a.s.l., buildings, 5.vi.2004 (A.V. Gromov), 1♂1♀ in ZMMU. Almaty Region, Chilik Distr., N foothills of Tzansili Alatau Mt. Range, Zhalganbulak Spring Valley, ca. 7 km SE Teskensu (43°29.2'N, 77°55.5'E), 740 m a.s.l., in mine, 31.i.2009 (N.V. Baskakov), 6♂1♀ in ZMMU. Zhambyl (=Taraz, Dzhambul) Region, Shu (=Chu) Distr., left bank of Chu River, 3rd km of road Novotroitskoe-Moinkum [~43°44'N, 73°47'E], 31.v.1990 (A.A. Zyuzin), 1♂ in ZMMU; Moinkum Desert, ca. 72 km S of Ulanbel' (44°10.6'N, 71°07.3'E), 350 m a.s.l., 28.v.2002 (A.V. Gromov), 1♂2♀ in ZMMU. Aqmola Area, Kurgal'dzhinskoe Distr., Kurgal'dzhino Nature Reserve, ca. 25.5 km WSW Urkendeu, E shore of Sultankel'dy Lake, Karazhar (50°28.6'N, 69°32.6'E), 310 m a.s.l., 13.-14.vi.2005 (A.V. Gromov), 2♂1♀ in ZMMU.

UZBEKISTAN: *Samarkand Area*: Urgut Distr., N slope of Zeravshan Mt. Range, Aman-Kutan (39°18.1'N, 66°58.2'E), 1300 m a.s.l., 26.iv.2002 (A.V. Gromov), 1♂2♀ in ZMMU.

KYRGYZSTAN: Bishkek [42°54'N, 74°36'E], 20. ix.1995 (S.V. Ovchinnikov), 2♂2♀ in ZMMU; same locality, 17.vi.1974 (S.L. Zonstein), 1♀ in ZMMU; S part of Bishkek, waste ground, 20.iv.2005, 17. and 23.vi.2005 (S. Ovchinnikov), 4♀ (3 vials) in ZMMU. Surroundings of Gumkhana village, ~6 km SE Arslanbob town [~41°18'N, 72°59'E], 1200 m a.s.l., 1.vi.1981 (S.L. Zonstein), 1♀ in ZMMU.

CHINA: *Xinjiang Autonomous Region*: Altay [47°50'N, 88°07'E], 26.viii.2006 (F. Zhang), 1♂1♀ in MHBU.

Unspecified localities, material collected by Spassky: "UdSSR", 2♂4♀ in SMF (19437/7). "S-Rußland", 1♂ in SMF (19425/1). "S-Rußland", xii.1934, 1♂3♀ in SMF (19432/2).

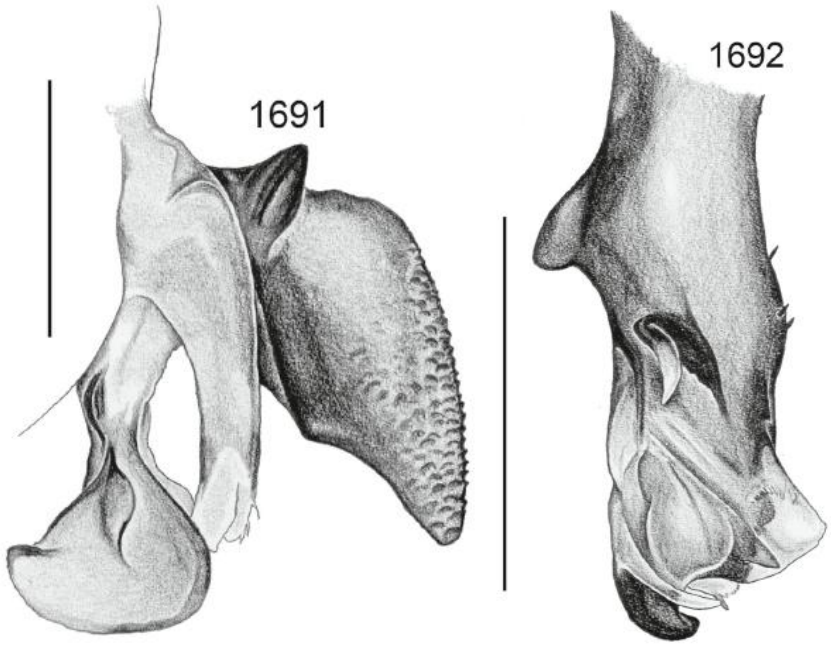


FIG. 1691-1696. Left bulbal processes, retrolateral views (same scale), and left procursi, prolateral views (same scale) of *Pholcus ponticus* (1691, 1692), Scale lines: 0.3 (bulbs), 0.5 (procursi).