

Pholcus manuely Gertsch, 1937

Gertsch, W. J. 1937. New American spiders. Amer. Mus. Novitates 936: 1-7; pl. 1-7.

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Pholcus manuely, new species

Figures 6 and 7

FEMALE.—Total length, 4.50 mm.

	CARAPACE	FRONT	STERNUM	LABIUM	MAXILLA	ABDOMEN
Length	1.37	0.70	0.70	0.15	0.33	3.30 mm.
Width	1.34	0.45	0.86	0.28	0.15	2.30 mm.

Carapace white to dull yellow, with a large, divided, pale brown patch at the middle, the eyes ringed with black. Integument of the carapace sparsely clothed with erect black hairs. Clypeus with two pale brown longitudinal stripes. Sternum and labium dusky brown, the former with a central pale bar at the front margin and three pairs of distinct submarginal pale spots on each side. Maxillae somewhat dusky, the

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coxae white. Clothing of the underside black hairs. Chelicerae pale brown, set with short black hairs. Abdomen concolorous with the carapace, without definite pattern, the clothing short black hairs.

Carapace suborbicular in outline as seen from above, the pars thoracica evenly convex, moderately high, the clypeus steeply sloping. Eyes elevated on a low tubercle. Ratio of the eyes: ALE : AME : PLE : PME = 12:8:12:12. First row of eyes seen from in front weakly procurved, the upper margins forming a straight line, the medians separated by about one-fourth their diameter, one-half their diameter from the larger laterals. Clypeus equal in height to more than the width of the first eye row (53/47). Posterior row of eyes moderately recurved, the medians separated by more than the diameter (12/16), subcontiguous with the laterals. Lateral eyes of one side and the posterior median subcontiguous, forming a triad. Median ocular quadrangle broader than long (36/21), narrowed in front (36/17). Sternum broadly truncated in front, truncated behind where the posterior coxae are separated by scarcely their length. Abdomen longer than broad, suboval, moderately high. Epigynum as illustrated in Fig. 7.

Legs long, without spines, evenly clothed with rows of black hairs.

	FEMUR	PATELLA	TIBIA	METATARSUS	TARSUS	TOTAL
I	6.15	0.60	6.50	9.35	1.50	24.10 mm.
II	4.65	0.55	4.35	6.15	1.00	16.70 mm.
III	3.70	0.40	3.20	4.55	0.80	12.65 mm.
IV	5.15	0.50	4.50	6.30	0.90	17.35 mm.

MALE.—Total length, 4.50 mm.

	CARAPACE	FRONT	STERNUM	LABIUM	MAXILLA	ABDOMEN
Length	1.40	0.90	0.75	0.14	0.35	3.10 mm.
Width	1.30	0.60	0.95	0.28	0.15	1.80 mm.

Coloration and structure in nearly complete agreement with the female. Eye tubercle more strongly elevated, clothed with short, erect, black hairs. Ratio of the eyes: ALE : AME : PLE : PME = 11 : 7 : 11 : 11. First row of eyes weakly procurved, the medians separated by one-fourth their diameter (2/7), about their radius from the lateral eyes (5/7). Posterior eye row very weakly recurved, essentially straight, the medians separated by more than the diameter (18/11). Median ocular quadrangle broader than long (40/22), narrowed in front (40/18). Clypeus equal in height to more than the width of the first eye row (65/50). Chelicera with a stout blunt tooth near the apex.

Palpus as illustrated in Fig. 6. Trochanter with a pale curved spur which is directed laterad.

	FEMUR	PATELLA	TIBIA	METATARSUS	TARSUS	TOTAL
I	7.35	0.60	7.35	11.00	1.80	28.10 mm.
II	5.35	0.50	5.15	7.35	1.10	19.45 mm.
III	4.30	0.50	3.70	5.40	0.85	14.75 mm.
IV	5.70	0.50	5.00	6.70	1.10	19.00 mm.

TYPE LOCALITY.—Male holotype and female allotype from the garage in the Dos Passos residence at Mendham, New Jersey, collected

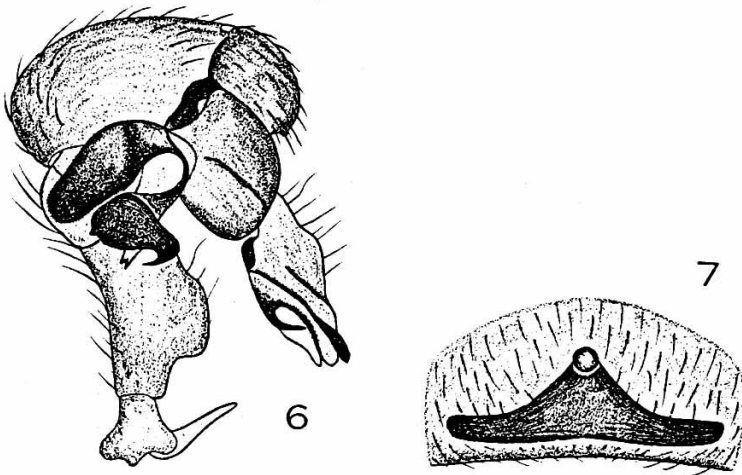


Fig. 6. *Pholcus manuelei*, new species, left male palpus retrolateral view.
Fig. 7. *Idem*, epigynum of female.

April 18, 1937, by Manuel Dos Passos. Additional paratypes of both sexes from the same locality, April 28, 1937 (W. J. Gertsch). The types are in the collection of The American Museum of Natural History.

This species approximates *Pholcus phalangioides* (Fuesslin) closely in color and structure but is distinct in various respects. The eyes in both sexes are more closely grouped, the anterior medians being proportionately much nearer the laterals than in *phalangioides*, separated by much less than the diameter in both sexes. The posterior median eyes are correspondingly much nearer together in *manuelei*, the separation being much less than two diameters. The apophyses of the bulb of the male palpus and the genital ridges of the female differ in form as illustrated in the figures.

Schenkel, E. 1953. Chinesische Arachnoidea aus dem Museum Hoangho-Peiho in Tientsin. Bol. Mus. Nac., Rio de Janeiro 119: 1-108.

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Pholcus affinis n. sp.

♂ : Körper 3,4 mm; Cephalothorax 11 mm lang, 13 mm breit; Augengruppe 0,5 mm breit; Bein I 25,5 mm ($7 \pm 0,5 \pm 7,4 \pm 6,6 \pm 4$).

Die Art steht dem *Ph. opilionoides* (Schrank) sehr nahe; die Gestalt des Palpentrochanters ist übereinstimmend; dagegen sind die Apophysen des Bulbs verschieden; die Hauptapophyse ist viel schmäler, schmäler noch als die von *Ph. phalangioides* (Fuesslin), gerade, nur leicht messerklingenartig gekrümmt; die 2. Apophyse ist gleichgerichtet und benachbart, anders gestaltet als bei den beiden europäischen Arten. Die Mittelbinde des fahlen Cephalothorax ist braun, nicht schwärzlich-grau, keilförmig, nicht parallelseitig, längs der Mitte von einer scharfen, hellen Linie durchzogen. Das Sternum ist bräunlich, mit je 3 hellen Randpunkten jederseits und einer diffusen Aufhellung auf der vorderen Hälfte der Scheibe, also ähnlich wie bei *Ph. opilionoides*, nur ist die mittlere Aufhellung nicht so deutlich.

♀ : Körper 3,7 mm; Cephalothorax 1,2 mm lang und breit; Augengruppe 0,5 mm; Bein I 24,3 mm ($6,4 \pm 0,5 \pm 6,7 \pm 5,5 \pm 5,2$). Färbung wie beim ♂. Der verhornte Hinterrand des Geschlechtsfeldes ist kurz und breit, mindestens 4 mal so breit wie lang, prokurv, mit allmählich zugespitzten Seitenflügeln, in der Mitte hinten leicht eingebuchtet, vorn stumpf dreieckig vorragend, mit länglich elliptischem Tuberkel als Spitze.

Funde: Sian hian, Tcheuly, 11. V. 1914: 2 ♂; Tietsin, 2. III. 1933: 1 ♀; 13. VIII. 1934: 1 (im Leben rot).

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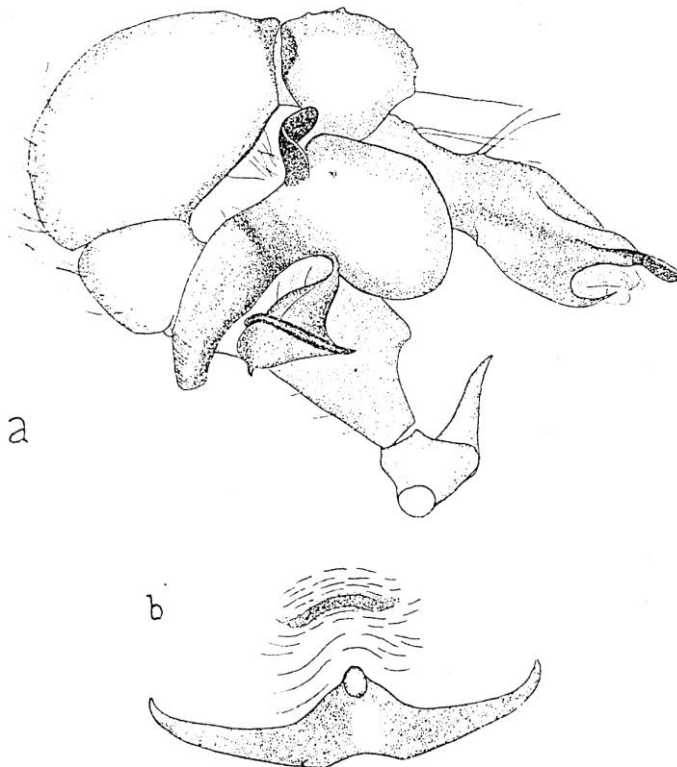


Fig. 12 *Pholcus affinis*, n. sp., a Palp des ♂, b Epigyne des ♀.

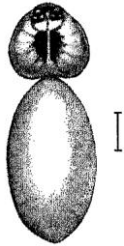
Yaginuma, T. 1960. Spiders of Japan in Colour. Hoikusha, Japan. Pp. 1-186.

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97. タイリクユウレイグモ *Pholcus opilionoides* (SCHRANK)

体長5mm。頭胸部黄褐色で中央後半に2個の褐色斑がある。腹部上面は淡黄色で青黄色の心臓斑がある。下面は黄色。胸板は中央に黄色斑が、周辺に円形黄色斑がある。イエユウレイグモに似るが腹部はやや丸みがある。分布：北海道・本州（高地）。

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97. タイリクユウレイグモ

Zhu, C. & Wang, F. 1963. Chinese Pholcidae and a new species. J. Jilin Med. Univ. 5(3): 461-466, pl. 1-2.

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***Pholcus opilionoides* (Schrank) 1781.**

(图版 I 图 1—3, 5—6, 9—10)

- 1781 Aranea o. Schrank, Enum. Ins. Austr. p. 530.
1834 P. phalangoides Hahn, Die Arachniden 2 p. 34 TF. 119.
1866 P. o. Simon, Ann. Soc. Ent. France (4) 6 p. 120 T. 2 F. 1—6.
1866 P. grossipalpus Simon, Ann. Soc. Ent. France (4) 6 p. 121 T. 2 F. 10.
1873 P. o.: Simon, Mem. Soc. Sci. Liege (2) 5 p. 231 (47)
1883 P. o.: Dahl, Schrift. Nat. Ver. Schlesw. Helst. 5 (2) p. 61.
1891 P. o.: Chyzer & Kulczynski, Aran. Hungar. I p. 149 T. 6 F. 20.
1902 P. o.: Bosenberg, Zoologica 14 (2—4) p. 219 T. 19 F. 210.
1910 P. o.: Lessert, Catal. Invert. Suiss. Araig. p. 87.
1913 P. o.: Kulczynski, Arachn. in: Velitchkovsky, Faun. Distr. Walouyky 10 p. 20 T. 1 F. 3, 4.
1914 P. o.: Simon, Arachn. de France 6 (1) p. 237, 243 f. 488—491.
1953 P. o.: Wiehle, Di Tierwelt Deutschlands T. 42 IX, p. 39.

♀: 体長4.0—5.1毫米，头胸部長1.15—1.4毫米。头胸部棕色，背面中央有两个对称的深棕色斑。腹部灰色，步足有較深的棕色环紋。腹柄背面邊緣、步足各节相連接处均为深棕色。头部隆突。腹部背面稍隆起，紡器部位向腹面突出。下唇近似半圆形，前緣横直。胸板梯形，后緣横直，不突出于二IV基节之間。胸板棕色，中央有一淡色斑，每側邊緣各有4个淡色斑。

8眼，前中眼为晝眼，其他6眼为夜眼；除前中眼外，其他6眼組成两个三角形；眼均位于隆起之眼丘上；自背面观察，二眼列均为后凹，后眼列較前眼列后凹厉害。中眼区梯形，前緣短于后緣，寬大于長。8眼中，以前中眼为最小，前中眼間距小于前中側眼間距，后中眼間距甚大于后中側眼間距，后中眼直徑大于后中眼間距的一半以上。

附节3爪，成对爪各有8—10个櫛齿，第三爪有1櫛齿。螯肢后齿緣有1齿，螯肢前面光滑无齿。

♂：体長4.0—4.6毫米，头胸部長1.1—1.2毫米。体似♀体。螯肢除后齿緣有1齿外，螯肢前面靠近內緣有1齿，齿尖朝向螯爪；外側緣約于螯肢全長一半的位置另有一齿，齿尖朝向螯肢基部，該齿之內側有1隆起。

两性均在戶内外織不規則網，蜘蛛倒悬于網上。雌蛛以螯肢啣卵袋。幽灵蛛之所謂卵袋，仅系膠狀物質將卵粘附在一起，呈桑葚狀，卵外无其他复盖物或有少許蛛絲。卵袋中有35—54个卵。

分 布：

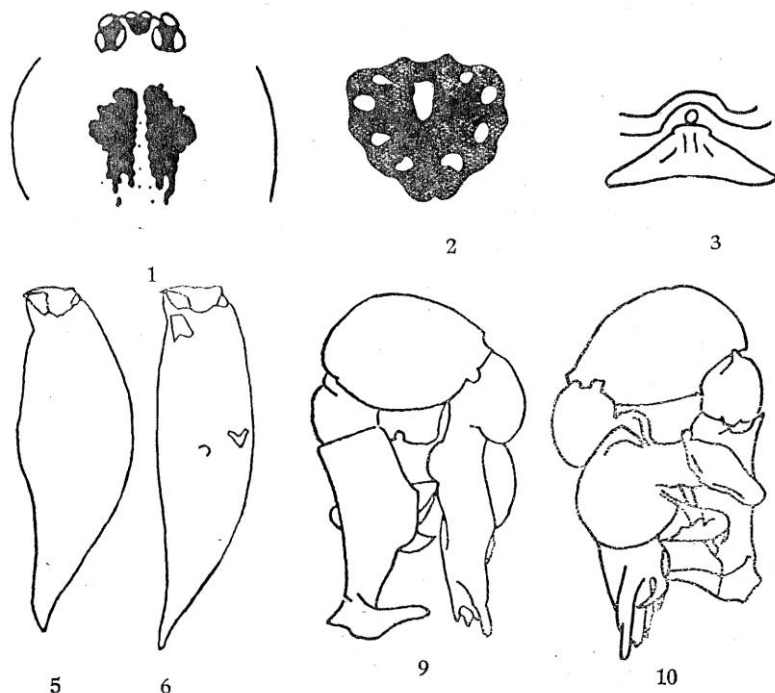
国内：北京（1880, Simon, E.; 8♀、2♂, 1934年6月15日，王鳳振）、陝西省临潼驪山（3♀、1♂, 1957年5月25日，朱傳典, 3051号）、辽宁省綏中（4♀、1♂, 1961年7月6日，朱傳典, 5061号）、吉林省長春（10♀、8♂, 1956年6月, 1352号；2♀, 1956年6月28日, 1178、1206号；1♀, 1956年7月8日, 1176号；2♀, 1956年8月26日, 1064号；9♀, 1956年9月10日, 1024—25、1027号；1♀, 1961年7月25日, 1350号；2♀、1♂, 1961年9月23日；4♀、1♂, 1962年8月11日, 1351号；12♀、1♂, 1962年8月18日, 1349号）；

北营房（1936, Saito, S.）、

苏州（1924, Chamberlin）。

国外：法国、匈牙利、苏联、中欧。

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長踦幽灵蛛 (*Pholcus opilionoides*):

图1 头胸部背面之斑紋；图2 胸板之斑紋；图3 生殖嚢；图4 雌性螯肢前面；图5 雌性螯肢前面；图6 雌性螯肢前面；图7 触肢器官外面；图8 触肢器官內面。

Kaston, B. J. 1977. Supplement to the spiders of Connecticut. J. Arachnol. 4: 1-72.

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Add

Pholcus opilionoides (Schrank)

Aranea opilionoides Schrank 1781, Enum. Ins. Austriae indig., p. 530 *Pholcus manuei* Gertsch 1937, Amer. Mus. Novitates 936, p. 1. f. 6-7. *Pholcus opilionoides* :Wiehle 1953, Tierw. Deutschland, Teil 42, Spinnentiere 9:39, f. 93-99.

Length of female 4.3 to 5 mm, of male 3.3 to 4.5 mm. This species may be distinguished from the much larger *phalangioides* in having the PME much closer together, the separation being much less than two diameters. Also, the AME are much closer to the ALE. The sternum is grayish brown with a much lighter longitudinal mark in the middle, while in *phalangioides* it is concolorous. In the female the epigynum is only slightly wider than long while in *phalangioides* it is twice as broad as long. In the male the spur on the palpal trochanter is here curved, though straight in *phalangioides*. This species has not been recorded from Connecticut, but is known from Long Island, N.Y.

28. *Pholcus opilionoides* (SCHRANCK, 1781)

대륙유령거미

[Pl. 14 Fig. 28 우, 김천, 15/VIII, 1960. H. J. Lee]

암컷은 배갑이 연한 황백색이고, 가슴 등면의 암황갈색 무늬는 일견 집유령거미의 무늬와 비슷하나 정중선에서 좌우로 나누어져 있어서 뚜렷이 이것과 구별된다. 또 이마에는 1쌍의 암황갈색 줄 무늬가 있다(집유령거미에는 없다). 눈은 눈두덩 위에 집유령거미와 같은 방식으로 배열되어 있다.

위턱은 갈색이고 밀마디 기부는 좌우가 서로 유착하였다. 아랫입술은 암황갈색이고, 가슴판에 유착하며 그 사이에 홈줄이 없다. 가슴판은 나비가 넓고 뒤 끝은 폭 넓게 네째 다리 밀마디 사이에 돌출하였으며 뒷가장자리는 약간 앞으로 굽었울 뿐 거의 직선을 이룬다. 가슴판은 암황갈색이고 정중선 전반부의 세로 무늬와 각 다리의 밀마디와 맞서는 둥근 무늬는 황갈색이다.

더듬이다리¹와 다리는 연한 황갈색이지만 끝으로 가면 약간 갈색이 진해진다. 넓적다리²마디의 끝 부분, 무릎마디, 종아리마디의 양 끝 부분에 암황갈색의 고리 무늬를 가지고 있으나 개체에 따라 뚜렷하지 않은 것도 있다.

다리의 센털은 집유령거미처럼 길고 뚜렷하지 않다.

배는 달걀 모양을 하고 황백색이며, 특별한 무늬를 가지는 일이 없다. 암컷의 외부 생식기는 적갈색이고 밀번의 길이와 높이의 비는 33 : 13으로 높이는 밀번 길이의 약 39%에 이른다.

역시 사이젖은 없고 실젖은 암황갈색이다.

수컷은 눈두덩의 모양이 암컷과 같고 집유령거미의 수컷처럼 양쪽 3개의 눈이 몰려 있는 곳이 돌출하는 일이 없다. 눈두덩 뒤편에 역시 털이 나 있으나 집유령거미의 털처럼 굵지 않았다.

더듬이다리 밀마디의 모양은 소빨 모양을 이룬다.

[몸길이] : 우——몸 길이 4.07 mm, 배갑 길이 1.43 mm, 배갑 나비 1.31 mm, 배 길이 3.23 mm, 배 나비 2.09 mm ; ♂——몸 길이 4.29 mm, 배갑 길이 1.39 mm, 배갑 나비 1.39 mm, 배 길이 2.86 mm, 배 나비 1.60 mm

[채집지] : 강원도·광릉·청량리·수원·속리산·범주사·소천·영양·영덕·안동·상주·김천·용연사·대구·경주·청도·해인사·화엄사·서귀포·도동·저동 ; 감악산<남궁 준·윤 경일, 1975>·춘천·삼악산<남궁 준·백 남극, 1973>·치악산<남궁 준·윤 경일, 1976>·충주<남궁 준, 1964>·민주지봉<남궁 준, 1972>

[분포] : 한국·일본·유럽 등 구북구에 널리 분포한다.

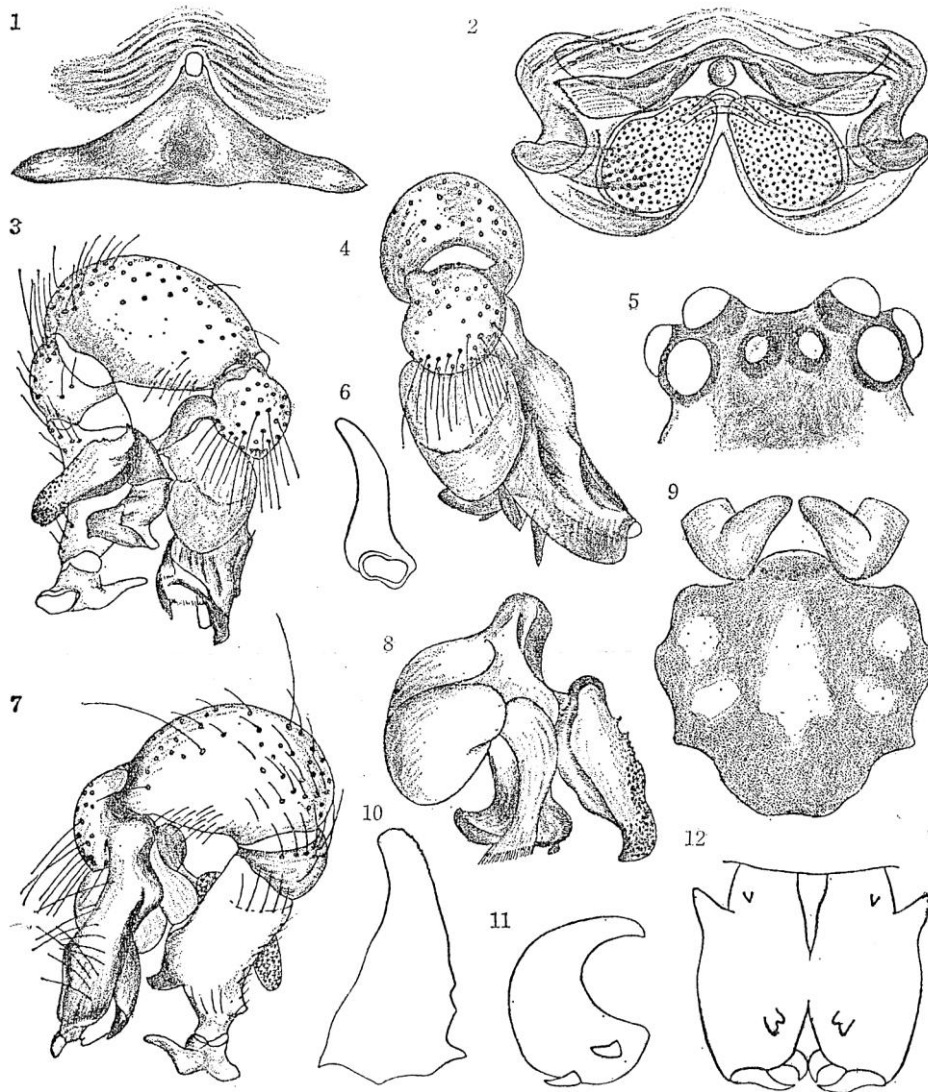


그림 96. 대륙유령거미(*Pholcus opilionoides*)

1: 암 외부 생식기(epigynum) 2: 암 내부 생식기(genitalia) 3: 더듬이다리 기관, 왼쪽, 안면(palpal organ, left, inner view) 4: 더듬이다리 기관, 왼쪽, 등면(palpal organ, left, dorsal view) 5: 눈두덩(ocular tubercle) 6: 수컷의 더듬이다리의 도래마디, 배면(trochanter of male palp, ventral view) 7: 더듬이다리 기관, 왼쪽, 바깥면(palpal organ, left, ectal view) 8: uncus, appendix 및 bulb 를 배면에서 본 것(uncus, appendix and bulb, ventral view) 9: 수컷의 가슴판, 아래턱 및 아랫입술(sternum, endite and labium of male) 10: uncus, 옆면(uncus, lateral view) 11: uncus, 등면(uncus, dorsal view) 12: 수컷의 위턱(chelicerae of male)

Paik, K. Y. 1978. The Pholcidae (Araneae) of Korea. Educational Journal Kyungpook Univ. 20(1978): 113-135.

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Tab.1. The author and species reported for Korean Pholcids.

Species \ Author	Kishida('36)	Kaneyama('41)	Paik, K. Y.('53)	Paik, K. Y.('54)	Paik, K. Y. & Kim('56)	Paik, K. Y.('57)	Namkung, J.('64)	Choi & Namkung('66)	Paik, K. Y.('67)	Paik, K. Y. et al.('69)	Paik, W. H. & Woo('70)	Cav. Soc. Kor.('70)	Namkung, J.('72)	Namkung, J. et al.('72)	Namkung & N. Paik('73)	Namkung & Yoon('75)	Namkung & Yoon('76)
<i>Spermophora</i> sp.						○			○								
<i>Pholcus</i> sp.			○						○								
<i>P. crypticolens</i>	○				○		○	○	○	○	○	○	○	○	○	○	○
<i>P. opilionoides</i>		○			○		○		○		○		○	○	○	○	○
<i>P. phalangioides</i>				○	○		○		○								

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Pholcus opilionoides (Schranck, 1781)

specimens examined. Kwangreung(26♀♀, 12Y♀♀, 8♂♂, 10Y♂♂, 4—6—Ⅸ—1964, Y.K.Kim; 6♀♀, 1♂, 20—Ⅷ—1969, E.T.An), Suwon(1♀, 14—Ⅳ—1946, K.Y.Paik), Cheungrang-ri, Seoul(1♀, 3—Ⅹ—1960, I.H.Yoo), Cheungganjeung, Kanseung, Kanseung-myeon, Koseung-gun, Kangwon-do(11♀♀, 7♂♂, 14—Ⅷ—

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1964, K.Y.Paik), Kangwon-do(1♀, 1♂, 15—Ⅷ—1955, T.R.Kim), Mt. Sokkri (2♀♀, 28—Ⅶ—1957, K.Y.Paik), Socheun, Bongwha-gun, Kyungpook(1♀, 1♂, 20—Ⅸ—1963, E.K.Jeung), Yeungyang, Kyungpook(19♀♀, 10♂♂, 5—Ⅷ—1964, K.Y.Paik), Andong city(18♀♀, 5♂♂, 3—8—Ⅷ—1959, S.E.Kim), Yeungdeuk, Kyungpook(12♀♀, 8♂♂, 1Y♂, 15—Ⅷ—1956, T.S.Park), Sangjoo(5♀♀, 4♂♂, 15—Ⅷ—1956, I.H.Son), Kimcheun(5♀♀, 1♂, 10—Ⅹ—1956, S.T.Kim; 1♀, 15—Ⅷ—1956, H.K.Kim; 13♀♀, 3♂♂, 15—Ⅷ—1963, H.S.Jeun; 33♀♀, 19♂♂, 15—Ⅷ—1960, H.J.Lee), Yongyeun-sa, Dalseung-gun, Kyungpook(1♀, Ⅴ—1973, 1♀, 1♂, 15—Ⅷ—1973, Y.S.Hong), Mt. Pargong(1♀, 1Y♀, 3♂♂, 30—Ⅶ—1958, 1♀, 27—Ⅶ—1959, 1♂, 18—Ⅶ—1965, 1♀, 1♂, 15—Ⅷ—1973, K.Y.Paik; 1♀, 3—Ⅶ—1965, M.S.Song; 1♀, 1♂ 19—Ⅷ—1960, Y.K.Kim; 2♂♂, 11—Ⅷ—1977, Y.M.Shin), Mt. Apsan, Taegu(1♂, 10—Ⅶ—1955, I.H.Son; 1♀, 29—Ⅷ—1959, 1♂, 15—Ⅷ—1956, K.Y.Paik), Mt. Kaya(1♀, 17—Ⅶ—1962, K.Y.Paik), Keungjoo(1♂, 25—Ⅴ—1963, Y.K.Kim), Cheung-do(1♂, 10—Ⅷ—1956, H.S.Park), Mt. Jiri(1♀, 10—Ⅷ—1959, H.S.Park; 4♀♀, 1♂, 26—31—Ⅶ—1963, K.Y.Paik), Seugwipo, Jejoo-do(1♀, 31—Ⅶ—1969, K.Y.Paik), Jejoo city(7Y♀♀, 30—Ⅶ—1964, K.Y.Paik), Jeudong, Ulreung-do (8 Y♀♀, 16—Ⅷ—1964, Y.K.Kim), Ulreung-do(4♀♀, 2♂♂, 15—Ⅷ—1952, M.J.Lee; 1♀, 5—6—Ⅷ—1955, C.E.Lee)

Distribution. Korea, Jejoo-do Isl., Ulreung-do Isl., Japan, (Palaeartic region)

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长踦幽灵蛛 *Pholcus opilionoides* (Schrank, 1781)

雌蛛体长5毫米。背甲棕色，头部隆起，胸部背面中央有2个对称的深棕色斑纹(图71, 1)。8眼均具眼丘，前中眼黑色，其余6眼白色，前侧眼与后中侧眼组成三角形眼群，并位于隆起之眼丘上，前眼列微后曲；后眼列强后曲，中眼区梯形，宽大于长，前边小于后边。前中眼间距小于前中侧眼间距；后中眼间距大于后中侧眼间距。螯肢构造与隐匿幽灵蛛同。下唇近似半圆形，前缘横直。胸板呈心形，前缘凸出，后端窄而横直，色泽灰黑，中央有一淡黄色斑，两侧缘各有4个淡黄色斑(图71, 2)。腹柄背面边缘，步足各节相连接处均为深棕色。步足具棕色轮纹。腹部灰色，背面稍隆起。纺器向腹面突出，外雌器如图71, 3所示。

雄蛛体长4.5毫米，形态构造与雌蛛同，触肢器如图71, 4-5所示。

见于旱田作物间及果园，稻区也有分布。织不规则网，蜘蛛倒悬于网上，若受惊动，即在網上颤动。雌蛛以螯肢衔卵块。

分布：山东（临沂、昌维、济宁、惠民）、辽宁、陕西、吉林、河南（开封、中牟、杞县）、北京、江苏、新疆（吐鲁番、达坂城、伊犁、昭苏、霍城、乌苏、石河子）。

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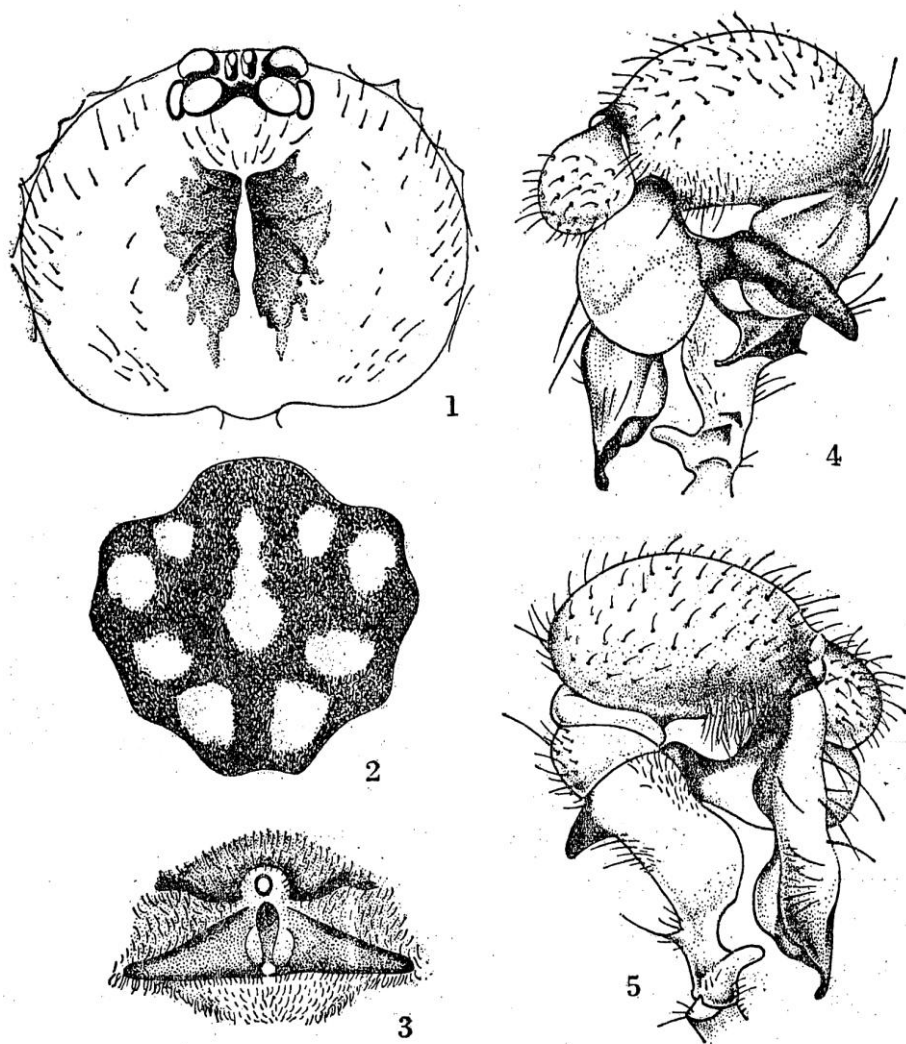


图71 长踦幽灵蛛 *Pholcus opilionoides*

1.雌蛛头胸部背面观 2.胸板 3.雌蛛外雌器之外形 4.雄蛛触肢器之内侧观 5.同前，外侧观 (编者)

Zhu, M.S., Tu, H.S. & Shi, J.G. 1986. Spiders of the genus *Pholcus* (Araneae, Pholcidae) from Shanxi and Shanxi Provinces, China, with description of a new species. J. Hebei Normal Univ. 1986(2): 118-124.

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Pholcus affinis Schenkel, 1953: 23—34, fig.12.

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雌蛛体长4.48毫米左右。头胸部淡黄色，背面有两个对称的棕色斑。头部隆起，8个眼均位于该隆起上。8眼均着生在眼丘上，除前中眼外，其它6个眼组成左右两个三角形。第2眼列稍长于第一眼列，前中眼间距 < 前中侧眼间距，前中眼最小，中眼区梯形，后边 > 前边(0.41 : 0.24)。下唇近似半圆形，前缘横直。胸板棕色，近似半圆形，中央有1个及每侧各有3个淡色斑。螯肢后齿堤有1齿，前齿堤无齿。步足淡黄色，有棕色环纹。腹部黄灰色，背面无斑纹。

雄蛛体长4.17毫米左右。体色斑和雌蛛相似。螯肢前面共有3个齿状突，后齿堤有1齿。

已知分布：江苏、陕西、北京、辽宁、吉林、河北。

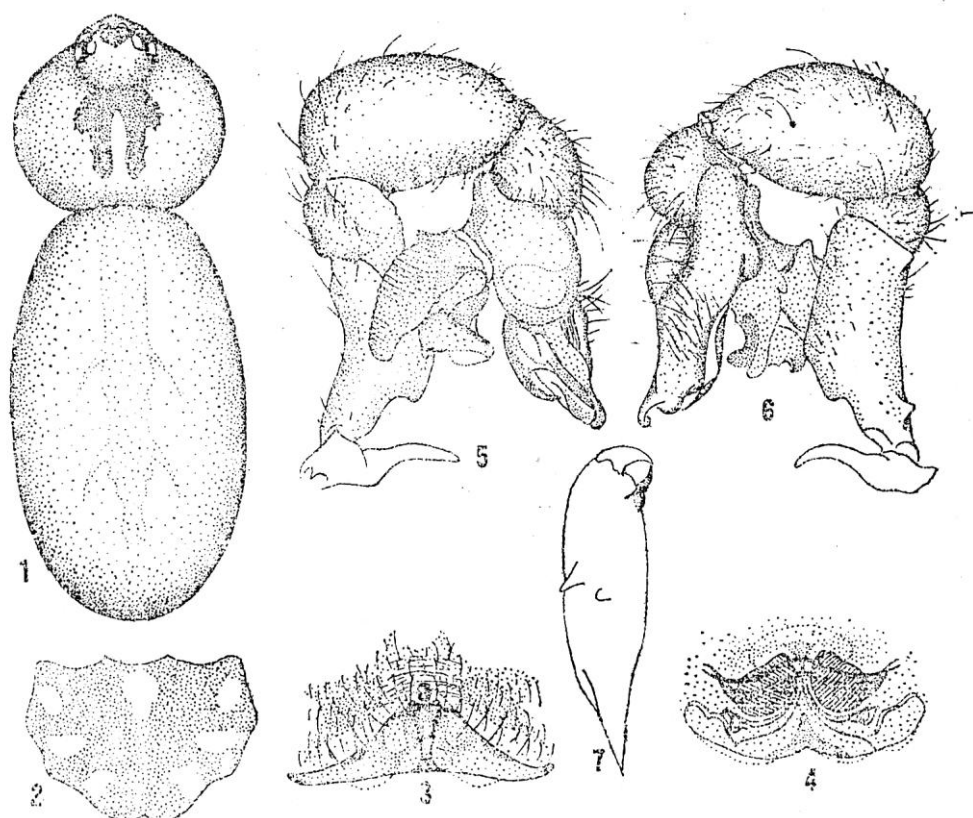


图1 近亲幽灵蛛 *Pholcus affinis*

- 1、雌蛛背面观 2、胸板 3、外雌器外面观 4、同前，内面观
5、雄左触肢器外侧观 6、同前，内侧观 7、雄左螯肢

Pl. 6



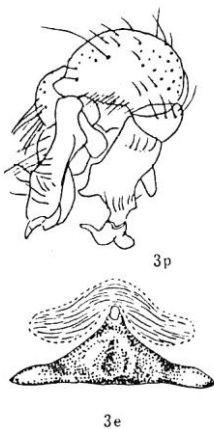
12. タイリクユウレイグモ

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12. タイリクユウレイグモ *Pholcus opilionoides* (SCHRANK)

体長 5 mm. 頭胸部は褐色で、中央後半に 2 個の褐色斑がある。胸板は淡褐色で中央が黄色、周辺に円形黄色斑が並ぶ。腹部背面は淡黄色で、青黄色の心臓斑がある。下面は黄色。イエユウレイグモに似るがやや小形で腹部は丸みがある。(Fig. 17). 分布：北海道、本州(高地)。

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3. タイリクユウレイグモ *P. opilionoides*

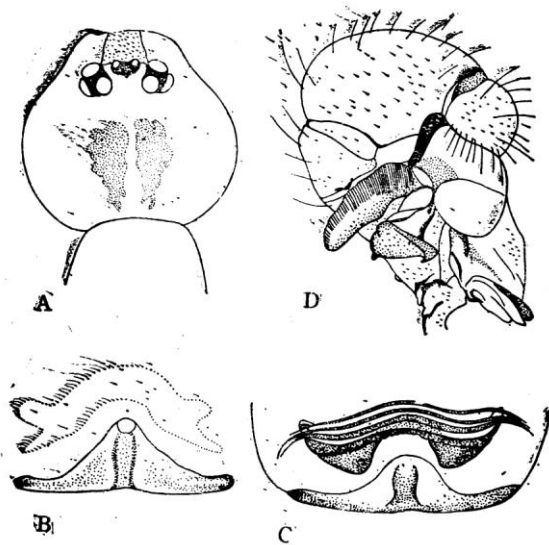


图 71 近亲幽灵蛛

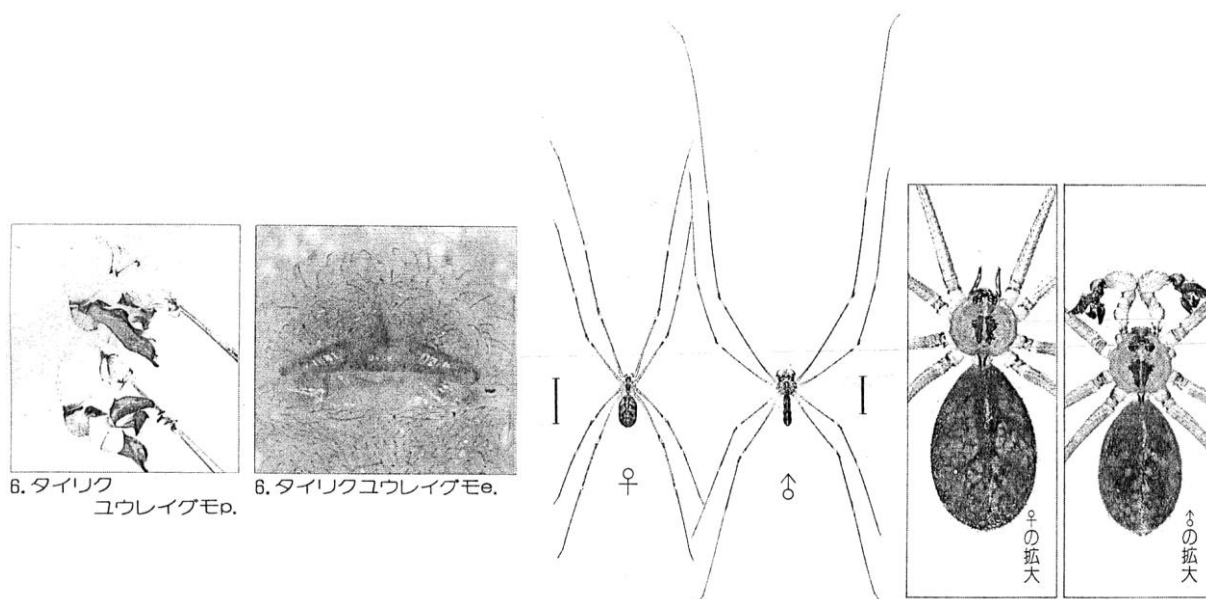
A. 雌蛛头胸部 B. 外雌器 C. 外雌器内面观 D. 雄蛛左触肢内侧观

近亲幽灵蛛 (*Pholcus affinis* Schenkel, 1953) (图71)

雌蛛长 4.0—5.6 毫米。头胸部黄橙色，胸部中线两侧有两块褐斑。额部长，向前倾斜，中部有两条褐色纵带。眼集中位于一个突起的眼丘上。前中眼小，为昼眼；其余 6 眼大，为夜眼，在突起的两端，三眼排列成三角形。螯肢后齿堤有一齿，前面无齿。步足细长，橙色，末端有 3 爪，上爪各有 8—10 个栉齿，下爪有一栉齿。胸板棕色，中央有一淡色斑，两侧各有 3 个淡色斑。腹部卵圆形，灰褐色，无斑纹。纺器朝向腹面。

雄蛛长 3.8—4.6 毫米。螯肢前部背面近内侧有一粗齿，齿的末端有 3 个小锯齿，朝向内侧。螯肢全长的一半位置处在背面外侧和中部各有突起。腹部较雌蛛窄小。

多在室内结不规则网，蜘蛛倒悬于网上。雌蛛以螯肢衔卵袋。卵袋透明，呈桑椹状，含卵约 35—54 个。已知分布于河北、北



近亲幽灵蛛 (*Pholcus affinis* Schenkel, 1953) (图55, 1—4; 57)

Pholcus affinis Schenkel, 1953: 23—24, fig. 12; 宋大祥, 1987: 109—110, 图71。

雌蛛体长4.40—6.00毫米。头胸部黄橙色，胸部中央有2个对称的褐色纵斑，额部弧形且向前斜伸。8眼均集中于一个突起的眼丘上，各眼具黑环，前中眼小为黑色，其余6眼等大，均为白色，前侧眼与后中眼组成两个三角形眼群，从背面观察，前眼列微后曲，并稍短于后眼列，前中眼间距小于前中侧眼间距，后眼列略后曲，后中眼间距大于后中侧眼间距，中眼区宽大于长，后边大于前边。螯肢棕色，前齿堤无齿，后齿堤1齿。颚叶及下唇皆显黄色。胸板棕褐色，中央有一淡黄色斑纹，两侧各有3个淡黄色斑。步足细长，黄色，末端具3爪，上爪下有梳齿8—10枚。腹部卵圆形，呈浅黄色，无任何斑纹。纺器朝腹面。外雌器如图55，1—2所示。

雄蛛体长3.50—4.30毫米。螯肢前部背面近内侧有一粗齿，齿的末端有3个小锯齿，螯肢全长的一半位置处在背面外侧和中部各有1突起。触肢器如图55，3—4。其它形态结构皆同雌体。

布网于户内。

地理分布：达板城（1050米），1982年7月4日（胡金林）；特克斯（1100米），1982年7月7日（吴文贵）；伊宁（1300米），1982年7月20日（吴文贵），霍城（1100米），1982年7月28日（胡金林）；石河子（500米），1983年7月9日（吴文贵）；沙湾（500米），1984年8月（许浩然）。国内尚分布于内蒙古、陕西、河北、北京、吉林、江苏。

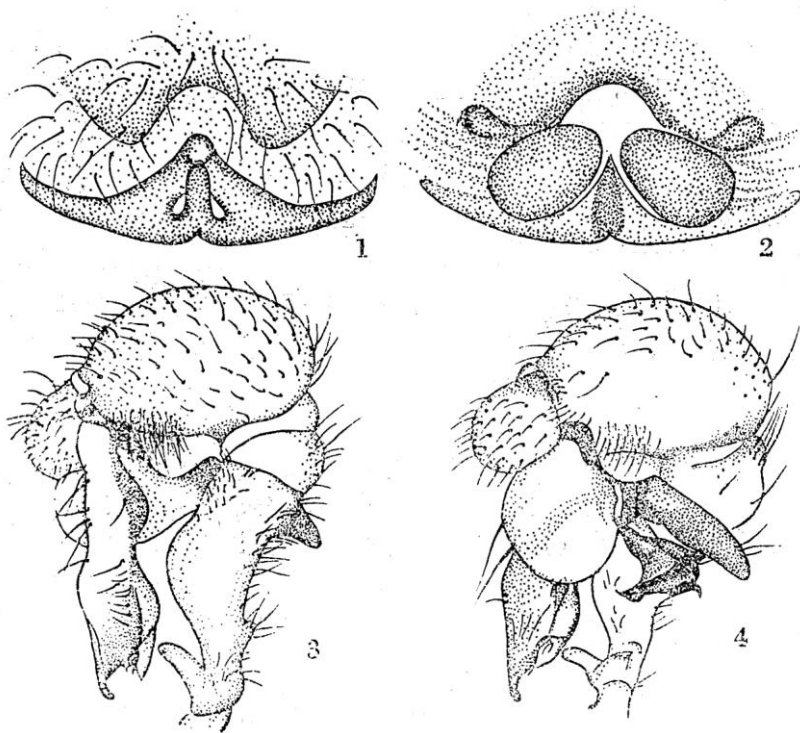


图55 近亲幽灵蛛、新疆长纺器蛛

1—4. 近亲幽灵蛛 (*Pholcus affinis*)

1. 外雌器外形 2. 外雌器内部结构 3. 雄蛛右触肢器外侧观 4. 同3, 内侧观

(21) 近亲幽灵蛛

图 21 图版 11—21

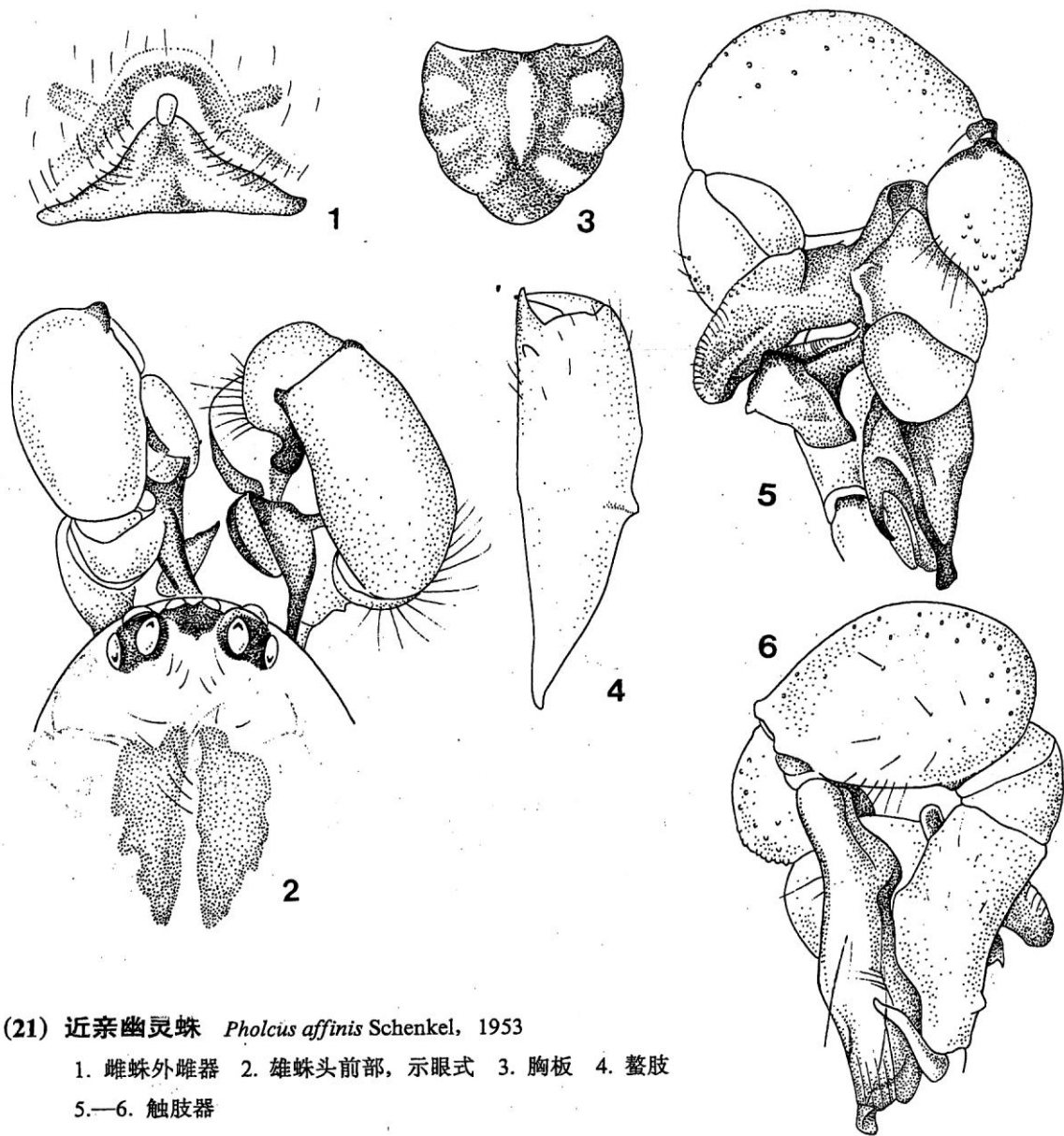
Pholcus affinis Schenkel, 1953

雌蛛体长 4—5 毫米，雄蛛体长 4—4.6 毫米。

雌雄蛛头部隆起，8 眼，前中眼为昼眼，其他 6 眼均为夜眼，组成两个三角形；均位于隆起之眼丘上。胸板棕色，中央有淡色斑一个，两侧缘各有淡色斑四个。

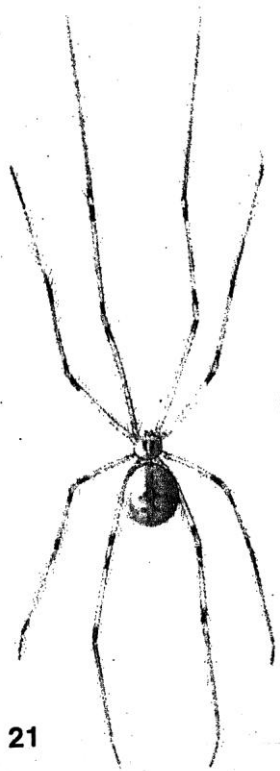
雌雄蛛均在室内外结不规则网，蛛倒悬于网下。卵袋透明，系胶状质将卵粒粘附在一起，呈桑葚状。雌蛛以螯肢衔卵袋，卵袋中有 32—54 粒卵，卵乳白色。北京地区 11 月上、中旬在室内仍可见到衔卵袋倒悬于网下的雌蛛。

分布 北京、内蒙、辽宁、吉林、江苏、陕西。



(21) 近亲幽灵蛛 *Pholcus affinis* Schenkel, 1953

1. 雌蛛外雌器 2. 雄蛛头前部，示眼式 3. 胸板 4. 螯肢
5.—6. 触肢器



21



21a

21) 近亲幽灵蛛 *Pholcus affinis* Schenkel
a. 雌蛛背面观

Chen, X. & Gao, J. 1990. The Sichuan Farmland Spiders in China. Sichuan Sci. Techn. Publ. House, Chengdu, China. Pp. 1-226; pl. 1-31.

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近亲幽灵蛛 *Pholcus affinis* Schenkel, 1953 (图版 4—23)

雌蛛体长4.5~5毫米。背甲卵圆形，棕黄色，头部隆起，背甲正中央有对称的褐色大斑纹。8眼均具眼丘，前中眼黑色，位于头前端正中，左右两侧稍向后各有3眼1组，且均大于前中眼。螯肢特征与隐匿幽灵蛛相同。下唇近似半圆形。胸板心形，前缘凸出、后端狭，灰黑色，中央有黄色纵条斑，两侧缘各有4个黄色斑块。腹柄边缘深褐色。步足细长，棕黄色，各节相连处色深。腹部灰色。外雌器如图41—a。

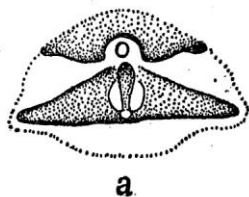


图41 近亲幽灵蛛
a. 外雌器外形 b. 雄蛛触肢器
(仿胡金林)

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雄蛛体长4.5毫米，形态与雌蛛同。触肢器如图41—b。

此蛛常在旱田作物、果树、林木或稻田边缘织不规则网，蜘蛛倒悬网上，受惊动后即在网上颤动。雌蛛用螯肢衔卵袋。

分布：四川、吉林、辽宁、新疆、北京、陕西、山东、河南、江苏。

Chen, Z. & Zhang, Z. 1991. Fauna of Zhejiang. Araneida. Zhejiang Sci. Tech. Publ. Pp. 1-356; pl. 1-8.

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拟盲幽灵蛛

Pholcus opilionoides (Schrank) (图64)

别名 长踦幽灵蛛

形态 雌蛛体长5毫米。头胸部棕色，中央后半部两侧有2个褐色斑。头部隆起。8眼均具有眼丘，前中眼黑色，其余6眼白色，前后侧眼和后中眼在两侧各组成三角形眼群，并位于隆起之眼丘上。前眼列稍后曲，后眼列后曲。中眼区梯形，宽大于长，前边小于后边。螯肢似隐股幽灵蛛。下唇近似半圆形，前缘横直。胸板心形，前缘凸出，后缘横直、灰黑色，中央有淡黄色纵斑，两侧各有对称排列的4个圆形淡黄色斑。腹柄背面边缘、步足节间均呈深棕色。步足有轮纹。

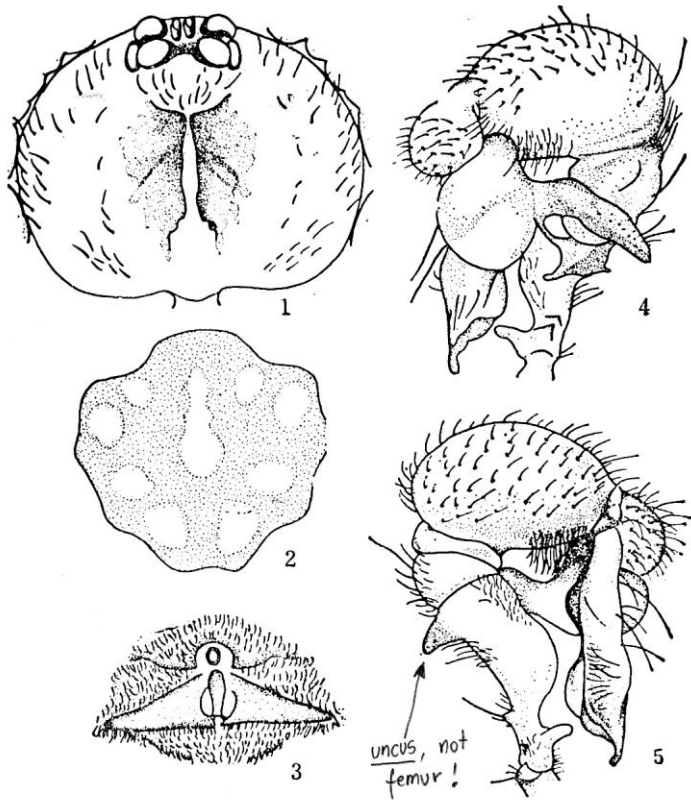


图64 拟盲幽灵蛛 *Pholcus opilionoides* (Schrank)

1. 雄蛛头胸部背面观 2. 胸板 3. 外雌器外面观 4. 雄蛛触肢器内侧观 5. 雄蛛触肢器外侧观

腹部灰色，背面稍隆起状。

雄蛛体长4.5毫米。形似雌蛛。

习性 本种多栖息于寺院周围，张不规则网，蜘蛛倒悬于网上，若受惊动，即在网上颤

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动。雌蛛以螯肢衔卵囊。

分布 省内：丽水。国内还分布于吉林、辽宁、山东、江苏、安徽、河南、陕西、新疆。

近亲幽灵蛛

Pholcus affinis Schenkel (图67)

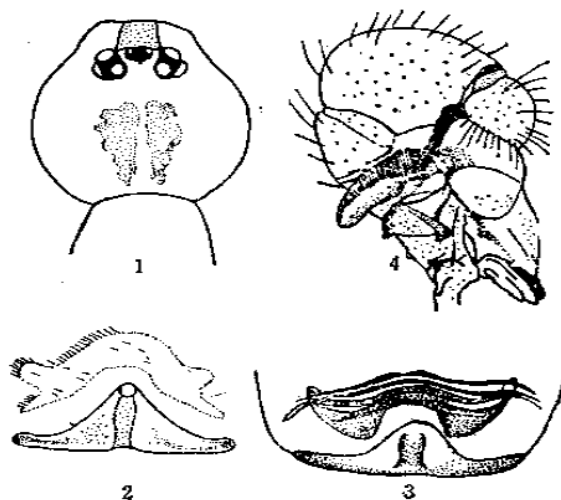
形态 雌蛛体长4~5.3毫米。头胸部淡黄色，胸部中线两侧有2块褐斑。8眼集中位于一个突起的眼丘上。前中眼小，为昼眼；其余6眼大，为夜眼，在突起的两端，3眼排列成三角形。第2眼列稍长于第1眼列；前中眼间距小于前中侧眼间距；中眼区梯形，后边大于前边。螯肢后齿堤有1齿，前面无齿。胸板棕色，中央有1淡色斑，两侧各有3个淡色斑。步足细长、橙色，末端有3爪，上爪各有8~10个栉齿，下爪有1栉齿。

腹部卵圆形、灰褐色，无斑纹。纺器朝向腹面。

雄蛛体长3.8~4.5毫米。体色似雌蛛。螯肢前部背面近内侧有1粗齿，齿末端有3个小锯齿朝向内侧。在螯肢的一半位置，处于背面外侧和中部各有1个突起。腹部较雌蛛窄小。

习性 本种多栖息于屋内，张不规则网，蜘蛛倒悬于网上。雌蛛以螯肢衔卵囊，卵囊透明状。

分布 省内：丽水。国内还分布于河北、内蒙古、吉林、辽宁、江苏。

图67 近亲幽灵蛛 *Pholcus affinis* Schenkel

1.雌蛛头胸部 2.外雌器外面观
3.外雌器内面观 4.雄蛛左触肢器内侧面观

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

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***Pholcus affinis* Schenkel, 1953 (figs. 11H, 22D—G)**

Pholcus affinis Schenkel, 1953: 23, f. 12; Zhu & Shi, 1983: 66, f. 54; Zhu, Tu & Shi, 1986: 118, f. 1; Song, 1987: 109, f. 71; Zhang, 1987: 58, f. 42; Hu & Wu, 1989: 74, f. 55; Feng, 1990: 46, f. 21; Chen & Gao, 1990: 39, f. 41; Chen & Zhang, 1991: 76, f. 67.

Distribution: Zhejiang, Jiangsu, Sichuan, Shaanxi, Shanxi, Hebei, Inner Mongolia, Liaoning, Jilin.

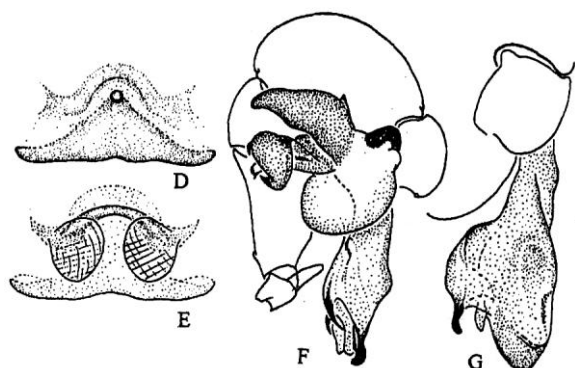
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***Pholcus opilionoides* (Schränk, 1781)**

Pholcus opilionoides: Chamberlin, 1924: 4; Zhu & Wang, 1963: 463, f. 1—3, 5, 6, 9, 10; Hu, 1984: 78, f. 71; Chen & Zhang, 1991: 74, f. 64.

Distribution: Zhejiang, Jiangsu, Beijing, Liaoning, Jilin; Holarctic.

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Marusik, Y. M., Koponen, S. 2000. New data on spiders (Aranei) from the Maritime Province, Russian Far East. *Arthropoda Selecta* 9(1): 55-68.

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Pholcus affinis* Schenkel, 1953*

Song et al., 1999: f. 11h, 22d-g.

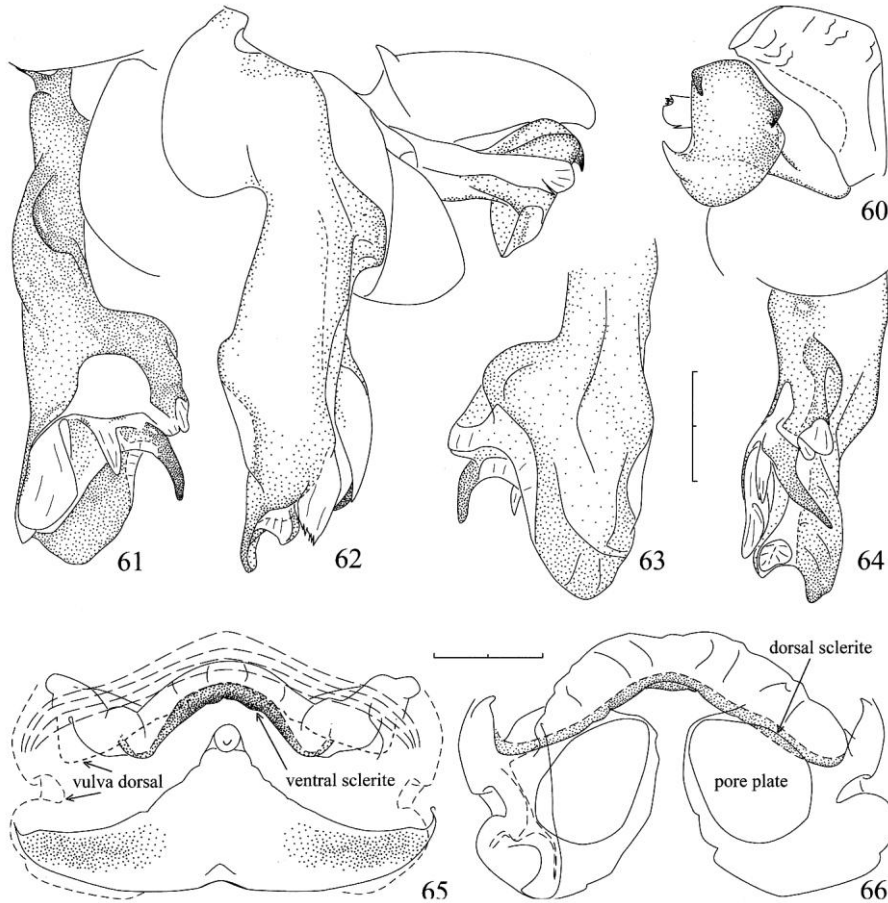
Material examined: 1 ♀ 2 ♂♂, Lazo Town, 43°22.7'N 133° 54'E, in buildings, 11.1998–03.1999, YS.

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COMMENTS. The first record in Russia and the northernmost locality in the range, earlier known only from China [Song et al., 1999].

Senglet, A. 2001. Copulatory mechanisms in *Hoplopholcus*, *Stygopholcus* (revalidated), *Pholcus*, *Spermophora* and *Spermophorides* (Araneae, Pholcidae), with additional faunistic and taxonomic data. Mitt. schweiz. Ent. Ges. 74: 43-67.

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Figs 60-66. *Pholcus manuli*; 60: male bulbal apophyses, prolateral view; 61: Left procursus ventral view; 62: Id., retrolateral view with bulbus, femur removed; 63: Id., dorsal view; 64: Id., prolateral view; 65: Vulva and genital plate, ventral view; 66: Vulva dorsal view. Scale, 0.2 mm.

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Pholcus manuli GERTSCH, 1937 (Figs 60-66)

Pholcus affinis SCHENKEL 1953, **syn. n.** One male paratype in the collection SCHENKEL (Natural History Museum Basel) examined.

Material: USA, New Jersey, Lambertville, 40°22'N, 74°56'W, leg. Wilton Ivie, 10/50, 5♂, 5♀ (det. Gertsch 79).

KASTON (1977: 6) synonymized this species with *P. opilionoides*, but he did not give any reason for doing so and probably did not see type material. He cited WIEHLE (1953: 39, Figs 93-99). WIEHLE's figures of *P. opilionoides*, compared with those of GERTSCH clearly separate the two species.

The material studied completely correspond with the original description. I restrain myself to give detailed drawings of the vulva and male pedipalp (Figs 60-66).

Zhang, F., Zhu, M.S., Song, D.X. 2006. A review of pholcid spiders from Tibet, China (Araneae, Pholcidae). J. Arachnol. 34: 194-205.

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Pholcus manuei Gertsch 1937

Pholcus manuei Gertsch 1937: 1, figs. 6–7; Senglet 2001: 62, figs. 60–66.

Pholcus affinis Schenkel 1953: 23, figs. 12a–b; Song et al. 1999: 52, figs. 11H, 22D–G; Hu 2001: 81, figs. 7.1–4 (first synonymized with *P. manuei* by Senglet in 2001).

Type material.—*Pholcus manuei*: the type specimens from New Jersey are deposited in the American Museum of Natural History, New York (not examined).

Pholcus affinis: 1 male paratype from Tcheuly of China is deposited in the Natural History Museum of Basel, Switzerland, examined by Senglet (2001); other type material unknown.

Material examined.—None from Tibet.

Description.—See Gertsch (1937) and Hu (2001).

Distribution.—China: Tibet (Gyirong), Hebei, Zhejiang, Jiangsu, Sichuan, Shannxi, Shanxi, Inner Mongolia, Liaoning, Jilin; Russia, Japan, U.S.A.

Remarks.—Judging from the figures drawn by Hu (2001), we are confident that this species is correctly identified and it is confirmed from Tibet.

Cutler, B. 2007. The identity of the small, widespread, synanthropic *Pholcus* (Araneae, Pholcidae) species in the northeastern United States. Trans. Kansas Acad. Sci. 110: 129-131.

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Pholcus manuei and not *P. opilionoides* is the smaller of the two synanthropic *Pholcus* of the northeastern and midwestern United States. Figures are provided for distinguishing *P. manuei* from *P. opilionoides*, a Eurasian species sometimes confused with *P. manuei*.

"All the citations of *P. opilionoides* Schrank from eastern USA examined to date are misidentifications of *P. manuei*" - Baptista (1998)

Pholcus is a genus of pale, elongate spiders with thin, extremely elongated legs. There are two common *Pholcus* species associated with manmade structures in the northeastern quadrant of the 48 conterminous United States. One of these is the large *Pholcus phalangioides* (Fuesslin 1775) with a body length greater than 6 mm. The other is smaller with a body length less than 5 mm. This latter species is being determined as *P. opilionoides* (Schrank 1781), as conveyed to me informally by colleagues. None of the small synanthropic *Pholcus* I examined belong to this species. Instead all specimens examined belong to *P. manuei* Gertsch 1934, as Baptista recognized in the above quote from a meeting abstract concerning his observations. While there are descriptions and illustrations of the two species, the best are in foreign publications (Huber 1995, Senglet 2001, Wiehle 1953) and may not be readily available to those working on faunal lists. Kaston (1977) contributed to the confusion by synonymizing *P. manuei* with *P. opilionoides*, and noting its occurrence (as *P. opilionoides*) on Long Island, New York. Senglet (2001) formally removed *P. manuei* from the synonymy of *P. opilionoides*. It should be noted that Huber (2005) mentions *P. manuei* from the United States, but not *P.*

opilionoides. The purpose of this note is to provide figures of a couple of characters that allow for easy differentiation between the two species, and can be seen at relatively low magnification, such as a triplet hand lens of 10-15X power. These are the structure of the procurus which is the sclerotized retrolateral paracymbium of the male palpus, and of the triangular plate of the female epigynum (see Figure 1). Note that the callosity on the ventral edge of the procurus is relatively closer to the base of the procurus in *P. manuei* than is the callosity in *P. opilionoides*, (arrows); and the procurus is more slender and straighter in *P. manuei*. In females of both species the triangular plate forms a broad, anteriorly pointing isosceles triangle, however in *P. manuei* the lateral sides are deeply excavated and the base is broader, while in *P. opilionoides* the sides are only slightly excavated, (arrows).

For this note, I examined material of *P. manuei* from the following locations: U.S.A.: ILLINOIS: Cook County, KANSAS: Douglas and Wyandotte Counties, MAINE: Penobscot County, MINNESOTA: Ramsey County, and OHIO: Summit County.

B. Huber contributed the following records: PENNSYLVANIA: Lackawanna and Pike Counties. The *P. opilionoides* from AUSTRIA: Upper Austria: Lichtenberg, were provided by B. Huber.

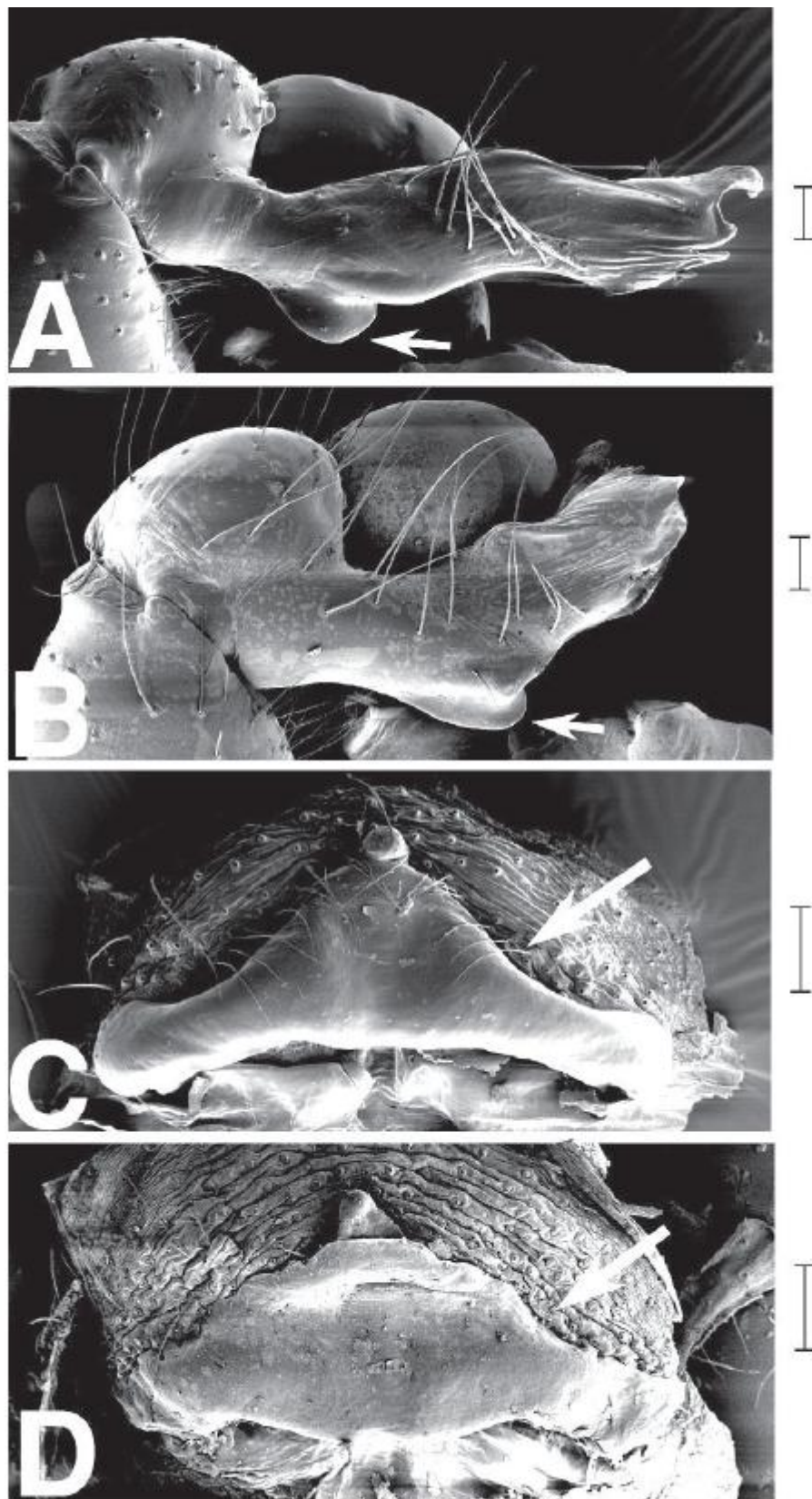


Figure 1. Images A (*P. manueli*) and B (*P. opilionoides*) show the procursus of the retrolateral side of the right male palpus (morphologically dorsal is at the top); Images C (*P. manueli*) and D (*P. opilionoides*) show the epigynum of the females. Scale bars = 100 μ m.

Irie, T. 2009. Pholcidae. In: Ono, H. (ed.) *The Spiders of Japan, with Keys to the Families and Genera and Illustrations of the Species*. Tokai Univ. Press, Kanagawa, pp. 106-111, pl. 4-5.

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タイリクユウレイグモ (図 2-2-13-24~26)

Pholcus opilionoides (Schränk, 1781)

体長雌雄 5 mm 内外。背甲はほぼ円形で淡黄色。中央後半に 2 個の褐色斑がある。眼の前端線は端直。腹部は淡黄褐色で円筒形で丸みがある。背面には、淡黄色の心臓斑がある。雄触肢附節の鉤状突起は淡黒褐色で大きい。触肢転節の形は靴の形で淡黄色。歩脚は淡黄色。屋内性のクモ。北海道、本州、四国、九州に分布する。

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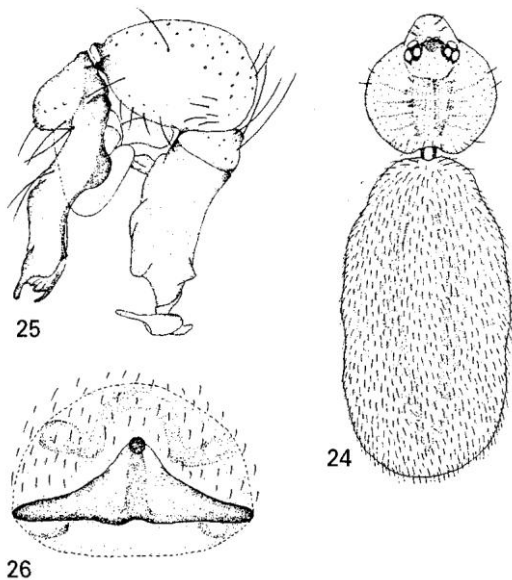


図 2-2-13-18~35.

タイリクユウレイグモ *Pholcus opilionoides*

24~26.

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

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***Pholcus manuelei* Gertsch, 1937**
(Fig. 26)

Pholcus manuelei Gertsch 1937: 1, f. 6–7. Senglet 2001: 62, f. 60–66.

Pholcus affinis Schenkel 1953: 23, f. 12a–b. Zhu & Shi 1983: 66, f. 54a–e. Zhu, Tu & Shi 1986: 118, f. 1.1–7. Song 1987: 109, f. 71. Zhang 1987: 58, f. 42.1–4. Hu & Wu 1989: 74, f. 55.1–4. Feng 1990: 46, f. 21.1–6. Chen & Gao 1990: 39, f. 41a–b. Chen & Zhang 1991: 76, f. 67.1–4. Song, Zhu & Chen 1999: 52, f. 11H, 22D–G. Hu 2001: 81, f. 7.1–4. Song, Zhu & Chen 2001: 71, f. 28A–D.

Diagnosis. This species resembles *P. bessus*, *P. crypticolens*, and *P. pilis* in the shape of the palpal organ and epigynum and probably has an especially close relationship with *P. bessus*: carapaces both with small butterfly-shaped mark, epigyna with ball-shaped apophyses and V-shape of the anterior sclerotized arch, and palpal organ with large uncus. *P. manuelei* can be distinguished from *P. bessus* by the shape of tip of the procurus and by the forceps-like tip of the appendix (Figs. 26G–I).

Redescription. Male: A specimen measured (Mt. Xiaowutai), total length 4.2: cephalothorax 1.3 long, 1.3 wide; abdomen 2.9 long, 1.4 wide. Leg I: 34.8 (9.1+0.7+9.0+14.0+2.0), tibia II: 6.3, tibia III: 4.0, tibia IV: 5.8; tibia I L/D: 60. Prosoma shape as in Fig. 26C. Carapace short, broad and almost circular, ochre, with pair of small brown butterfly-shaped marks broadly connecting to ocular area. Cephalic region raised, without brown central marks, ocular area dark yellow. Clypeus 0.46, slightly ochre, without marks. Distance AME–AME 0.05. Diameter AME 0.08, ALE 0.14, PME 0.12, PLE 0.13. Chelicerae as in Fig. 26E, with pair of black serrated apophyses distally, pair of unsclerotized thumb-shaped apophyses proximolaterally, and pair of small unsclerotized rounded apophyses proximocentrally. Labium and endites yellow. Sternum slightly ochre, with some regular yellow marks on it as in Fig. 26F. Femora, patellae and tibiae ochre, with dark rings, metatarsi and tarsi brown. Abdomen cylindrical, dark pale, dorsum without brown spots on it as in Fig. 26C. Venter pale, without marks. Palps as in Figs. 26H and 26I, bulb with long uncus, appendix with forceps-like tip. Procurus as in Fig. 26G.

Female: in general very similar to male. A specimen measured (Mt. Xiaowutai), total length 4.5: cephalothorax 1.5 long, 1.5 wide; abdomen 3.0 long, 1.6 wide. Tibia I: 7.2. Epigynum volcano-shaped as in Fig. 26A, with a basketball-shaped apophysis on the top. Dorsal view as in Fig. 26B, with a low mound sclerotized arch anteriorly and a pair of large triangular pore plates posteriorly.

Distribution. Known from many localities in China; Russia, U. S. A., Japan, Korea.

Material. Types. *Pholcus manuelei*: male holotype and female allotype from a private building in Mendham, New Jersey, U.S.A, deposited in the American Museum of Natural History, New York (not examined). *Pholcus affinis*: male holotype and one male paratype collected from Tcheuly, Sien hien (now known as Xian County), 11 May, 1914, Hebei Province, China; one female paratype collected from Tietsin (now known as Tianjin), 2 March, 1933. One male paratype is deposited in the Natural History Museum of Basel, Switzerland, examined by Senglet (2001); other type material unknown.

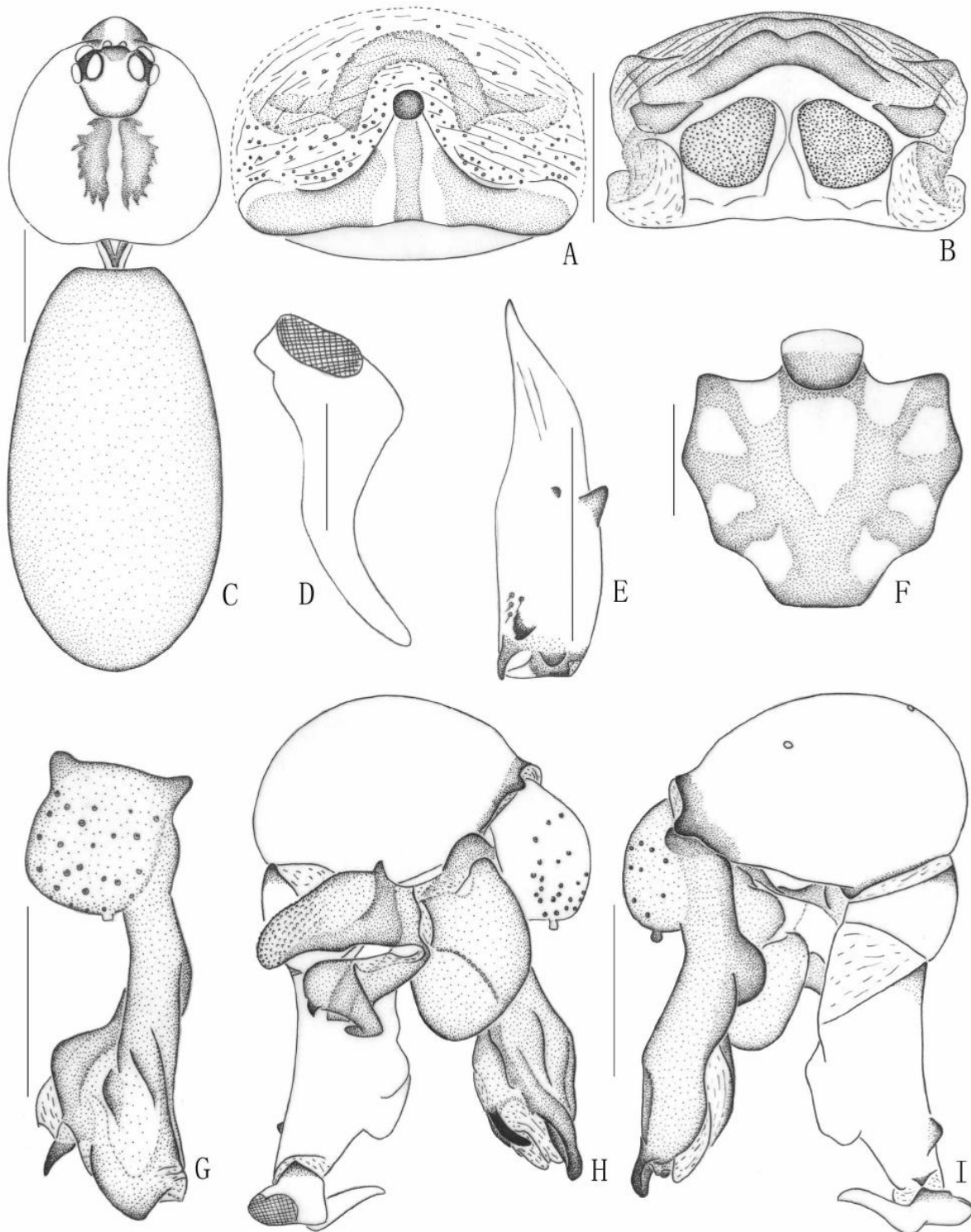


FIGURE 26. *Pholcus manuei* Gertsch, 1937. A. epigynum, ventral view. B. same, dorsal view. C. male body, dorsal view. D. trochanter of male left palp, dorsal view. E. male left chelicera, frontal view. F. male sternum, ventral view. G. left procursus, dorsal view. H. left palp, prolateral view. I. same, retrolateral view. Scale lines: 1.0mm (C), 0.5mm (A, B, E–I), 0.2mm (D).

Material examined. CHINA: **Hebei:** Zhuolu County, Yangjiaping Village, July 6, 2004, leg. F. Zhang, 5♂, 5♀; Yu County, Mt. Xiaowutai Natural Reserve, July 4, 1998, leg. F. Zhang, 3♂, 6♀; July 3, 2002, leg. F. Zhang, 10♂, 10♀; August 20, 2005, leg. F. Zhang, 3♂, 5♀; July 10, 2006, leg. F. Zhang, 1♂, 1♀; Baoding City, campus of Hebei University, May 3, 2002, leg. F. Zhang, 3♂, 7♀; June 4, 2004, leg. Z. S. Zhang, 1♂; Dongfeng Park, November 7, 2001, leg. Z. S. Zhang, 1♂, 1♀; September 20, 2003, leg. Z. S. Zhang, 1♂; Yinding Village, August 20, 2003, leg. Z. S. Zhang, 8♂, 6♀; September 24, 2002, leg. Z. S. Zhang, 1♂, 2♀; Anxin County, May 11, 1999, leg. C. Zhang, 3♀; Huanghua City, May 3, 2002, collector unknown, 4♀; Qinhuangdao City, October 6, 2003, leg. W. H. Wang, 3♂; Handan City, August 1, 2002, leg. D. Li, 4♀, 3♂; October 2, 2003, leg. P. Wang, 2♀, 1♂; Qinglong County, Mt. Nanshan, August 4, 2002, leg. X. L. Jin, 7♀, 5♂; Neiqiu County, May 3, 2002, collector unknown, 10♀, 3♂; Chicheng County, August 26, 2003, leg. Z. S. Zhang, 3♀, 2♂; Shijiazhuang City, May 7, 2003, leg. P. Yu, 1♂; September 26, 1998, leg. F. Zhang, 6♀, 2♂; Luquan County, October 6, 2003, leg. G. Geng, 3♀, 3♂; Xinji County, October 6, 2003, leg. Y. Duan, 3♀, 3♂. **Beijing:** Badachu Park, July 23, 2003, leg. Z. S. Zhang, 3♀, 3♂. **Heilongjiang:** Suihua City, July 25, 2003, leg. F. Zhang, 1♀; Suifenhe City, July 15, 2003, leg. F. Zhang, 1♀, 2♂. **Jilin:** Mt. Changbai Natural Reserve, July 11, 2003, leg. F. Zhang, 31♀, 22♂. **Liaoning:** Dandong City, Yalvjiang Park, July 5, 2003, leg. F. Zhang, 5♀, 2♂; Beipiao City, Mt. Dongshan, July 29, 2003, leg. F. Zhang, 16♀, 8♂; Kuandian County, Huangyishan Forest Park, July 26, 2003, leg. F. Zhang, 5♀, 2♂. **Sichuan:** Qingchuan County, July 13, 2003, leg. J. X. Zhang, 4♀, 1♂. **Xinjiang:** Yining City, August 14, 2006, leg. F. Zhang, 6♀, 3♂; Tacheng City, August 19, 2006, leg. F. Zhang, 7♀, 6♂; Hami City, July 25, 2006, leg. F. Zhang, 1♂. All specimens in MHBU.

Remark. This species is very common in China, all specimens we collected were found in or close to a house or building, leading us to believe that it is a synanthropic species. Schenkel (1953) described it as a new species (collected from Xian County, Hebei Province, and Tianjin) and named it *P. affinis*. Thereafter this species was found in many places in China, until Senglet synonymized it with *P. manuei* in 2001.

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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1655, 1656. *Ph. manueli*, male, dorsal and lateral views.

1671, 1672. *Ph. manueli*.

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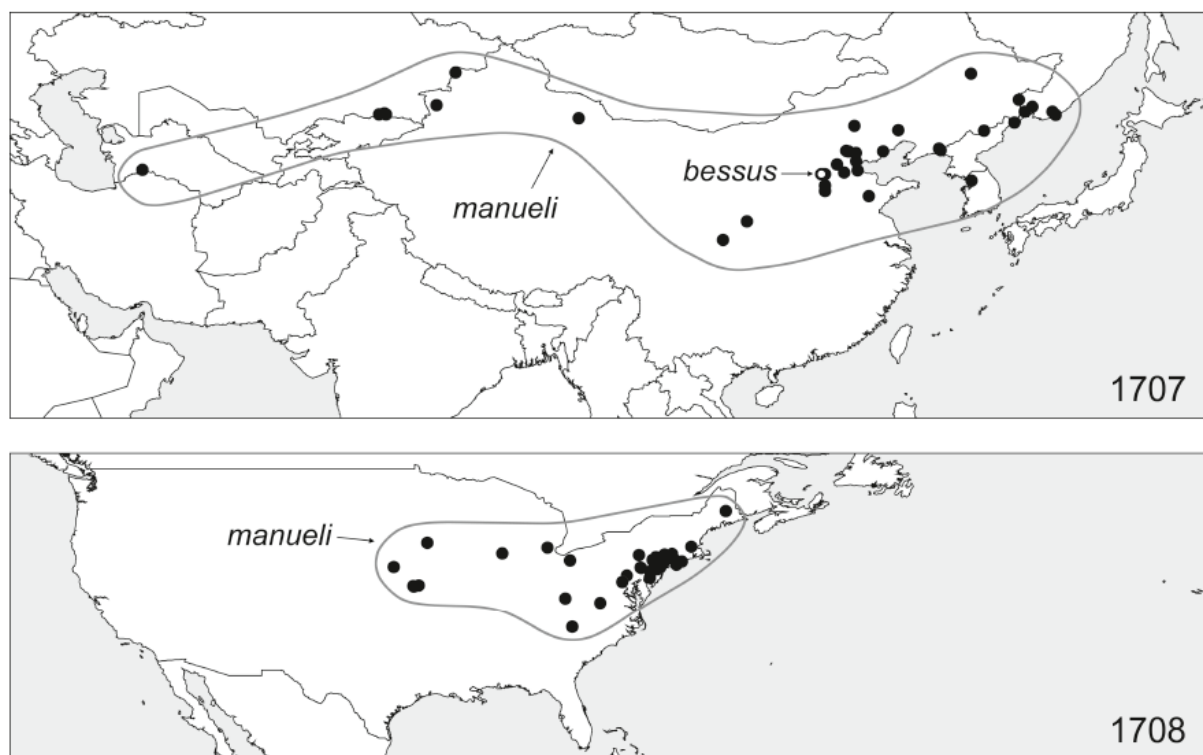


FIG. 1707, 1708. Known distributions of *Pholcus bessus* and of *Ph. manueli* in Asia (1707) and North America (1708).

Pholcus manueli Gertsch, 1937

Figs. 1655, 1656, 1671, 1672, 1729-1741

Pholcus manueli Gertsch 1937: 1-4, figs. 6, 7. Kaston 1977: 6 (erroneous synonymization with *Ph. opilionoides*). Senglet 2001: 62, figs. 60-66 (reestablishment of *Ph. manueli*, synonymization of *Ph. affinis*). Zhang *et al.* 2006: 195. Cutler 2007: 129-131, figs. 1a, c. Zhang & Zhu 2009a: 52-54, figs. 26a-i.

Pholcus affinis Schenkel 1953: 23, figs. 12a, b. Yaginuma 1957: 57, pl. 3, fig. 6 (not seen). Zhu & Shi 1983: 66, figs. 54a-e. Zhu, Tu & Shi 1986: 118-119, figs. 1.1-7. Song 1987: 109, figs. 71a-d. Zhang 1987: 58, figs. 42.1-4 (not seen). Hu & Wu 1989: 74, figs. 55.1-4. Feng 1990: 46, figs. 21.1-6, 21, 21a. Chen & Gao 1990: 39-40, figs. 41a, b. Chen & Zhang 1991: 76, figs. 76.1-4. Song *et al.* 1999: 52, figs. 11h, 22d-g. Marusik & Koponen 2000: 64-65. Hu 2001: 81, figs. 7.1-4 (not seen). Song *et al.* 2001: 71, figs. 28a-d.

"Pholcus opilionoides" (misidentifications): Zhu & Wang 1963: 463-464, pl. 1, figs. 1-3, 5-6, 9-10. Yaginuma 1960: 48, pl. 15, fig. 97. Paik 1978a: 225, figs. 96.1-12. Paik 1978b: 2-4. Hu 1984: 78, figs. 71.1-5. Yaginuma 1986: 29-30, figs. 3e, 3p, pl. 6, fig. 12. Chikuni 1989: 29, fig. 6. Chen & Zhang 1991: 74-75, figs. 64.1-5 (copied from Hu 1984). Song *et al.* 1999: 58. Irie 2009: 108, figs. (2-2-13) 24-26.

Types. *Pholcus manueli*: Male holotype and female "allotype" from USA, New Jersey, Mendham [40°46.2'N, 74°36'W], garage, 19.iv.1937 (M. dos Passos), in AMNH, examined. 7♂8♀ paratypes from same locality, 28.iv.1937 (W.J. Gertsch), in AMNH, examined.

Pholcus affinis: 1♂ syntype (not "paratype" as in Senglet 2001, Zhang *et al.* 2006, and Zhang & Zhu 2009a) from China, "Sian hian, Tcheuly" [Hebei Prov., Xian County, ~38°12'N, 116°06'E], 11.v.1914, in NHMB, examined. The depository of the second

male from "Tcheuly" and of the female from "Tiet-sin" (Schenkel 1953) is not known to me ("Museum Hoangho-Peiho").

Diagnosis. Easily distinguished from most congeners by male procursus with distinctive dorsal sclerite distally (Figs. 1730, 1736); from very similar *Ph. bessus* by shapes of procursus, appendix, ventral femur modifications, and by female genitalia (Figs. 1729, 1730, 1732, 1733).

Male (paratype). Total body length 4.1, carapace width 1.3. Leg 1: 30.4 (7.8 + 0.6 + 8.0 + 12.1 + 1.9), tibia 2: 5.5, tibia 3: 4.0, tibia 4: 5.4; tibia 1 L/d: 60. Habitus as in Figs. 1655 and 1656. Carapace ochre-yellow, with brown median mark divided medially, clypeus slightly darkened medially, sternum brown, with light spots near coxae 2-4 and larger light mark anteriorly, legs monochromatic ochre-yellow, abdomen ochre-gray with some indistinct lighter and darker spots visible through cuticle, ventrally only genital area light brown. Distance PME-PME 185 µm, diameter PME 105 µm, distance PME-ALE 25 µm, distance AME-AME 45 µm, diameter AME 60 µm. Ocular area moderately elevated, ~12 stronger hairs posteriorly on each side (Fig. 1734). No thoracic furrow; clypeus unmodified. Chelicerae as in Fig. 1731, distal apophyses with two modified hairs each (Fig. 1740), stronger hairs medially, two pairs of apophyses proximally. Sternum wider than long (0.90/0.65), unmodified. Palps as in Figs. 1729 and 1730, coxa unmodified, trochanter with slender retrolatero-ventral apophysis, femur with small proximal apophysis dorsally and slightly angular hump ventrally, tibia ventrally unmodified, procursus with distinctive prolateral pointed apophysis and dorsal apophysis (actually flat, Figs. 1736, 1737), three small dorsal spines, bulb with long uncus, short weakly sclerotized embolus, distinctive appendix with two small pointed processes. 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 indistinct, only distally ~10 fairly distinct. Gonopore with epiandrous spigots (Fig. 1739); ALS with seven or eight spigots each (Fig. 1738).

Variation. The shape of one of the pointed processes on the appendix (arrow in Fig. 1729) varies slightly (often thinner than in Fig. 1729); procursus dorsally often with only two spines. Tibia 1 in 20 males from New Jersey: 6.8-8.0 (mean 7.4; holotype: 6.8); in 12 males from Asia: 6.2-8.0 (mean 7.2; syntype of *Ph. affinis*: 6.8).

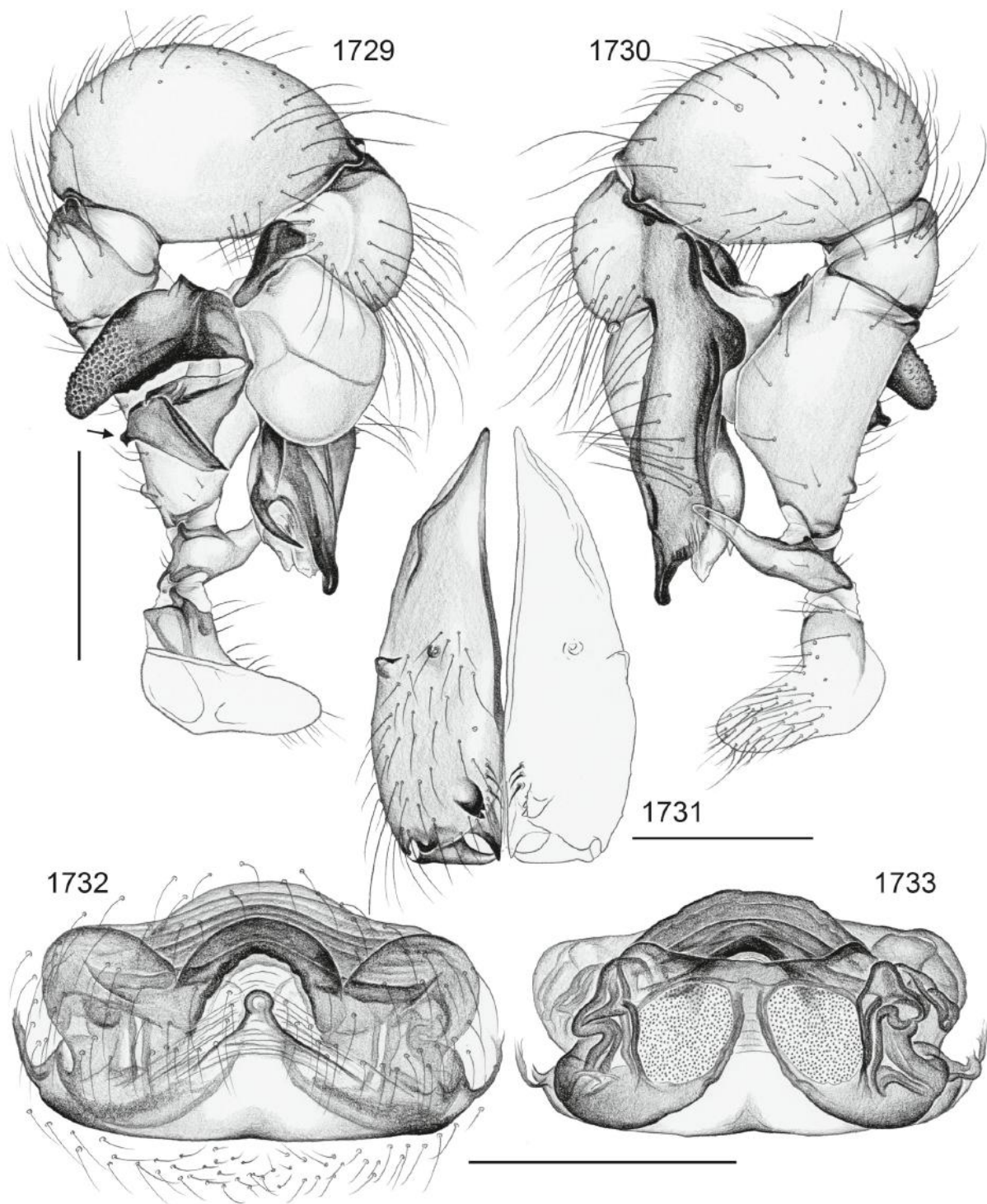


FIG. 1729-1733. *Pholcus manueli*. 1729, 1730. Left male palp, prolateral and retrolateral views (arrow points at variable detail of appendix). 1731. Male chelicerae, frontal view. 1732, 1733. Cleared female genitalia, ventral and dorsal views. Scale lines: 0.5 (1729, 1730, 1732, 1733), 0.3 (1731).

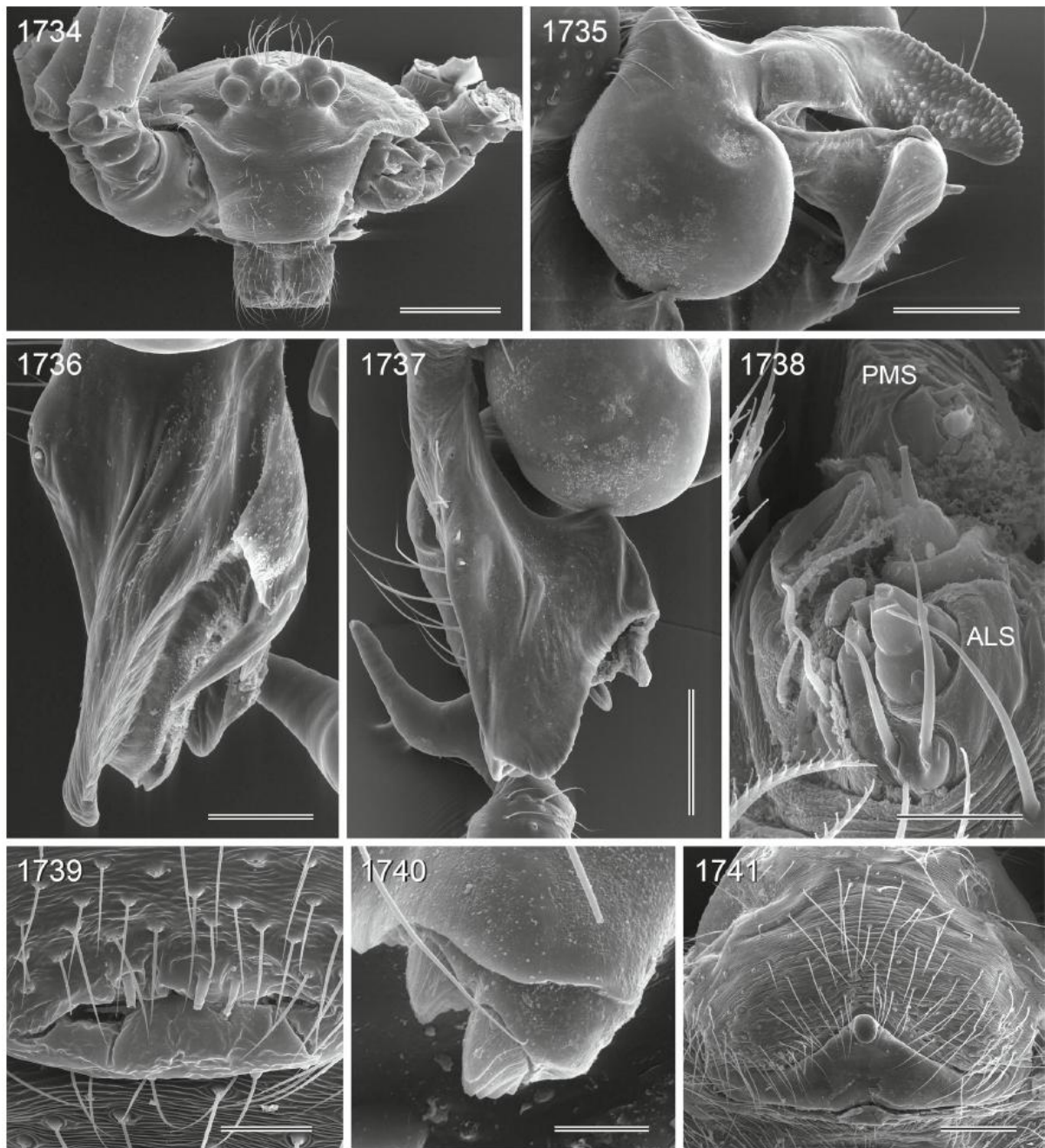


FIG. 1734-1741. *Pholcus manuli*. 1734. Male prosoma, frontal view. 1735. Right bulb, prolateral view. 1736, 1737. Right procursus, prolateral and dorsal views. 1738. Male ALS and PMS. 1739. Male gonopore. 1740. Distal male cheliceral apophysis. 1741. Epigynum. Scale lines: 400 μm (1734), 200 (1735, 1737, 1741), 100 μm (1736), 60 μm (1739), 20 μm (1738), 10 μm (1740).

Female. In general similar to male, triads slightly closer together (distance PME-PME 155 μm). Tibia 1 in 20 females from New Jersey: 5.7-7.6 (mean 6.5), in 16 females from Asia: 5.8-7.3 (mean 6.5). Epigynum rather flat, anterior internal structures visible through cuticle (distinctive median arc),

simple triangular plate with 'knob' (Figs. 1671, 1732, 1741); internal genitalia as in Figs. 1672 and 1733.

Distribution. Widely distributed in Asia (Fig. 1707, Turkmenistan to Russian Maritime Province), and the USA (Fig. 1708, eastern and central states).

Material examined. USA: *New Jersey*: Mendham: 8♂9♀ types above; Lambertville (40°22'N, 74°56'W), various dates (1950-1953) (W. Ivie), ~36♂63♀ (7 vials) in AMNH. 1 mile N Lambertville (40°23'N, 74°56'W), x.1950 (W. Ivie), ~5♂9♀ in AMNH. Ramsey [41°03.6'N, 74°08.6'W], various dates (1946-1963) (W.J. Gertsch), 4♂4♀ (6 vials) in AMNH; same locality, ix.1946, 3♂2♀ in USNM. Glassboro [39°42.2'N, 75°06.8'W], 21.viii.1942 and 12.viii.1943 (W.F. Rapp), 1♂2♀ in AMNH. Sussex Co., Baleville [-41°03'N, 74°27'E?], rock wall, 11.x.1979 (K. Schmidt, P. Wygodzinsky), 3♀ 3 juvs. in AMNH. Kinnelon (40°35.4'N, 74°13.2'W), 13.vi.1964 (J. & W. Ivie), 1 juv. in AMNH. Harrington Park [40°59.3'N, 73°58.5'W], in building, 13.xi.1966 (V. Roth), 1♂ in AMNH. Somerset, 3 mi S of Neshanic Station [-40°27.7'N, 74°26.8'W], 550' a.s.l., spring/summer 1976 (collector not given), 1♂1♀ in AMNH. *New York*: Orange Co., Cuddebackville [41°28'N, 74°35.6'W], 10.vii.1967 (collector not given), 1♀ 3 juvs. in AMNH. Orange Co., Monroe [41°19.3'N, 74°11.2'W], Ludlam Rd., 1.iii.-21.v.1988 (C.J. Cole, C.R. Townsend), 1♀ 2 juvs. in AMNH. Orange Co., Gardnertown [41°32.1'N, 74°04.2'W], 13.xi.1938 (A. Pizzini), 1♂1♀ + juvs. in USNM; same locality, 3.vi.1939 (J.E. Gross), 1♂2♀ in USNM. Dutchess Co., 3 mi E Poughkeepsie [-41°42'N, 73°52'W], 6.vii.1972 (G. Dingerkus), 1♂ in AMNH. Dutchess Co., Lithgow [41°49.7'N, 73°37.2'W], 21.vi.1971 (J. Coddington), 4♀ in USNM. Dutchess Co., Pine Plains [41°58.9'N, 73°39.4'W], 1.vii.1974 (J.A.C.), 1♀ in USNM. Greenport, 1 mi N of town (41°07'N, 72°22'W), 8.v.1955 (W. Ivie), ~20♂20♀ in AMNH. Long Island, Mastic [40°48.2'N, 72°50.5'W], various dates (vii.-x.1945) (Nichols), 1♂4♀ 1 juv. (3 vials) in AMNH. *Connecticut*: New Haven Co.: Orange [41°16.9'N, 73°01.7'W], off route 34, in barn, "frozen, but thawed up", 17.i.1981 (L.N. Sorkin, S. Voket, T. Douglan), 1♂2♀ in AMNH. Litchfield Co., Litchfield [41°44.9'N, 73°11.4'W], buildings, sawhouse and understructure, 29.v.1980 (L.N. Sorkin, M.W. Klemens), 1♂1♀ in AMNH. *Massachusetts*: Middlesex Co., Framingham [42°16.8'N, 71°25.0'W], Primate Research Center, in barn, 1. ix.1969 (collector not given), 1♀ in USNM. *Pennsylvania*: Bucks Co., NE of Jamison, Horseshoe Bend, Neshaminy Creek, (40°16'N, 75°03'W), various dates (1953-1958) (W. Ivie), ~87♂116♀ (22 vials) in AMNH. 3 miles S of New Hope (40°20'N, 74°56'W), 11.vi.1953 (W. Ivie), 2♀ in AMNH.

Berks Co., Virginville [40°31.4'N, 75°52.4'W], summer 1966 (P. Vaurie), 1♂2♀ in AMNH. Berks Co., Lenhartsville [40°34.4'N, 75°53.2'W], summer 1964 (P. Vaurie), 1♀ in AMNH. Wyoming Co., Slumber Valley Camping Ground NW Scranton [41°39'N, 76°01'W], 25.vi.2000 (B.A. Huber), 1♂1♀ in ZFMK; same data 2♂3♀ in pure ethanol, in ZFMK. Pike Co., Dingmans Campground, ~20 mi NE Stroudsburg [41°13'N, 74°52'W], vii.2000 (B.A. Huber), 3♂2♀ in pure ethanol, in ZFMK. Allegheny Co., Pittsburgh [40°27'N, 80°01'W], 29.x.1989 (H.J. Guarisco), 1♀ in ZFMK. Lancaster Co., 405 Lampeter Rd. [40°01.7'N, 76°16.2'W], in bucket in garage, 15.v.1985 (K. Smith, L. Kirsch), 1♂1♀ in USNM. *Maryland*: Charles Co., St. Charles [38°36.4'N, 76°54.7'W], in horse barn, 21.vi.1986 (S. Larcher, J. Coddington), 4♀ in USNM. *Washington D.C.*: Rock Creek Park, Rock Creek at Broad Branch Road [38°57.1'N, 77°03.3'W], 16.vii.1985 (J. Coddington), 1♀ in USNM. *Virginia*: Prince William Co., Lake Ridge [38°41.1'N, 77°17.8'W], 4.vi.1999 (collector not given), 1♂ in USNM. Montgomery Co., Blacksburg area [37°14'N, 80°25'W], 14.vi.1997 (S.W. Lingafelter), 1♀ 1 juv. in USNM. *North Carolina*: Rutherford Co., Hollis [35°26.2'N, 81°43.9'W], shed behind house, 24. viii.1981 (F. Coyle), 1♀ in AMNH. *Kentucky*: Jackson Co. [-37°25'N, 84°00'W], 21.vi.1996 (H.J. Guarisco), 1♂1♀ in ZFMK. *Michigan*: Washtenaw County [-42°15'N, 83°50'W], urban area, ix.1990 (L. Vawter), 1♂ in WAM (99/1488). *Iowa*: Guthrie Co., Springbrook State Park, Conservation Education Center [41°46.3'N, 94°27.5'W], 17.vii.1986 (D.J. Perschau), 1♀ in USNM. *Kansas*: Douglas Co., Lawrence [38°57.6'N, 95°15.2'W], Univ. Kansas, outside wall, lower level, 25.v.2005 (B. Cutler), 1♂1♀ in AMNH; Lawrence, in building, 10.vi.1991 (H.J. Guarisco), 3♂1♀ in ZFMK; Lawrence, 17. ix.1995 and 13.vi.2000 (2 vials) (H.J. Guarisco), 3♂3♀ in ZFMK. 3 mi S Lecompton [-39°00'N, 95°24'W], "summer" (H.J. Guarisco), on house, 1♂2♀ in ZFMK. "FNHR", October (H.J. Guarisco), 1♂1♀ in ZFMK. *Nebraska*: Saline Co., Crete [40°37.5'N, 96°57.5'W], various dates (1976-1986) (W.F. Rapp), 2♂1♀ (3 vials) in AMNH; same locality, 12.ix.1987 (J. & W. Rapp), 1 juv. in AMNH. KAZAKHSTAN: Almaty [=Alma-Ata; 43°15'N, 76°57'E], indoor, 30.vi.1974 (collector not given), 1♂5♀ in ZMMU; Almaty, indoor, 20.iii.1981 (M.Y. Folkina), 1♀ in ZMMU. Almaty Region, Chiliksky Distr., "Kisht-Bai Canyon", biostation, in honeybee

hive, 9.viii.1984 (N.Y. Polchaninova), 2♀ in ZMMU. Almaty Region, Zhambyl Distr., Fabrichniy Vil. [$-43^{\circ}09'N$, $76^{\circ}25'E$], indoor, 26.vi.1994 (A.A. Zyuzin), 1♂2♀ in ZMMU. Almaty env., Talgarsky Distr., near Medeo [$-43^{\circ}09'N$, $77^{\circ}04'E$], 3.-28.vii.1997 (A.V. Gromov), 1♂ in ZMMU. Mangyshlak Peninsula, "Turusli Vil.", 13.v.1985 (S.I. Deryugin), 1♂ in ZMMU.

TURKMENISTAN: Balkhan velayat, near Kara-Kala [$-38^{\circ}26'N$, $56^{\circ}18'E$], Syunt-Khasardagh Reserve, 29.iii.1993 (A.A. Zyuzin), 1♂ in ZMMU.

RUSSIA: *Maritime Territory*: Khasan Vil. [$42^{\circ}25'N$, $130^{\circ}39'E$], indoor, 22.vii.1977 (B.P. Zakharov), 1♂2♀ in ZMMU. ~7 km NNW of Zanadvorovka [$-43^{\circ}21'N$, $131^{\circ}34'E$] Gusevsky's mine, 14.-23.vi.1999 (V.V. Dubatolov), 1♂ in ZMMU. Lazovsky Nat. Res., near Glazovka [Glazovka: $43^{\circ}04'N$, $134^{\circ}11'E$], indoor, vii.1984 (T. Oliger), 1♀ in ZIN. Ussuriysk Distr., nr. Gornotaezh-noe [$43^{\circ}47'N$, $132^{\circ}14'E$], 21.-22.viii.1999 (V. Krivokhatski, Ovchinnikova), 1♀ in ZIN. Lazo Town ($43^{\circ}22.7'N$, $133^{\circ}54.0'E$), in house, xi.1998-iii.1999 (Yu. Sundukov), 2♂1♀ in ZMMU.

SOUTH KOREA: near Seoul [$-37.5^{\circ}N$, $127^{\circ}E$], Biostation Aik, 23.x.1991 (Yu.M. Marusik), 1♂ in ZMMU.

CHINA: *Shaanxi Prov.*: Taibai Shan [$-34^{\circ}00'N$, $107^{\circ}50'E$], S flanks, above Houshenzi, secondary broad-leaved forest, 1300-1700 m a.s.l., 30.vi. and 2.vii.1997 (J. Martens, P. Jäger), 2♂7♀ (2 vials) in SMF; same data but 7.-17.vi.1997 (various dates) (P. Jäger, J. & B. Martens), 1♂5♀ (3 vials) in SMF. *Hebei Prov.*: Xian County: 1♂ syntype of *Ph. affinis* above. *Beijing Municipality*: Beijing [$-40^{\circ}N$, $116.5^{\circ}E$], 100 m a.s.l., cultivated land, 6.vii.1997 (J. Martens, P. Jäger), 3♂ in SMF. *Shandong Prov.*: Taisihan [$36^{\circ}15'N$, $117^{\circ}05'E$], without date (Hwang Har Ho), 1♂ in AMNH.