Pholcus higoensis Irie & Ono, 2008

Irie, T., Ono, H. 2008. A new species of the genus *Pholcus* (Araneae, Pholcidae) from Kumamoto Prefecture, Kyushu, Japan. Bull. Natl. Mus. Nat. Sci. Ser. A 34: 95-98.

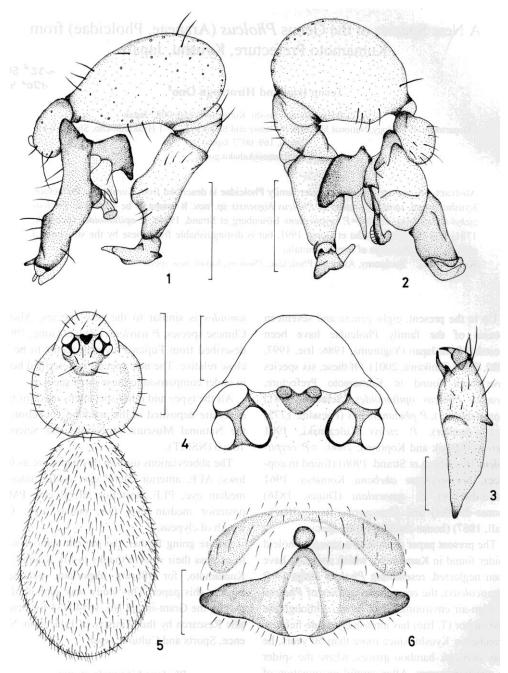
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Pholcus higoensis sp. nov.

[Japanese name: Higo-yûreigumo] (Figs. 1–6)

Diagonosis. This new species is similar to

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Figs. 1–6. *Pholcus higoensis* sp. nov. 1–4, holotype ♂ (NSMT-Ar 7859); 5–6, allotype ♀ (NSMT-Ar 7860). — 1, Left palp, retrolateral view; 2, same, prolateral view; 3, left chelicera, ventral view; 4, ocular area, dorsal view; 5, body, dorsal view; 6, genital field, ventral view. (Scales: 1–2, 0.5 mm; 3–4, 6, 0.2 mm; 5, 1.0 mm.)

Pholcus zichyi Kulczyński, 1901, distributed in Japan, Korea, Russian Far East, China and Taiwan, *P. opilionoides* (Schrank, 1781), Horarctic, and *P. wuyiensis* described by Zhu and Gong (1991) from Fujian Province, Southeast China, both in general appearance and in genital morphology, especially in shape of the procursus, uncus and trochates of male palp, but is distinguished from these three species in details of the parts of male palp (Figs. 1–2) and the shape of female genitalia (Fig. 6).

Type specimens. Holotype: ♂, Kusuno-machi, Kumamoto-shi, Kumamoto Prefecture, Kyushu, Japan, 5-I-2008, T. Irie leg. (NSMT-Ar 7859); allotype: ♀, same locality, 16-I-2008, T. Irie leg. (NSMT-Ar 7860); paratypes: 4♀, same locality (1♀, 8-X-2007, 1♀, 16-I-2008, 2♀, 21-II-2008), T. Irie leg. (NSMT-Ar 7861-7863).

Other specimens examined. 2♀2♂, Kajiomachi, Kumamoto-shi, Kumamoto Prefecture, Kyushu, Japan, 22-X II-2007, K. Uki leg. (NSMT-Ar 7864).

Description. Measurements (holotype/allotype; in mm): Body length 2.86/3.46. Carapace length 1.00/1.26, width 0.86/1.06. Abdomen length 1.86/2.20, width 1.13/1.33. Lengths of legs as shown in Table 1. Eye sizes: AME 0.05/0.05, ALE 0.13/0.13, PME 0.13/0.13, PLE 0.13/0.13. Distances between eyes: AME-AME 0.03/0.02, ALE-ALE 0.20/0.20, PME-PME 0.16/0.10, PLE-PLE 0.36/0.30. OA length 0.23/0.22, width 0.53/0.50. Cp 0.20/0.20.

Male (holotype). Carapace milky white, with whitish gray dorsal pattern, nearly as long as wide. Eight eyes on cephalic tubercle arranged in three groups as usual in the genus *Pholcus*. AME dark, the smallest, ALE=PME=PLE>AME. Anterior eye row procurved. Chelicera light yel-

lowish brown, with a lamella and a long frontal apophysis, and with a sharp ridge on the lateral margin. Sternum light yellowish brown, with light gray spots at both sides, almost as long as wide. Legs very long, light yellowish brown, lengths of hairs 0.20–0.25 mm. Leg formula 1,4,2,3. Abdomen milky-whitish yellow, yellowish white or light whitish brown, cylindrical and hairy, lengths of hairs 0.12–0.15 mm.

Male palp (Figs. 1–2): Uncus reddish dark brown, J-shaped. Procursus reddish dark brown. Trochanter slender, horizontally, like a flat shoe.

Female (allotype). Body and legs slightly longer than those of male holotype. Genital field glossy light brown, the structure as shown in Fig. 6. Other characters as same as in the male holotype.

Variation. Body length (in mm): δ 2.86–3.06, \Re 2.72–4.19.

Distribution. Japan (at present known only from Kumamoto Prefecture).

Etymology. The specific name is derived from Japanese Higo, an old name of Kumamoto.

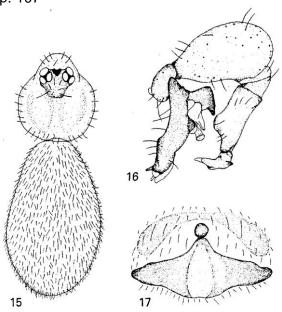
Remarks. This new species inhabits clumps of a thick-stemmed bamboo, moso-chiku (*Phyllostachys* sp.), and the spiders were collected from rotten stems, twigs and leaves of bamboos on ground.

Table 1. Measurements of legs of *Pholcus higoensis* sp. nov. (♂ holotype/♀allotype; in mm).

Leg	Femur	Patella+Tibia	Metatarsus	Tarsus	Total
I	3.87/4.33	4.12/4.60	4.75/5.33	1.16/1.26	13.90/15.52
II	2.93/3.06	2.93/3.20	3.46/3.66	0.86/1.00	10.18/10.92
III	2.16/2.20	2.20/2.40	2.50/2.73	0.66/0.73	7.52/8.06
IV	3.06/3.33	3.20/3.53	3.40/3.86	0.93/0.93	10.59/11.65

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.





ゴユウレイグモ Pholcus higoensis:

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ヒゴユウレイグモ (図 2-2-13-15~17, Plate 4-7) Pholcus higoensis Irie & Ono, 2008

体長雌3~4 mm, 雄3 mm. 背甲はほぼ円形で乳白色 眼の前端線は前曲. 腹部は円筒形で乳白色. 雄触肢跗 節の鉤状突起は褐色で, 先端部は幅広くなっている. 転節は, 靴の形になって先端部が尖っている. 歩脚は 淡黄褐色. 熊本県の熊本市, 菊池郡大津町 (竹林) に 分布する.



Plate 4. 単性域類 (ユウレイグモ科).

7, ヒゴユウレイグモ Pholcus higoensis 雌;

15~17, ヒ

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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Pholcus higoensis is best considered incertae sedis. Its uncus resembles the *Ph. nagasakiensis* group, but it is much smaller, and has a longer tibia 4 than tibia 2 (as in the *Ph. opilionoides* species group).

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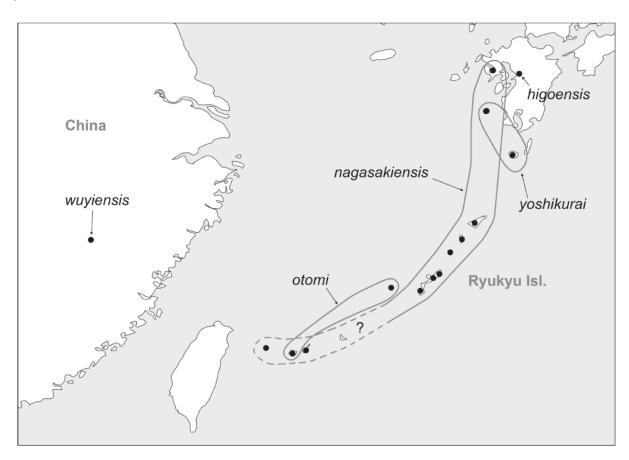


FIG. 2077. Known distribution of the *Pholcus nagasakiensis* species group. Most of the *Ph. nagasakiensis* localities are from Irie (1997); some of them (especially the southern ones) may represent *Ph. otomi*.