

Pholcus gosuensis Kim & Lee, 2004

Kim, B. W., Lee, W. 2004. A new species of *Pholcus* (Araneae: Pholcidae) from Gosu Cave, Korea. Korean J. syst. Zool. 20: 79-85.

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****Pholcus gosuensis* sp. nov. (Figs. 1-3)**

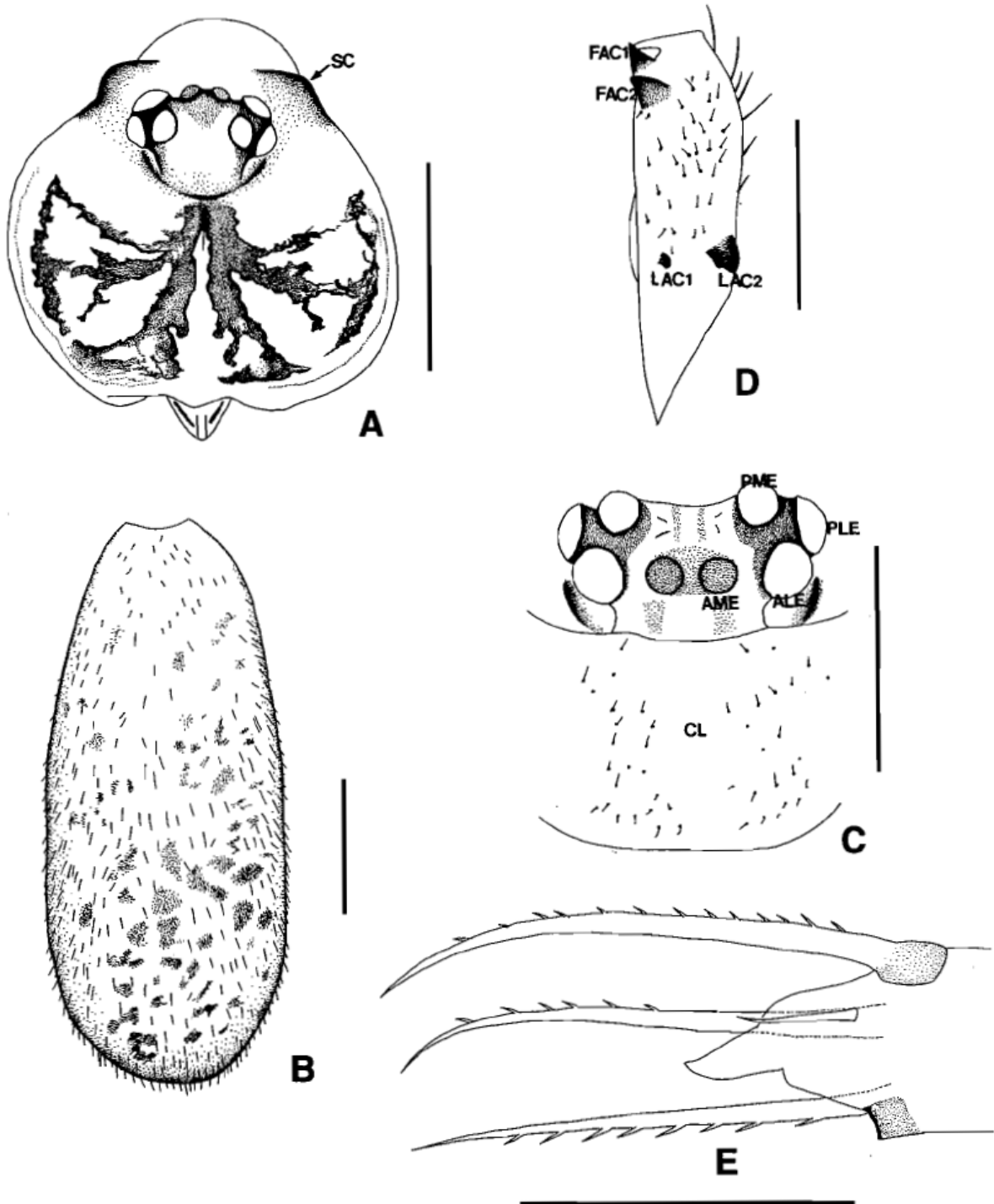
Material examined. Holotype: ♂, Gosu cave, Danyang-gun, Chungcheongbuk-do, 13 Aug. 1984, J. Namkung, in entrance zone. Paratype: 1♂1♀, Gosu cave, Danyang-gun, Chungcheongbuk-do, 27 Oct. 1975, 1♂, 20 Jan. 1982, J. Namkung, 1♂6♀, 17 Jul. 1999, 2♀♀, 1. Nov. 1999, Y.G. Choi, in entrance zone.

Description. Male. Prosoma ochre yellow and length/width/height 1.66/1.82/1.21. Carapace slightly wider than length with brownish gray dorsal marks and thoracic furrow (Fig. 1A). Eye pattern as in figs. 1A, C and eye area expanded on carapace diameter AME 1.61 μm, ALE 2.50 μm, PME 1.96 μm, PLE 2.77 μm, distance PME-PME 4.38 μm. Eye ratio, AME < PME < ALE < PLE (100: 122: 155: 172). Clypeus as in fig. 1C, without marks and six times of the diameter AME. Chelicerae as in fig. 1D with two pairs of frontal apophyses, FAC1, 2, two pairs of lateral apophyses, LAC1, 2 and length/width, 0.71/0.30. Opistosoma cylinder-type, with very indistinct darker spots dorsally and length/width/height, 4.24/1.76/1.88. Labium swelled and entirely fused to sternum. Sternum broadly protruded, not extending between 4th coxae and length/width, 1.18/1.55. Palps as in figs. 2A-F, with one inner apophysis on femur and with large developed procurus that have three apophyses, AP1, 2, 3 on distal region, sclerotized prolonged callosity, inflatable area and circular depression site, and globular shaped genital bulb with two organs: embolus dorsally tip hairy and disc-shaped uncus heavily sclerotized that is provided with minute scales. No appendix between embolus and uncus. Legs brownish yellow, without spines, without curved and vertical hairs and with three tarsal claws. leg I, 40.79 (femur 11.93, patella 0.64, tibia 11.93, metatarsus 14, tarsus 2.29); leg II, 30.86 (8.57, 0.64, 7.93, 12.29, 1.43); leg III, 21.28 (6.07, 0.64, 5.29, 8.21, 1.07); leg IV, 28.06 (8.5, 0.64, 7.21, 10.57, 1.14).

Female. In general very similar to male. Tip of palpal tarsus as in fig. 1E. Prosoma length/width/height 1.61/1.70/1.36. Opistosoma length/width/height, 4.09/2.58/2.49; chelicerae length/width, 0.58/0.27; chelicerae fang length, 0.21; clypeus height, 0.58; endite length/width, 0.42/1.12; labium length/width, 0.39/0.61; sternum length/width, 1.64/1.94; diameter AME 1.06 μm, ALE 1.28 μm, PME 1.38 μm, PLE 1.28 μm, distance PME-PME 2.02 μm; leg I, 34.44 (femur 9, patella 0.64, tibia 9.5, metatarsus 15.3, tarsus missing); leg II, 24.71 (6.64, 0.57, 6.14, 10.07, 1.29); leg III, 16.79 (4.93, 0.57, 4.5, 6.79, missing); leg IV, 13.64 (6.86, 0.57, 6.21, missing, missing). Epigynum as in figs. 3A-C, consisting of frontal plate with worm-shaped "knob" (HPE) and posterior plate swelled. Female genitalia as in fig. 3D with a pair of circular sclerotized arches of uterus externus, one triangular in middle and a pair of small arches in upper region.

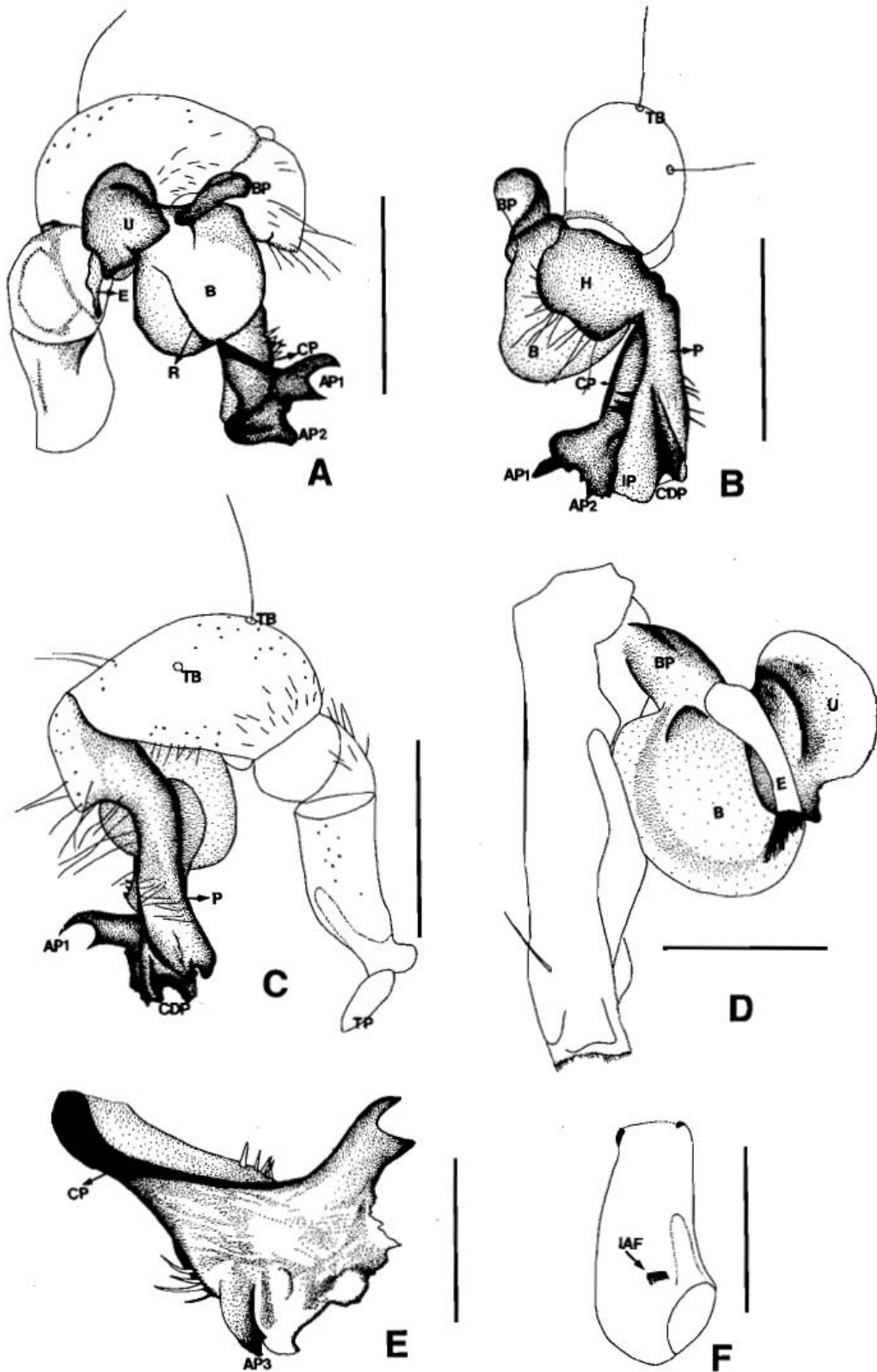
Etymology. The specific name is taken from its type locality, Gosu cave, Korea.

Remarks. The new species is related to two Korean endemic species, *P. crassus* Paik, 1978 and

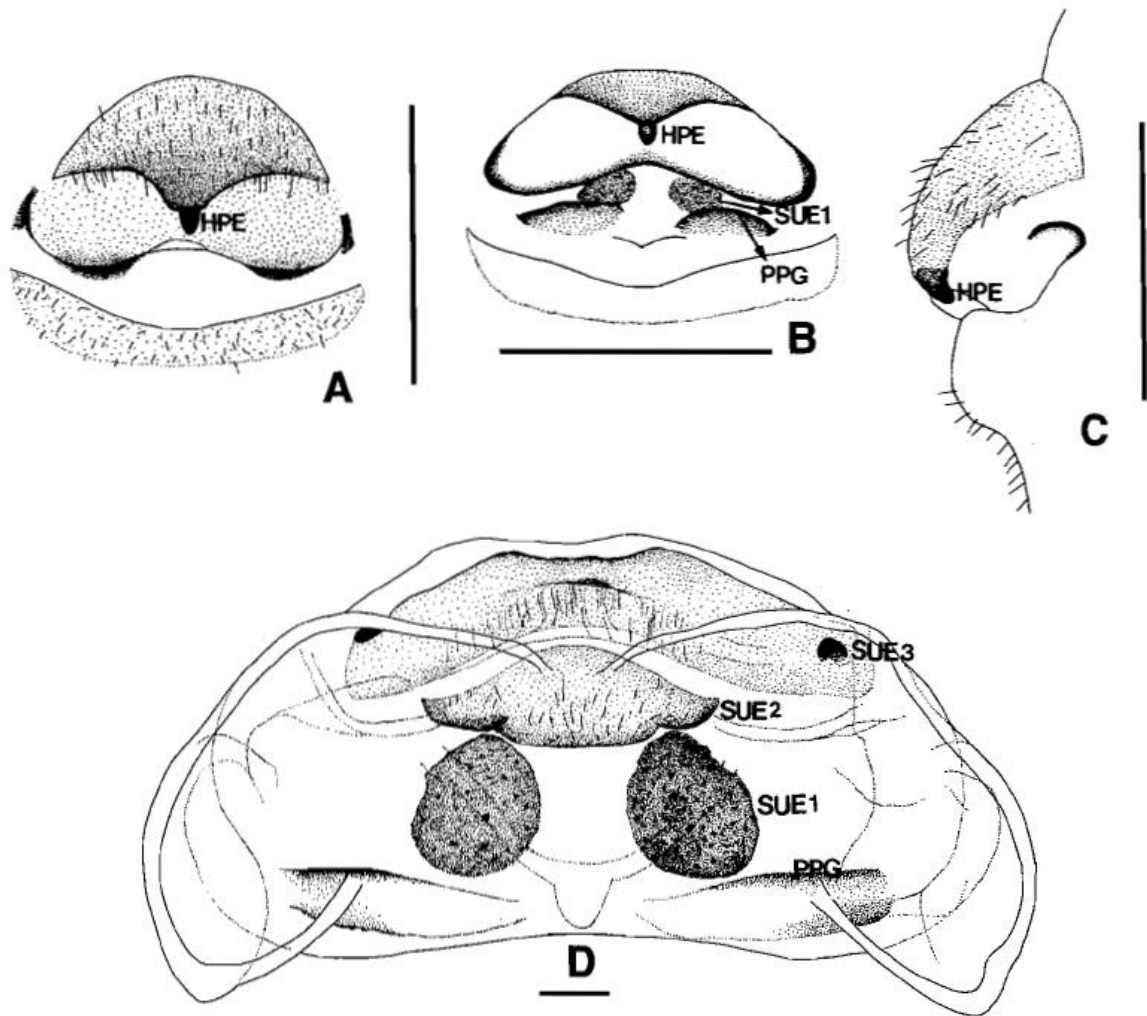


Figs. 1A-E. *Phocus gusuensis* sp. nov. (A-D, male; E, female). A, prosoma, dorsal view; B, opistosoma, dorsal view; C, eye area and clypeus, frontal view; D, right chelicerae, frontal view; E, tip of female palp, left part, retrolateral view. Scale bars = 1 mm (A-C), 0.5 mm (D), 0.1 mm (E).

P. acutulus Paik, 1978 in having identical uncus, embolus, degrading appendix and a hook-like prominence on epigynum. But this species is differentiated from large developed apophyses and heavily sclerotized callosity on procurus of male palpi, each two frontal and lateral apophyses of



Figs. 2A-F. Male palpal organs of *Pholcus gosuensis* sp. nov. (left part). A, bulb and procrurus, inner ectal view; B, procrurus, frontal view; C, procrurus, outer ectal view; D, uncus and embolus, ectal view; E, procrurus, inner ectal view; F, femur, inner ectal view. Scale bars = 1 mm (A-C), 0.5 mm (D-F).



Figs. 3A-D. Female genital organs of *Pholcus gosuensis* sp. nov. A-C, epigynum; A, ventral view; B, posterior view; C, lateral view; D, genitalia, ventral view. Scale bars = 1 mm (A-C), 0.1 mm (D).

chelicerae, and sclerotized arches of uterus externus of female genitalia.

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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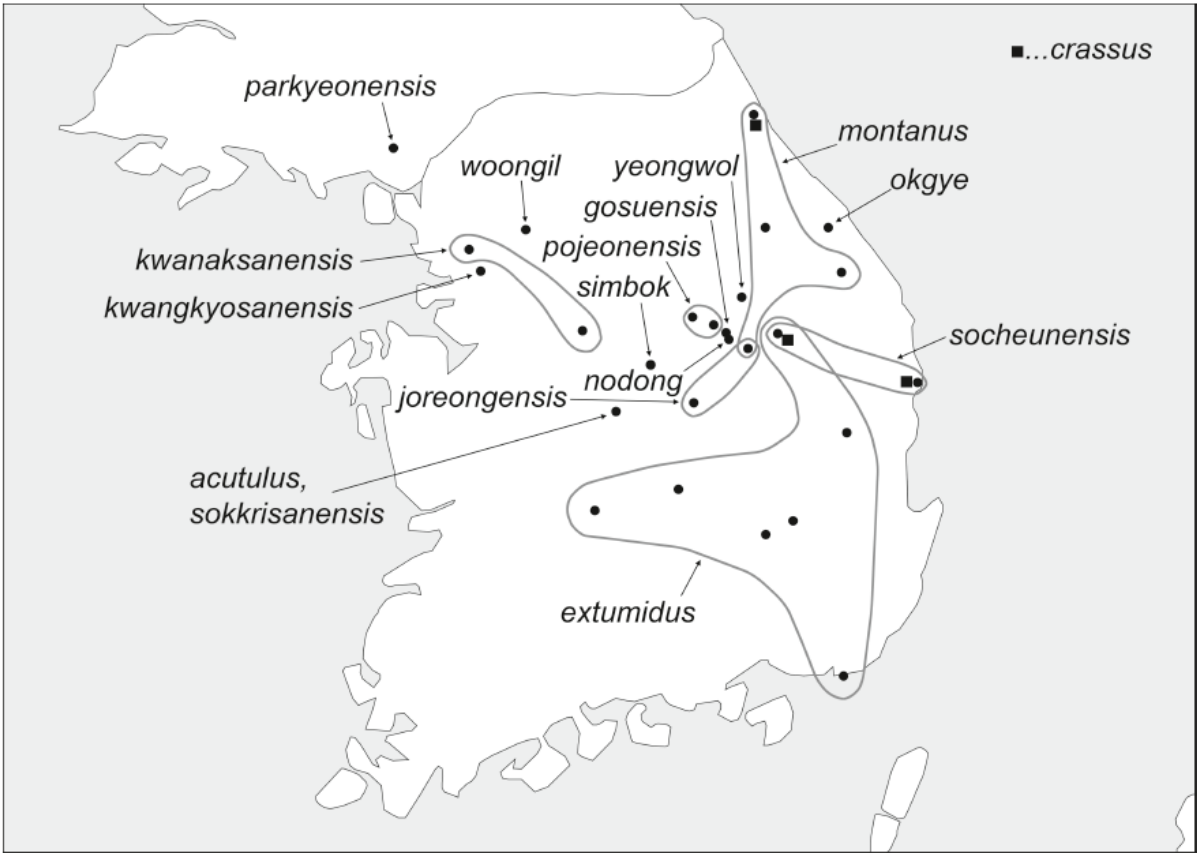


FIG. 2217. Known distribution of Korean representatives of the *Pholcus phungiformes* species group.