Pholcus kakum Huber, 2009

Huber, B. A. 2009. Life on leaves: leaf-dwelling pholcids of Guinea, with emphasis on *Crossopriza cylindrogaster*, a spider with inverted resting position, pseudo-eyes, lampshade web, and tetrahedral egg-sac (Araneae: Pholcidae). J. Nat. Hist. 43: 2491-2523.

p. 2496



(10-11) Pholcus kakum, n. sp., male and female with egg-sac;

p. 2498



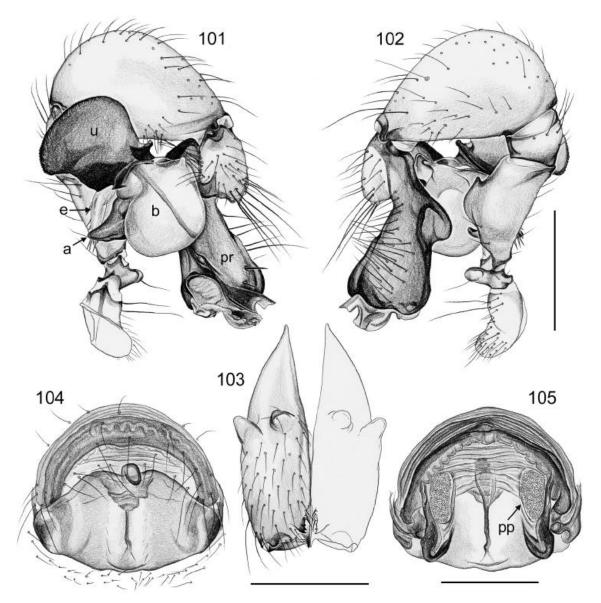
(32–33) *Pholcus kakum*, male in dorsal and lateral views; (34, 35) *P. kakum*, epigynum ventral and cleared dorsal views;

p. 2510

Pholcus kakum n. sp. (Figures 10, 11, 32–35, 101–123, 150)

Type

Male holotype from Kakum forest (5°20′N, 1°23′W), Ghana; primary forest, 21.xi.2005 (R. Jocqué, D. de Bakker, L. Baert), in MRAC (separated from 217714).



Figures 101–105. *Pholcus kakum*. (101, 102) Left palp, prolateral and retrolateral views, respectively; (103) male chelicerae, frontal view; (104, 105) cleared female genitalia, ventral and dorsal views, respectively. Notes: a, appendix; b, bulb; e, embolus; pp, pore plate; pr, procursus; u, uncus. Scale lines: 0.3 mm (103–105), 0.5 mm (101, 102).

Etymology

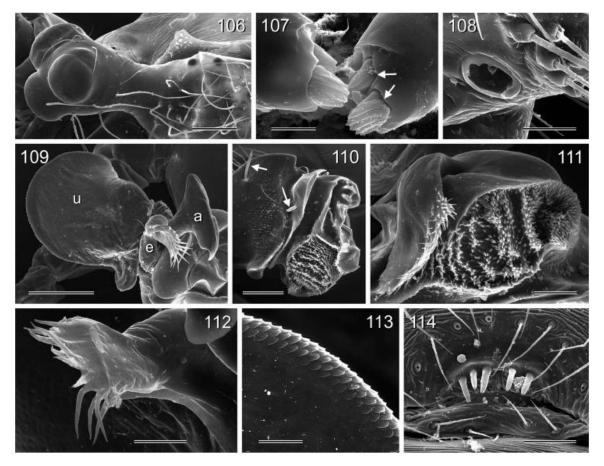
The species name is taken from the type locality and used as a noun in apposition.

Diagnosis

Distinguished from known congeners by the shapes of procursus (Figures 101, 102), uncus and appendix (Figures 101, 109), and epigynum (Figures 34, 104, 119).

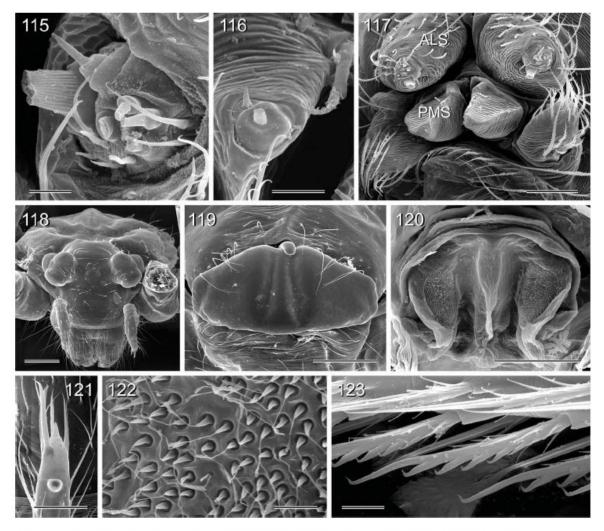
Male (holotype)

Total body length 3.7, carapace width 1.0. Leg 1: 32.0 (7.8 + 0.4 + 7.8 + 14.3 + 1.7), tibia 2: 5.0, tibia 3: 2.8, tibia 4: 4.4, tibia 1 L/d: 77. Habitus as in Figures 32 and 33;



Figures 106–114. *Pholcus kakum*. (106) Male ocular area with left eye stalk and AME, dorsal view; (107) distal male cheliceral apophyses with modified hairs (arrows); (108) left male palpal tarsal organ; (109) left bulbal projections, retrolatero-dorsal view; (110) tip of left procursus, prolateral view (arrows point to spines); (111) spiny area prolatero-distally on left procursus; (112) left embolus; (113) edge of uncus; (114) male gonopore with epiandrous spigots. Notes: a, appendix; e, embolus; u, uncus. Scale lines: 10 μm (107), 40 μm (108, 111–114), 100 μm (106, 110), 200 μm (109).

carapace mostly pale ochre-yellow, ocular area and clypeus dark brown, sternum and legs pale ochre-yellow, patellae and tibia-metatarsus joints dark brown, abdomen pale ochre-grey with indistinct dark spots dorsally, ventrally monochromous. Distance PME-PME 425 µm, diameter PME 125 µm, distance PME-ALE 25 µm, distance AME-AME 30 µm, diameter AME 20 µm. Ocular area elevated, with long hairs on posterior side, each triad on short stalk directed towards lateral (Figure 106). No thoracic furrow, clypeus unmodified. Chelicerae as in Figure 103, distal frontal apophyses with two modified hairs each (Figure 107), with lateral and frontal proximal apophyses. Sternum wider than long (0.70/0.50), unmodified. Palps as in Figures 101 and 102, coxa unmodified, trochanter with short retrolatero-ventral projection, femur with distinctive ventral modification, tarsal organ capsulate (Figure 108), procursus large, distally complex, with two prolatero-dorsal spines (Figures 101, 110) and distinctive spiny and possibly extensible area (Figure 111), bulb with large uncus with scaly edge (Figures 109, 113), T-shaped appendix, weakly sclerotized embolus with many transparent projections (Figures 109, 112). Legs without spines and curved hairs, few vertical hairs; retrolateral trichobothrium on tibia 1 at 4%;



Figures 115–123. *Pholcus kakum*. (115) Male ALS; (116) male PMS; (117) female spinnerets; (118) female prosoma, dorso-frontal view; (119) epigynum; (120) cleared female internal genitalia, dorsal view; (121) right female palpal tarsus, dorsal view; (122) detail of pore plate (enlarged from figure 120); (123) comb hairs on right female tarsus 4, prolateral view. Scale lines: 10 μm (115, 116, 122, 123), 60 μm (117, 121), 200 μm (118–120).

prolateral trichobothrium missing on tibia 1, present on other tibiae; tarsal pseudosegments indistinct, distally ~10 visible in dissecting microscope. ALS with one widened, one pointed, and five cylindrically shaped spigots (Figure 115); PMS with two small spigots (Figure 116). Gonopore of scanned male with five epiandrous spigots (Figure 114).

Variation

Tibia 1 in nine other males: 7.0–8.0 (mean 7.5).

Female

In general similar to male but triads closer together (distance PME-PME 220 µm), not on stalks (Figure 118), clypeus not darkened except upper part, carapace often with pair of posterior dark marks, dorsal spots on abdomen variably distinct. Tibia 1

in 11 females: 5.5–6.3 (mean 5.9). Epigynum with distinctive orange-brown plate with light median section traversed by darker line, with frontal "knob" (Figures 34, 119); internal genitalia as in Figures 35, 105, and 120. Tip of palpal tarsus ending in sclero-tized cone accompanied be several strong bristles (Figure 121). Tarsus 4 with ventral row of comb-hairs (Figure 123). Spinnerets and spigots as in male (Figure 117).

Distribution

Known from Ghana, Côte d'Ivoire, and Guinea (Figure 150).

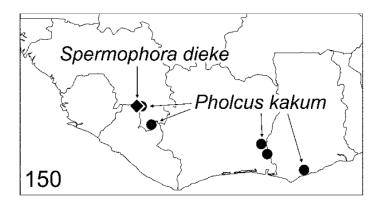
Material examined

GHANA: Kakum forest: 13 holotype above; same data, 24319 in MRAC (217714); same data but 16./18./23./25.xi.2005 (4 vials), 5310 in MRAC (217685, 217706, 217707, 217740); same data but secondary forest, 15./17./18./19.xi.2005 (4 vials), 436 in MRAC (217683, 217719, 217723, 217732).

CÔTE D'IVOIRE: *Moyen-Comoé:* FC Songan, near Comoé river [~6°07′N, 3°13′W], hand catch in forest, 8.iii.1997 (T. Steyn), 1♀ in MRAC (207396). Apouesso, FC Bossematié (6°35′N, 3°28′W), rain forest, 18.xi.1994 (R. Jocqué), 1♀ in MRAC (201011).

GUINEA: Guinée Forestière: Forêt Classée de Diéké (7°32.0′N, 8°49.9′W), 430 m a.s.l., 1.xii.2008 (B.A. Huber), 1♀ in ZFMK; Forêt Classée de Ziama (8°24.2′N, 9°19.3′W), 640 m a.s.l., 2.xii.2008 (B.A. Huber), 1♂1♀ in ZFMK; same data, 2♀ in pure ethanol, in ZFMK.

p. 2520



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

p. 200

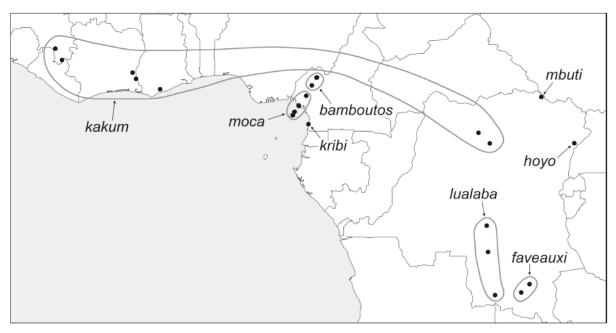


FIG. 940. Known distribution of the Pholcus bamboutos species group.

p. 209

Pholcus kakum Huber, 2009

Pholcus kakum Huber 2009b: 2510-2514, figs.10, 11, 32-35, 101-123, 150.

New records (MRAC Congostream Expedition 2009). CONGO DEM. REP.: Monzé (Engengele) (02°02'N, 22°44'E), "FOG07", 29.vi.2009, old secondary forest (periodically inundated), 2♀ in MRAC; same data but "FOG08", 2♂3♀ in MRAC; same data but "FOG09", 30.vi.2009, 4♂2♀ in MRAC; same data but "FOG10", 2♀ in MRAC. Basoko (Bokungu), 1°14'N, 23°36'E, "FOG11", 7.iii.2009, old palm plantation (60 years old), 2♂3♀ in MRAC; same data but "FOG12", 7♂10♀ in MRAC.