Smeringopina fang Huber, 2013

Huber, B. A. 2013. Revision and cladistic analysis of the Guineo-Congolian spider genus *Smeringopina* Kraus (Araneae, Pholcidae). Zootaxa 3713: 1-160.

p. 16

Smeringopina fang new species

Figs. 29-30, 125-132, 165-166, 175-176, 197-224

Type. ♂ holotype from Gabon, Ogooué-Ivindo, near Djidji (0°12.8'N, 11°49.3'E), 470 m a.s.l., forest, 12.viii.2011 (B.A. & S.R. Huber), in ZFMK (Ar 10193).

Other material examined. GABON: *Ogooué-Ivindo*: near Djidji, same data as holotype, $6\sqrt[3]{7}$ 1 juv. (2 vials) in ZFMK (Ar 10194-95); same data, $1\sqrt[3]{4}$ 2 juvs. in pure ethanol, in ZFMK (Gab 239). Monts de Belinga, forest near Mayebout (1°06.7'N, 13°06.6'E), 500 m a.s.l., 13.–14.viii.2011 (B.A. & S.R. Huber), $3\sqrt[3]{14}$ 1 juv. in ZFMK (Ar 10196); same data, $5\sqrt[3]{4}$ 1 juv. in pure ethanol, in ZFMK (Gab 197). Near Ntenkélé (0°31.4'N, 12°31.5'E), 550 m a.s.l., forest, 12.viii.2011 (B.A. & S.R. Huber), $2\sqrt[3]{4}$ in ZFMK (Ar 10197); same data, $1\sqrt[3]{4}$ 1 juv. in pure ethanol, in ZFMK (Gab 236). Makokou, CNRS [0°30.8'N, 12°48.2'E; not 0°04'N, 12°08'E as on label], ix.–xi.1976 (A.L. Rypstra), $8\sqrt[3]{18}$ 4 juvs. in USNM. *Moyen-Ogooué*: near Ndjolé, "site 1" (0°09.0'S, 10°40.0'E), 120 m a.s.l., forest near brook, 11.viii.2011 (B.A. & S.R. Huber), $6\sqrt[3]{3}$ 2 juvs. in ZFMK (Ar 10198); same data, $2\sqrt[3]{4}$ 1 juv. in pure ethanol, in ZFMK (Gab 230). *Ngounié*: Massif du Chaillu, "site 2", near Moukabou (1°36.6'S, 11°40.7'E), 560 m a.s.l., forest, 25.viii.2011 (B.A. & S.R. Huber), $3\sqrt[3]{2}$ in ZFMK (Ar 10199); same data, $1\sqrt[3]{4}$ 1 juv. in pure

ethanol, in ZFMK (Gab 175). Massif du Chaillu, "site 3", between Mimongo & Yéno (1°38.1'S, 11°32.6'E), 570–650 m a.s.l., forest, 26.viii.2011 (B.A. & S.R. Huber), 2♂6♀ in ZFMK (Ar 10200); same data, 1 juv. in pure ethanol, in ZFMK (Gab 235).

Etymology. Named for the Fang, an ethnic group ranging from southern Cameroon south into Gabon and Congo; noun in apposition.

Diagnosis. Easily distinguished from known congeners by distinctive long and slender process of bulb (Fig. 199) and by highly distinctive pair of processes on epigynum (Figs. 206, 221); also by pair of large sclerotized areas medially on male chelicerae (Fig. 205; sometimes indistinct) and small retrolateral apophysis on male palpal femur directed toward dorsally (Fig. 129).

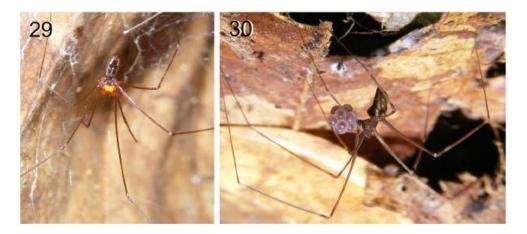
Male (holotype). Total body length 3.2, carapace width 1.1. Leg 1: 34.3 (8.1 + 0.4 + 8.3 + 15.8 + 1.7), tibia 2: 4.8, tibia 3: 3.3, tibia 4: 5.1; tibia 1 L/d: 94. Distance PME-PME 95 μm, diameter PME 115 μm, distance PME-ALE 55 μm, distance AME-AME 25 μm, diameter AME 90 μm. Carapace ochre-yellow with brown triangular mark posteriorly and brown lateral margins; ocular area with brown mark posteriorly; clypeus with pair of brown bands, sternum brown; legs light brown, with indistinct darker rings subdistally on femora and tibiae and in patella area, tips of femora and tibiae whitish; abdomen ochre-gray with dark pattern dorsally, laterally, and ventrally, ventral dark bands with lateral constriction. Habitus as in Figs. 125-126, ocular area slightly elevated, secondary eyes with indistinct 'pseudo-lenses'; clypeus with pointed and slightly hooked apophysis near rim (Figs. 211, 213– 214); deep thoracic pit and pair of shallow furrows diverging behind pit. Chelicerae as in Figs. 205 and 213-215, with lateral apophyses in very distal position, with distinctive pair of large sclerotized areas medially, with rows of small frontal apophyses, without modified hairs. Palps as in Figs. 127-129; coxa with indistinct retrolateral apophysis; trochanter with simple ventral apophysis; femur with large retrolateral apophysis directed toward ventrally, small retrolateral apophysis directed toward dorsally, small proximal prolateral process, and weakly sclerotized ventral projection distally; prolateral femur-patella joint strongly shifted toward ventrally; tarsus with some longer and slightly stronger hairs dorsally (Fig. 216); procursus with large distal apophysis and complex membranous prolatero-ventral structures, without hinge (Figs. 197-198); bulb with long slender process (sperm duct opens at basis of this process from weakly sclerotized bulge; Figs. 199, 218). Legs without spines and curved hairs, with few vertical hairs; retrolateral trichobothrium on tibia 1 at 1%; prolateral trichobothrium present on all tibiae; pseudosegments barely visible. ALS with eight spigots each; male gonopore with two epiandrous spigots (Fig. 219).

Variation. There is conspicuous variation among localities and the species may eventually turn out to include several reproductively isolated communities. They are here treated as one species because different characters suggest different groupings and some characters seem to vary continuously and are difficult to evaluate given the small sample of localities and specimens. The distal procursus apophysis may be short and thick (Ndjolé; Figs. 200–201), short and bifid (Massif du Chaillu; Figs. 203–204), or just much shorter than in the holotype (Mayebout, Makokou); the membranous structures prolatero-ventrally on the procursus seem to differ among localities but are difficult to evaluate; the same is true for the slender process of the bulb that may be variably curved (Figs. 199, 202). Tibia 1 in 23 other males: 7.7–9.2 (mean 8.3).

Female. In general similar to male; clypeus unmodified. Tibia 1 in 44 females: 4.8–5.8 (mean 5.2). Epigynum anterior plate with pair of distinctive projections (Figs. 206, 221) whose shapes and positions vary among localities (more rounded than in specimens from type locality in specimens from Massif du Chaillu, Ntenkélé, Ndjolé: Fig. 209; closer together in females from Ntenkélé); entire anterior plate sometimes relatively narrower (Mayebout, Makokou, Ntenkélé); posterior indentation sometimes much deeper (Massif du Chaillu, Makokou, Ndjolé: Fig. 209, Mayebout: Figs. 222, 224); with rugose area in anterior part of anterior epigynal plate; posterior plate laterally with overhanging folds; internal genitalia as in Figs. 175–176, 207, 210.

Natural history. Litter-dwelling species with small domed webs under dead curved leaves on the ground. At "site 1" near Ndjolé this species was found to share the leaf-litter with the superficially very similar *S. ndjole*.

Distribution. Widely distributed in Gabon (Fig. 114).

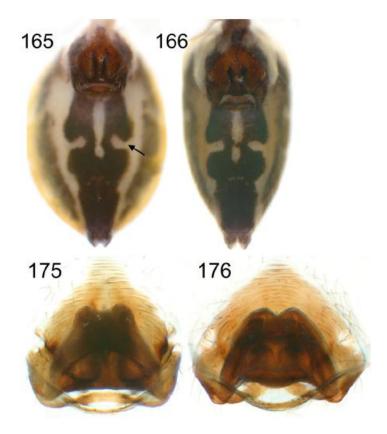


 $29\text{--}30.\ \textit{S. fang},$ male (Djidji, Gabon) and female with eggsac (Mayebout,

Gabon).

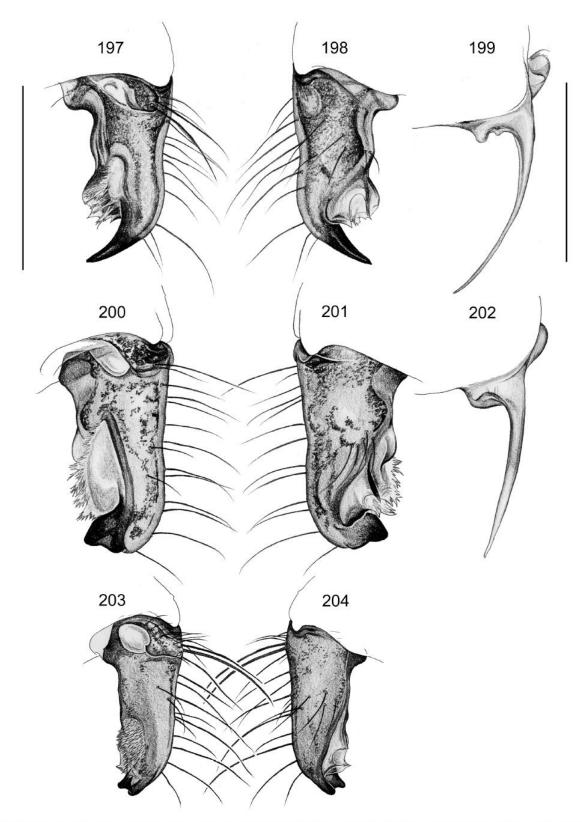


FIGURES 125–132. Smeringopina fang n. sp. 125–126. Male, dorsal and ventral views. 127–132. Left male palps of males from Djidji (127–129) and Ndjolé (130–132), prolateral, dorsal, and retrolateral views. Arrows point at prolateral femur-patella joints (127, 130) and at distinctive small apophysis directed toward dorsally (129).

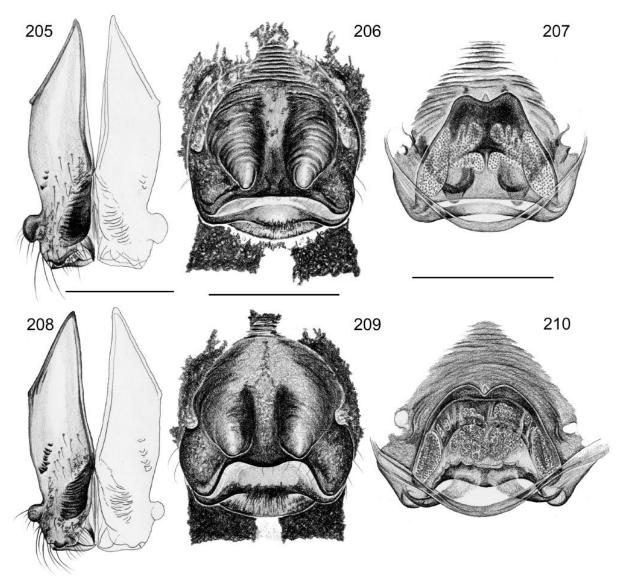


Ndjolé (166, 176).

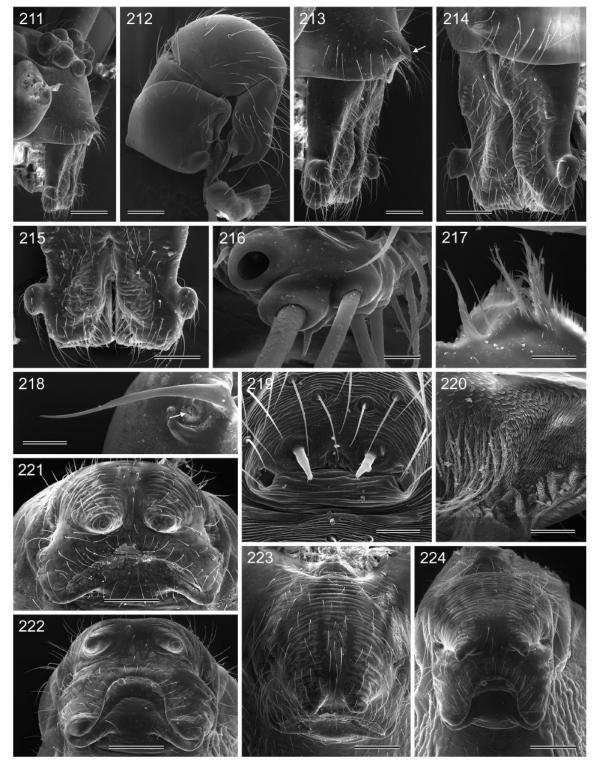
165–166, 175–176. S. fang n. sp. from Djidji (165, 175) and



FIGURES 197–204. Smeringopina fang n. sp., males from Djidji (type locality; 197–199), Ndjolé (200–202) and Massif du Chaillu (203–204). 197–198, 200–201, 203–204. Left procursi, prolateral and retrolateral views. 199, 202. Left bulbal processes, prolateral views. Scale lines: 0.3 (bulbs, at same scale), 0.5 (procursi, at same scale).



FIGURES 205–210. *Smeringopina fang* n. sp., specimens from Djidji (type locality; 205–207) and Ndjolé (208–210). 205, 208. Male chelicerae, frontal views. 206, 209. Epigyna, ventral views. 207, 210. Cleared female genitalia, dorsal views. Scale lines: 0.3 (chelicerae, at same scale), 0.5 (epigyna, cleared genitalia).



FIGURES 211–224. Smeringopina fang n. sp. 211. Male prosoma, frontal part in lateral view. 212. Right male palp, retrolateral view. 213–214. Male clypeus and chelicerae, lateral and oblique views; arrow points at clypeus apophysis. 215. Male chelicerae, frontal view. 216. Palpal tarsal organ. 217. Membranous processes on left procursus, prolateral view. 218. Bulbal apophysis; arrow points at sperm duct opening. 219. Male gonopore. 220. Male palpal endite, internal view. 221–222. Epigyna, ventral (slightly posterior) views, from Djidji (221) and Mayebout (222). 223–224. Epigyna, ventral views, from Djidji (223) and Mayebout (224). Scale lines: $10 \mu m$ (216), $30 \mu m$ (219, 220), $40 \mu m$ (217), $60 \mu m$ (218), $100 \mu m$ (213–215), $200 \mu m$ (211–212, 221–224).