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A new harvestman from Cameroon (Arachnida: Opiliones: Phalangiidae)

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ABSTRACT. Camerobunus okucola, a new genus and species of the family Phalangiidae is described from Cameroon. The genus is compared with its closest relatives: Odontobunus, Cristina and Megistobunus.

KEY WORDS: Phalangiidae, Cameroon, systematics, new genus, new species.

INTRODUCTION

The subfamily Phalangiinae is the only part of the family Phalangiidae reaching in Africa further south than the Mediterranean Region. From the sub-Saharan part of the continent the following genera were up-to-date known (STAREGA 1984): *Rhampsinitus* SIMON, 1879, *Cristina* LOMAN, 1902, *Guruia* LOMAN, 1902, *Odontobunus* Roewer, 1910, *Dacnopilio* ROEWER, 1911 and *Megistobunus* HANSEN, 1921. One additional, described after 1984 (KAURI 1985) genus *Hindreus* KAURI, 1985 is rather doubtful, possibly identical with *Odontobunus*. Seven further genera of the subfamily were noted either from the Mediterranean (*Phalangium* LINNAEUS, 1758, *Metaphalangium* ROEWER, 1911), from Ethiopia (*Coptophalangium* STAREGA, 1984) or from nearby islands (Madeira, Canary and Selvagens Islands: *Metadasylobus* ROEWER, 1911, *Bunochelis* ROEWER, 1923, *Parascleropilio* RAMBLA, 1975, *Ramblinus* STAREGA, 1984). Some of the genera or species were revised (STAREGA 1972, 1973, 1984, 2008) but many of them have still a doubtful systematic position. Geographically most species are known from the belt from Ethiopia to South Africa in

the East, less from West Africa and the other from the regions mentioned above. No species has been known from Cameroon.

TAXONOMY

Camerobunus gen. n.

Diagnosis

A genus of Phalangiinae with the following characteristics.

- 1. Body with small denticles mainly on carapace and only sparse on abdomen. Main coloration brown with different shades of brown.
- 2. Eye mound as high as long and wide, its distance from frontal margin is equal to its length. Eye rings with sharp denticles of the same size in front and behind.
- 3. Supracheliceral lamellae with small denticles.
- 4. Chelicerae in males with hardly visible bump frontally over the chelae. Not enlarged or modified.
- 5. Pedipalps: patella with triangular apophysis, tibia only with thickened distal end, tarsus with relatively few sensual granules ventrally. No articles armed, only with bristles.
- 6. Legs of medium: length (BLI about 1.7), femora through tibiae in males or only femora in females with minute denticles. Other articles with bristles. Metatarsi with false articulations.
- 7. Penis with slightly broadened base, subapical "spoon" hardly visible, glans banana-shaped, stylus long.

Affinities

Camerobunus is most closely related to Odontobunus – similar are: male chelicerae, legs and to some extent pedipalps and penis; differences are: the armature of the eye mound (characteristic "crown" of 3+3 or 4+4 long thorns in Odontobunus) and the body (thorns or large denticles in Odontobunus). Some similarities exist also with Cristina and Megistobunus but differences are: eye mound, chelicerae, pedipalps and penis. The other African and non-African Phalangiinae are not directly related or even similar.

Etymology

The name comes from words Cameroon and Odontobunus. Its gender is masculine.

Species typica

Camerobunus okucola sp. n. The genus is monotypic.

Camerobunus okucola sp. n.

Type locality

Cameroon, North-West Province, Mt Oku, 2800 m a.s.l. (6°12.801' N, 10°31.837' E).

Material examined

1 \circlearrowleft (holotype), 1 \circlearrowleft , 1 \circlearrowleft (paratypes), 1 j: Cameroon, North-West Province. Mt Oku, 6°12.801' N, 10°31.837' E, 2800 m a.s.l., 3.–5. May 2006 leg. B.D. GILL. 4 \circlearrowleft (paratypes), 2 j: Cameroon, North-West Prov., Mt and Lake Oku, 6°12.218' N, 10°27.598' E, 2200 m a.s.l., 6. May 2006 leg. B.D. GILL. The holotype and 1 paratype (\circlearrowleft) are stored in the Zoological Institute, Russian Academy of Sciences, Sankt-Petersburg, Russia, 3 \backsim paratypes (from the second series) in the Institute of Zoology, National Academy of Sciences of Azerbajian (Baku), 1 \circlearrowleft and 1 \backsim paratypes (from the first series) in the reference collection of the first author (RCWS II/0091).

Etymology

The specific name is a noun in apposition meaning "living in Oku". Its gender is masculine (like "agricola"!).

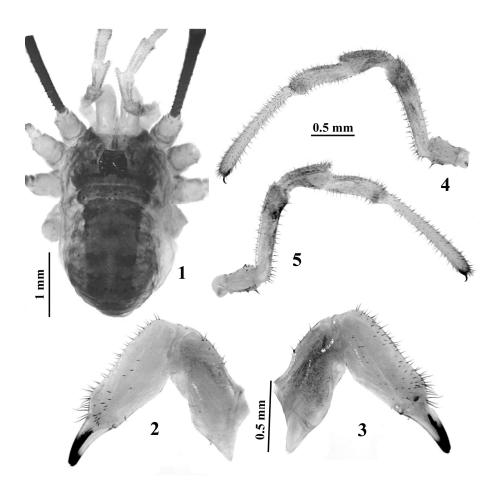
Description

Male holotype. Body 3.1 mm long, 1.9 mm wide. Carapace with sharp denticles in front of and laterally to the eye mound (directly in front a smooth stripe) (Fig. 1). Each free thoracal tergite with single transversal row of minute denticles, abdominal tergites with very few denticles and with short bristles. Eye mound as in genus diagnosis, eye rings with 6-7 strong denticles each. Supracheliceral lamellae with single sharp denticles. Venter smooth, sternites with rows of short bristles, genital operculum, coxae and mouth vicinity with stronger bristles.

Chelicerae small, only with scattered bristles (Figs 2-3). Basichelicerite 1.13 mm long, distal article 1.26 mm long. The second article frontally over the chelae with a small, hardly visible (from side!) bump. Pedipalps not armed, only with bristles (Figs 4-5). Some minute denticles dorsally on trochanter. Patella medio-apically with a triangular, conical apophysis. Distal end of tibia slightly thickened but without apophysis.

Tarsus ventrally with short longitudinal row of granules near mid-length. Length of pedipalpal articles: femur 1.22, patella 0.48, tibia 1.22, tarsus 1.31; total length 4.23 mm.

Legs of medium length (BLI 1.68) ("Beinlängenlindex" [index of legs length] as proposed by STAREGA (1972) = proportion of femur I length to the width of carapace between coxa II and III), slender, without any modifications. All articles rounded. Femora with \pm regular longitudinal rows (2-3 laterally and dorsally) of minute denticles or short bristles. Tibiae with similar denticles on the ventral edges. The other segments only with bristles. Metatarsi I and III with 3 false articulations, II with 5 [holotype lacks both legs IV – paratype with 4]. Length of legs: I 3.23+0.85+2.77+4.0+5.61 = 16.46, II 5.77+1.08+5.92+6.61+11.3 = 30.68, III 3.46+0.85+2.69+4.23+6.23 = 17.46, IV 4.92+0.85+3.46+5.84+8.07 = 23.14 mm.



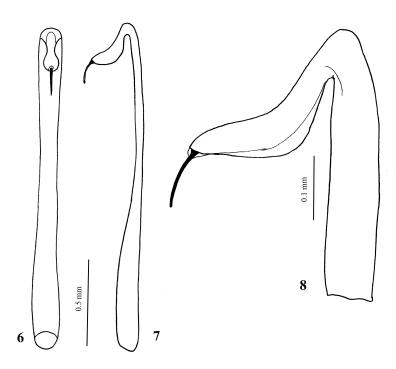
Figs 1-5. *Camerobunus okucola* gen. et sp. n., male (holotype): 1 – dorsal view of the body; 2 – right chelicera, mesal view; 3 – right chelicera, ectal view; 4 – right pedipalpus, mesal view; 5 – right pedipalpus, ectal view.

Penis is nearly rod-like, base a little broader and apical "spoon" only marked as a shallow furrow (Figs 6-8). Glans large, banana-shaped, stylus long. Length of the shaft 1.91 mm, glans 0.33 mm, stylus 0.15 mm.

Coloration. Body generally brown with different shadows from yellowish to dark brown. The saddle begins broad on the frontal margin of carapace and reaches nearly to the last tergite being gradually narrower or nearly with parallel margins (on abdominal tergites). Body sides yellowish-brown, venter yellow, coxae darker – brownish-yellow in distal halves [or only slightly darker with small apical brown spot – in the paratype]. Chelicerae and pedipalps yellow, femur darker (brownish-yellow) towards the apex. Legs uniformly dark brown, metatarsi and tarsi slightly lighter.

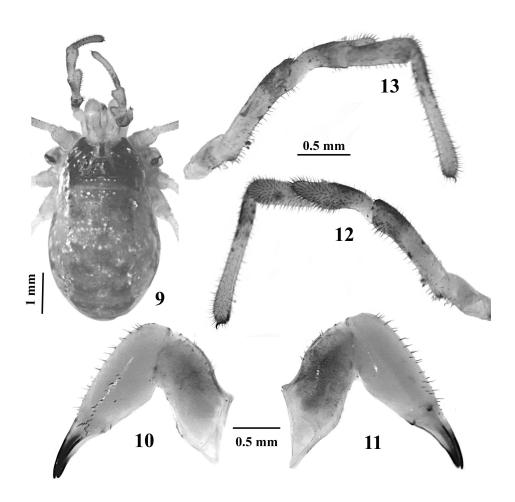
Male paratype (from the same series – RCWS II/0091) is identical to holotype – the small differences noted in the description above.

Female paratypes differ in the following: Body oviform, nearly smooth; patella of pedipalp with longer, nearly finger-like apophysis, tibia with very short, lobiform apophysis; body coloration less contrasted, saddle with brighter and sides with darker patches, saddle with thin, whitish-yellow margins, venter brownish-yellow, legs with lighter rings; false articulations -2, 5, 1-2, 2. Body 4.5 mm long, 2.4 mm wide (Fig. 9).



Figs 6-8. *Camerobunus okucola* gen. et sp. n., male (holotype): 6 – penis, dorsal view; 7 – penis, lateral view; 8 – glans, lateral view.

Basichelicerite 1.14 mm, distal article 1.47 mm long (Figs 10-11). Length of pedipalpal articles: femur 1.17, patella 0.83, tibia 0.72, tarsus 1.33; total length 4.05 mm (Figs. 12-13). Length of legs: I 2.92+0.85+2.31+3.85+4.61=15.54, II 4.84+1.0+3.46+5.38+7.54=22.22, III 2.77+0.77+2.08+3.15+5.0=13.77, IV 4.6+0.92+3.08+5.38+7.46=21.44 mm.



Figs 9-13. *Camerobunus okucola* gen. et sp. n., female (paratype): 9 – dorsal view of the body; 10 – right chelicera, mesal view; 11 – right chelicera, ectal view; 12 – right pedipalpus, mesal view; 13 – right pedipalpus, ectal view.

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