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The genus *Cyathiger* KING from the Solomon Islands (Coleoptera: Pselaphidae)

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Cyathiger solomonensis sp. n. from the Solomon Islands is described and illustrated. This find extends the known range of the genus considerably eastwards. The phylogenetic position of the new species within the genus is briefly discussed.

INTRODUCTION

The genus *Cyathiger* KING is known from the afrotropical and indo-australian regions. Unidentified material in the collections of the MHNG indicate that the genus is particularly abundant and diverse in the oriental realm, where it is commonly found in tropical forests at low elevations. Published information on *Cyathiger* spp. from the Australian faunal region east of Wallace's line is scarce. Five species are recorded from Australia (BURCKHARDT, 1988; CHANDLER, 1986) and four from New Guinea (RAFFRAY, 1882, 1903).

Among unidentified pselaphids in the collections of the BMNH were two *Cyathiger* spp. from the Solomon Islands. This material is interesting as it extends the known range of the genus considerably eastwards. One species is described below; the second one is represented by a single female from Solomon Islands, San Cristoval, Nr. Wainoni, 1000', 8. viii. 1965 (P. N. Lawrence), ridge litter 371–394, Roy. Soc. Exped., Brit. Mus. 1966-1 (BMNH). In the absence of males, it is not described. It differs from *C. solomonensis* sp. n. in the longer setosity, in the shape of the antennal club and in the larger eyes.

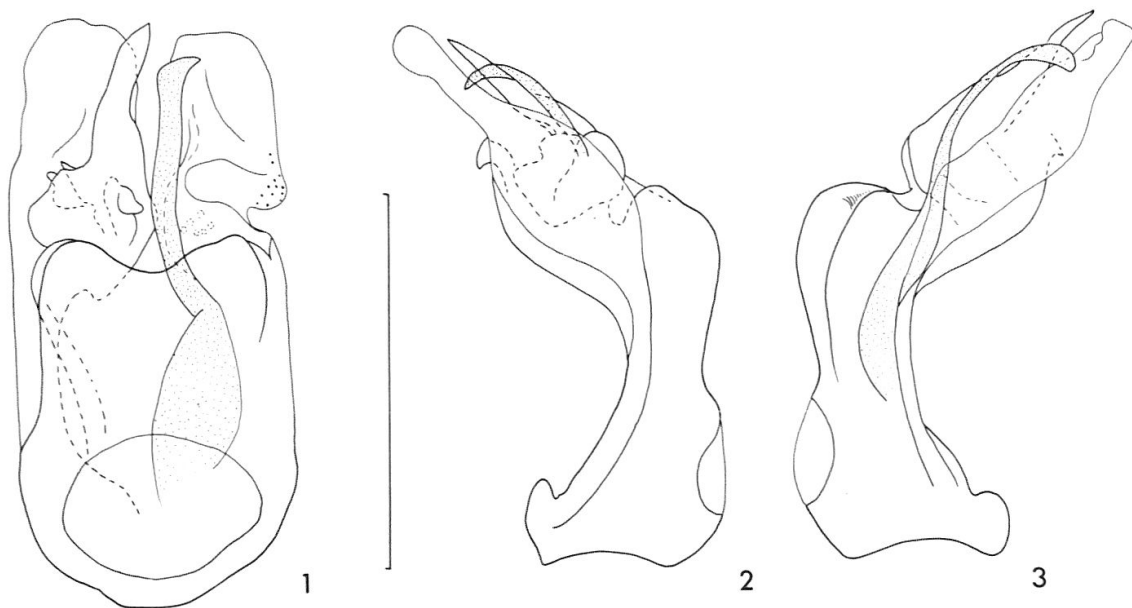
Material is deposited in the British Museum (Natural History), London (BMNH), and the Muséum d'Histoire naturelle, Genève (MHNG). I thank M. E. Bacchus (BMNH) for the loan of material.

DESCRIPTION OF SPECIES

Cyathiger solomonensis sp. n.

Description. Length 1.6 mm. Coloration chestnut brown, tarsi lighter, abdomen slightly darker; maxillari palpi ochreous. Finely and confluent punctured with medium long, whitish, adpressed setosity. Head including eyes as long as wide (0.30/0.30 mm), a little narrower than pronotum. Frontal lobe wider than long (0.11/0.18 mm), lateral margins weakly converging to apex, anterior corners rounded, slightly raised to form small tubercles, anterior margin indented in the middle, with deep, short longitudinal groove in the middle bearing punctures. Interocular foveae indistinct, not differentiated from punctures. Fore-margin of

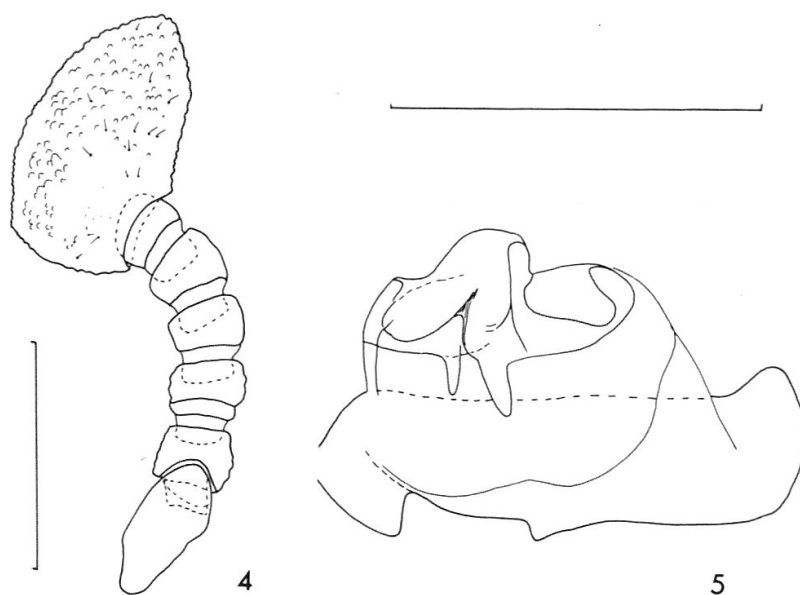
eyes situated slightly behind anterior third of head (0.11/0.18 mm). Head, in dorsal aspect, strongly rounded behind eyes; hind-margin almost straight. Lower head margin, in dorsal view, forming conspicuous tooth in front of eyes. Lower head margin, in profile, straight or weakly curved, not costate. Ventral surface finely granulate without setae, bearing a low median tubercle which is flattened anteriorly and laterally forming a three faced pyramid; on either side with shallow longitudinal depressions which are carinate laterally. Eyes medium sized. Antennae 7-segmented (fig. 4); scape about twice as long as pedicel, slightly widened towards apex, apical margin forming a small interior and exterior lobe; segment 3 slightly longer than pedicel with indistinct suture in basal portion of interior surface, suture completely reduced on exterior surface; segments 4 and 5 subequal, slightly shorter than segment 3, somewhat wider than pedicel; segment 6 narrower and shorter than preceding segments, partially included in basal cavity of segment 7 which forms a club. Apical segment of maxillari palpi (length 0.09 mm) conical, slightly widening towards apical third, surface smooth, evenly covered in suberect setae. Pronotum as wide as long (0.33/0.33 mm); maximum width slightly before the middle, convex. Lateral foveae large and deep, mediobasal one shallower. Elytra together wider than long (0.41/0.57 mm), widest behind the middle, apical margin weakly convex. Humeral foveae very deep and large, with short, wide humeral groove, sutural foveae smaller, discal foveae not visible. Abdomen with a well-developed longitudinal, lateral carina on either side and a very indistinct median one which bears a flat subapical hump; with deep transverse groove at the base of first visible tergite. Pygidium weakly convex with small median tubercle. Metasternum laterally with a large tooth in front of coxal insertions; lateral longitudinal carinae developed; median part depressed, anterior part bearing a round patch with dense setae covered in secretions. Tibial groove of femora with very indistinctly serrate anterior and posterior margins.



Figs. 1–3. *Cyathiger solomonensis* sp. n., aedeagus. 1: dorsal view. 2, 3: lateral views. Scale line = 0.2 mm.

Sexual characters of female. Eyes relatively flat, oval, consisting of about 10 coarse facets. Antennal club similar to the one of male but shorter. Legs simple. Metasternum along hind-margin, in the middle, adjacent to coxal insertion with two small tubercles. Base of abdomen on ventral surface with 2 deep depressions filled with setae which are covered in secretions similar to male; abdominal venter weakly depressed and smooth in the middle, almost flat and punctured apically, without apicolateral ridges. Apical sternite bearing internal, little sclerotized armature which has two backwards directed processes in the middle (fig. 5).

Sexual characters of male. Eyes strongly convex, oval, consisting of 10–15 coarse facets. Antennal club elongate triangular (fig. 4), interior surface flat, exterior surface weakly convex; evenly setose and covered in small tubercles apart from base of internal surface which is smooth. Legs simple, pro and mesotibiae with small subapical tooth on inner face. Metasternum along hind-margin adjacent to coxal insertions with each a large, backwards directed hook. Ventral surface of abdomen with shallow median depression which is very finely granulate, two deep depressions at the base of abdomen densely covered with setae. Ventral depression delimited laterally by a longitudinal ridge bearing 3 flat irregular teeth.



Figs. 4, 5. *Cyathiger solomonensis* sp. n. 4: ♂ antenna. 5: last ♀ abdominal sternite with internal armature. Scale line = 0.2 mm.

Aedeagus (figs. 1–3) 0.31 mm long. Median lobe flat with a long, strongly sclerotized, apical process. Parameres large, apart from base membranous. Internal sac slender, curved.

Material examined. Holotype ♂, Solomon Islands: New Georgia, Vangunu Is., 23177, 10. vi. 1966 (P. Greenslade), B. M. 1966-477 (BMNH).

Paratypes. Solomon Islands: 1♂, same data as holotype; 2♂, Kolombangara, N of Kuzi, 500', 6. ix. 1965 (P. N. Lawrence), forest litter 721–750, Roy.

Soc. Exped., Brit. Mus. 1966-1; 1♂, 1♀, same, 1000', forest litter 751–780; 1♀, Kolombangara, S of Kuzi, 1000', 6. ix. 1965 (P. Greenslade), litter, Roy. Soc. Exped., Brit. Mus. 1966-1 (BMNH, MHNG).

Comments. *C. solomonensis* sp. n. differs from other described species in the combination of the following characters: number of antennal segments, shape of antennal club, and morphology of aedeagus. The latter character does not indicate a close relationship to any of the described species. The antennal club resembles the one of *C. bironis* RAFFRAY from which it differs in the reduced number of antennal segments.

RÉSUMÉ

Cyathiger solomonensis sp. n. découvert dans les îles Salomon est décrit. Cette trouvaille élargit considérablement vers l'est l'aire de répartition connue pour ce genre. La position phylogénétique dans le genre de l'espèce nouvelle est brièvement discutée.

REFERENCES

- BURCKHARDT, D. 1988. On some Australian species of *Cyathiger* KING (Coleoptera: Pselaphidae). *Revue suisse Zool.*, 95: in press.
- CHANDLER, D. S. 1986. A revision of the genus *Cyathiger* (Coleoptera: Pselaphidae). *Aust. ent. Mag.*, 12: 119–124.
- RAFFRAY, A. 1882. Psélaphides nouveaux ou peu connus. *Revue Ent.*, 1: 1–16.
- RAFFRAY, A. 1903. Voyage de M. L. BIRÓ dans les possessions allemandes de la Nouvelle-Guinée. Psélaphides. *Anns. hist.-nat. Mus. natn. hung.*, 1: 29–101.

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