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Two New Dytiscid Beetles from Palawan, the Philippines[1)]

By

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The dytiscid fauna of Palawan is very poorly known, no more than fifteen species having been recorded from the island so far as I am aware. In 1977, I had an opportunity to visit Palawan as a member of the National Science Museum expedition to the Philippines under the leadership of Dr. Tadashige HABE. During our short stay, I was able to collect some interesting aquatic beetles, two species of which seemed to be new to science. They belong to the genera *Lacconectus* MOTSCHULSKY and *Sandracottus* SHARP respectively, both of which are considered to be the Indo-Malayan elements. It is difficult to retrace their origins, but their ancestors seem to have reached Palawan via Borneo.

Before going further, I wish to express my hearty thanks to the members of the Philippine expedition, above all to Dr. Yoshihiko KUROSAWA and Dr. Shun-Ichi UÉNO for their kind support in many ways during the course of the researches.

Lacconectus (*Paralacconectus*) *kurosawai* M. SATÔ, sp. nov.

(Figs. 1–3)

Body oval, moderately convex, shining. Color brown; inner sides of eyes, anterior margin and centro-posterior area of pronotum, lateral margins, sutural part and two zigzag bands of elytra, and epipleura darkened; femora and tarsi of hind legs dark brown.

Head about 1.8 times as broad as long; surface microreticulated, provided with a small number of minute punctures on the inner sides of eyes; clypeus emarginate in front. Pronotum about 3 times as broad as long, broadest at the base which is about 1.6 times as broad as the anterior breadth; sides rounded anteriorly; surface microreticulated as on head, being provided with a series of punctures along the anterior margin and with a group of punctures along the lateral to posterior margins, which do not reach the central area; scutellum minute. Elytra about 1.2 times as broad as pronotum, about 1.3 times as long as broad, broadest at the middle, thence gently narrowed anteriorly and more strongly so posteriorly; surface finely and somewhat

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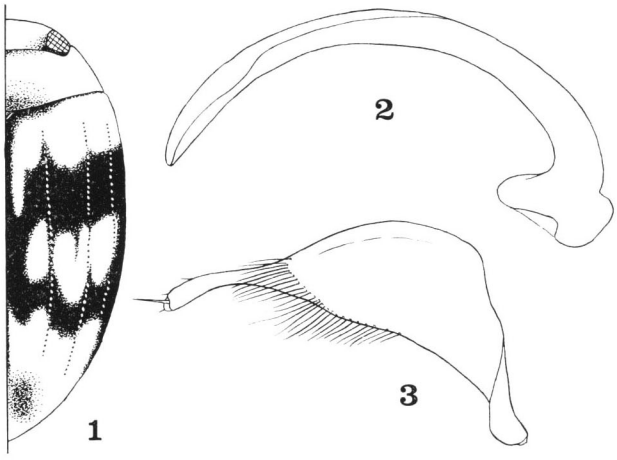


Figs. 1–3. *Lacconectus* (*Paralacconectus*) *kurosawai* M. SATÔ, sp. nov. —— 1. Body, right half. —— 2. Median lobe of male genitalia in lateral aspect. —— 3. Paramera of male genitalia in lateral aspect.

closely punctate and scattered with more or less distinct punctures in addition to the fine ones, the distinct punctures on lateral and posterior areas bearing fine pubescence; integument finely microreticulated; each elytron provided with three punctate striae which do not reach the anterior and posterior margins.

Ventral surface finely microreticulated; prosternal process distinctly swollen apicad and with rounded tip, the apical portion being ridged at the sides. Legs somewhat flattened; basal three segments of pro- and mesotarsi incrassate and provided with some small suckers and fine bristles in ♂, simple and with fine bristles in ♀; claws simple, hind inner one a little longer than the outer.

Male genitalia: median lobe slender, evenly arcuate, and bluntly rounded at the apex; paramera rather large, subtriangular, its apical portion projecting as a club which bears a spine and three minute hairs at the tip, apical half of ventrite bearing long hairs.

Length: 4.4–4.6 mm; breadth: 2.6–2.7 mm.

Holotype: ♂, Sabang, Palawan, Philippines, July 13, 1977, M. SATÔ leg. (in coll. Natn. Sci. Mus., Tokyo). Paratypes: 2 ♂♂, 3 ♀♀, same data as the holotype (in coll. Natn. Sci. Mus., Tokyo, and Biol. Lab., Nagoya Women's Univ.).

Notes. This new species comes near to *L.* (*P.*) *andrewesi* GUIGNOT from India, but differs from it in the conspicuous zigzag markings of elytra and the different structure of male genitalia. The type material was obtained in a small stream flowing through a thick forest near the seashore.

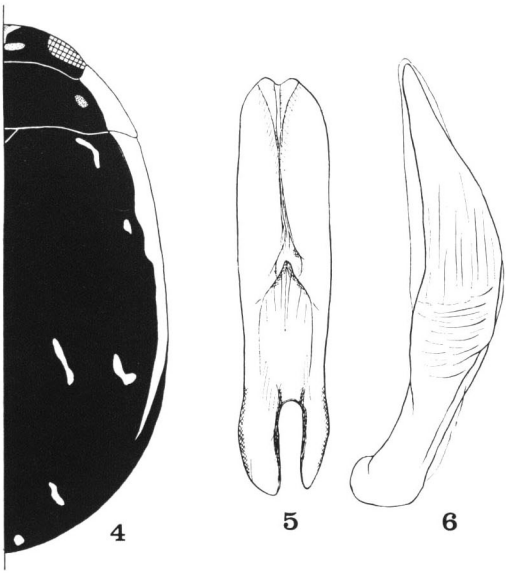
The specific name of the present species is dedicated to Dr. Yoshihiko KUROSAWA who afforded every facility for my field works.

Sandracottus palawanensis M. SATÔ, sp. nov.

(Figs. 4–6)

Body oval, well convex, somewhat shining. Color black; ventral surface and hind legs brownish black; antennae, buccal appendages, fore and mid legs, natatorial hairs of hind legs, markings of head, pronotum and elytra brown to yellowish brown; light-colored markings are arranged as follows: head — apical one-third, anterior one-third of lateral sides, Y-shaped spot on vertex and two transverse oval spots behind it, all of these being contiguous with one another; pronotum — broad lateral stripes and vague oval spots inside them; elytron — a stripe extending for the basal three-fifths of lateral side, four rather longitudinal short markings, one of which is situated just behind pronotum, two transversely arranged on apical one-third and one situated near apex, two minute spots, one of which is situated at basal two-fifths just inside of the lateral stripe and the other close to apex.

Head about 1.5 times as broad as long; surface finely microreticulated, bearing four small impressions, two of which are situated just behind clypeal suture and the other two just inside of eyes at an apical portion; clypeus distinctly emarginate in front. Pronotum about 3.2 times as broad as long, broadest at the base which is about 1.7 times as broad as the anterior breadth; sides slightly rounded anteriad; surface microreticulated as on head, obsoletely striolate on posterior half, provided with a transverse series of fine punctures along the anterior margin, a short transverse



Figs. 4–6. *Sandracottus palawanensis* M. SATÔ, sp. nov. —— 4. Body, right half. —— 5. Median lobe of male genitalia in dorsal aspect. —— 6. Paramera of male genitalia in lateral aspect.

series of punctures along each side of the posterior margin and a longitudinal series of punctures along lateral margins. Elytra about 1.4 times as broad as pronotum, as long as broad in the same proportion, broadest at the apical third, thence gently narrowed anteriorly and more distinctly so posteriorly; surface microreticulated as on head, and scattered with obsolete punctures which are arranged into three longitudinal rows.

Ventral surface microreticulated, the reticulation being finer than on the dorsal surface; prosternal process distinctly dilated posteriad, with rounded tip and rimmed lateral sides; each metacoxal process rounded at the apex and bearing a small concavity just on each side of the middle near the apex; abdomen longitudinally and obsoletely striolate. Legs moderate; basal three segments of fore and mid tarsi provided with suckers on the ventral surfaces; the number of these suckers are as follows: fore tarsus — 1st segment provided with three large and six small suckers, 2nd with seven small ones on the left and six on the right, and 3rd with six small ones; mid tarsus — 1st with seven small suckers, 2nd with four small ones, and 3rd with four small ones; hind tibia provided with about thirty-five setiferous punctures on its ventral surface and with two spines, the longer one of which is a little shorter than the tibial length and the shorter one about a half as long as the longer one; claws simple, hind inner claw longer than the outer one.

Male genitalia: median lobe elongate, flattened, emarginate at the apex; paramera elongate, broadest at the middle, thence distinctly tapering apicad and having rounded apex.

Length: 13.4 mm; breadth: 8.1 mm.

Holotype: ♂, Sabang, Palawan, Philippines, July 13, 1977, M. SATÔ leg. (in coll. Natn. Sci. Mus., Tokyo).

Notes. The present new species is decisively different from *S. wehnckei* BALFOUR-BROWNE from Java, Malaya and India and *S. nauticus* SHARP from Sumatra and Borneo in the smaller body, reduced brown markings on the elytra and in the shape of the male genitalia.

The type-specimen was found in a small pool in a thick forest near the seashore, together with *Hydaticus* (*Guignotites*) *pacificus* AUBÉ.

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