

**THREE NEW *PARATHROSCINUS* FROM SINGAPORE
(COLEOPTERA: LIMNICHIDAE)**

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ABSTRACT. - Three new species are described from mangrove swamps in Singapore. These are *Parathroscinus murphyi*, *P. corrinae*, and *P. magnus*. A key to separate all known species in the genus is included.

The genus *Parathroscinus* Wooldridge (1984) is known only from Southeast Asia. One species is known from the Philippine Islands and another, described by Motschulsky, has as its only locality information the label 'Ind. or.' which probably refers to Burma. No ecological data is available for these two species.

The three species described in this paper, all from Singapore, were sent to me for identification by Assoc. Prof. D. H. Murphy of the National University of Singapore. All three were taken from the intertidal zone of mangrove swamps. Perhaps increased collecting in similar habitats will reveal the genus to be more common than it now appears to be.

Members of *Parathroscinus* have two forms of pubescence: short, flattened, appressed hairs that are fairly dense in distribution and a more scattered, long, erect, somewhat recurved series of hairs. Some of the short, appressed hairs on the Singapore species form silver or golden maculae against a darker background especially when illumination is oblique. The patterns of maculation formed seem to vary in size and shape with the angle of incident light.

Type specimens are deposited in the U.S. National Museum of Natural History (USNM), British Museum (Natural History) (BMNH) and the Zoological Reference Collection (ZRC), Department of Zoology, National University of Singapore.

***Parathroscinus murphyi*, new species**

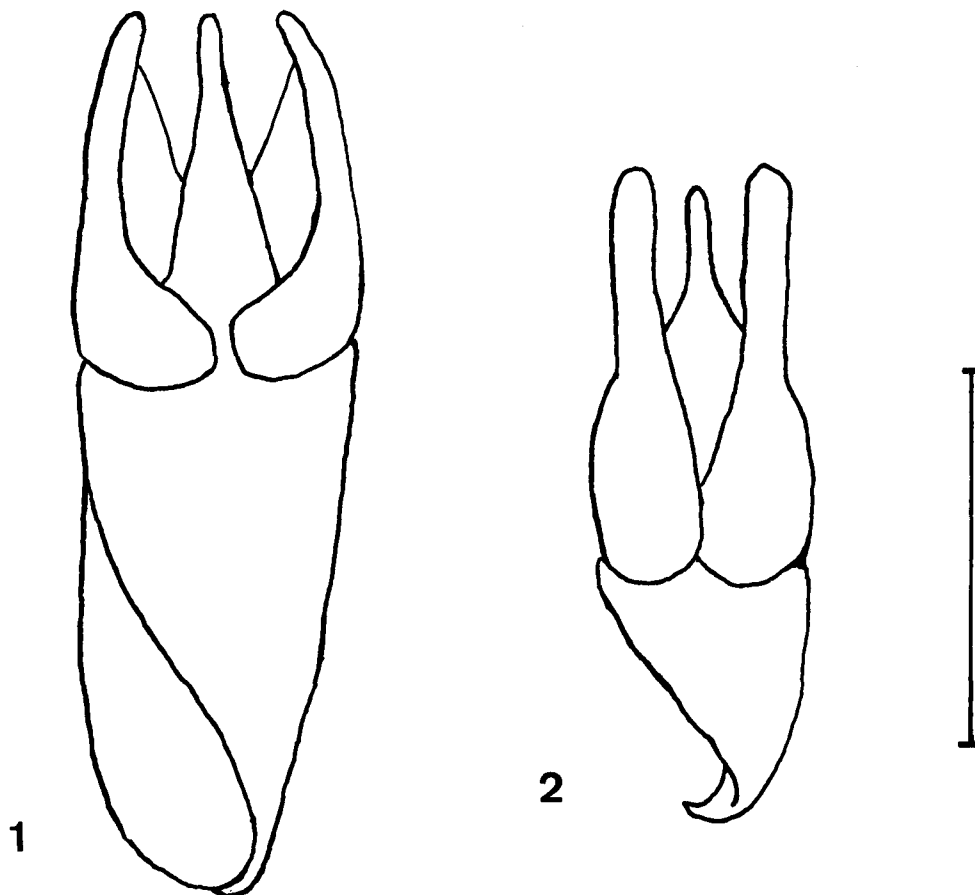
(Fig. 1, Pl. 1 D, E)

Material examined. - Holotype. ♂ (USNM), flying over mud, mangroves, Pasir Ris, Singapore, coll. D. H. Murphy, 10.x.1985. Allotype: ♀, same data as holotype. Paratypes: 13 specimens, same data as holotype. — 2 specimens, surface of clayey soil in mangroves near extreme high tide level, Pasir Ris, Singapore, coll. D. H. Murphy, 3.vii.1988, (5 to USNM, 4 to BMNH), 4 to ZRC).

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Description. - Length 2.7-2.8 mm, greatest width 1.5 mm; elongate oval, convex. Black head punctation very fine; eyes prominent; fine, appressed hairs dense, golden-brown; long erect hairs scattered, brown. Pronotal punctation very fine; longer hairs golden-brown at sides, brown on disc. Elytra with perforate punctures separated by 2-3X their own diameters; surface rugulose between punctures; short appressed hairs forming silver maculae in some lights. Scutellum triangular with arcuate margins. Ventral pubescence dense. Prosternal punctation minute; prosternal process convex. Metasternum evenly perforately punctured. Abdomen rugulose with scattered larger, shallow, impressed punctures. Aedoeagus with sides of parameres converging to tips, extending under median lobe at base; median lobe broad at base, tapering to about 2/3 its length, then nearly parallel-sided to the rounded tip; all lobes curving sharply upward near tips (Fig. 1).

Etymology. - This species is named for Assoc. Prof. D. H. Murphy who collected all known specimens of this and the other Singapore species.



Figs. 1 and 2. Male genitalia, dorsal view. 1. *Parathroscinus murphyi*, 2. *P. corrinae*. Scale equals 0.25 mm.

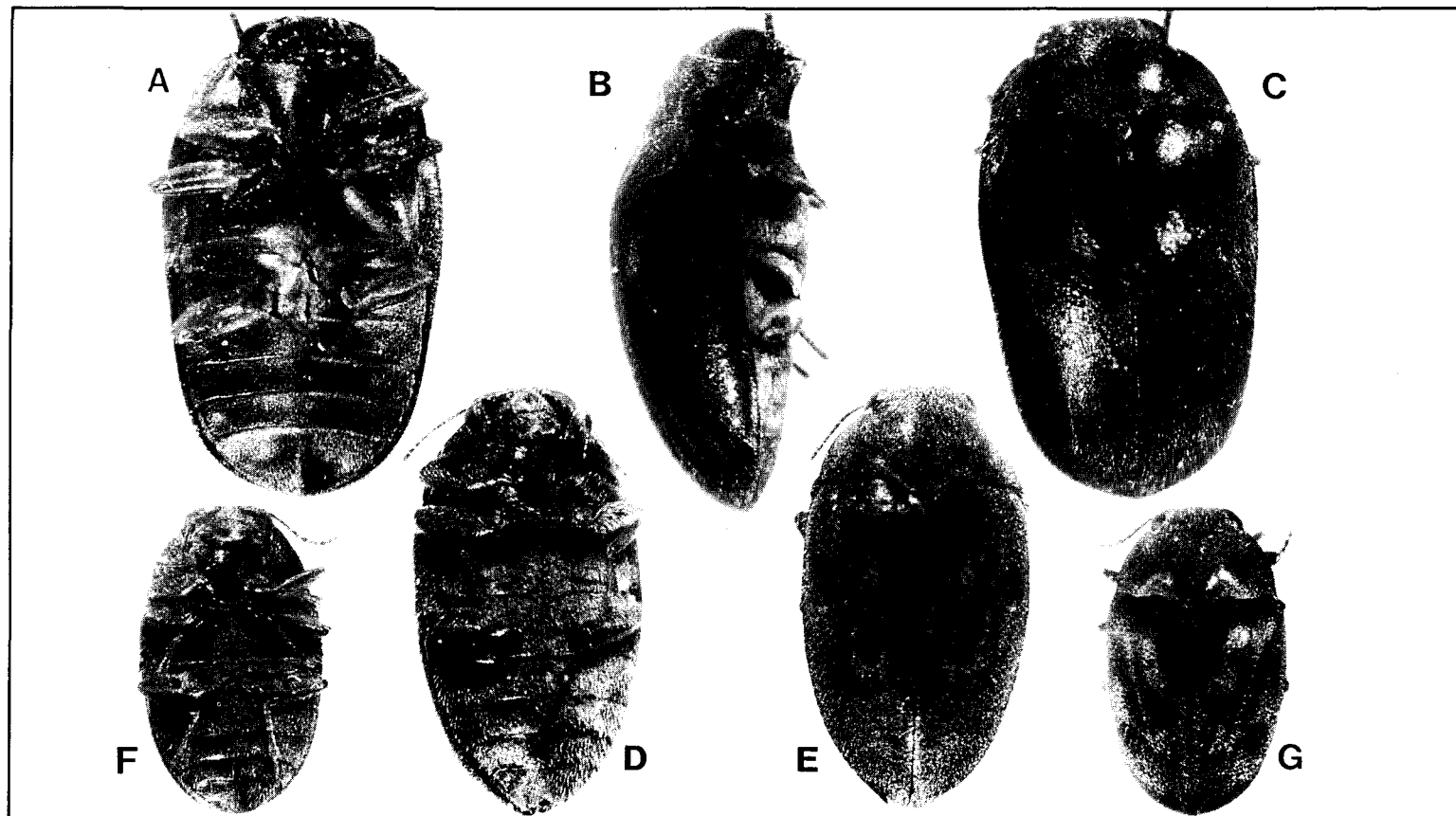


Plate 1. A - C *Parathroscinus magnus*, new species (Specimen from Khlong Ngau mangroves, S. Thailand). A - ventral, B - lateral, C - dorsal. D - E *Parathroscinus murphyi*, new species (Specimen from type locality). D - ventral, E - dorsal. F - G *Parathroscinus corrinae*, new species (Specimen from type locality). F - ventral, G - dorsal. Photographs (D. H. Murphy) from additional material, not part of the type series, which have been compared with the holotypes by the author. All to same scale. Size as stated in text.

Parathroscinus corrinae, new species
(Fig. 2, Pl. F, G)

Material examined. - Holotype:♂(USNM), Surface of clayey soil in mangroves near extreme high tide level, Pasir Ris, Singapore, leg. D. H. Murphy, 3.vii.1988. Allotype: nn (USNM), same data as holotype. Paratypes: 16 specimens, same data as holotype. — one specimen, mangrove forest, Lim Chu Kang mangrove forest, Site #1, Singapore, coll. D. H. Murphy, 18.vii.1987 (4 to USNM, 6 to BMNH), 6 to ZRC).

Description. - Length 1.8-2.2 mm; greatest width 1.0-1.1 mm; elongate oval, convex. Black. Head with very fine punctation; short, appressed hairs golden, close; long, erect hairs brown, scattered. Pronotum with very fine punctation; short, appressed hairs, close, black on disc and silver in a broad triangle at posterior angles and across base; long, erect hairs black. Elytra evenly impresso-punctate, punctures separated by 2-7X their diameters; short appressed hairs black except in silvery maculae and streaks; long erect pubescence golden. Scutellum triangular. Ventral surfaces with long, denser golden-brown pubescence. Metasternum lacking large punctation. First visible abdominal sternum very rugulose under legs. Abdomen lacking large punctures. Aedoeagus with parameres curved and converging, rounded at tips; median lobe tapering from broad base to rounded tip (Fig. 2).

Etymology. - I take pleasure in naming this species for my wife who has struggled with my handwriting, corrected and typed my manuscripts without complaint.

Parathroscinus magnus, new species
(Pl. A - C)

Material examined. - Holotype:♂(USNM), under rotten intertidal wood, Mandai mangrove, MD3, Singapore, coll. D. H. Murphy, 11.v.1988.

Description. - Length 3.8 mm, greatest width 2.1 mm. Broadly elongate oval. Black. Head with very fine punctation; short pubescence dense, yellow-brown, long pubescence brown. Pronotum with fine, distant punctation; short pubescence dense, brown except yellow-brown at sides. Elytral punctation fine, perforate, close, separated by about 1X their diameters, surface rugulose; short pubescence dense, brown, forming irregular silvery maculae and stripes; long pubescence close. Scutellum diamond-shaped with a faint longitudinal carina. Ventral pubescence golden. Prosternal process slightly convex with a faint longitudinal carina. Metasternum finely punctate; metacoxal plates with a transverse row of large, even punctures. Abdomen rugulose.

The type is the only known specimen.

Etymology. - The species is named for its large size.

Key to the Known Species of *Parathroscinus*

1. Size large, greater than 3.0 mm; scutellum diamond-shaped (Singapore)
.....*magnus*
Size smaller, less than 3.0 mm; scutellum triangular 2
2. Elytral bases deeply bisinuate (Burma)*oculatus*
Elytral bases shallowly bisinuate 3
3. Short, appressed pubescence forming maculae and stripes on elytra
.....4
Short, appressed pubescence not forming maculae or stripes on elytra*orientalis*
4. Metasternum evenly perforately punctate (Singapore) *murphyi*
Metasternum lacking perforate punctures (Singapore) *corrinae*

LITERATURE CITED

- Wooldridge, D., 1984. *Parathroscinus*, a new genus of beetles from Southeast Asia (Limnichidae: Cephalobyrrhinae). *J. New York Entomol. Soc.*, 92(2): 121-24.