

**TWO NEW SPECIES OF THE *PLATYPUS*
CANDEZEI CHAPUIS SPECIES-GROUP
(COLEOPTERA: PLATYPODIDAE) FROM
BRUNEI DARUSSALAM**

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ABSTRACT

Two new species of *Platypus*, *P. bifurcatus* and *P. dividius* are described from Brunei Darussalam. A key is given to the three species now included in the *Platypus candezei* Chapuis species-group.

Key words: Coleoptera, Platypodidae, genus *Platypus*, new species, Brunei Darussalam.

ABSTRAK

Dua spesies baru *Platypus*, *P. bifurcatus* dan *P. dividius* diperihalkan dari Brunei Darussalam. Satu kunci disediakan untuk ketiga spesies yang kini termasuk dalam kumpulan spesies *Platypus candezei* Chapuis.

Kata kunci: Coleoptera, Platypodidae, genus *Platypus*, spesies baru, Brunei Darussalam.

INTRODUCTION

Chapuis (1865) in his monograph of the Platypodidae (Coleoptera) described both sexes of the species *Platypus candezei* Chapuis from Borneo and 'de la presqu'île de Malacca (actually Singapore). As with all his descriptions, the male and female sexes were reversed. He placed the species in a separate species-group he called the *Platypi bisulcati*. The species-group and its sole species was distinguished in the male sex (female of Chapuis) from all other Platypodidae by the division of interstriae 1 - 7 for most of their length by a groove similar in width to the striae. The group *Platypi bisulcati* was retained by Schedl (1972) in his monograph of the Platypodidae, still with a single species. The species is catalogued under *Platypus* Herbst by Wood and Bright (1992: 1123), who give type data, references and distribution. The species is not mentioned by Wood (1993) in his revision of platypodid genera, and his partial list of species included within *Platypus*, but it clearly belongs within the genus. *Platypus candezei* is unusual among platypodids, most of which are polyphagous, in having a fixed host association with the plant family Ebenaceae (Browne 1961). I have also collected it only from trees belonging to this family. Recent collecting by Dr.N.Mawdsley in Brunei has revealed two more species related to *P.candezei* and these are described below. It is not known whether these are also associated with Ebenaceae. A key is provided to separate males and females of the three species in the group. The group can be distinguished within the genus *Platypus* using the keys in Schedl (1972).

TAXONOMY

Descriptions of new species

Platypus bifurcatus Beaver, new species (Figs 3 - 5)

Male: 3.8 mm long, 3.45 times as long as wide, chestnut-brown, the head and posterior part of elytra darker, pitchy. Frons very weakly impressed medially, dull, reticulate-rugulose over almost the whole surface, the punctures fine, moderately dense, a small median fovea just above the level of the antennal insertions, the vestiture

inconspicuous of short, upwardly-directed golden hairs on most of frons, the hairs longer and ventrally-directed on lowest quarter. Pronotum 1.1 times longer than wide, lateral emarginations shallow, angulate only posteriorly, disc shining, the median, impressed line extending from near the base about one-third the length of the pronotum, lacking mycangial pores, the punctures of variable size, larger and denser towards anterior and posterior margins, a small oval area around the median line impunctate. Elytra 1.6 - 1.7 times as long as pronotum, sides weakly diverging, widest beyond the middle, then more strongly converging, constricted before the declivity; declivity very short, abrupt, elytral apex rounded; disc with a basal carina extending from close to suture to fifth interstriae, shining in anterior one-third to one-half, matt posteriorly, striae quite strongly impressed, very finely seriate-punctate, striae hairs not evident, interstriae 1 - 7 flat near base, divided for most of their length by a groove similar to the striae so that the elytra appear to have double the normal number of striae, the two sides of the interstriae where divided, narrow, almost carinate, interstriae 8 - 9 not divided in this way, all interstriae becoming granulate towards the declivity, and the distinction between striae and interstriae obscure (Fig. 3), the furrows and granules with short, golden hairs, a small tooth projecting above the declivity on interstriae 2, a weak transverse ridge extending from interstriae 2 - 5 above the declivity; declivity almost vertical, the flat surface nearly circular, matt, with a marginal carina in lower half extending from apex to level of interstriae 5 (Fig.4), upper part of the margin less sharply angled, declivital face densely granulate, the granules bearing short, semi-erect hairs, striae and interstriae not distinguishable.

Female: Resembling male, but a little larger and more elongate, 4.0 mm long, 3.7 times as long as wide. Frons as male. Pronotum with a patch of 7 - 8 equal-sized mycangial pores on each side of impressed median line (Fig. 5), otherwise resembling male. Elytra 1.8 times as long as pronotum, both disc and declivity shining, the sides subparallel in the basal two-thirds, then gradually convergent without a constriction, a series of transverse rugae on interstriae 9 appearing as a series of small lateral spines when elytra viewed from above, declivity short, almost vertical; disc with two sub-basal carinae, the anterior extending from suture to interstriae 5, the posterior between interstriae 2 and 4, with some transverse rugosities

behind them especially on the slightly widened base of interstriae 3; striae impressed, finely punctate, interstriae weakly convex, not bifurcated, with a few scattered, fine punctures in anterior two-thirds, more closely punctate posteriorly, the posterior punctures with short, golden hairs arising from minute granules; declivity without trace of striae and interstriae, quite densely, minutely granulate, the hairs longer than in the male and directed latero-ventrally away from the suture, the apex slightly emarginate.

HOLOTYPE. Male. BRUNEI, Kuala Belalong FSC, 115° 7' E, 4° 34' N, 260 m alt., dipterocarp forest, ground F[light] I[ntercept] T[rap] 1A, 16.vi.92 (N. Mawdsley). In Natural History Museum, London (BMNH).

ALLOTYPE. Female. Data as holotype (BMNH).

PARATYPES. 1 male, 1 female, data as holotype (in R.A. Beaver's collection). (The male paratype lacks the head, mid- and hind-legs.)

Remarks. The male has the same pattern of bifurcated interstriae as *Platypus candezei* Chapuis (Fig. 1) (syntypes in BMNH from Singapore examined), but can be distinguished from that species by the much weaker, non-carinate transverse ridge above the elytral declivity, the flat, not biconcave declivity with a densely granulate, not largely smooth surface, and the presence of a carina which margins the lower part of the declivity from the apex to the fifth interstriae. The female can be distinguished from *P. candezei* by the reticulate-rugose, not simply punctate frons, the presence of mycangial pore patches on the pronotum, the more shiny pronotum and elytra, the weaker and less extensive rugosities at the base of the elytra, and the less strongly impressed striae and less convex interstriae of the elytra. Nothing is known of the species' biology.

***Platypus dividuus* Beaver, new species**
(Figs 6 - 8)

Male: 2.6 - 2.7 mm long, 3.4 times as long as wide, brown with the head darker, posterior part of elytra tinged with black. Frons flat with a velvety appearance, middle part rather sparsely, finely punctate, the punctures with very short hairs, the hairs longer above the epistoma, laterally and towards the vertex, a median striga present extending about one-quarter the height of the eyes.

Pronotum about 1.15 times longer than wide, shining, lateral emarginations shallow, angulate only posteriorly, sparsely, finely punctured, the punctures of variable size, more closely placed towards anterior and posterior margins, median line extending a little more than one-quarter the length of the pronotum, on each side of it a patch of 7 - 8 mycangial pores, the anterior 2 - 3 slightly smaller than the basal pores (Fig. 7). Elytra about 1.7 times as long as pronotum, anterior half shining, posterior half matt, shaped similarly to *P. candezei* (Fig. 1) and *P. bifurcatus* (Fig. 3), widest beyond the middle, and constricted before the very short, steep declivity, apex truncate; basal part of disc flat, smooth, not granulate posteriorly, striae impressed beyond basal quarter, finely punctate, interstriae 1 - 7 similar to *P. candezei* and *P. bifurcatus*, divided into two narrow strips by a median groove of similar depth and width to striae, the grooves with regularly-spaced short hairs, slightly longer posteriorly, interstriae 8 - 9 not bifurcate, interstriae 8 shining for two-thirds of the length; disc ending in a transverse ridge extending from interstriae 3 to 8, and forming the margin of the sides of the declivity; interstriae 1 - 2 run onto the top of the declivity, interstriae 3 end in a small spine above the declivity, each half of interstriae 4 - 7 and interstriae 8 end in granule-like teeth, not a continuous carina; declivity almost vertical, flat, depressed below the lateral margins, striae and interstriae not distinguishable, finely granulate, the granules with short, postero-laterally directed hairs, postero-lateral margin of declivity shallowly emarginate between lateral ends of transverse ridge and truncate elytral apex (Fig. 6).

Female: Resembling male, but a little larger and more elongate, 2.9 mm. long, 3.9 times as long as wide. Frons with velvety appearance as in male. Pronotum slightly more elongate than male, 1.2 times as long as wide, the mycangial pore patch larger and more elongate with 17 - 20 pores on each side of median line, the anterior 8 - 10 pores a little smaller than the basal pores (Fig. 8). Elytra 1.8 times as long as pronotum, shining, the sides subparallel in the basal two-thirds, then weakly convergent, declivity abrupt, vertical; disc with two sub-basal carinae as in *P. bifurcatus*, and a short series of smaller, transverse rugae on the basal part of interstriae 3; striae moderately impressed, with a row of fine punctures, interstriae weakly convex, not bifurcate, almost impunctate on anterior half, and increasingly closely punctured, with fine, setiferous punctures

posteriorly; declivity nearly semicircular in outline, its upper margin weakly depressed at suture, quite densely, non-seriately punctate, the punctures with laterally-directed, fairly short hairs, the apex truncate, very slightly emarginate at suture.

HOLOTYPE. Male. BRUNEI, Kuala Belalong FSC, 11°7' E, 4°34' N, 260 m alt., dipterocarp forest, ground malaise 1A, 22.vi.91 (N.Mawdsley). In Natural History Museum, London (BMNH).

ALLOTYPE. Female. Data as holotype except: ground F[light] I[ntercept] T[rap], 16.vi.91 (BMNH).

PARATYPE. Male. Data as holotype except: 16.vi.91 (in R.A.Beaver's collection).

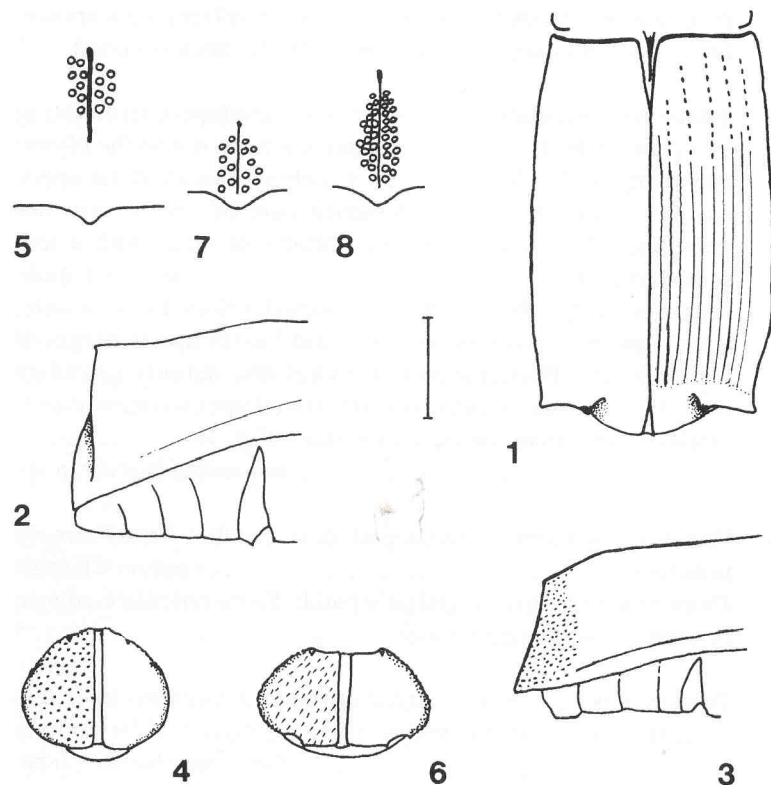
Remarks. The species can be distinguished from *P.candezei* and *P.bifurcatus* by its smaller size, and the presence of a patch of mycangial pores on the pronotum in both sexes. The male is further distinguished by the truncate apex of the elytra, the posterolateral emargination of the declivity, and from *P.candezei* by the termination of the posterior transverse ridge on the elytra in a series of small teeth rather than a continuous carina. The female is distinguished by the greater number of mycangial pores and their variability in size, the velvety appearance of the frons, and the lack of granules on the declivity. Nothing is known the species' biology.

Key to species of the *Platypus candezei* group

- 1 Elytra with interstriae 1 - 7 divided into two narrow strips by a groove similar in width and depth to the striae (Fig. 1). Elytra with a transverse ridge above the elytral declivity. Posterior half of the elytral disc matt and granulate. (Males)..... 2
- Elytra without any division of interstriae 1 - 7 by a groove, and without a transverse ridge above the declivity. Posterior half of the elytral disc shining, without granules. (Females)..... 4
- 2 2.6 - 2.7 mm long. Pronotum with a mycangial pore patch of 7 - 8 pores on either side of median line (Fig. 7). Frons with a velvety appearance. Declivity with a small emargination postero-laterally, the apex truncate (Fig. 6)..... *dividuus* Beaver, n.sp.
- 3.5 - 3.8 mm long. Pronotum without mycangial pores. Frons

punctate or reticulate-rugose, without a velvety appearance. Declivity not emarginate postero-laterally, apex rounded..... 3

- 3 Transverse ridge above declivity well-developed, terminating in a carina which extends to interstriae 8 but not to the elytral apex (Figs 1, 2). Interstriae 2 - 3 without a tooth at the upper margin of the declivity. Posterior part of elytral disc not granulate. Declivity biconvex, shining or matt, with a few scattered granules..... *candezei* Chapuis
- Transverse ridge above declivity weakly developed, not carinate, a small tooth between interstriae 2 and 3 at the upper margin of the declivity. Posterior part of elytral disc densely granulate (Fig. 3). A carina extends from the elytral apex to interstriae 5. Declivity flat, matt, densely granulate (Fig. 4)..... *bifurcatus* Beaver, n.sp.
- 4 Pronotum without a mycangial pore patch. Frons simply punctate..... *candezei* Chapuis
- Pronotum with a mycangial pore patch. Frons reticulate-rugose or with a velvety appearance..... 5
- 5 Pronotum with 7 - 8 equal-sized mycangial pores on either side of median line (Fig. 5). Frons reticulate-rugose. 4.0 mm long..... *bifurcatus* Beaver, n.sp.
- Pronotum with 17 - 20 mycangial pores on either side of median line, the anterior 8 - 10 a little smaller in size (Fig. 8). Frons with a velvety appearance. 2.9 mm long. *dividuus* Beaver, n.sp.



Figs 1 - 8. *Platypus* species. 1-2. *P. candezei* male elytra; 1, dorsal view; 2, lateral view. 3-5. *P. bifurcatus*. 3, male elytral apex, lateral view; 4, male elytral apex, posterior view; 5, female, mycangial pores on pronotum. 6-8. *P. dividius*. 6, male elytral apex, posterior view; 7, male, 8, female, mycangial pores on pronotum. Scale line = 0.5 mm (figs 1-4); 0.33 mm (fig. 6); 0.25 mm (figs 5, 7-8).

ACKNOWLEDGEMENTS

I am grateful to the authorities of the Natural History Museum, London (BMNH) for making the specimens available for study.

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