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A new *Platambus* (s.str.) Thomson, 1859 species from Guangxi, China (Coleoptera, Dytiscidae)

by Michel Brancucci

Abstract. *Platambus* (s.str.) *yuxiae* sp.nov. is described from the Guangxi province, China. The species presents distinctive characters that can easily and without ambiguity distinguish it from all other known species. The relationships to other species are briefly discussed. Habitus and aedeagus are illustrated.

Key words. Coleoptera – Dytiscidae – *Platambus* – China – Guangxi – new species

Introduction

In the collection of the Institute of Zoology, Chinese Academy of Sciences, Beijing (IZAS) a large series of an interesting *Platambus* species was found. Determined as *Platambus fletcheri* Zimmermann, this species was revealed to be new for science and is described herewith under the name of *P.* (s.str.) *yuxiae* sp.nov. This brings the total number of valid species belonging to the *maculatus* group to 24. Seventeen species are mentioned in NILSSON (2001) and seven have been described since (NILSSON 2003; BRANCUCCI 2005a, 2005b, 2007), including the present description. Ten species of these are recorded from continental China. *P. fimbriatus* Sharp is excluded, as having no precise locality in China.

Material

The material examined in this study is deposited in the Institute of Zoology, Chinese Academy of Sciences, Beijing (IZAS) and in the Natural History Museum of Basel (NHMB).

Taxonomy

As I proposed earlier (BRANCUCCI 2005a), I follow both the subgeneric subdivision proposed in the revision of *Platambus* (BRANCUCCI 1988) and the group classification established by NILSSON (2001). This subdivision is rendered necessary because of the transfer of the whole *Agabus* group (*optatus* group) to *Platambus*. For the moment, this is surely the most efficient system, although I must admit that it is not yet fully worked out. However, *P. yuxiae* sp.nov. indubitably belongs to the typical subgenus and is to be placed in the *maculatus* group near *P. heteronychus* Nilsson and *P. wulingshanensis* Brancucci.



Fig. 1. *Platambus yuxiae* sp.nov., habitus.

***Platambus* (s.str.) *yuxiae* sp.nov.**

Figs 1–6

Type material (holotype and 210 paratypes).

Holotype ♂ (IZAS): Guangxi, Napo, Baihe, 440m, 6.IV.1998, leg. Wen-Zhu Li, IOZ(E) 832919; The holotype has a red label with the data: “Holotype *Platambus yuxiae* n.sp., det. M. Brancucci 11”.

82 paratypes (23 ♂ and 58 ♀; IZAS): same data as holotype; 5 paratypes (1 ♂ and 4 ♀, IZAS): Guangxi, Napo, Baihe, 440m, 7.IV.1998, leg. Wen-Zhu Li; 2 paratypes ♂ (IZAS): Guangxi, Napo, Baihe, 440m, 7.IV.1998, leg. Ge-Xia Qiao; 3 paratypes (2 ♂ and 1 ♀, IZAS): Guangxi, Napo, Baihe, 440m, 7.IV.1998, leg. Chun-Sheng Wu; 13 paratypes (9 ♂ and 4 ♀, IZAS): Guangxi, Napo, Baihe, 440m, 7.IV.1998, leg. Chao-Dong Zhu ; 33 paratypes (12 ♂ and 19 ♀, IZAS; 2 ♀, NHMB): Guangxi, Napo, Baihe, 440m, 7.IV.1998, leg. Fu-Sheng Huang; 3 paratypes (2 ♂, IZAS; 1 ♂, NHMB): Guangxi, Napo, Baihe, 440m, 8.IV.1998, leg. Fu-Sheng Huang; 11 paratypes (5 ♂ and 6 ♀, IZAS): Guangxi, Napo, Baihe, 440m, 8.IV.1998, leg. Min Wu; 41 paratypes (16 ♂ and 25 ♀, IZAS): Guangxi prov., Napo, 900m, 7.IV.1998, leg. Ge-Xia Qiao; 5 paratypes (3 ♂ and 1 ♀, IZAS; 1 ♂, NHMB): China, Guangxi, Napo, Beidou, 550m, 9.IV.1998, leg. Ge-Xiao Qiao; 10 paratypes (5 ♂ and 3 ♀, IZAS; 1 ♂ and 1 ♀, NHMB): Guangxi, Napo, Beidou, 550m, 10.IV.1998, leg. Wen-Zhu Li; 2 paratypes (1 ♂ and 1 ♀, IZAS): Guangxi, Napo, Beidou, 550m, 11–13.IV.1998, leg. Min Wu; All specimens being individually marked by an ID: IOZ (E) 832848-833060. All paratypes have a red label with the data: “Paratype *Platambus yuxiae* n.sp., det. M. Brancucci 11”.

Description. Body regularly oval, distinctly convex, black with a bronze lustre, ferruginous brown on head, on sides of pronotum and on underside, with testaceous markings on elytra (Fig. 1).

Head black with a bronze lustre, with two dark ferruginous spots on vertex and labrum. Antennae testaceous. Reticulation consisting of well-impressed polygonal meshes, irregular in size, with 1–4 small punctures within them and medium punctures at some of the intersections; several large and irregularly-distributed punctures present on disc. Row alongside eyes and clypeal grooves consisting of medium-sized and confluent punctures. Antennae testaceous, short, joint slender, the fifth 2.3 times longer than broad.

Pronotum black with a bronze lustre, dark ferruginous at sides. Reticulation consisting of well-impressed polygonal meshes, irregular in size; meshes with 1 to 3 minute punctures on their inner sides and medium-sized punctures at their intersections. Anterior row of punctures complete at sides and consisting of large and confluent punctures, narrowly interrupted midway; punctures more or less grouped, leaving spaces free. Posterior row broadly interrupted midway; punctures large and strongly confluent at sides, forming long and superficial wrinkles along posterior margin on lateral half.

Lateral margin distinct and distinctly bordered with some punctures alongside the grooves.

Elytra black with a bronze lustre, with a broad, sub-basal, half-moon-shaped band, a postmedian angled patch and a preapical spot. Epipleura completely testaceous at base, ferruginous on remainder of the surface. Reticulation consisting of superficially impressed polygonal meshes, with 1–5 (mostly 3) minute punctures within them and with larger punctures at the intersection of some meshes. Sutural row of punctures restricted to apical half and consisting of medium-sized and well-spaced punctures. Discal, sublateral and lateral rows not reaching base, consisting of well-spaced groups of medium-sized, mostly strongly-confluent punctures. Epipleura broad at base, quite narrow as far as first sternite and then evenly but slightly tapered as far as apical part.

Underside dark ferruginous, legs ferruginous-brown, metafemora and anal sternite distinctly darker. Prosternal process lanceolate, broad and carinate, and prolonged into a long, sharp point. Metasternal wings long and narrow. Metacoxae rough in structure, almost wrinkled. Metatrochanters sharpened apically. Metacoxal processes short and broad, delimited by deep, impressed lines. Metafemora finely striolate with a row of short, strong setae at distal posterior angle; this row is often somewhat prolonged laterally. Ventral surface of metatibiae with a row of short, broad setae along outer margin and a few smaller punctures on the remainder of the surface; ground-surface striolate. Sternites superficially wrinkled-reticulate, with some deeply impressed punctures along middle.

Measurements: Holotype: TL = 7 mm, TL-h = 6.3 mm; TW = 3.9 mm. Paratypes: TL = 6.7–7 (6.87, n= 10), TL-h = 6.2–6.6 (6.35, n= 10); TW = 3.9–4.2 mm (4.01, n = 10).

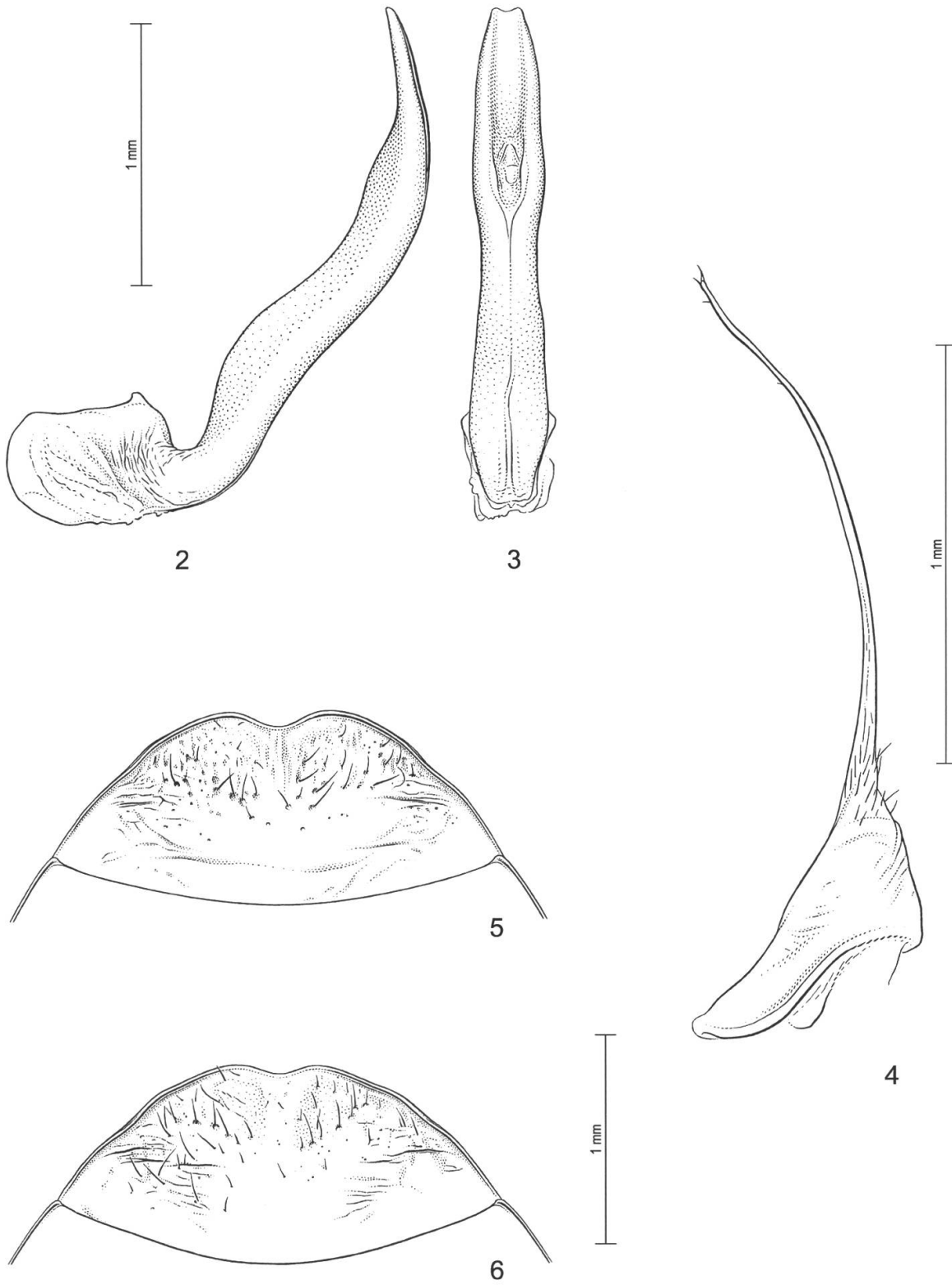
Male. Protarsi and mesotarsi distinctly dilated with numerous rounded pads. Outer protarsal claw somewhat shorter than inner. Anal sternite wrinkled on anterior half, reticulate posteriorly; meshes polygonal with some small punctures within and some very large punctures irregularly distributed on each side of the centre (Fig. 5). Posterior margin finely bordered. Median lobe sinuate in lateral view, evenly tapered in apical two-thirds (Fig. 2); in dorsal view it is narrow at base, somewhat enlarged on apical two-thirds and emarginate apically. (Fig. 3). Basal part of parameres transverse, apical part very long and filiform (Fig. 4).

Female. Similar to male, anal sternite also wrinkled but somewhat less so than in male (Fig. 6).

Distribution. China (Guangxi).

Etymology. This species is dedicated to my friend and colleague, Dr. Yuxia Yang, from Baoding University, Baoding (Hebei, China), a young Chinese specialist in Cantharidae, for providing me with this interesting material.

Differential diagnosis. This species comes close to *P. heteronychus* Nilsson, described from Guangdong Prov. and to *P. wulingshanensis* Brancucci described from Hunan. It can, however, be easily distinguished from both by its habitus, which is somewhat more elongate. Further, the inermous protarsal claws of the male allow this species to be distinguished very easily from *P. heteronychus* Nilsson. From all other known species it can be distinguished by the typical aedeagus, particularly the unique form of the median lobe and its emarginated apex, as well as the filiform apical part of the parameres, which also appear to be unique among species known to date.



Figs 2–6. *Platambus yuxiae* sp.nov.: 2 – median lobe in lateral view; 3 – median lobe in dorsal view; 4 – left paramere; 5 – anal sternite ♂; 6 – anal sternite ♀.

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