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6.5.5. Species group 5 (sp.gr. *balfourbrowni*)

Hydrovatus balfourbrowni n.sp.

Figs 619–626.

Type locality: Pahang, Malaysia.

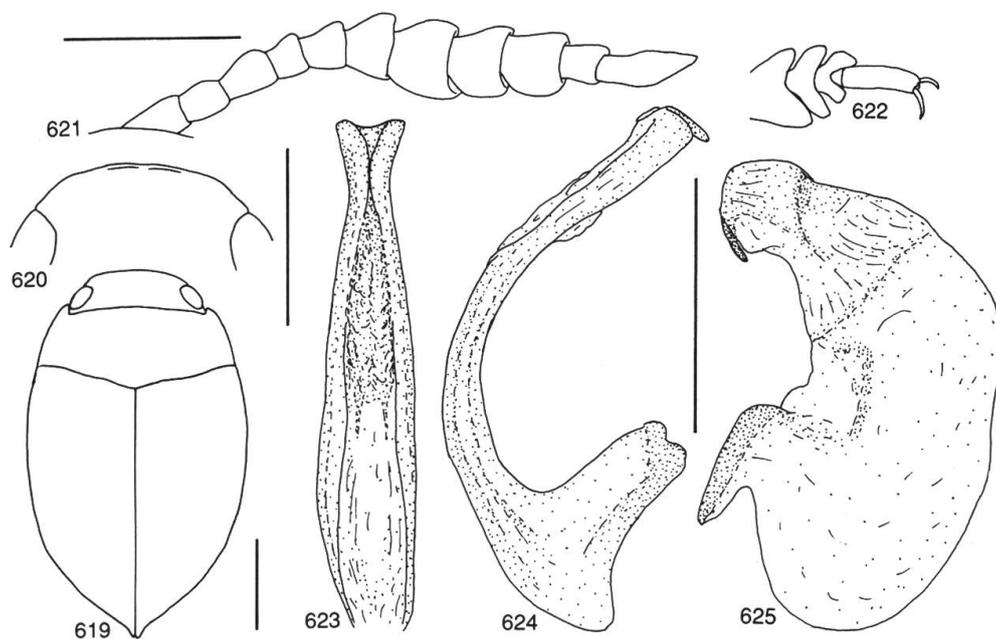
Type material: Holotype, m: Mardi M13033, 14.10. 83 Tax. Expdn./West Malaysia Pahang sg. Baging/CIE 18071/Pres. by Comm. Inst. Ent. B.M. 1986–1/*Hydrovatus* sp. det. R.B. Madge, 1986 (BMNH). – Paratypes: Principally with same data as holotype (2 exx. BMNH, 1 ex. MZH); Borneo: Sarawak Bau district Lake area 30.VII.1958/at light/T.C. Man collector, Bishop (1 ex. BBM). In all, 5 exx.

Derivation of the name: The new species is named after Dr. J. Balfour-Browne, who has worked intensively on the taxonomy of the genus *Hydrovatus*.

Diagnosis: A very well characterized species, which is, above all, recognized by the strongly modified male antenna and by the peculiar shape of male the genitalia.

Length of body: 3.46–4.00 mm, breadth: 2.08–2.24 mm. Habitus (Fig. 619).

Head: Pale ferrugineous to ferrugineous; frontally palest. Punctuation fine, irregularly distributed. Punctures rather sparse, except at eyes and in an U-shaped area starting from two quite shallow but



Figs 619–625: *Hydrovatus balfourbrowni*. – 619, habitus. – 620, head, frontal aspect. – 621, male antenna. – 622, male protarsus. – 623, penis, dorsal aspect. – 624, penis, lateral aspect. – 625, paramere. Horizontal scale 0.5 mm, antenna and tarsus; left top scale 1 mm, head; left bottom scale 1 mm, habitus; right scale 0.5 mm, genitalia.

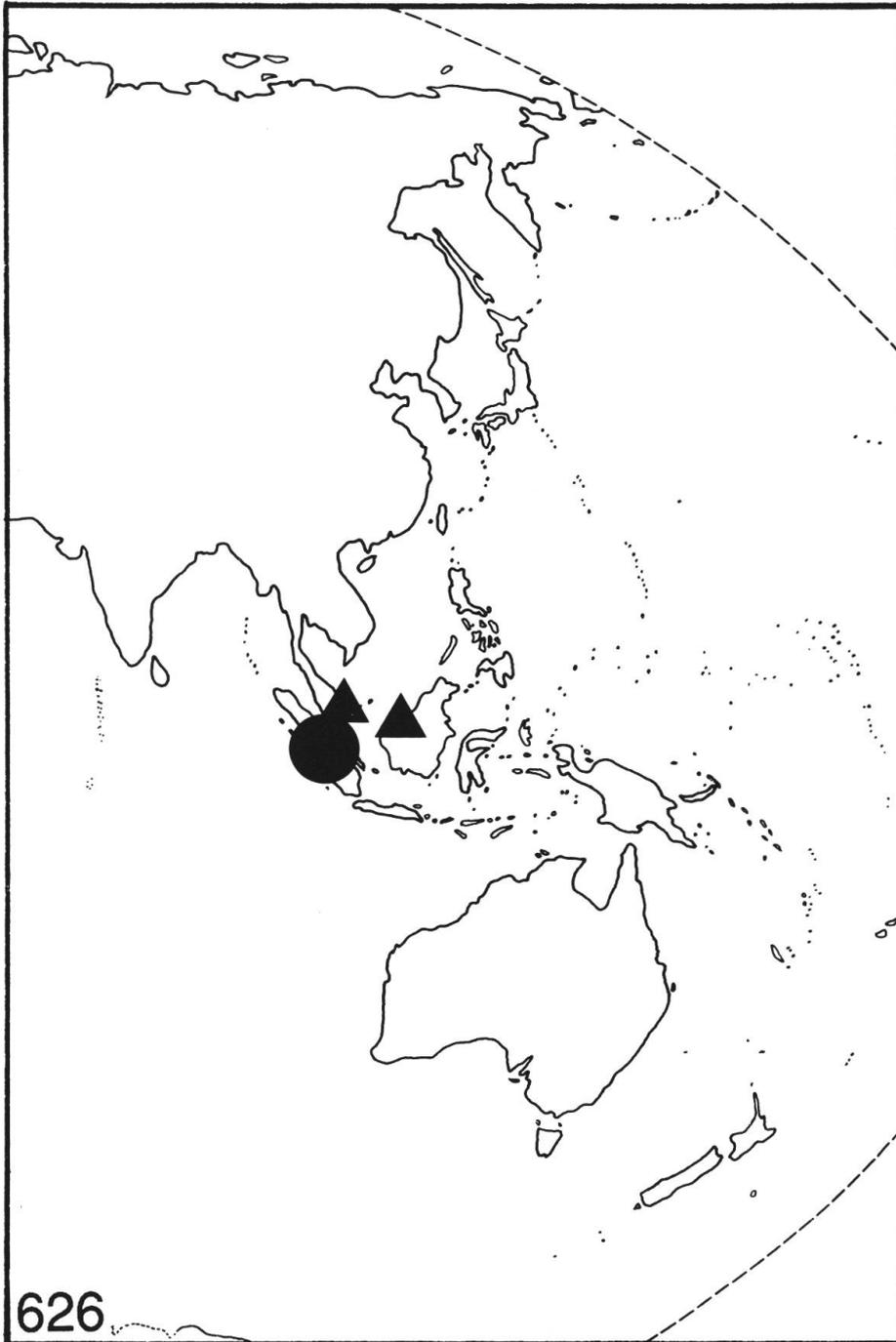


Fig. 626: Distribution of *Hydrovatus balfourbrownei* (triangle) and *H. semirufus* (dot).

wide depressions. Slightly mat, microsculptured (meshes distinct). Head with frontal outline slightly uneven, medially very finely margined (Fig. 620). Antenna distinctly modified, segments 5–9 strongly enlarged (Fig. 621).

Pronotum: Brown to dark ferrugineous, laterally with vague paler areas. Punctuation fine to very fine, discally sparse and at margins quite dense. Slightly mat, microsculptured (meshes distinct). Sides of pronotum evenly rounded.

Elytra: Dark brown to brown to ferrugineous, without distinct colour pattern. Punctuation fine to fairly coarse, rather sparse to dense. Punctures finest and sparsest frontally at suture and at pronotum, and densest and coarsest at apical region. Rows of punctures hardly discernible (mixed with adjacent punctures). Slightly mat, microsculptured (meshes distinct). Epipleura ferrugineous to brownish, with quite coarse but sparse punctures, microsculptured.

Ventral side: Brownish to ferrugineous. Quite sparsely and coarsely punctate, except apically on abdomen; punctures rather fine to fine. Slightly mat, microsculptured (meshes distinct). Pronotal process laterally very finely margined, medially broadly grooved and punctate.

Legs: Pale ferrugineous to ferrugineous. Protarsus broad, third segment asymmetric and claws unmodified (Fig. 622). Mesotarsus also enlarged.

Male genitalia: Figs 623–625.

Female: Body somewhat smaller. Antenna simple. Protarsus narrower.

Distribution: Malaysia (Fig. 626).

Biology: Unknown. In Borneo collected at light.

Hydrovatus semirufus Zimmermann

Figs 626–630

Hydrovatus semirufus ZIMMERMANN, 1924:194 (orig. descr., faun.); 1927:19, 25 (descr., faun.); VAZIRANI, 1977a:30 (faun.).

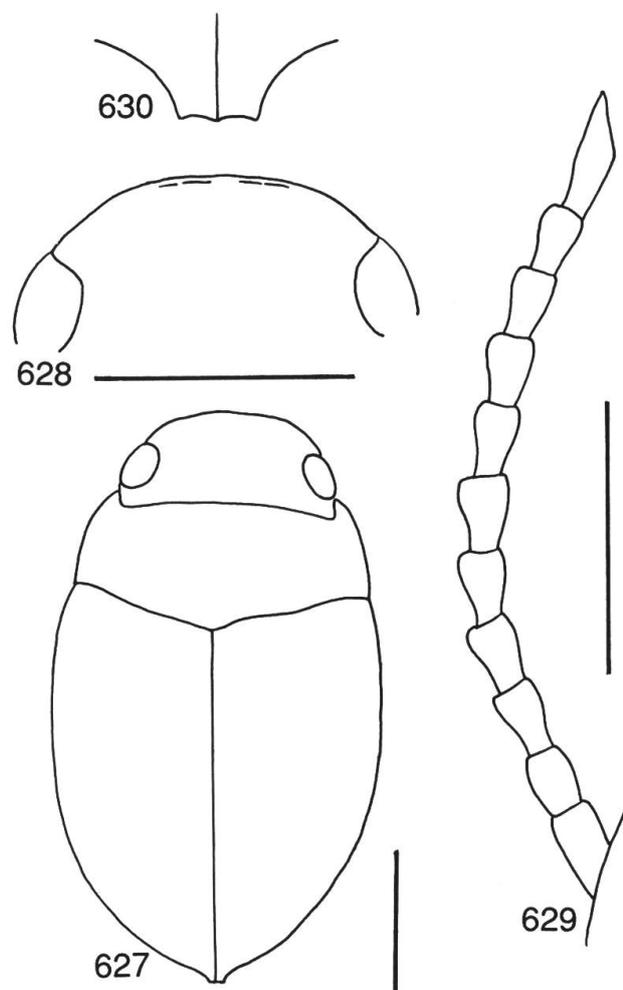
Type locality: Sumatra, Indonesia.

Type material studied: Holotype, f: Sumatra/Type/Typus (ZSM). In all, 1 ex.

Diagnosis: The status of this species is unclear because only a single female has been available for study. The elytral punctuation, being apically coarsest, indicates that *H. semirufus* is closely related to *H. balfourbrownei* n.sp., above. The female of *H. semirufus* has a truncate elytral apex, while the elytral apex in the female of *H. balfourbrownei* is quite pointed.

Description: based on female.

Length of body: 3.80 mm, breadth: 2.20 mm. Habitus (Fig. 627).



Figs 627–630: *Hydrovatus semirufus*, female. – 627, habitus. – 628, head, frontal aspect. – 629, antenna. – 630, elytral apex. Horizontal scale 1 mm, head; left scale 1 mm, habitus; right scale 0.5 mm, antenna and elytral apex.

Head: Brownish, anteriorly with a narrow pale brown area. Finely and sparsely punctate. In shallow frontal depressions and at eyes with slightly coarser punctures. Submat, distinctly microsculptured. Head frontally rounded, medially slightly straightened. Medially for a short distance finely margined (Fig. 628). Antenna pale ferruginous, segments 3–10 slightly serrate (Fig. 629).

Pronotum: Brownish, laterally with rather vague pale brown areas. Finely to very finely punctate. Punctures coarsest and densest basally and at anterior margin. Submat, microsculptured (meshes distinct). Sides of pronotum rounded.

Elytra: Brown to dark ferruginous, laterally slightly paler; pale brown. Rather finely to coarsely and quite densely punctate. Punctu-

res finest frontally at suture and coarsest apically. Discal row of punctures visible only at base. Dorsolateral row of punctures absent. Lateral row of punctures consists of coarse and sparse punctures, which apically are located in a shallow furrow. Submat, finely microsculptured (meshes distinct). Epipleura pale brown, coarsely but somewhat indistinctly punctate, rather shiny although finely microsculptured. Apex of elytra truncate (Fig. 630).

Ventral side: Pale brown. Fairly coarsely and densely punctate. Abdomen apically and metathorax medially with finer punctures. Rather shiny, although distinctly microsculptured. Prosternal process laterally finely margined, medial surface slightly excavated.

Legs: Pale brown to pale ferruginous. Pro- and mesotarsus somewhat enlarged.

Male: Unknown.

Distribution: Indonesia: Sumatra (Fig. 626).

Biology: Unknown.

6.5.6. Species group 6 (sp.gr. *pumilus*)

Hydrovatus pudicus (Clark)

Figs 631–637.

Hydroporus pudicus CLARK, 1863:426 (orig. descr., faun.); SHARP, 1882a:807 (descr., faun.).

Hydrovatus pudicus (CLARK), BRANDEN, 1885:27 (faun.); RÉGIMBART, 1899b:234 (descr., faun.); ZIMMERMANN, 1920a:35 (faun.); 1927:19, 22 (descr., faun.); GUIGNOT, 1954g:565 (disc., faun.); 1956g:58 (disc., faun.); VAZIRANI, 1977a:29 (faun.).

Hydrovatus pusillus RÉGIMBART, 1881:620 (orig. descr., faun.); BRANDEN, 1885:27 (faun.); RÉGIMBART 1859a:339 (descr., faun.); 1899b:236 (descr., faun.); ZIMMERMANN, 1920a:35 (faun.); 1927:22 (disc.); CSIKI, 1938:126 faun.); VAZIRANI, 1977a:29 (faun.). **New synonym.**

Type locality: Java, Indonesia.

Type material studied: *H. pudicus*: Holotype, f: Type/Bowring Java/*pudicus* Cl. (BMNH). – *H. pusillus*: Cotype, f: Sumatra Kaju Tanam Agosto & Sett. 1878 O. Becari/Typus/*pusillus* Régimbart 2751 Typus !/*Hydrovatus pusillus* Rég. det. Régimbart (MCG). In MNHN three specimens, labelled Sumatra, Tabacs Grouwelle, are provided also with type labels. The data do not fit with the original description, accordingly they cannot be types of *H. pusillus*. The three specimens are all females, and body measurements are a little larger (length 2.04–2.20 mm, breadth 1.24–1.32 mm) than a real type of *H. pusillus*. Their specific association with the treated species is unclear.

Additional material studied: Burma: Toungoo V–X. 1888/*H. pumilus* Shp ? det. Régimbart (1 ex. MCG). – Thailand: Chiangmai 300 m, MV light 14.XI.1957 (42 exx. BBM, 10 exx. MZH); Chiangmai, light 14.XI.1957 (7 exx. BBM); Chiangmai Ban-tin-doi 350 m, 13.XI.1957 (1 ex. BBM); Pangmakampon (Pankampawng) nr Fang 450 m