

Hebauerina, new genus of water beetle from Thailand (Coleoptera, Hydrophilidae)

by

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Abstract - A new genus, *Hebauerina*, is established with reference to the new species *H. nanica*. For its morphological characters it is placed in the tribe *Anacaenini*, near the genus *Paracymus*. A new key to the genera of *Anacaenini* is proposed.

Riassunto - Viene descritto un nuovo genere, *Hebauerina*, sulla base della nuova specie *H. nanica*. Le caratteristiche morfologiche permettono di inserirlo nella tribù *Anacaenini*, vicino al genere *Paracymus*. È fornita una nuova chiave per i generi di *Anacaenini*.

INTRODUCTION

The new genus *Hebauerina* is established based on a small series of 4 *Hydrophilidae* received from N Thailand by Hans Hebauer, brother of the well known specialist in *Hydrophilidae* Franz Hebauer. It is a pleasure for me to dedicate the new genus to the Hebauer brothers.

HEBAUERINA GEN. N.

Type species: *Hebauerina nanica* sp. n., here designated. The gender is feminine.

Body broadly oval and convex, widest behind pronotal-clytral junction, contour not interrupted between pronotum and elytra, evenly attenuate posteriorly (Fig. 1). Dorsal surface glabrous. Labrum well sclerotised, not concealed by clypeus, anterior margin with a central notch. Clypeus forming a shelf above antennal base, it is demarcated from frons by a complete Y-suture, without systematic punctures; anterior margin continuously convex, anterior corners rounded. Frons without systematic punctures, frontal suture less engraved than fronto-clypeal one. Eyes rather large, separated by about 4 x the width of one eye, very slightly protruding from the outline of head; anterior and posterior margins laterally covered by a canthus. Temporae slightly converging behind eyes. Maxillary palpi nearly 1/3 as long as width of head; second segment swollen, longer than third; fourth segment nearly symmetrical, almost twice as long as third. Mentum anteriorly convex, posteriorly straight, about as broad as long, flat and shining. Labial palpi shorter than width of mentum, second segment without wreath of setae, nearly as long as third, this conical. Gula posteriorly narrowing, gular sutures converging. Antennae 9-segmented, nearly half as long as width of head; scape longer than pedicel; three intermediate segments very small, subconical; cupule slightly protruding medially; pubescent club well developed, loosely segmented, last segment twice as long as the penultimate. Pronotum widest at base, sides weakly rounded, converging anteriorly; surface evenly convex, without systematic punctures but with a border at hind margin. Prosternum short, apparently with antennal grooves, tectiform medially and with a longitudinal keel. Scutellum not longer than wide. Mesosternum nearly as long as prosternum, only reaching the prothoracic margin at a single point, not fused to metepisterna; middle portion raised anteriorly as triangular tooth. Metasternum not projecting anteriorly between mesocoxae, covered with hydrofuge pubescence except for a narrow glabrous area near the posterior margin of the raised middle portion. Metepisterna parallel-sided, about 5 x as long as wide. Abdomen with 5 visible sternites, lateral surface covered with fine pubescence. First and second ventrite of about same length, not carinate

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medially, without cavities or fringes of setae, hind margin of fifth ventrite simply rounded. Femora flattened, with sharply defined tibial grooves on inner face. Anterior femora with hydrofuge pubescence only near the fore margin; middle and hind femora covered with dense pubescence except extreme base and apical portion (Figs 2, 3). Hind femora completely contacting the trochanter basally. Tibiae flattened, with spines on outer face and without swimming hairs. Tarsi 5-segmented, without fine setae beneath, only with the usual rows of small spines, and without swimming hairs on the dorsal face. Elytra convex, with a well marked callosity jutting on humeri; sharply impressed sutural stria on posterior 2/3, anteriorly continued in a row of large punctures; ten incomplete longitudinal rows of serial punctures, detectable on lateral and posterior parts of elytra, becoming obsolete in about anterior third (as in *Grodum striatum* Hansen, Fig. 4). Elytral margins smooth, not serrate; epipleura almost vertical - the body is lowered into the elytral cavity -, very broad anteriorly, reaching metacoxae; pseudopipleura very narrow, not clearly distinct from epipleura, reaching elytral apex. Aedeagus flat when dried.

Etymology - The generic name refers to the collector, Hans Hebauer, and to my friend and colleague Franz Hebauer, specialist in *Hydrophilidae*.

Discussion - Following the opinions and particularly the systematics by HANSEN (1991), the new genus belongs to the family *Hydrophilidae* and has the diagnostic features of the subfamily *Hydrophilinae*, tribe *Anacaenini*. The characters I examined are not all those considered by HANSEN, but they are enough for a systematic identification. 1) Characters of the *Hydrophilidae*: head and pronotum not granulate; fronto-clypeal suture not grooved; gular sutures well separated; antennae 9-segmented with a pubescent club of only 3 segments; temporae not defined from eyes by a ridge, nor abruptly constricted behind these. 2) Characters of the *Hydrophilinae*: body outline not interrupted between pronotum and elytra; pronotum widest at base; body lowered into the elytral cavity; labrum well sclerotised, not concealed by clypeus; 2nd segment of labial palpi without subapical wreath-like tuft of setae. 3) Characters of the *Anacaenini*: elytral margins smooth, not serrate; pronotum impunctate; ventral face of tarsi without fine setae; tibiae without swimming hairs; scutellum not longer than wide; first and second ventrite simple, without cavities or fringes of setae; head and pronotum without systematic punctures; pseudopipleuron narrower than the epipleuron anteriorly, not defined from it by a distinct ridge; 5th ventrite without apical emargination.

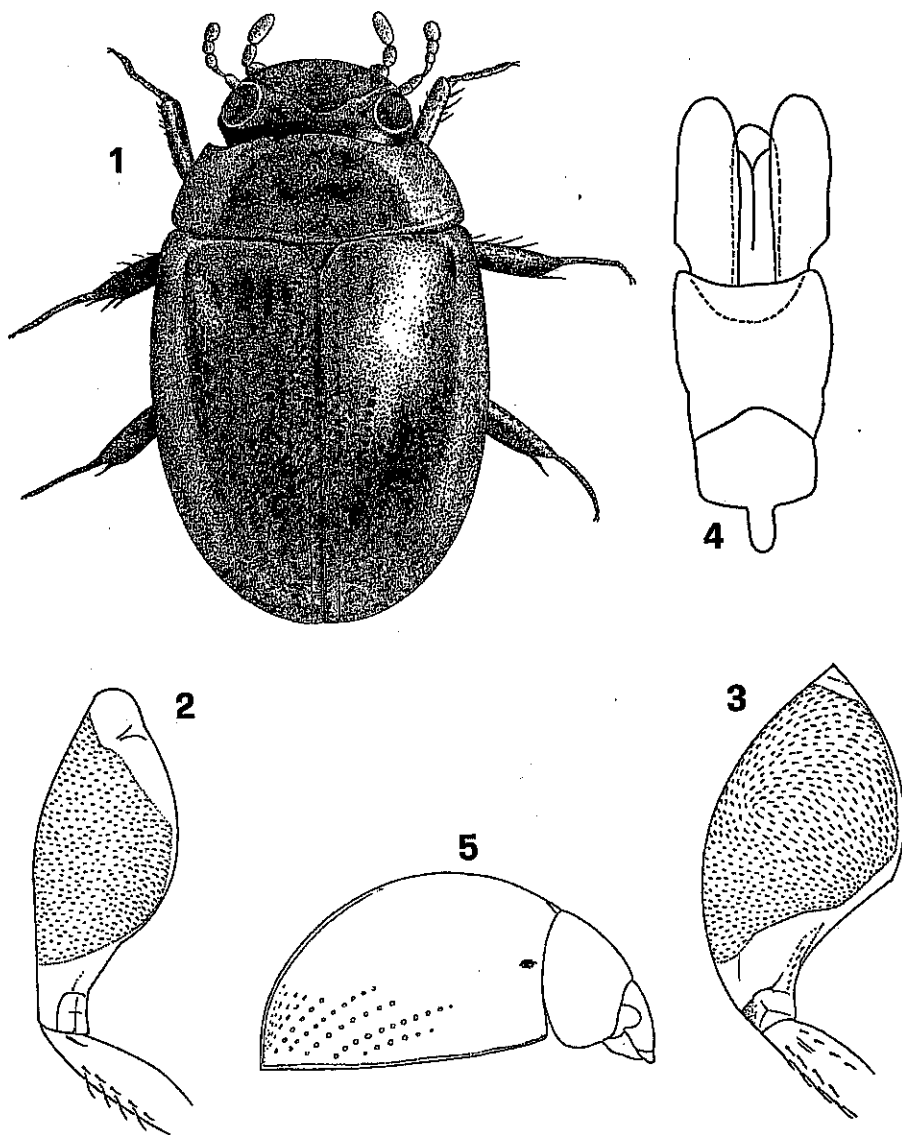
The genus differs from the other genera of *Anacaenini* by the marked callosity on elytral humeri (an exclusive character of *Hebauerina*); the evident, coarsely punctate elytral striae (*Notohydrus*, *Crenitis*, *Phelea*, *Grodum*, *Enigmata* and many *Paranacaena* may also have distinct striae of serial punctures, but these are less conspicuous or differently arranged); the carinate prosternum (as in *Paracymus* and *Notionotus*); the parasutural stria (differing from *Notionotus*); the widely spread hydrofugic hairs on metafemora (differing from *Paracymus*). *Hebauerina* can also be recognized from *Notohydrus* by the much shorter maxillary palpi, 9-segmented antennae, and non-protruding eyes; from *Crenitis* by the non-protruding eyes, and the markedly swollen 2nd segment of maxillary palpi.

Hebauerina nanica sp. n.

Material examined - Holotype male: THAILAND, N Nan prov., Doi Phu Kha, Headq., 19°13'N 101°07'E, 22-26.4.1999, leg. D. Hauck (Naturhistorisches Museum Wien); Paratypes: 1 male and 2 females, same data, coll. H. Hebauer (2 specimens) and E. Gentili (Museo Civico di Storia Naturale, Verona).

Description

Besides the characters of the genus, above described, here are the specific ones. Length mm 2.2-2.4 (Holotype mm 2.4); width mm 1.3-1.5 (Holotype mm 1.5). Broadly oval, very convex. Head chestnut in colour, darker posteriorly; smooth, impunctate, with a complete Y-suture producing a short branch towards eyes. Pronotum chestnut, darker than head, smooth and shining, with rare punctures detectable at 100 x. Elytra paler, chestnut with longitudinal



Figs 1-5. *Hebauerina nanica* sp. n. 1: habitus; 2: mesofemur, ventral view; 3: metafemur, ventral view; 4: aedeagus, dorsal view; 5: clytron, lateral view.

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9 Mesosternum with a pronounced posteromedian rise. Labrum normally with stiff setae. Base of tegmen with a spiniform process. Australian Region.

Paranacaena Blackburn, 1888

- Mesosternum without posteromedian rise. Labrum glabrous. Base of tegmen not spiniform. South-Africa.

Grodum Hansen, 1999

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Mailed 18 January 2002, though modified afterwards