

**A new *Hemiplecta* species from a remote mountain in south-east Sumatra, Indonesia (Gastropoda, Pulmonata, Ariophantidae)**

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*Hemiplecta abbasi* spec. nov. is described from SE Sumatra, Indonesia.

Key words: Mollusca, Gastropoda, Pulmonata, Ariophantidae, *Hemiplecta*, taxonomy, South East Asia, Indonesia, Sumatra.

INTRODUCTION

A sample, containing some specimens of a supposed *Hemiplecta* species, collected by Mr. J. Abbas (Jakarta) in south-east Sumatra, was received for identification. Thanks to the publications of Van Benthem Jutting (1950a, b, 1959) on the non-marine molluscs from Sumatra and Java, the malacofauna of these two islands is relatively well known, especially with regard to the larger species. In her "Catalogue of the non-marine Mollusca of Sumatra" Van Benthem Jutting (1959) not only listed all the species, but also discussed the records for Sumatra. Therefore it was made easier to conclude that this *Hemiplecta* sample must represent not only a new record but even a new species, which is described below.

Abbreviations. – For shell characters: W, width; H, height. For anatomical characters: DS, dart sac; EC, epiphallic caecum; EP, epiphallus; FL, flagellum; GA, glandula albuminifera; O, oviductus; P, penis; SD, spermathecal duct; SO, spermoviductus; SP, spermatheca; R, retractor muscle; V, vagina; VD, vas deferens. For collections: MZB, Museum Zoologicum Bogoriense, Bogor, Java, Indonesia; RMNH, Nationaal Natuurhistorisch Museum Naturalis, Leiden, The Netherlands; MD, reference collection W.J.M. Maassen, Duivendrecht, The Netherlands (material to be deposited in RMNH).

SYSTEMATIC PART

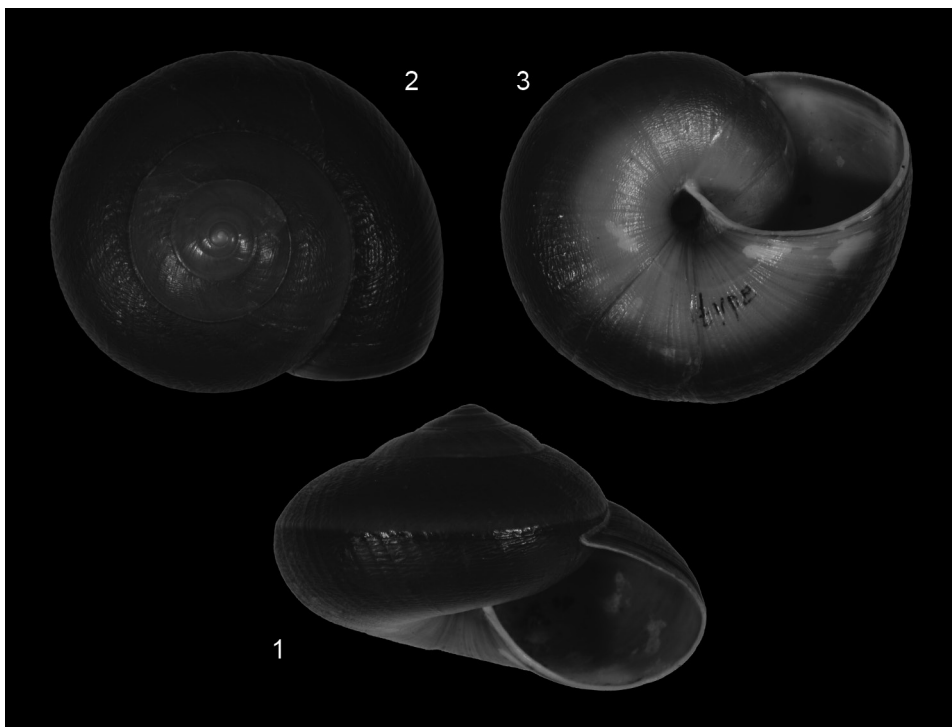
Family Ariophantidae Godwin-Austen, 1888

Genus *Hemiplecta* Albers, 1850

Type species: *Helix humphreysiana* Lea, 1840 [Singapore].

*Hemiplecta abbasi* spec. nov. (figs 1-2)

Material examined (holotype and paratypes). – Indonesia, Sumatra, Lampung, W-side summit Gunung Rajabasa, SE of Telukbetung; 1281 m alt.; leg. J. Abbas, Jakarta (RMNH 113927/holotype; RMNH 113928 alc., MZB, MD/2).



Figs 1-3. *Hemiplecta abbasi* spec. nov., Indonesia, Sumatra, Lampung, W-side summit Gunung Rajabasa, SE of Telukbetung; 1281 m alt.; leg. J. Abbas, Jakarta (holotype RMNH 113927). 1, front view, width 48 mm; 2, dorsal view; 3, umbilical view.

Shell. – Shell large, low-conical, with small spire and inflated last whorl. Ground-colour mostly very dark brown above and beneath the periphery; a much lighter zone is present in the area near the umbilicus. Along the periphery runs a very dark, brown-black band, adapically accompanied by a lighter brown band. The entire shell is covered by a dark brown epidermis. The 1.5 apical whorls are very finely striated; apart from that, the shell is irregularly striated with growth lines, crossed by numerous, radially arranged, coarse wrinkles. Between these wrinkles there is a very fine, radial sculpture of striae, giving the shell a dull and granulated appearance. On the base of the whorls, towards the umbilicus, this oblique sculpture becomes weaker. With 5.25 whorls; the initial ones slowly increasing in size, the final 1.5 to 2 whorls more convex and large. Suture shallow along the upper whorls, increasingly deeper between the following ones. Periphery in young shells acutely keeled at the periphery; in fully grown specimens this carination becomes obsolete towards the aperture, where only a vague angularity remains. Top elevated, but not sharp; base rounded. The umbilicus is open, measuring about 1/9 of the total width. Aperture oblique with regard to the coiling axis, wide, broad-oval. Peristome not continuous, hardly thickened, not reflected; the two ends connected by a thin membrane on the penultimate whorl.

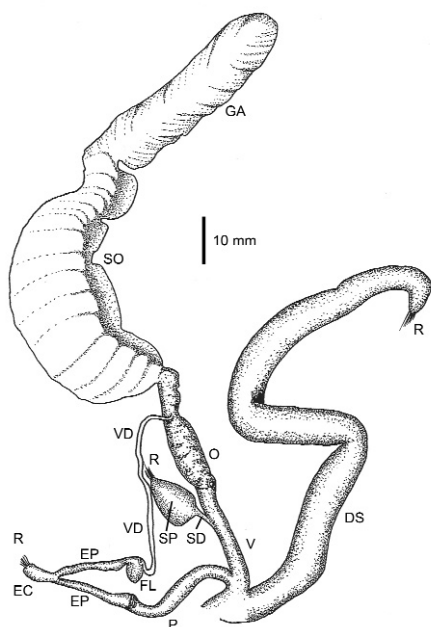


Fig. 4. *Hemiplecta abbasi* spec. nov., genitalia of a paratype.

Genitalia. – There was only one preserved specimen available. Vas deferens quite short, thin, entering the epiphallus laterally. Flagellum small, rounded conical. Epiphallus slender, distinctly longer than the penis. Penial retractor inserting at a short caecum halfway the epiphallus; at the other end attached to the spermoviduct. Penial papilla small, conical; penial lumen with numerous, small tubercles. Penis about as long as the oviductus, longer than the vagina and shorter than the narrow epiphallus. Pedunculus very short; its bursa pear-shaped. There is a very large conspicuous dart-gland.

Dimensions: H, 28-35 mm; W, 43-48 mm. Holotype: H, 33 mm; W, 48 mm.

Derivatio nominis. – Named in honour of my malacological friend John Abbas (Jakarta), who discovered this species and had to visit the place three times before he could collect one live animal.

Remarks. – For Sumatra only a few species of *Hemiplecta* are recorded: *H. humphreysiana* (Lea, 1840), *H. goliath* Van Benthem Jutting, 1959, *H. obliqueundulata* Van Benthem Jutting, 1959, and *H. obliquata* (Reeve, 1852).

*Hemiplecta abbasi* can be separated from *H. humphreysiana* by its coarser sculpture and the much wider last whorl, which is only a little wider than the penultimate whorl in *H. humphreysiana*. *Hemiplecta obliquata* is larger (W 54.5 mm), whitish or greenish, with more or less regular ribs, and an umbilicus which is partly hidden by the columellar side of the peristome. It differs from *H. goliath* by being much smaller (W 83.7 mm in *H. goliath*), with a less prominently angular periphery and more rounded whorls as compared to the more flattened whorls of *H. goliath*. *Hemiplecta abbasi* differs from *H. obliqueundulata* by its less coarse sculpture, smaller dimensions (W 57-66 mm in *H. obliqueundulata*), much darker colour, and a rounded instead of a broadly oval aperture.

Only a few illustrations of the genitalia of *Hemiplecta* species could be traced in the literature. The figure in Godwin-Austen (1898: 74, pl. 80 fig. 6b) is too small to show all the

details. The figure published by Van Benthem Jutting (1950a: 126, fig. 1) is somewhat confusing; since the small and indistinct flagellum has apparently been overlooked, the part of the epiphallus from the epiphallic caecum onwards is called vas deferens. Only the illustration by Collinge (1902: pl. 4 figs 16-19) gives a better idea of the genitalia of *Hemiplecta humphreysiana*. In that species both the vagina and the oviduct, and the penis and the epiphallus are very long, while in *H. abbasi* these parts are relatively short.

#### ACKNOWLEDGEMENTS

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