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***Cantharus vermeiji* sp. nov., a new species from East Africa
(Gastropoda: Buccinidae)**

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Abstract: The new species *Cantharus vermeiji* sp. nov. is described from Mozambique. Conchological differences in sculpture and shape serve to distinguish this species from *Cantharus tranquebaricus* (Gmelin, 1791), its closest congener and type species of the genus.

Introduction: The *Cantharus* group contains a large number of circumtropical, mainly shallow water buccinids from all tropical seas, with some outcrops into the tropical deep water fauna. The group originated in the Oligocene and, after a complex evolutionary history, a broad radiation in the Recent is present. The species are rather easily distinguishable and usually no major taxonomic problems are present in past literature. The systematics on the generic level, on the contrary, have always been subject to great confusion. The species usually all got accommodated in the genus *Cantharus*. Occasionally some generic (or subgeneric) taxa were described when insight (usually on a local fauna) required so. A thorough study on the history and systematics of the Neogastropoda by Geerat Vermeij originated in a number of important publications on the matter, and on the *Cantharus* group in particular. His important review of the Oligocene to Recent genera confirmed the heterogeneity of the group and many genera were recognized or confirmed as distinct: *Anna* Risso, 1826; *Cancellopolia* Vermeij & Bouchet, 1998; *Cantharus* Röding, 1798; *Editharus* Vermeij, 2001; *Gemophos* Olsson and Harbison, 1953; *Hesperisternia* Gardner, 1944; *Pollia* Gray in Soweby, 1834; *Preangeria* Martin, 1921; *Prodotia* Dall, 1924; *Pusio* Gray in Griffith and Pidgeon, 1834, *Solenosteira* Dall, 1890 and *Zeapollia* Finlay, 1927.

In the present paper one more species is added to the genus: *Cantharus vermeiji* sp. nov.

SYSTEMATICS

Family: **BUCCINIDAE** Rafinesque, 1815

Genus: *Cantharus* Röding, 1798

Type species: *Buccinum tranquebaricum* Gmelin, 1791 (subsequent designation by Cossmann 1901). Recent.

Cantharus vermeiji sp. nov.

Figs 1-7

Type material: Holotype, 44.7 mm, Mozambique, Nacala Bay area, by local fishermen in shallow water, in Muséum national d'Histoire naturelle, Paris. MNHN 20846. Paratypes 1-2, 43.4 mm, 31.0 mm juvenile, Mozambique, off Inhaca Island, trawled, coll. Koen Fraussen nr. 4261.

Paratypes 3-8, 39.9-43.5 mm, coll. Koen Fraussen nr. 4123, 4662, 5246.

Paratype 9, 43.1 mm, Yemen, Gulf of Aden, trawled by ex. USSR commercial fishing vessels, 1985, coll. Koen Fraussen nr. 2317.

Paratype 10, 35.7 mm, Mozambique, trawled by fishermen, 70 m deep, coll. Aart Dekkers.

Paratype 11, 36.9 mm, Mozambique, trawled, 50 m deep, coll. David Monsecour.

Type locality: Mozambique, off southern Mozambique, trawled, 250 m deep.

Range and habitat: Known from Gulf of Aden (off Yemen) in the north to Mozambique in the south. About 25-80 m deep.

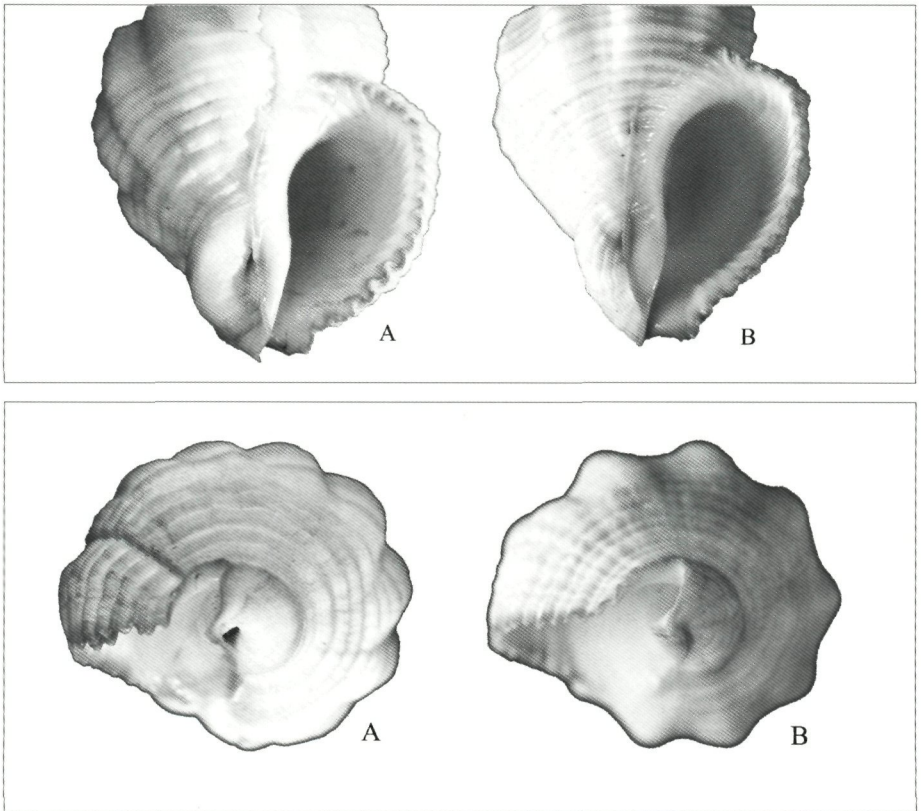
Description: Shell of medium size for genus, up to 44 mm, thick and solid. Shape ovate, broad with moderately short spire. Base broad, convex. Suture distinct. Colour yellow with 1 or 2 broad, white spiral bands, inside of aperture white, edge of columella and outer lip orange. Spiral sculpture consisting of thick primary spiral cords (4 on first, 5 on fourth teleoconch whorl); gradually becoming broader and sharper. Interspaces narrow on upper spire whorls, with 1 fine secondary spiral cord. Interspaces gradually becoming broader. Secondary spiral cord gradually becoming stronger, almost as strong as primary spiral cords on penultimate whorl. Number of spiral cords increasing because of additional, tertiary spiral cords which appear on both sides of this strong secondary spiral cord: 3 on penultimate, 5 on body whorl.

Tertiary spiral cords situated on slope of primary spiral cords, resulting in a triliriate appearance. Axial sculpture consisting of broad, rounded ribs, angulated on shoulder, with rather narrow interspaces. 9 or 10 on spire whorls, 11 on body whorl. Aperture oval, almost round. Outer lip typical of genus, adapically angulated, sharp with fine crenulations, with fine internal lirae, labral tooth indistinct. Columella smooth, glossy, callus slightly projecting.

Operculum (Fig. 5) large, slender, claw shaped, abapically sharp with terminal nucleus, adapically rounded.

Periostracum (Figs 4, 6) thick, coarse, pale brown, consisting of a dense structure of fine, irregular axial lamellae.

Comparison: *Cantharus vermeiji* sp. nov. is characterized by the oval shape, big spiral cords on the base and broad axial ribs on the body whorl. A: *C. vermeiji*, holotype; B: *C. tranquebaricus*, India.



C. tranquebaricus (Gmelin, 1791) (Figs 8-9) is similar in colour but differs by the shape which is slenderer with a slightly higher spire, the shape of the base which is more prolonged (instead of rather convex) and narrower (instead of rather broad), the sculpture with slightly finer spiral cords on the base with spiral cords present on the siphonal canal (instead of an almost smooth siphonal canal), the axial sculpture which is finer and the narrower aperture.

C. erythrostomus (Reeve, 1846) is similar in colour but differs by the slender shape with high spire and elongated base and a thin shell.

Etymology: *Cantharus vermeiji* sp. nov. is named to honour Geerat Vermeij (Department of Geology, University of California at Davis) for his many important contributions to malacology, paleontology and biogeography, and in particular to the knowledge of the *Cantharus* group.

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Plates

1-3. *Cantharus vermeiji* sp. nov., holotype, 44.7 mm, Mozambique, Nacala Bay area, in Muséum national d'Histoire naturelle, Paris.

4-6. *Cantharus vermeiji* sp. nov., paratype 1, 43.4 mm, operculum 20.8 mm, Mozambique, off Inhaca Island, coll. Koen Fraussen nr. 4261.

7. *Cantharus vermeiji* sp. nov., paratype 9, 43.1 mm, Gulf of Aden, off Yemen, trawled, coll. Koen Fraussen nr. 2317.

8-9. *Cantharus tranquebaricus* (Gmelin, 1791), 42.8 mm, India, Madras, coll. Koen Fraussen nr. 0023.

