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***Gari sharabatieae* (Bivalvia: Psammobiidae),
a new species from the Gulf of Suez, Red Sea, Egypt**

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Key words: PSAMMOBIIDAE, *Gari*, taxonomy, Gulf of Suez, Egypt, Red Sea.

Abstract: *Gari sharabatieae* sp. nov. is described from the northern end of the Gulf of Suez, the Red Sea of Egypt. Its shape and colour pattern is similar to that of *Gari pallida* Deshayes, 1855 and *Soletellina ruppelliana* (Reeve, 1857) with which it might be confused and it is compared with this species. It is endemic to the Gulf of Suez.

Introduction: While preparing to write the section on the species of *Gari* of the Red Sea to be included in my forthcoming book (Seashells of the Egyptian Red Sea, American University of Cairo Press) I noticed that some of the specimens I had earlier placed in *Gari pallida* Deshayes, 1855 (= *weinkauffi* auctorum) in fact had no oblique sculpture. Fresh specimens are beige with softly golden rays. Subsequently I have collected about 25 more specimens, most of them with the valves still articulated. None of them have any oblique sculpture. This convinced me they were not just aberrant specimens of *Gari pallida*. I showed them to a number of bivalve specialists, none of whom had seen this shell before. Finally I sought the advice of **Psammobiidae** specialist Dr. Richard C. Willan of Darwin, Australia. He confirmed that this is indeed a new species to science.

Abbreviations:

BMNH	= British Museum of Natural History
CAS	= California Academy of Sciences
EAUFS	= El Azhar University, Faculty of Science, Cairo
NGMW	= National Galleries and Museum of Wales
NTM	= Northwest Territories Museum, Darwin, Australia
SCU	= Suez Canal University, Ismailia, Egypt
ZMA	= Zoölogisch Museum Amsterdam

Systematics:

Family PSAMMOBIIDAE

Genus *Gari* Schumacher, 1817Type species: *Gari vulgaris* Schumacher, 1817, Recent, Indo-Pacific***Gari sharabatae* sp. nov.**

(Figs 1-4)

Type material: The holotype is deposited in ZMA (Moll. 4.05.010). It consists of both valves and measures 21.0 mm length and 11 mm height.

Additional paratypes are deposited in the National Galleries and Museum of Wales at Cardiff, collection number NMW.Z.2005.029.00001, and the California Academy of Sciences at San Francisco numbers CASIZ 173282 and CASIZ 173283. Additional paratypes range in length from 14 to 24 mm. Of these one specimen will be donated to each of the following: BMNH, EAUFS, NTM, SCU, H. Dekker, and P. Piombino.

Type locality: The far northwestern shore of the Gulf of Suez, Red Sea, Egypt. (N 29.71789 -E 32.38958).

Description: Shell small to medium, length up to 25.5 mm, usually between 18 and 23 mm, almost equivalve, inequilateral, compressed, left valve nearly flat, right valve slightly inflated. Outline: Broadly elliptical, anterior higher and longer, anterior margin unevenly rounded, posterior subtruncate. Umbones strongly to the posterior at about 1/3 of the length of the shell. Antero-dorsal margin nearly straight and horizontal, sloping only slightly to the rounded anterior. Ventral margin weakly curving, nearly parallel to dorsal. Postero-dorsal margin short, straight, sloping slightly downwards. Nymph occupying about half this length at whose end the outline slants abruptly. Posterior itself short and nearly vertical. Postero-ventral margin straight from angle with posterior to a point under the posterior end of the nymph where it changes into the ventral margin. Small posterior gape but no posterior flex. Hinge: RV with two cardinal teeth, the posterior one is slightly bifid, anterior simple and narrow. LV with anterior cardinal faintly bifid, posterior cardinal becoming obsolete. Pallial sinus deep, reaching about 2/3 of the length of the shell. Its dorsal margin is flat, anterior end angular, confluent with pallial line to a point about 1/3 the distance of the antero-dorsal margin of the shell from the beak. Posterior slope: Gentle, flat. Both valves very weakly subcarinate. The angle of the posterior slope increases with maturity. Sculpture: Fine concentric growth lines only, no posterior ribbing or ornamentation. Weak radial lines interior to the shell are visible with backlighting. Color: Drab olivaceous beige with narrow darker and lighter radial rays and broad concentric bands. Pericostracum thin,

olivaceous, translucent. Juveniles are very light beige to completely transparent with or without occasional rays.

Distribution: All known specimens of this shell are from the northern end of the Gulf of Suez. They are more common on the western shore near Ain Sukhna than on the eastern (Sinai) and have not been found farther south than N. 29.44571, E. 32.74515. All have been beach collected by the author and her friends.

Etymology: Named in honour of Mrs. Doreen Sharabati, author of the first popular book on the mollusca of the Red Sea.

Discussion: The present species differs in sculpture from *Gari pallida* Deshayes, 1855. The latter has very strong oblique sculpture while this species has none. The present species has a thinner more fragile shell. The strongly posterior placement of the ligament, which also distinguishes it from *Soletellina ruppelliana* (Reeve, 1857), is an easily noticed characteristic in the field. Compared to both of these species, *Gari sharabatae* sp. nov. is more compressed. While the color pattern of fresh dead specimens is nearly identical to that of *Gari pallida*, it is often obscure and seems to fade rapidly after collection. Many have asked how it is that this species could have remained undetected in such a well known place as the Gulf of Suez. Perhaps more significantly *Gari sharabatae* sp. nov. is also extremely localized. It has been found along the shore for a distance of only about 30 km. It is most commonly found at a beach with an extremely long shallow slope, very fine limestone sand and for Egyptian shores, a significant amount of silt and clay. This substrate is quite uncommon, so that may be a factor in its limited range.

A new large-vessel port and oil terminus has just been constructed inside the extremely limited range of this newly discovered mollusc. The dredging and other construction and usage activities have destroyed approximately 10 to 15% of the very small range of this species. Heavy use by waders and bathers of the very shallow beach where most of the specimens were found seriously endangers the species further. One piece of land remains undeveloped within the habitat range. I am positive that at least several more undocumented species inhabit this area. Preservation of this one remaining plot would be a tremendous boon to the protection of biological diversity in Egypt.

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assistance in confirming that this is a new species. For their friendship, fun, finds, food, and frivolity which made our collecting trips so wonderful, I am happily indebted to Pam Piombino, Barbara Fudge, Myrette el Sokari, Pam Sparr, and Eva Montville. To my husband, John Villaume, I owe so much for his patience, assistance, driving, support, and love. The debt to my parents, Jean and Ted Rusmore, cannot be calculated, but for their encouragement of all my interests, especially shell collecting, and their firm belief I could accomplish anything I set out to do: Thank you!

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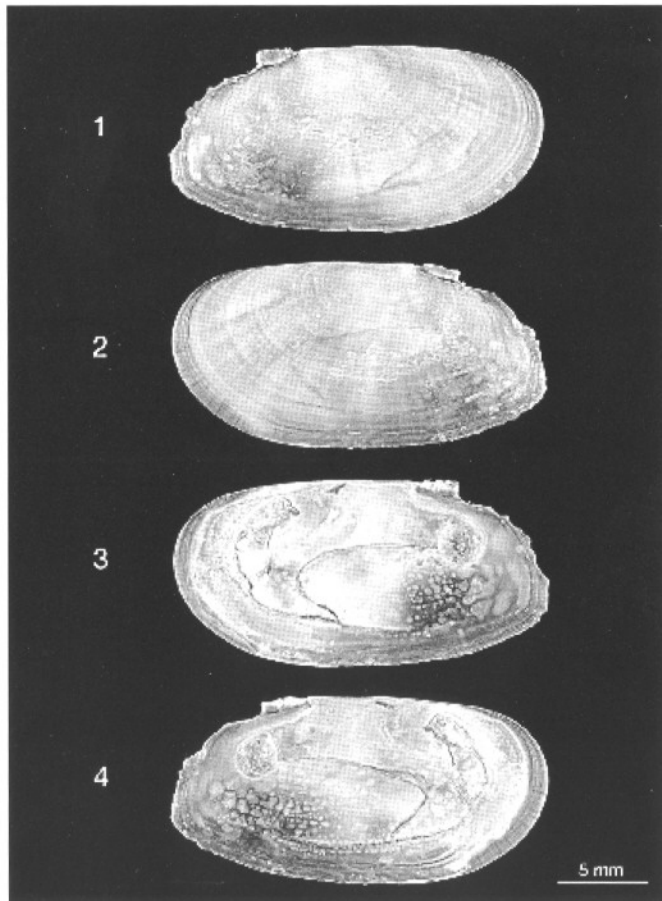


Plate: *Gari Sharabatiea* sp. nov. holotype.

Gloria Maris	44 (6)	150-154	Antwerpen, december 2005
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**A new *Antillophos* (Gastropoda: Buccinidae)
from Saya de Malha Bank (western Indian Ocean)**

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Key words: MOLLUSCA, GASTROPODA, BUCCINIDAE, *Antillophos*, *usquamaris*, Mascarene Plateau, Saya de Malha Bank.

Abstract: A new species of **Buccinidae**, *Antillophos usquamaris*, is described from the western Indian Ocean and is compared with *Antillophos retecosus* (Hinds, 1844).

Introduction: Many new species were found among the shells trawled by fishermen or taken during scientific surveys by vessels from the former Soviet Union in the Indian Ocean and offshore the East African coast. Among them a beautiful shell belonging to the genus *Antillophos* was collected at Saya de Malha Bank.

For a history of the scientific survey and commercial activities on Saya de Malha Bank, I refer to Bondarev & Roeckel (1992: 21).

Genus *Antillophos* Woodring, 1928

Tritiaria (*Antillophos*), Woodring 1928: 259-261. Type species by original designation: *Cancellaria candei* d'Orbigny, 1853 (type locality: Guadeloupe). Recent, Caribbean.

For a discussion on the taxonomic position of *Antillophos* and *Phos*, I refer to Fraussen and Poppe (2005)