

A new deep water miter (Gastropoda: Mitridae) from the Indian Ocean

Jean Claude MARTIN
48 Route de Bellet
06200 Nice, France
nitram04@gmail.com

Richard SALISBURY
947 North Parkdale Ave.
Meridian, ID 83642 USA
rsalisbury8@msn.com

KEYWORDS. Mitridae, *Mitra*, Somalia, Madagascar, new species.

ABSTRACT. A new species of Mitridae, *Mitra (Mitra) roselineae*, is described from deep water off Somalia and northern Madagascar. It is compared with *Swainsonia fusca* Swainson, 1824 and with *Mitra floccata* Reeve, 1844.

INTRODUCTION

In 1991 Somalia collapsed into civil war and numerous trawlers harbored in Mogadishu moved to Djibouti for security. As a result, large quantities of shells, byproducts of shrimp trawling, were put on the local market by fishermen. Among them were true rarities such as *Cypraea broderipi*, *Chimeria incomparabilis*, and many species new to science. Three specimens of *Mitra roselineae* n.sp. were found at this time in a basketful of shells. Another specimen was purchased at Diego Suarez in northern Madagascar from a local shell dealer.

Abbreviations

MNHN: Muséum national d'Histoire naturelle, Paris, France.

RAS: Richard A Salisbury, Meridian, Idaho, USA

SYSTEMATICS

Superfamily **MURICOIDEA** Rafinesque, 1815

Family **MITRIDAE** Swainson, 1831

Subfamily **Mitrinae** Swainson, 1831

Genus ***Mitra*** Lamarck, 1798

Subgenus ***Mitra*** Lamarck, 1798

Type species: *Voluta mitra* Linnaeus, 1758, by subsequent designation, Recent, Indo-Pacific

***Mitra (Mitra) roselineae* n. sp.**

Figs 1- 5

Swainsonia fusca – Thorsson & Salisbury 2003a: 3, 15, 16, pl. 286B (not *M. fusca* Swainson, 1824).

Mitra species (correction) – Thorsson & Salisbury, 2003b: 7.

Type material. Holotype: MNHN 25857 (Figs 1-3): Length 34.9 mm, width 12.1 mm, aperture 19.0 mm. Somalia, off Ras Hafun, trawled, 150-200 meters, 1991, ex. J. C. Martin coll. # 4929B.

Paratype # 1 (Figs. 4-5). Length 30.4 mm, width 10.2 mm, aperture 16.8 mm. Somalia, off Ras Hafun, trawled, 150-170 meters, 1991, ex. J. C. Martin coll. # 4929A, RAS collection

Paratype # 2. Length 41.1 mm, width 12.8 mm, aperture 19.0 mm. Somalia, off Ras Hafun, trawled, 150-170 meters, 1991, J. C. Martin coll. # 4929C.

Paratype # 3. Length 31.5 mm, width 10.7 mm, aperture 17.5 mm. N. Madagascar, Diego Suarez, from shrimp fishing grounds, no depth recorded, J. C. Martin coll. # 7959.

Paratype # 4. Length 35.5 mm, width 10.5 mm, aperture 18.0 mm. Somalia. No collection data, Hans-Heinrich Heinicke collection.

Paratype # 5. Length 36.0 mm, width 11.0 mm, aperture 18.5 mm. Somalia. No collection data, Hans-Heinrich Heinicke collection.

Distribution. East Africa, Off Somalia, south to northern Madagascar in 150-200 meters, on shrimping grounds.

Description. Shell of medium size to 41.6 mm, elongate-fusiform, protoconch unknown, early whorls smooth with 3 to 5 punctate, spiral grooves, tiny microscopic axial grooves connect some punctations, whorls slightly convex, suture distinct, impressed with tiny crenulations on penultimate and teleoconch whorls, body whorl with 6 or 7 shallow, punctate,

spiral grooves becoming obsolete on lower body whorl. Aperture narrow, slightly longer than half total shell length, outer lip thickened, with 3 to 7 pustules on outer lip near siphonal canal, aperture smooth within, columella heavily callused, with 3 columellar folds. Siphonal notch obliquely angled, deeply notched. Base color light to dark brown, with a lighter colored band between aperture and suture, small white spots and streaks at the suture, some specimens display a distinct brown and white spiral striping on the lower body whorl. Aperture light brown background color, darker toward the outer lip; columellar folds reddish.

Remarks. *Mitra roselinae* could be confused with *Swainsonia fusca* Swainson, 1824 (Figs 6-7) which is also found in East Africa. The original description reads "Shell thick ovate, smooth, brown, spire contracted, suture minutely crenulated: outer lip thick, gibbous, smooth: pillar 4-plaited". The columellar folds number 5-6 on *Swainsonia fusca* and override the columella which is a distinguishing characteristic of most *Swainsonia* species. Additionally in the original description Swainson describes the shell as "length one inch [25.4 mm]". This is smaller than our new species which can reach 41.6 mm in length. *Mitra zephyrina* Sowerby, 1874 was described from Mauritius and is considered a synonym of *Swainsonia fusca*. *Mitra roselinae* differs from *S. fusca* in being

larger, dark brown with a distinct brown and white spiral striping on the lower body whorl, the interior of the aperture is brown versus white. This species differs from *Mitra floccata* Reeve, 1844 (Figs 8-9) in being slenderer and shiny; the interior of the aperture is reddish brown versus white. Adult specimens of *Mitra floccata* can reach 60 mm. *Mitra roselinae* is smaller to approximately 41.6 mm in length.

Etymology. Named in honor of Mrs. Roseline Martin, wife of the senior author.

ACKNOWLEDGEMENTS

Thanks to Alain Cornic who purchased the Somalian shells in Djibouti from a fisherman working aboard "scampi" trawlers from Somalia, to John Wolff for review of the early versions of this manuscript and to Roland Houart for further comments and for the layout of the plate.

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Figures 1-9

1-5. *Mitra (Mitra) roselineae* n. sp.

1-3. Holotype MNHN 25857, length 34.9 mm, width 12.1 mm, aperture 19.0 mm. Off Ras Hafun, Somalia, trawled, 150-200 meters, 1991, ex. J. C. Martin coll. # 4929B; **4-5.** Paratype 1: Length 30.4 mm, width 10.2 mm, aperture 16.8 mm. off Ras Hafun, Somalia, trawled, 150-170 meters, 1991, ex. J. C. Martin coll. # 4929A, RAS collection.

6-7. *Swainsonia fusca* (Swainson, 1824), Cap Champagne, Reunion Island, May 1985, collected by Jean Drivas, inside of lagoon, in sand, RAS collection, size: 21.6 x 8.6 x 12.1 mm.

8-9. *Mitra (Mitra) floccata* Reeve, 1844, Cargados Carajos, N.E. of Mauritius, beached after a storm, April 03, 2002, Jacques Bertard collection, size: 56.4 x 18.0 mm (photo J. C. Martin).