

SPIXIANA	24	2	107–110	München, 01. Juli 2001	ISSN 0341–8391
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A new species of Turbinidae Rafinesque, 1815 from the northern Red Sea

(Mollusca, Gastropoda)

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Kreipl, K. & A. Alf (2001): A new species of Turbinidae Rafinesque, 1815 from the northern Red Sea (Mollusca, Gastropoda). – *Spixiana* 24/2: 107–110

A new species of the genus *Turbo* Linnaeus, 1758 from the northern Red Sea is described. The shell of *Turbo marisrubri*, spec. nov. is completely different from those of the three other species of *Turbo* known to occur in the Red Sea: *Turbo petholatus* Linnaeus, 1758, *Turbo radiatus* Gmelin, 1791 and *Turbo* (*Lunella*) *coronatus* Gmelin, 1791.

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Introduction

The new *Turbo* species was offered to the senior author by two shell dealers as *Turbo pustulatus* Brocchi, 1821, respectively as *Homalopoma gestroi* (Caramagna, 1888). In fact, *Turbo pustulatus* is not a *Turbo*, but a *Homalopoma* which is a genus of the Turbinid subfamily Colloniinae Cossmann, 1916. Therefore the correct name for this species is *Homalopoma pustulata* (Brocchi, 1821). *Homalopoma gestroi* – originally described as *Collonia gestroi* Caramagna, 1888 – is a synonym.

After a close examination of the literature on Red Sea molluscs we found out that our Red Sea *Turbo* obviously represents an undescribed species.

Turbo marisrubri, spec. nov.

Fig. 1

Types. Holotype: Northern Sinai, Gulf of Aqaba, Egypt, Red Sea; dived in about 30 m (Senckenberg-Museum, Frankfurt am Main, Germany, no. SMF 321179.) – Paratypes: 6, from same locality.

Description of holotype

Size. Height: 24.1 mm, width: 21.4 mm.

Shell medium-sized, thick and solid; slightly taller than wide ($h/w = 1.1$).

Apex pinkish-white; teleoconch consisting of 5 whorls, sculptured by very distinct spiral cords. Early whorls with keeled shoulder bearing minute spines. Body whorl with three strong spiral cords at midbody with one much weaker cord between them. Subsutural ramp sculptured with four strong spiral cords of distinct, rounded nodules. Base with seven spiral cords getting weaker towards the umbilical area. Suture distinct. Columella smooth and evenly curved, heavily calloused; aperture round; umbilicus completely closed.

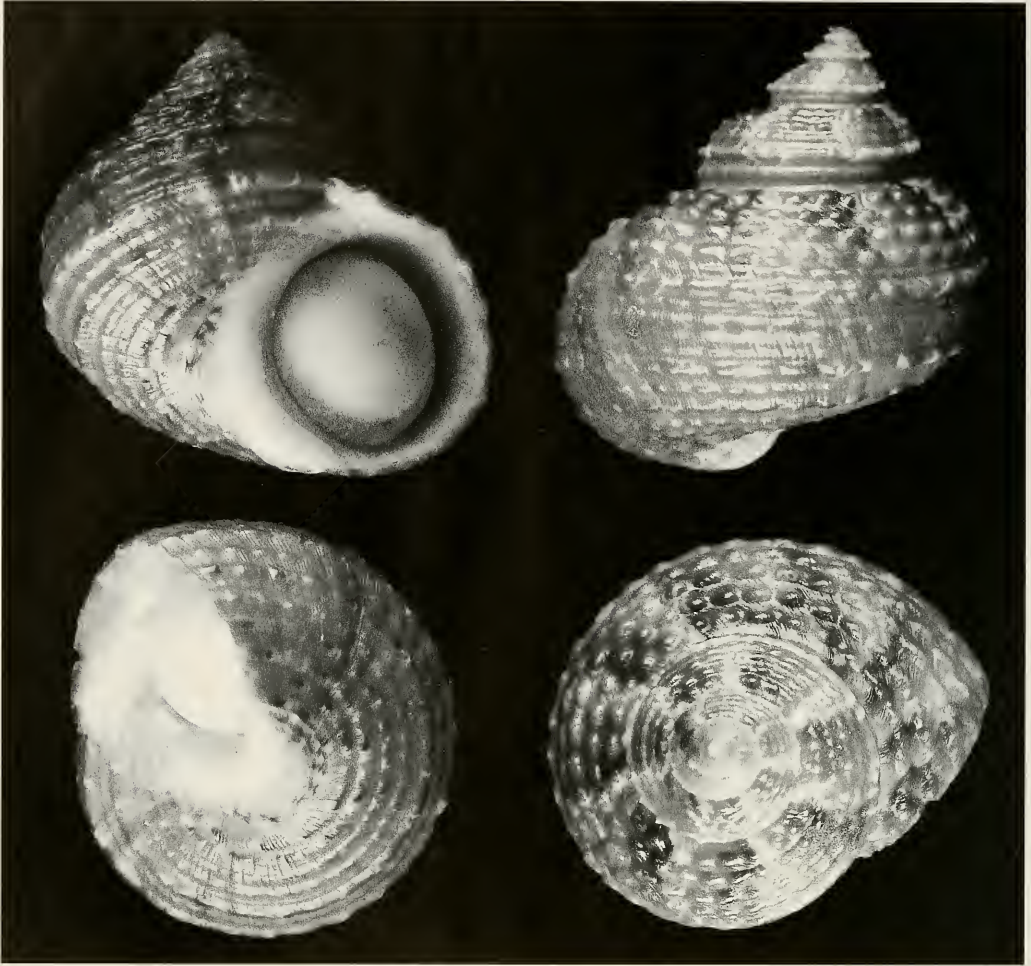


Fig. 1. Holotype of *Turbo marisrubri*, spec. nov.

Basic colour deep reddish-brown, with indistinct, rather regularly spaced axial flames of light and dark brown, particularly on the subsutural ramp. Some of the spiral cords on the base show very small, alternating light and dark spots. Columella and aperture white, aperture nacreous within; umbilical area with a small yellowish-orange blotch.

Operculum thick, round, very finely granulate, with a distinct rim along its outer margin, dull white.

Soft parts not available for study.

Variation. The paratypes 1-6 do not vary much, neither concerning the shape and sculpture nor the coloration. Paratype 2 is a bit more slender than the holotype specimen and in paratype 3 the nodules on the subsutural ramp are not as distinct as in the holotype. All paratypes were collected at the type locality.



Fig. 2. *Homalopoma pustulata* (Brocchi, 1821).

Paratypes:

Paratype no.	remarks	height [mm]	width [mm]	collection
1	with operculum	24.7	20.2	Kurt Kreipl, Meeresmuseum Öhringen, no 7183a
2	with operculum	24.4	18.9	Kurt Kreipl, Meeresmuseum Öhringen, no 7183b
3	with operculum	20.6	16.9	Kurt Kreipl, Meeresmuseum Öhringen, no 7183c
4		16.9	14.2	Kurt Kreipl, Meeresmuseum Öhringen, no 7183d
5	with operculum	23.9	19.5	Axel Alf, Weidenbach, lot no 112115a
6	with operculum	23.1	18.4	Axel Alf, Weidenbach, lot no 112115a

Etymology. Combination of *mare* (lat.: sea) and *ruber* (lat.: red). Genitive: *maris rubri* = of the Red Sea.

Discussion

Turbo marisrubri, spec. nov. cannot be confused with any other Red Sea *Turbo*. *Turbo petholatus* Linnaeus, 1758 reaches a larger size, is completely smooth and its operculum is smooth and coloured. *Turbo radiatus* Gmelin, 1791 is much larger, bears distinct scaly protrusions and spines and has a pale greenish-blue, grey or pinkish-brown operculum. *Turbo (Lunella) coronatus* Gmelin, 1791 is distinctly wider than tall ($h/w = 0.8-1.0$; in *T. marisrubri* $h/w = 1.1-1.3$), low to flat-spired, with 2 spiral rows of pointed nodes on either side of the periphery.

The only *Turbo* species which superficially resembles *Turbo marisrubri* is *Turbo cailletii* Fischer & Bernardi, 1856 from the Caribbean but can be easily distinguished by its open umbilicus and the less numerous spiral cords on the body whorl (about 12 in *cailletii*; about 16 in *marisrubri*) which are smooth in *T. cailletii* and nodulose in *T. marisrubri*.

The only other Turbinid species from the Red Sea which shows a certain similarity to *T. marisrubri* is *Homalopoma pustulata* (Brocchi, 1821). This species can be distinguished from *T. marisrubri* by its lighter colour (basic colour: white to dirty green) and especially by the row of red blotches on the outer margin of the aperture. These red blotches often lead into fine red spiral lines visible on the body whorl near the aperture. *Homalopoma pustulata* is not a very typical *Homalopoma*, but on closer examination shows all features of this genus.

Acknowledgements

We want to thank Mr. Luigi Bozzetti from Milan, Italy, for useful information on *Homalopoma pustulata* (Brocchi, 1821) and Mr. Domenico Strazzeri, Heidelberg, Germany, for helping us with the translation of Italian texts. All photographs by Uschi Damaschke, Möckmühl, Germany.

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Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Spixiana, Zeitschrift für Zoologie](#)

Jahr/Year: 2001

Band/Volume: [024](#)

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Artikel/Article: [A new species of Turbinidae Rafinesque, 1815 from the northern Red Sea \(Mollusca, Gastropoda\) 107-110](#)