

Marginella himburgae nov. sp.(Gastropoda: Marginellidae: *Marginella*)

Description of a new Marginellidae species from Namibia

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ABSTRACT: Description of a newly discovered *Marginella* sp. from the Skeleton Coast in northern Namibia.

INTRODUCTION: Due to the inaccessibility of the Skeleton Coast hardly any research has been conducted in this area. The Leibniz Institute for Baltic Sea Research from Rostock-Warnemünde, Germany, sampled the macrozoobenthos along this coast on two occasions: in 2004 with the research vessel "Alexander von Humboldt" and in 2008 with the "Maria Sybilla Merian".

Triplicate benthic samples were taken with a 0.1 sqm van Veen grab at each station. Additionally dredge hauls (containing a net mesh size of 5 mm) were taken for collecting larger, mobile or rare

species. All samples were sieved through a 1 sqmm screen and animals were preserved on board in

4 % buffered formaldehyde. Sorting procedures were conducted at the laboratory with a stereomicroscope with 10-40x magnification. The station grid and more information about the methods applied can be found at Zettler et al (2009).

Many species from different families were found in Namibian waters for the first time – a number of them undescribed. Among these is a member of the *Marginellidae* family. Although this family is richly represented in western and southern Africa, none of the known species adequately describes the new discovery. We therefore propose naming it.

Marginella himburgae nov. sp.

DESCRIPTION: Ranging in size from 14 to 20 mm, it is of medium size for the genus. The holotype measures 14,7 mm. Both sides are gently curved. The spire is steeply angled and about one third of the total length of the shell. The spiral whorls are slightly convex and smooth. The protoconch is thick, blunt and calloused, while the suture consists only of a thin line.

The shoulder is round, with no step at all. The labrum is well pronounced and clearly visible from above. It displays short, broad teeth along the entire inside edge. A longer tooth is situated at the beginning of the posterior third of the labrum – a feature which is only present in some shells of the type material. The anterior terminal is evenly

*Marginella himburgae* nov. sp. Holotype

rounded.

The columella is almost straight with four broad, sharply cut pleats. These pleats are very prominent for the size of the shell. The aperture is of medium width and almost straight along its entire length. The surface of the shell is completely smooth.

The basic colour is medium khaki, but the type material shows variations from light to medium beige and khaki. The protoconch is pattern-free. Post-nuclear whorls display lighter and darker radial bands and rows of black, vertically straight commas. On the shoulder the commas lean either to the left or right of an entire row.

Below the shoulder is a red band with white wavelike markings above it. Below the red band, which divides the shell, the bands are off-white and covered by chevrons. These chevrons are only situated on the bands and are absent on the khaki-coloured background. In some specimens of the type material there are further thin red bands below the main band at the shoulder, and the chevrons are actually commas. The pattern continues onto the base and into the aperture.

Two red lines run from the second and third pleat towards the anterior terminal. The pleats are white, while the labrum is off-white with irregularly placed reddish-brown streaks.

HABITAT: The type material was taken at a depth of 29,6 m to 45 m at shell deposits of the brachiopod *Discinisca tenuis* (Sowerby, 1847).



Marginella himburgae paratypes
from left paratype 1, 2, 3, 4

TYPE LOCALITY: North Namibia, Skeleton Coast, south of the Kunene River, 17°39'0S 11°7'24E, station BE30, at a depth of 29,6 m, date of sampling 5th March 2008.

DISTRIBUTION: Thus far this species has only been found in northern Namibia from 17°39'0S 11°7'24E to 18°38'5S 11°9'22E.

TYPE MATERIAL:

	Length mm	Width mm
- Holotype	14,7	12,2
Museum für Naturkunde, Humboldt-Universität, Berlin, Germany		
- Paratype 1	15,5	12,7
Leibniz Inst. for Baltic Sea Research, Warnemünde, Germany		
- Paratype 2	14,2	12,2
Malacologia Mostra Mondiale, Cupra Marittima, Italy		
- Paratype 3	16,0	13,1
Collection Werner Massier, Swakopmund, Namibia		
- Paratype 4	18,1	13,8
Leibniz Inst. for Baltic Sea Research, Warnemünde, Germany		
- Paratype 5	14,4	12,6
Leibniz Inst. for Baltic Sea Research, Warnemünde, Germany		
- Paratype 6	15,6	13,3
Natal Museum, Pietermaritzburg, South Africa		
- Paratype 7	15,3	13,0
Museum für Naturkunde, Humboldt-Universität, Berlin, Germany		
- Paratype 8	15,6	12,9
Leibniz Inst. for Baltic Sea Research, Warnemünde, Germany		
- Paratype 9	16,7	13,4
Collection Werner Massier, Swakopmund, Namibia		

- Paratype 10 16,1 13,4
Leibniz Inst. for Baltic Sea Research, Warnemünde, Germany

ETYMOLOGY: Named after the maiden name of the co-author's wife.

MATERIAL EXAMINED: 12 adult and two juvenile specimens were examined, most of them live-taken.

COMPARATIVE EXAMINATION: *M. himburgae* nov. sp. cannot be confused with any other species. It has a typical *Marginella* shape, but its pattern is unique. The closest species is *Marginella stuarti* Kilburn, 1977, another species endemic to Namibia. This is found further south, in the Swakopmund/Walvis Bay area. *M. stuarti* has similar markings on the labrum. These are never red but greenish or grey. The basic colour is usually grey or sometimes yellow, but never khaki.

It does not possess any red bands on the body whorl or red lines on the fasciole. The pattern consists mostly of rows of commas, and in some cases a single wavy band below the shoulder is present. *M. stuarti* is considerably stockier and on average about 3 mm smaller.

Marginella luculenta Gofas & Fernandes, 1994, and *Marginella gemmula* Bavay in Dautzenberg, 1913, have a similar but different pattern and their shape is only slightly stockier than *M. himburgae* nov. sp. However, they only reach about half the size and all adult specimens have a thicker labrum. The markings on the labrum are brown, beige or greenish, but never red.

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