

**A note on the systematics and distribution
of „*Cocculina*” *simplicior* Melvill, 1912
(Mollusca, Gastropoda, Lepetellidae)**

H. K. Mienis

Abstract: *Cocculina simplicior* Melvill, 1912, described originally from the Gulf of Oman, is reported from dredgings carried out in the Gulf of Aqaba. On conchological characters the species is transferred from the genus *Cocculina* Dall, 1882, Fam Cocculinidae, to the genus *Lepetella* Verrill, 1880. Fam. Lepetellidae.

Key words: Gastropoda, *Cocculina simplicior*, *Lepetella*, systematics, distribution.

Introduction

Between 1892 and 1914 Frederick W. Townsend carried out intensive dredging activities in the Arabian Gulf (formerly Persian Gulf), Gulf of Oman and northern Arabian Sea, while working as chief of the Telegraph Staff aboard the Indian Government Steamer „Patrick Stewart” of the Indo-European Telegraph Company.

The first samples of molluscs among this material were studied by G. B. Sowerby (1894–1895), whose papers were followed by numerous studies of Melvill and Melvill and Standen (see Trew, 1987, for a complete list of those papers and the new taxa they contain).

Most papers by Melvill (and Standen) are devoted to the description of new taxa. Many of the new (sub)species, especially those from deepwater, remained known sofar from the type-locality only. This is also the case with *Cocculina simplicior* Melvill, 1912, a tiny saddle-shaped gastropod dredged in the Gulf of Oman.

Although Franc (1956: 25) mentioned *Cocculina simplicior* from North Cape of Abulat Island, Red Sea, the specimens in question turned out to be misidentified and belong in reality to a species of the genus *Patelloida* Quoy & Gaimard, 1834, Fam. Acmaeidae (the late Dr. I. Yaron in litt.). Never-the-less the species seems to live in the Red Sea because dredgings carried out in the northern part of the Gulf of Aqaba have resulted in the discovery of several shells, wich agree in full detail with the description and figure of *Cocculina simplicior*.

A study of the shell characters has revealed that it has nothing in common with either *Cocculina* Dall, 1882, or any other genus of the family Cocculinidae. In fact there exists a striking resemblance between *Cocculina simplicior* and *Lepetella laterocompressa* (De Rayneval & Ponzi, 1854), an Atlantic-Mediterranean species (Warén, A. 1972; Panetta, P. 1973; Mienis, H. K. 1981). *Cocculina simplicior* in therefore transferred to the genus *Lepetella* Verrill, 1880, of the family Lepetellidae.

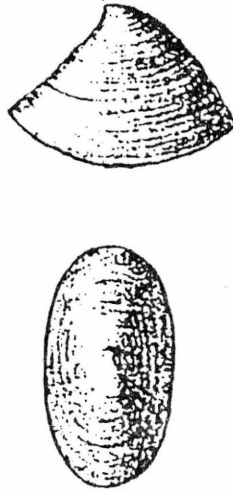


Fig. 1: *Lepetella simplicior* (Melvill, 1912)
(copied after Melvill, 1912: plt. 12. figs. 1–1a)

Lepetella simplicior (Melvill, 1912) – Fig. 1

Cocculina simplicior Melvill, 1912: 240, plt. 12, figs. 1–1a.

Cocculina simplicior Trew, 1987: 63.

Description: Shell semitransparent, conical, laterally compressed, with a saddle-shaped base. Apex placed centrally, wart-like. Sculpture consisting of concentric incremental growth-lines only. Animal unknown. Dimensions of largest specimen: length 3.4 mm, width 1.9 mm.

Type-locality: Gulf of Oman, lat. 24° 58' N; long. 56° 54' E, in shell sand dredged at a depth of 156 fathoms (= 285 metres)

Type-material: Two syntypes British Museum (Natural History) 1912.9.17.33–34 (Trew, A. 1987: 63).

Studied material: Red Sea, Gulf of Aqaba, off Elat, RS-18, grab, 190 m, 8 October 1965 (HUI 1964/3); off Elat, 300 m, summer 1988 (HUI 1972/4); of Elat, RS-7C, grab, 410 m, 21 August 1965 (HUI 1983/1).

General distribution: Gulf of Oman and Gulf of Aqaba, but probably else-where in deep-water in the NW-corner of the Indian Ocean.

Batymetric range: 190–410 metres.

Remarks: Shells of *Lepetella simplicior* seem to differ from *Lepetella laterocompressa* only by being slightly more slender. It is not unlikely that this character is only of secondary importance. The form of the shell, especially its base, depends heavily on the shape of the substrate on which it lives. In the case of *Lepetella laterocompressa* this seems to be the tubes of polychaetes (Panetta, P. 1973: 2).

Although Panetta (1973: 1) considers *Lepetella laterocompressa* a cosmopolitan species, his distributional records are confined to both sides of the Atlantic Ocean and the Mediterranean Sea. As long as the animal of *Lepetella simplicior* remains unknown and can not be compared with that of *Lepetella laterocompressa* (Warén, A. 1972: 20–21, fig. 3), we prefer to treat *Lepetella simplicior* as a separate Indo-Pacific species.

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Henk K. MIENIS
Dept. Evolution, Systematics & Ecology
Hebrew University, 91904 Jerusalem, Israel

