**Brachycythara atlantidea** (Knudsen, 1952) (Gastropoda, Neogastropoda, Conidae), first report from the Western Mediterranean Sea

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The present paper records a noteworthy West African turrid species, *Brachycythara atlantidea* (Knudsen, 1952), for the first time from the Western Mediterranean Sea (Alboran Sea). The unexpected presence within the Mediterranean basin of this amphiatlantic genus is discussed.

**Key words:** Gastropoda, Neogastropoda, Conidae, Mangeliinae, *Brachycythara*, Mediterranean, Alboran Sea, Atlantic Ocean.

**INTRODUCTION**

The epithet ‘turrid’ was largely used as a very general term indicating a huge number of species belonging to the family-group Turridae H. & A. Adams, 1853 s. I. Among the numerous genera included within this large group of Neogastropoda, the genus *Brachycythara* Woodring, 1928, has been redescribed by Powell (1966) and consists of small Recent and Tertiary turrids that mainly occur in the Caribbean area. *Brachycythara atlantidea* (Knudsen, 1952) has been described on two shells collected during the ‘Danish Expedition to the Coasts of Tropical West Africa, 1945-1946’. The type locality of this species is 10°22'N 16°22'W (Guinea) (Knudsen, 1952: 172); its distribution in the Eastern Atlantic Ocean has been subsequently enlarged by the report of Rolán & Otero-Schmitt (1999: 21), showing it to be ranging from Senegal to Angola. Surprisingly, eight shells of *B. atlantidea* have now been dredged along the coast of South Spain (Costa del Sol, Alboran Sea). This is the first record of this amphiatlantic genus from the Mediterranean Sea. Abbreviations used for collections: CS-PM, Carlo Smriglio and Paolo Mariottini (Rome, Italy); FG, Franco Gubbioli (Marbella, Spain).
Figs 1-7. Shells of *Brachycythera atlantidea* (Knudsen, 1952). 1-2, off Estepona (36°25'N, 5°09'W), 150-250 m depth; 1, specimen A (10.2 x 4.1 mm); 2, C (7.5 x 3.4 mm); 3, off Adra (36°45'N, 3°01'W), 80-150 m depth (E, 7.7 x 3.4 mm); 4-5, off Malaga (36°33'N, 4°22'W), 50 m depth (4, F, 7.4 x 3.2 mm; 5, G, 10.2 x 4.4 mm); 6, off Marbella (36°28'N, 4°52'W), 30-40 m depth. (H, 10.5 x 4.3 mm); 7, off West Sahara, 30-60 m depth. (L, 9.5 x 3.6 mm). Scale bars: 2 mm.
Brachycythara Woodring, 1928.

Type species (by original designation): Cythara gibba Guppy, 1896; Recent, Atlantic Ocean, Miocene, Pliocene.

Brachycythara atlantidea (Knudsen, 1952) (figs 1-14)

Cythara atlantidea Knudsen, 1952: 172-173, pl. 3 fig. 5

Material. — Spain: off Estepona (36°25'N 5°09'W), 150-250 m depth (specimen A, 10.2 × 4.1 mm; B, 9.2 × 3.7 mm; C, 7.5 × 3.4 mm; D, 8.2 × 3.6 mm); off Adra (36°45'N 3°01'W), 80-150 m depth (E, 7.7 × 3.4 mm); off Malaga (36°33'N 4°22'W), 50 m depth (F, 7.4 × 3.2 mm; G, 10.2 × 4.4 mm); off Marbella (36°28'N 4°52'W), 30-40 m depth (H, 10.5 × 4.3 mm; I, 9.3 × 3.6 mm). West Sahara, dredged along the coast, 30-60

Figs 8-14. Morphological details of shells of Brachycythara atlantidea (Knudsen, 1952), SEM photographs. Specimen F, Spain, off Malaga (36°33'N 4°22'W), 50 m depth (7.4 × 3.2 mm).
m depth (L, 9.5 × 3.6 mm; M, 6.3 × 2.6 mm). Specimens A-D were from muddy bottoms hosting the biocoenosis C (sensu Péres & Picard, 1964). SEM photographs were made at the LIME (Interdepartmental Laboratory of Electron Microscopy), University of “Roma Tre”, Rome, Italy. Specimens A-G are stored in the CS-PM collection, specimens H-M in the FG collection.

Discussion. — The prosobranch gastropod superfamily Conoidea (= Toxoglossa), shows extreme diversity, according to the last classification proposed by Taylor, Kantor & Sysoev (1993). The family Conidae has been subdivided into seven subfamilies and the genus Brachycythara Woodring, 1928 (redescribed by Powell, 1966:117, pl. 18 fig. 7) is classified in the Mangelinae. This is an amphiatlantic group of Recent and Miocene/Pliocene turrids which distribution ranges from Caribbean to West African coasts. In the Check List of European Marine Mollusca [CLEMAM: Gofas & Le Renard (eds), home page, http://www.mnhn.fr/base/malaco/html] the genus Brachycythara is not shown. The Mediterranean shells are identical to the ones figured by Rolán & Otero-Schmitt (1999: 23, figs 73-78), including the holotype (fig. 74), and to the specimens collected from West Sahara (fig. 7a-c). We assume that the Mediterranean specimens of B. atlantidea derive from the nearby Atlantic Ocean, passively drifting through the Straits of Gibraltar by the eastwards surface current as meroplanktonic larvae and metamorphosing when favorable conditions are encountered. The planktotrophic protoconch of this turrid (figs 13-14) fits well within this hypothesis. The finding of eight specimens of B. atlantidea from four localities off the Spanish coast (Alboran Sea) implies an extension of the range of this species, that can now be added to the Recent Mediterranean malacofauna. The collecting depth and the hosting biocoenosis are suggesting that it is a circalittoral species.

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REFERENCES


