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# THE FAMILY CASSIDAE (MOLLUSCA: GASTROPODA) IN THE ARCHIPELAGO OF MADEIRA

A. D. ABREU\* & M. J. BISCOITO\*

ABSTRACT: The presence of Cypraecassis testiculus senegalica (GMELIN, 1791) and Phalium saburon (BRUGUIÈRE, 1792) in Madeiran waters is recorded for the first time.

RESUMO: Na presente nota, os autores assinalam pela primeira vez a presença de Cypraecassis testiculus senegalica (GMELIN 1791) e Phalium saburon (BRUGUIÈRE, 1792) no arquipélago da Madeira.

Up to the present date the only species of the Cassidae known from Madeiran waters was *Phalium granulatum undulatum* (GMELIN, 1791) whose distribution is confined to the waters of Madeira, the Canary Islands and the Azores as well as the Mediterranean. NORDSIECK & TALAVERA (1979) and TALAVERA (1981) also mention the presence of the nominal subspecies in waters of the Canary Islands. POPPE & GOTO (1991) record the existence of sympatric populations of the two subspecies in the Canary Islands however, mentioning the fact of not having found intermedian forms. The specimens we had the oportunity to study and all of which belong to the Museu Municipal do Funchal (MMF), were collected in Madeiran waters (MMF N° 23889, 24630, 24678 & 24727), the waters of Porto Santo (MMF N° 24620) as well as the Selvagem Pequena (MMF N° 24025) belong to *Phalium granulatum undulatum* (GMELIN, 1791).

A. NOBRE (1889) was the first to mention the presence of *Phalium saburon* (BRUGUIÈRE, 1792) in waters of the archipelago of Madeira, based on specimens belonging to R. T. LOWE's collection. The relevant specimens were later considered by R. B. WATSON (1897) to belong to *Cassis sulcosa* (= *P. granulatum*). The first Madeiran specimens clearly identifiable as *Phalium saburon* (BRUGUIÈRE, 1792) were three shells which were given to the senior author of the present paper by Madeiran fishermen from Caniçal, as originating from the Baía d'Abra of the southeastern extremity of the island of Madeira caught in fish traps at

<sup>\*</sup> Museu Municipal do Funchal, Rua da Mouraria 31, P - 9000 FUNCHAL - MADEIRA

a depth of 50-70 m. Later collecting carried out by the authors in the bay of Funchal at a depth of 300 m confirmed the presence of this species in Madeira.

The occurrence of Cypraecassis testiculus senegalica (GMELIN 1791) in Madeiran waters, here registered for the first time, is based on a handwriten note by the Madeiran naturalist A. CÉSAR de NORONHA (1873 - 1963), first director of the MMF. The said note was found in the MMF library and in it he mentions the presence of this species from off Porto Santo. The fact that A. CÉSAR de NORONHA was carried out numerous dredgings for molluscs in Porto Santo and his contacts with many other malacologists of his time, as well as a vast bibliography he had to his disposition (G. E. MAUL, personal communication) make us believe that the relevant specimens were correctly identified. Despite of not having found a single specimen of C. testiculus senegalica (GMELIN, 1791) in the conchological collection of the MMF, the distribution of this species, wich extends to North of the Azores (TALAVERA, 1982) and to Portugal (NORDSIECK, 1982) corroborates the likeliness of its occurrence in madeiran waters.

### Systematic note of the species of Cassidae of the archipelago of Madeira

Class Gastropoda CUVIER, 1797 Subclass Prosobranchia MILNE EDWARDS, 1848 Order Mesogastropoda THIELE, 1925 Family Cassidae SWAINSON, 1822

Cypraecassis testiculus senegalica (GMELIN, 1791) Phalium granulatum undulatum (GMELIN, 1791) Phalium saburon (BRUGUIÈRE, 1792)\*

\* The specimen collected on 13th December 1992, (MMF N° 25216) results from the captures carried out in the "Estudo ecológico e biológico das comunidades de peixes e crustáceos decápodes bentónicos da vertente continental da Madeira", carried out by the Museu Municipal do Funchal and the Direcção de Serviços de Estudos e Investigação das Pescas, in the framework of the Programa Mobilizador de Ciência e Tecnologia - JNICT - Proj. N° PMCT/C/MAR/985/90.

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