

SHORT COMMUNICATION

NEW RECORDS OF MARINE INVERTEBRATES FROM THE CAPE VERDE ISLANDS.

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The anthozoan *Pseudocorynactis caribbeorum* den Hartog, 1980, the polychaete *Lygdamis wirtzi* Nishi and Núñez, 1999, the cirriped *Oxynaspis celata* Darwin, 1852, the cephalopod *Octopus macropus* (Risso, 1826), and the phoronid *Phoronis australis* Haswell, 1883 are recorded from the Cape Verde Islands for the first time.

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INTRODUCTION

During two trips to the Cape Verde Islands, in December 1998 and in February 2000, I photographed and collected marine invertebrate species. I here report on five invertebrate species from five different phyla that have not previously been recorded from this archipelago.

MATERIAL AND METHODS

The animals were observed, photographed *in situ*, and collected (*Lygdamis wirtzi* and *Oxynaspis celata*) during 37 SCUBA dives in the bay of Tarrafal, north-western coast of São Tiago Island, Cape Verde Islands. Specimens were sent to experts for identification or validation of my identification (see Acknowledgements).

RESULTS

***Pseudocorynactis caribbeorum* den Hartog, 1980**
(Cnidaria, Anthozoa, Corallimorpharia)

During several night-dives, this species was observed and photographed in a depth range of 10 – 22 m. The species is unmistakable (e.g. photo of

animal from Tenerife, Canary Islands in WIRTZ 1995, p 52).

P. caribbeorum is known from the Caribbean and, in the eastern Atlantic, from the Canary Islands (HARTOG et al. 1993). HARTOG et al. (1993) described *Pseudocorynactis caboverdensis* from São Vicente Island, Cape Verde Islands, based on a single juvenile specimen. Whether this is really a separate species, only a more detailed study can tell.

***Lygdamis wirtzi* Nishi and Núñez, 1999**
(Annelida, Polychaeta)

This sabellariid polychaete was common on coarse sand in a depth of about 20 m. The species was photographed and two animals were collected and sent to E. Nishi for validation of my provisional identification. The specimens are now deposited in the collection of the Coastal Museum of Natural History, Katsuura, Chiba, Japan.

The species is not mentioned in a recent account of the polychaetes of the Cape Verde Islands (NÚÑEZ et al. 1999). It has only recently been described from Madeira and from the Canary Islands, where it is common (NISHI & NÚÑEZ 1999). Colour photos are given in WIRTZ (1995 p. 81, under the name *Lygdamis murata*) and in NISHI & NÚÑEZ (1999).

***Oxynaspis celata* Darwin, 1852**
(Crustacea, Cirripedia)

The pedunculate barnacle *Oxynaspis celata* was common on two black coral species tentatively identified as *Antipathes subpinnata* Ellis & Solander, 1786 and *Antipathes spinescens* Gray, 1857 by D. Opresco (these two species apparently were called *A. barbadensis* and *A. tanacetum* by MORRI & BIANCHI 1995) in a depth range of 7 to 35 m. Specimens were deposited in the collection of the Museu Nacional, Rio de Janeiro.

YOUNG (1998, Fig. 2) and SOUTHWARD (1999) review the geographic and depth distribution of the species. *O. celata* is a circum(sub)tropical species, in the eastern Atlantic known from the Azores and from Madeira. Previous records of the species come from 35 to 1425 m depth. A colour photo of animals from the Azores is given in WIRTZ (1995 p. 89, under the name *Heteralepas* sp.).

***Octopus macropus* Risso, 1826**
(Mollusca, Cephalopoda)

This unmistakable species (cf. colour photo of an animal from Tenerife, Canary Islands, in WIRTZ 1995, p. 193) was seen and photographed during several night dives. Despite being common, this circum(sub)tropical species has apparently not yet been recorded from the Cape Verde Islands. Its presence there is not listed by either ADAM (1962) or ROPER et al. (1984),

***Phoronis australis* Haswell, 1883**
(Tentaculata, Phoronida)

Large unidentified cerianthids (Anthozoa Ceriantharia, genus *Pachycerianthus* or *Cerianthus*) in a depth range of 10 to 15 m were frequently observed to bear phoronids in their tube walls. The association was documented by underwater photography. No specimens were collected.

Of the ten known species of Phoronida, *P. australis* is the only one known to burrow into the tube wall of cerianthids and this is the typical habitat of the species (EMIG 1979). As no

specimens were collected, the remote possibility remains that the Capeverdean animals might belong to an undescribed species. Like most Phoronida, *P. australis* is a circum(sub)tropical species; in the eastern Atlantic, it has been recorded from the coasts of Spain, the Canary Islands and Senegal (EMIG 1979; OCAÑA et al. 1991). Until now, no phoronid has been recorded from the Cape Verde Islands (C. Emig, pers. comm.).

DISCUSSION

The marine fauna and flora of the Cape Verde Islands shows a strong component of amphi-atlantic species (algae: PRUD'HOMME VAN REINE & VAN DEN HOECK 1988, coral: LABOREL 1974, molluscs: COSEL 1982, fish: REINER 1996, polychaetes: NÚÑEZ et al. 2000, echinoderms: PÉREZ-RUZAFÁ et al. 2000), higher than that of the Canary Islands, which is in turn higher than that of the Madeira archipelago, which is in turn higher than that of the Azores (TALAVERA 1982; WIRTZ & MARTINS 1993; WIRTZ 1998). Western Atlantic elements appear to be particularly common in the (warm) sublittoral and less pronounced in the (more temperate) midlittoral and circalittoral of the Cape Verdes (MORRI et al. 2000). The amphi-atlantic component of the marine fauna of the islands of the Gulf of Guinea appears to be higher still than that of the Cape Verdes but few species lists exist for that area (GASCOIGNE 1993, 1996; AFONSO et al. 2000).

The fact that amphi-atlantic species are proportionally more common towards the equator argues for a connection of the marine faunas of the eastern and western Atlantic by equatorial currents (WIRTZ & MARTINS 1993, but see BOEKSCHOTEN & BEST 1988). The Equatorial Undercurrent, flowing from west to east, appears to be the most likely candidate (SCHELTEMA 1971, 1995). Molecular studies of an amphi-atlantic plant and an amphi-atlantic fish are in agreement with this hypothesis (KOOISTRA et al. 1992, MUSS et al. 2001) Records of amphi-atlantic species from the Canary Islands or from Madeira but not further south are thus probably artefacts of much lower collecting efforts in southern areas. The western Atlantic sea

cucumber *Euapta lappa* (previously only known from the Canary Islands in the eastern Atlantic) was recently reported from the Cape Verde Islands (PÉREZ-RUZAFÁ et al. 2000) and is also common at São Tomé Island (WIRTZ unpublished). The finding at the Cape Verde Islands of *Pseudocorynactis caribbeorum* (previously recorded only from the Canary Islands in the eastern Atlantic) and of *Oxynaspis celata* (previously recorded only from the Azores and Madeira in the eastern Atlantic) are two further cases in point.

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