

ON A SMALL COLLECTION OF OPISTHOBRANCH MOLLUSCS FROM MINORCA (BALEARIC ISLANDS, SPAIN)

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RESUMEN

Sobre una colección de moluscos opistobranquios de Menorca (Baleares)

Se citan trece especies de moluscos opistobranquios de la costa oriental de Menorca (islas Baleares). Una de ellas, *Phyllidia pulitzeri* Pruvot-Fol. 1962, se comenta con mayor detalle.

Palabras clave: Opistobranquios. Menorca. *Phyllidia pulitzeri*.

ABSTRACT

Thirteen species of opisthobranch molluscs are reported from the east coast of Minorca (Balearic Is., Spain). One of them, *Phyllidia pulitzeri* Pruvot-Fol. 1962, is discussed more in detail.

Key words: Opistobranchia. Minorca. *Phyllidia pulitzeri*

INTRODUCTION

During a one week stay on the balearic island Minorca (Spain) in May 1984, diving excursions were made on four localities along the east and south-east coast (fig. 1). On these localities opisthobranch molluscs were collected by hand using SCUBA-gear. This paper lists the recorded species.

All animals were observed on hard-bottom habitats, and all were collected, unless otherwise stated. The lengths of the animals are the live lengths. All material collected is added to the author's collection.

The localities where the opisthobranchs were collected are:

- 1: Cala es Morts, near Macaret ($40^{\circ} 01' 14''$ N, $4^{\circ} 11' 46''$ E), 25-5-'84.
- 2: Punta Rafalet, near S'Algar ($39^{\circ} 49' 48''$ N, $4^{\circ} 18' 00''$ E), 26-5-'84,
- 3: Es Morro d'Alcaufar, just south of Cala d'Alcaufar ($39^{\circ} 49' 15''$ N, $4^{\circ} 17' 44''$ E), 28-5-'84.
- 4: A small reef a few hundreds of meters south of Biniancolla ($39^{\circ} 48' 22''$ N, $4^{\circ} 16' 03''$ E), 27-5-'84.

LIST OF SPECIES

The nomenclature is after SCHMEKEL & PORTMANN (1982).

ELYSIACEA

Thuridilla hopei (Vérany, 1853)

One specimen, length 11 mm, at a depth of about 6 m between foliose algae (loc. 4).

DORIDACEA

Chromodoris krohni (Vérany, 1846)

One specimen, length 8 mm (loc. 4).

Chromodoris purpurea (Laurillard, 1831)

One specimen at loc. 2, in a cave at 8 m depth, length 10 mm; two other specimens of 8 and 11 mm, depth 8 m, under a rocky overhang (loc. 4).

Hypselodoris villafranca (Risso, 1818)

One specimen, length 15 mm, on a vertical wall in a cleft, depth 8 m (loc. 3).

Peltodoris atrumaculata Bergh. 1880

Two specimens, lengths about 50 mm, one of them collected in the outer part of a cave on the sponge *Petrosia ficiformis*, depth 21 m (loc. 3).

Polycera quadrilineata (O. F. Müller, 1776)

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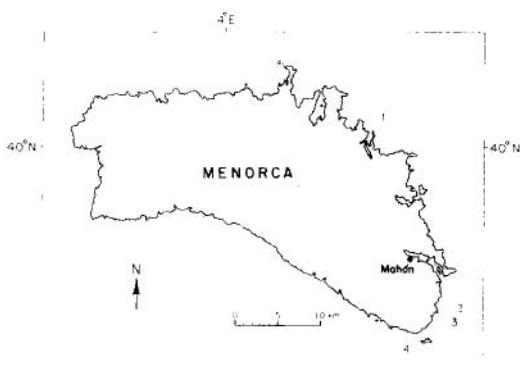


FIGURE 1. Map of Minorca with the sampling localities. The numbers of the localities correspond with those given in the text.

Mapa de Menorca con las localidades de muestreo. Los números son los que se dan en el texto.

One specimen, length 12 mm, depth 12 m (loc. 2).

Diaphorodoris papillata Portmann & Sandmeier, 1960

One specimen, depth 9 m, length 8 mm (loc. 4).

Trapania lineata Haefelfinger, 1960

One specimen between foliose brown algae, depth 7 m (loc. 3). This specimen got lost during transport.

Phyllidia pulitzeri Pruvot-Fol, 1962

One specimen, in a relative dark place under an overhang, depth 12 m, length 40 mm (loc. 4).

AEOLIDACEA

Coryphella pedata (Montagu, 1815)

Various specimens at localities 2, 3 and 4, of which 5 specimens were collected. Lengths varying from 5-20 mm. Obviously the most numerous nudibranch during this period in the area.

Flabellina affinis (Gmelin, 1791)

One specimen, length 35 mm, depth 10 m (loc. 3).

Calmella cavolini (Vérany, 1846)

One specimen at loc. 1, length 10 mm; one specimen at loc. 3, length 12 mm; one specimen at loc. 4, length 12 mm.

Caloria elegans (Alder & Hancock, 1845)

One specimen, length 15 mm, in a small hole with hydroids and encrusting bryozoans, depth 5 m (loc. 4).

DISCUSSION

The present knowledge of the Minorcan opistobranch fauna is quite limited (ROS, 1981:

pers. comm.), though recent studies focussed on the Minorcan invertebrate fauna enlarge the knowledge of this subject (BALLESTEROS *et al.*, 1983). No doubt this paper presents only a fragment of the total opistobranch fauna of Minorca. Most of the species observed are common and widespread in the western Mediterranean (PRUVOT-FOL, 1954; HAEFELINGER, 1960; FEZ, 1974; ROS, 1975; SCHMEKEL & PORTMANN, 1982). Only the dorid *Phyllidia pulitzeri* Pruvot-Fol, 1962, is a rare species in the Mediterranean, with reports from Italy: Genoa area (PRUVOT-FOL, 1962; BARLETTA, 1974) and Naples area (SCHMEKEL & PORTMANN, 1982), and Spain: Catalan coast and Majorca (ROS, 1980, 1981). From Minorca, however, no earlier reports of this species exist.

After collection and observation in live, the specimen of *Phyllidia pulitzeri* was directly put in a 10% formalin/seawater-solution, without prior anaesthetization. Due to this treatment the animal protruded many small threads from the mantle surface and the dorsal part of the foot. Probably these were proteins extruded by glands, which were denaturalized by the formaldehyde. SCHMEKEL & PORTMANN (1982) mention *P. pulitzeri* as a disgusting smelling nudibranch. This smell may be caused by the protein-like matter produced by these glands and may act as a defensive mechanism against large predators, especially fishes.

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