

NEW FINDINGS OF THE RARE BLACK BRITTLESTAR *OPHIOCOMINA NIGRA* (ABILDGAARD, IN O.F. MULLER, 1789) (ECHINODERMATA, OPHIACANTIDAE) IN THE SICILIAN CHANNEL

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Abstract

Fourteen specimens of *Ophiocomina nigra* were collected in a restricted area of the Sicilian Channel under the influence of Atlantic Ionian Stream, between 64 and 97 m depth. The species was associated with the sea urchin *Stilocidaris affinis* (Philippi, 1845), a species “characteristic” of the Coastal Detritus biocenosis. The Sicilian Channel represents the eastern border of the species occurrence in the Mediterranean.

Keywords: *Echinodermata, Biogeography, Sicilian Channel*

Ophiocomina nigra (Abildgaard, in O.F.Muller, 1789) is a brittle star living in the eastern Atlantic from the Azores to northern Norway and rarely in the western Mediterranean [1]. A first synthesis of Mediterranean distribution was given in [2], the species occurring in waters off Sicily, Algeria, Tunisia, Balears, France and Catalonia. Further records were reported along the southern Spanish coasts [3]. More recently, the species was confirmed in Sicily (South Tyrrhenian Sea) [4] and off the Maltese Islands [5, 6]. Our specimens were collected within the European Data Collection Framework (Reg. CE 199/2008) during the trawl surveys (MEDITS and GRUND) and the sampling of the commercial trawling discard (DISCARD). The main information on the records is reported in Table 1.

Tab. 1. Main information on the new findings of *O. nigra* in the Strait of Sicily

Survey	Date	Appr. Lat.	Appr. Lon.	Depth (m)	N individuals
MEDITS 2008	13/05/2008	37°23.2'	12°11.4'	64-67	1
GRUND 2008	09/11/2008	37°29.6'	12°00.4'	97-96	1
GRUND 2008	10/11/2008	37°11.9'	12°12.5'	66-69	1
GRUND 2008	10/11/2008	37°12.9'	12°07.9'	76-80	1
MEDITS 2009	22/05/2009	37°11.3'	12°12.6'	67-72	9
DISCARD 2009	30/01/2009	37°12.0'	12°12.0'	10-150	1

The reported findings occurred in a limited area between 64 and 96 m on the external border of the Adventure Bank in front of Pantelleria Island (western side of the Sicilian Channel). The species was associated with the sea urchin *Stilocidaris affinis* (Philippi, 1845), a species “characteristic” of the Coastal Detritus biocenosis (CD). The *O. nigra* distribution in the Mediterranean suggests a strong link with the Atlantic water (AW) [2], the Sicilian Channel representing the eastern border of the species occurrence in the Mediterranean.

References

- 1 - Tortonese E., 1965. Echinodermata - Fauna d'Italia, VI. Ed. Calderini, Bologna, pp 1-422.
- 2 - Allain J.Y., Romano J.Cl., Semroud R., 1978. *Ophiocomina nigra* (O.F. Muller) (Echinodermata, Ophiuroidea) dans la region d'Alger. *Pelagos*, 5: 50-64.
- 3 - Ocana A., De La Morena I., Moriana M., Alonso M.R., Ibanez M., 1982. Algunos Equinodermos de la costa de Malaga (Mar de Alboran). *Inv. Pesq.*, 46 (3) : 433-442.
- 4 - Rinelli P., 1998. A synthesis of the Echinoderm Fauna of the Tyrrhenian Sea. *Rapp. Comm. int. Mer Médit.*, 35: 484-485.
- 5 - Tanti C.M., Schembri P.J., 2006. A synthesis of the Echinoderm Fauna of the Maltese Islands. *J. Mar Biol. Ass. U.K.*, 86: 163-165.
- 6 - Mifsud C., Taviani M., Stohr S., 2009. Remarks on Echinodermata from the South Central Mediterranean Sea based upon collections made during the MARCOS cruise (10 to 20th April, 2007). *Medit. Mar. Sci.*, 10 (2): in press.