INTRODUCTION

The Gulf of Cádiz represents an area with a high faunistic biodiversity due to the coexistence of species from different biogeographical regions (Lusitanian, Mediterranean, Mauritanian). The natural distribution of these species includes latitudinal (African and north Atlantic species) or longitudinal gradients (Mediterranean and anaffiliative species). Information on the distribution/presence of species in the Gulf of Cádiz is scarce for deep-sea ones and it is of interest for biodiversity studies and further monitoring of global warming effects (colonization of species from lower latitudes), among others. During the scientific surveys INDEMARES/CHICA 0211 and ARSA 0311, carried out by the IEO on board R/V Corine de Saavedra, some rare fish species were caught using different fishing gears such as otter-trawl and beam-trawl. Some of them represents first records for the Gulf of Cádiz area or the European margin.

**Ophidiidae**

**Nebythitlidae**

*Benthocometes robustus* (Goode & Bean, 1886)

In February 2011 two specimens of Benthocometes robustus were collected in Hesperides Mud volcano with a beam-trawl during the “INDEMARES-CHICA 0211” cruise (14 mm and 94 mm, standard length (SL), 703-756 m depth, IEO-CD-H11/506 and IEO-CD-H11/507). Other components of the benthi-demersal community were the fishes Caenolimnichus caelofiricus, Nocumia eauquini, Hoplostethus mediterraneus and Lophius piscatorius; the crustaceans Nephrops norvegicus and Plesionika maria; the mollusc Asperarca nudolus; the cianidarians Leiothepes glaberrima and Flabellum cininum, and the poniara, Pheronema caper. The genus Benthocometes was only represented by this anaffiliative species (including the Mediterranean sea) until 2010 when another species (*B. australis*) was described off northwest Australia.

**Synghathidae**

**Synghathinae**

*Minyichthys sentus* Dawson, 1982

One specimen of this small Synghatidae, recently described by Dawson in 1982, was caught with an otter-trawl during the “ARSA 0311” (March 2011) (41 mm SL, 67-74 m, IEO-CD-H11/508). Other species of the benthi-demersal community were the fishes, Merlucius mennucius, Serranius hepatus and Lesueurigobius sanzi; the crustacean Parapenaeus longirostris; the molluscs Atlolothus media, Eledone moschata and Loligo vulgaris, and the echnoderm Astropecten irregularis and Brissopsis lyrifera.

**Distribution**

This species was only known in the eastern Atlantic from off Morocco and the Canary Islands and off Algeria in the western Mediterranean. Our record extends northward the distribution area of this species to the Gulf of Cádiz.

**Zenionidae**

**Zenion hololepis** (Goode & Bean, 1896)

A single specimen of Zenion hololepis was also caught with an otter-trawl during the “ARSA 0311” cruise (54 mm SL, 478-483 m, IEO-CD-H11/509). Other species of the community were the fishes Chimaera monstrosa, Nezumia eauquini, Elytropus spinax, Gnathostoma mystax, Galeus melastomus and Micromesistius poutassou; the crustaceans Parapenaeus longirostris, Chlorotocrus crassicornis, Solenocera membranacea and Paspheaea sivado; the molluscs Galeodona rugosa, Illex coelenterell and Sepiella owienia, and the echnoderm Centrostephanus longispinus, Cidaris cidaris, Echinus acutus, Luidia sarsi and Leptometra phalangiun.

**Opisthproctidae**

**Opisthproctus grimaldi** Zugmayr, 1911

A single specimen of Opisthproctus grimaldi was caught with a beam-trawl in Pipoca Mud volcano during the “INDEMARES-CHICA 0211” cruise (28 mm SL, 616-625 m, IEO-CD-H11/505). Other species collected were the fish Nezumia eauquini; the crustaceans Nephrops norvegicus and Ergasticus clueli; the mollusc Bathyarca philippiana; the cianidarians Kophobelemnon stelliformum, Funiculina quadrangularis and Isidella elongata, and the poniara Theina mircatia.

**Diagnosis**


**Distribution**

Zenion hololepis displays a circumboreal distribution, generally in tropical and subtropical areas. In the eastern Atlantic seems restricted to the African coasts, being particularly common in the Gulf of Guinea.

This species has not been previously reported in European waters in “Fishes of the north-eastern Atlantic and the Mediterranean” (Whitehead et al., 1986) and our specimen may represent the first record for Europe. The presence of Z. hololepis in the Gulf of Cádiz could be due to a northward migration from the African coast or to a west-east movement from the other side of the Atlantic.

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