

{rokbox title=|Remote Operated Vehicle (ROV) images of the sponge fauna from the seamounts of the Mallorca Channel, Ses Olives (SO), Ausias March (AM) and Emile Baudot (EB) :: Image: Authors| thumb=|images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-ieo-news-sponges-western-mediterranean-seamounts-diaz-eta-al-2021-thumb.jpg|images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-ieo-news-sponges-western-mediterranean-seamounts-diaz-eta-al-2021.jpg{/rokbox}

Julio A. Díaz, Sergio Ramírez-Amaro and Francesc Ordines, 2021. [Sponges of Western Mediterranean seamounts: new genera, new species and new records.](#)

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Abstract: Background: The seamounts Ses Olives (SO), Ausias March (AM) and Emile Baudot (EB) at the Mallorca Channel (Balearic Islands, western Mediterranean), are poorly explored areas containing rich and singular sponge communities. Previous works have shown a large heterogeneity of habitats, including rhodolith beds, rocky, gravel and sandy bottoms and steeped slopes. This diversity of habitats provides a great opportunity for improving the knowledge of the sponges from Mediterranean seamounts.

Methods: Sponges were collected during several surveys carried out by the Balearic Center of the Spanish Institute of Oceanography at the Mallorca Channel seamounts. Samples were obtained using a beam-trawl, rock dredge and remote operated vehicle. Additional samples were obtained from fishing grounds of the Balearic Islands continental shelf, using the sampling device GOC-73. Sponges were identified through the analysis of morphological and molecular characters.

Results

: A total of 60 specimens were analyzed, from which we identified a total of 19 species. Three species and one genus are new to science:

Foraminospongia balearica

gen. nov. sp. nov.,

Foraminospongia minuta

gen. nov. sp. nov. and

Paratimea massutii

sp. nov.

Heteroxya cf. beauforti

represents the first record of the genus *Heteroxya* in the Mediterranean Sea. Additionally, this is the second report of

Axinella spatula

and

Haliclona (Soestella) fimbriata

since their description. Moreover, the species

Petrosia (Petrosia) raphida

,
Calyx cf. tufa

and

Lanuginella pupa

are reported for the first time in the Mediterranean Sea.

Petrosia (Strongylophora) vansoesti

is reported here for the first time in the western Mediterranean Sea.

Haliclona (S.) fimbriata

is reported here for the first time in the north-western Mediterranean Sea.

Hemiasterella elongata

is reported here for the second time in the Mediterranean Sea. The species

Melonanchora emphysema

,
Rhabdobaris implicata

,
Polymastia polytylota

,
Dragmatella aberrans

,
Phakellia ventilabrum
and

Pseudotrachya hystrix

are reported for first time off Balearic Islands. Following the Sponge Barcoding project goals, we have sequenced the Cytochrome Oxidase subunit I (COI) and the 28S ribosomal fragment (C1–D2 domains) for

Foraminospongia balearica

sp. nov.,

Foraminospongia minuta

sp. nov.,

H. cf. beauforti

and

C. cf. tufa

, and the COI for

Paratimea massuti

sp. nov. We also provide a phylogenetic analysis to discern the systematic location of *Foraminospongia* gen. nov., which, in accordance to skeletal complement, is placed in the Hymerhabdiidae

Keywords: Biodiversity, Sponges, New genus, New species, DNA barcoding, Seamounts, Mediterranean Sea