

{rokbox title=|Pictures of *Dipturus nidarosiensis* specimens caught in the Alboran Sea (western Mediterranean) :: Image: Authors|
thumb=|images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-dipturus-nidarosiensis-mediterraneo-ramirez-et-al-2017-thumb.jpg|images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-dipturus-nidarosiensis-mediterraneo-ramirez-et-al-2017.jpg{/rokbox}

S. Ramírez-Amaro, F. Ordines, M. Ángel Puerto, C. García, C. Ramón, B. Terrasa, E. Masutí, 2017.

[New morphological and molecular evidence confirm the presence of the Norwegian skate](#)

[*Dipturus nidarosiensis*](#)

[\(Storm, 1881\) in the Mediterranean Sea and extend its distribution to the western basin.](#)

Mediterranean Marine Science, 0, 251-259.

Abstract: The present study confirms the presence of the Norwegian skate *Dipturus nidarosiensis*

(Storm, 1881) in the Mediterranean Sea, by means of morphological traits and molecular markers providing the first record of this species in the Alboran Sea. Cannas et al. (2010) reported

D. nidarosiensis

for the first time in the Mediterranean from specimens captured in the central western basin, but Ebert and Stehmann (2013) and Stehmann et al. (2015) considered these records "likely refer to the smaller morphotype,

Dipturus sp

.", a species not yet described. Eight specimens of the

Dipturus

genus (Rajiformes: Rajidae) were caught off the Alboran Island (western Mediterranean) in 2012, 2013 and 2016, between 620 and 819 m depth. These specimens showed morphometric diagnostic features corresponding to those of Norwegian skates from the Northeast Atlantic and the central western Mediterranean Sea. Moreover, the Alboran individuals were genetically compared to Northeast Atlantic specimens available in GenBank by means of two mitochondrial DNA fragments: cytochrome c oxidase subunit I (COI) and cytochrome b (Cytb). Analyses showed that the Northeast Atlantic Norwegian skate specimens and the Alboran Sea ones were genetically similar and shared haplotypes, corroborating the identification of the Alboran individuals as

Dipturus nidarosiensis

. However, they were different from other

Dipturus

species distributed throughout the Northeast Atlantic and the Mediterranean Sea. Our results

confirm the occurrence of this deep-sea large skate species in the Mediterranean, although the IUCN Red List of Threatened Species does not consider it possible (Stehmann et al., 2015).

Keywords: Alboran Sea, deep-sea skate, *Dipturus nidarosiensis*, DNA barcoding, misidentification, western Mediterranean