

Solenogastres (Mollusca) from expeditions off the South Iberian Peninsula, with the description of a new species

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The class Solenogastres (*sensu* Salvini-Plawen, 1967) includes approximately 270 described species, 30% of which can be found off the Atlantic and Mediterranean coasts of Europe. From the Iberian Peninsula, 36 species are known, and six are cited from the Southern Peninsula from Gorringer Bank to Cabo de Gata. The results of a study of a collection of 81 specimens are presented here. Solenogastres were collected from seafloors off the South Iberian Peninsula during three expeditions: DEEPER [Desarrollo de Estudios de Ecosistemas de Profundidad bajo un Enfoque interdisciplinar] 0409, INDEMARES [Inventario y designación en la Red Natura 2000 en áreas marinas del Estado Español]/Chica 0610–0211 and INDEMARES/Alborán 0911. Analysis of the collected solenogaster specimens resulted in the discovery of a new species, which is described here as *Alexandromenia avempacensis* sp. nov, along with the identification of four already known species: *Unciherpia hirsuta*, which had not been reported from the South of the Peninsula before and *Neomenia carinata*, *Anamenia gorgonophila* and *Dorymenia sarsii*, whose presence in this area was already known. New anatomical and ecological data regarding these species are also provided. The anatomical reconstruction of the anterior and posterior body ends of *Neomenia carinata* is presented in addition to a more detailed and extensive description of its copulatory spicules. A broader and more complete description of the sclerites of this species is also provided. The study of the *habitus*, hard parts and histological sections of *Dorymenia sarsii* points towards a synonymy between *D. sarsii* and *D. tortilis*. Ecological data related to the accompanying fauna and the type of substratum for each species described is also provided.

<http://zoobank.org/urn:lsid:zoobank.org:pub:EA987A53-FF5D-463F-A072-0EA99BCDA129>

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Introduction

The class Solenogastres (also called Neomeniomorpha; Scheltema 1978, 1988; Scheltema & Schander 2000; Okusu 2002) is a small group of worm-shaped marine molluscs characterized by having a mantle covered by sclerites, a longitudinal medioventral pedal groove, and a terminal or subterminal pallial cavity. They show

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