Zootaxa 4039 (1): 157–172
www.mapress.com/zootaxa/

Article

ISSN 1175-5326 (print edition)
ZOOTAXA
ISSN 1175-5334 (online edition)

http://dx.doi.org/10.11646/zootaxa.4039.1.7
http://zoobank.org/urn:lsid:zoobank.org:pub:B69D5BFD-8050-44FE-94A2-DA714430EBD7

New Acotylea (Polycladida, Platyhelminthes) from the east coast of the North Atlantic Ocean with special mention of the Iberian littoral

CAROLINA NOREÑA[1,3], JORGE RODRÍGUEZ[1], JACINTO PÉREZ[2] & BRUNO ALMON[2]

[1]*Dept. Biodiversidad y Biología Evolutiva. Museo Nacional de Ciencias Naturales (CSIC). c/ José Gutiérrez Abascal 2, 28006 Madrid, Spain*

[2]*Grupo de Estudo do Medio Mariño (GEMM). Puerto Deportivo s/n 15960 Ribeira, A Coruña, Spain*

[3]*Corresponding author. E-mail: norena@mncn.csic.es*

Abstract

Polyclad species diversity, although generally well known for European North Atlantic waters, is nearly unknown for the Iberian Peninsula. The "Ría de Arousa", located on the Atlantic coast of Galicia (Spain), is a place where many positive biological factors for species biodiversity converge. Therefore, it is an ideal location to study polyclad diversity. This research, which describes new records and new species, contributes to the knowledge of the distribution of Polycladida (Platyhelminthes), particularly of the suborder Acotylea, in the Atlantic waters of the Iberian Peninsula. The new records include the re-descriptions of *Cryptocelis compacta* Lang, 1884, *Stylochus neapolitanus* (Delle Chiaje, 1841–1844) and *Discocelis tigrina* (Blanchard, 1847), while the two newly described species are *Hoploplana elisabelloi* **n. sp**. and *Armatoplana celta* **n. sp**.

Key words: new Leptoplanidae and Stylochoplanidae, Spain, *Hoploplana*, *Armatoplana, Discocelis, Cryptocelis, Stylochus*

Introduction

Species within the order Polycladida (Platyhelminthes) are well known for having attractive colours and being more abundant in tropical regions; however these features are mostly present in species belonging to the suborder Cotylea. The suborder Acotylea, sister taxon of Cotylea, represents the cryptic fraction of Polycladida, with the same cosmopolitan or endemic distributions as those observed in Cotylea (Faubel 1984, Prudhoe, 1985). Acotylea not only differs from Cotylea in colouration pattern but also in the absence of an apomorphic ventral sucker and in tentacle type, which if present, are nuchal rather than marginal as in Cotylea. Despite the lack of monophyletic apomorphies constituting a monophyletic taxon, Acotylea is, overall, a well-characterised suborder.

Within this taxon, the absence/presence and organization (bauplan) of the prostatic vesicle characterises three superfamilies: Stylochoidea Poche, 1926 (with a free prostatic vesicle), Leptoplanoidea Faubel, 1984 (with an interpolated prostatic vesicle) and Illyplanoidea Faubel, 1984 (without a prostatic vesicle). This paper reports and describes species belonging to these superfamilies, which were found along the Iberian Atlantic coast, particularly in the Ría de Arousa in Galicia, Spain.

A total of five species belonging to Acotylea were captured without (apparent) seasonal restrictions from 2010 to 2014. Three of the species, *Cryptocelis compacta* Lang, 1884, *Stylochus neapolitanus* (Delle Chiaje, 1841–1844) and *Discocelis tigrina* (Blanchard, 1847), were previously described for the Atlantic coast, including Spain (Fig. 1), while two species, *Armatoplana celta* **n. sp.** and *Hoploplana elisabelloi* **n. sp.** are newly described. The genus *Hoploplana* is primarily known for the Pacific and western Atlantic oceans. *Hoploplana elisabelloi* **n. sp.** appears to be the first record of the taxon in the European North Atlantic.

With the exception of two Californian records, *Armatoplana reishi* (Hyman 1959) and *A. panamensis* (Plehn, 1896), the genus *Armatoplana* is only known for the South Atlantic shores. *Armatoplana celta* **n. sp.** is the first record for this genus for the North Atlantic Ocean and Iberian Peninsula.

Accepted by W. Sterrer: 3 Sept. 2015; published: 3 Nov. 2015