Diversity of the genus *Terebellides* (Polychaeta: Trichobranchidae) in the Adriatic Sea with the description of a new species

JULIO PARAPAR¹, BARBARA MIKAC²,³,⁵ & DIETER FIEGE⁴

¹Departamento de Biología Animal, Biología Vexetal e Ecoloxía, Universidade da Coruña, 15008 A Coruña, Spain. E-mail: jparapar@udc.es
²Center for Marine Research, Ruđer Boković Institute, Giordano Paliaga 5, 52210 Rovinj, Croatia. E-mail: barbara.mikac@cim.irb.hr
³CNR-IAMC Consiglio Nazionale delle Ricerche - Istituto per l’Ambiente Marino Costiero, Via G. da Verrazzano 17, 91014 Castellammare del Golfo (TP), Italy
⁴Forschungsinstitut und Naturmuseum Senckenberg Frankfurt, Sektion Marine Evertebraten II, Senckenberganlage 25, D-60325, Frankfurt/Main, Germany. E-mail: dieter.fiege@senckenberg.de
⁵Corresponding author

Abstract

Based on specimens collected during the sampling campaigns in the Northern Adriatic from 2003–2010, the diversity of genus *Terebellides* (Polychaeta: Trichobranchidae) was studied and three species are reported for the Northern Adriatic Sea: *Terebellides gracilis* Malm, 1874, *Terebellides mediterranea* spec. nov., and *Terebellides stroemii* Sars, 1835. *Terebellides stroemii* was the only species previously reported from the area. *Terebellides gracilis* is reported for the first time for the Mediterranean Sea and its geographical distribution is extended south. *Terebellides mediterranea* spec. nov., is characterised by the presence of long notopodia and notochaetae in the first thoracic chaetiger. These three species are compared to other *Terebellides* species described or reported from North Atlantic waters, and a key to *Terebellides* species of the North East Atlantic and Mediterranean is provided.

Key words: taxonomy, new records, Mediterranean Sea

Introduction

The presence of highly characteristic branchiae in the genus *Terebellides*, located dorsally on the third thoracic segment, has led to identification of most specimens across the world as *Terebellides stroemii* Sars, 1835. Therefore, this species was considered as being cosmopolitan, concealing the true diversity within the genus. A number of studies conducted in the last three decades have revealed that *T. stroemii* is not a true cosmopolitan taxon and several new species have been described, often from material previously attributed to this species (Hutchings & Peart 2000; Parapar et al. 2011; Schüller & Hutchings 2010; 2012; 2013; Solis-Weiss et al. 1991; Williams 1984). There are currently 51 valid species of the genus *Terebellides* known in the world (Schüller & Hutchings 2013).

The only valid species of the genus *Terebellides* so far recorded from the Mediterranean Sea has been *T. stroemii* (Arvanitidis 2000; Castelli et al. 2008) which was first recorded from the Adriatic Sea by Grube (1864) near the Island Lošinj in the Northern Adriatic. Subsequently it has been reported on soft bottoms up to a depth of 1,150 m (Katzmann 1973) in all parts of the Adriatic, and was considered as a species with a wide ecological distribution. While examining the polychaetes collected during benthic surveys in the Northern Adriatic Sea, it became clear that more than one species of the genus *Terebellides* was present. In this paper we provide the description of a new species, *T. mediterranea* spec. nov., and report on two other species, i.e. *T. stroemii* Sars, 1835 and *T. gracilis* Malm, 1874. The latter species is here recorded for the first time for the Mediterranean Sea. A key to all species of the genus known to occur in North East Atlantic and Mediterranean is provided.