



Species of the subgenus *Minuspio* (Polychaeta: Spionidae: *Prionospio*) from the southern coast of Turkey (Levantine Sea, eastern Mediterranean), with the description of two new species

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Abstract

Three species belonging to the subgenus *Minuspio* are described from the southern coast of Turkey. *Prionospio* (*Minuspio*) *anatolica* **sp. nov.**, and *Prionospio* (*Minuspio*) *maciolekae* **sp. nov.** are new to science and *P. (M.) pulchra* is a new report for the marine fauna of the Levantine and Black Sea coasts of Turkey. *Prionospio* (*M.*) *anatolica* **sp. nov.**, differs from all other *Prionospio* (*M.*) species by the shape of the prostomium, branchiae, and the absence of eyes. This species has 7 pairs of long, apinnate branchiae on chaetigers 2 to 8. *Prionospio* (*M.*) *maciolekae* **sp. nov.**, differs from other *Prionospio* (*M.*) species in having short, densely ciliated branchiae and distinct dorsal crests on chaetigers 10–28. The examination of older materials deposited at the Museum of Ege University (ESFM) revealed that *Prionospio* (*M.*) *pulchra*, an alien invasive species, also occurred in the Aegean and Black Seas since 2000. In the Mediterranean, this species seems to be first noticed from the Italian waters (Tyrrhenian Sea, Lago di Sabaudia) and misidentified as *Prionospio cirrifera*. These species were encountered on a variety of biotopes in the region. In addition, two specimens of *P. (M.) multibranchiata* collected near the type locality (Bazan Bay, Pacific coast of Canada) were examined and a redescription of this species was made. The morphology, ecology and distribution of these species are given together with a taxonomic key to all valid species of the subgenus *Minuspio*.

Key words: Spionidae, *Prionospio* (*Minuspio*) *anatolica*, *Prionospio* (*Minuspio*) *maciolekae* new species, alien species, eastern Mediterranean Sea

Introduction

The *Prionospio* generic complex has one of the most diverse species assemblages within the polychaete family Spionidae. Seven genera (*Prionospio* Malmgren, 1867; *Streblospio* Webster, 1879; *Paraprionospio* Caullery, 1914; *Apoprionospio* Foster, 1969; *Orthoprionospio* Blake & Kudenov, 1978; *Aurospio* Maciolek, 1981a and *Laubierielus* Maciolek, 1981b) are considered to be involved in this complex (Zhou & Li 2009). Although Wilson (1990) and Sigvaldadóttir (1998) considered the separation of subgenera within *Prionospio* as artificial groupings, and raised all subgenera to genus level, Maciolek (1985) and Dagli & Çinar (2009) distinguished three subgenera (*Prionospio* Malmgren, 1867; *Aquilaspio* Foster, 1971; *Minuspio* Foster, 1971) based on the type and arrangement of branchiae. However, further cladistic analyses based on morphological characters (especially the shape of apinnate branchiae) and genetic structures are required to assess if the characters (i.e. form of branchiae) of these subgenera are monophyletic or not. The subgenus *Minuspio* is characterized by having only apinnate smooth or wrinkled branchiae. This subgenus includes 20 species worldwide, of which *Prionospio* (*Minuspio*) *cirrifera* Wirén, 1883, *P. (M.) multibranchiata* Berkeley, 1927 and *P. (M.) pulchra* Imajima, 1990 have been reported from the coasts of the Mediterranean Sea (i.e. Fauvel 1927, Giangrande & Gambi 1982, Pancucci–Papadopoulou *et al.* 2005) and Turkey (i.e., Ergen 1979, Çinar & Ergen 1999, Çinar & Gönlügür–Demirci 2005, Çinar *et al.* 2006, 2011a, Dagli *et al.* 2011).

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