



## Species of the subgenera *Aquilaspio* and *Prionospio* (Polychaeta: Spionidae: *Prionospio*) from the southern coast of Turkey (Levantine Sea, eastern Mediterranean), with description of a new species and two new reports for the Mediterranean fauna

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### Abstract

The present study deals with species of the subgenera *Prionospio* (*Aquilaspio*) and *Prionospio* (*Prionospio*) collected from various habitats and depths along the southern coast of Turkey in September and October 2005. The examination of a large collection of material revealed 10 species, of which one species, *Prionospio* (*P.*) *ergeni* n. sp., is new to science; two species, *P.* (*P.*) *depauperata* and *P.* (*A.*) *krusadensis*, are new to the Mediterranean fauna; and one species, *P.* (*A.*) *sexoculata*, is new to the Turkish marine fauna. *Prionospio* (*P.*) *ergeni* n. sp. differs from all other *Prionospio* species in having three pairs of pinnate branchiae between chaetigers 2 and 4 and one pair of apinnate branchiae on chaetiger 5. Four species—*P.* (*P.*) *saccifera*, *P.* (*A.*) *sexoculata*, *P.* (*P.*) *depauperata*, and *P.* (*A.*) *krusadensis*—are aliens. The former two species could have been introduced to the Mediterranean from the Red Sea through the Suez Canal (Lessepsian migrants) and the others from the Pacific or Indian Oceans via ballast water of ships. The morphological, ecological, and distributional features of these species are discussed.

**Key words:** *Prionospio* (*Prionospio*) *ergeni*, Lessepsian, eastern Mediterranean Sea, Mediterranean coast of Turkey, alien species

### Introduction

Several generic schemes have been used in classifying species belonging to *Prionospio* Malmgren, 1867 (Hylleberg & Nateewathana 1991). Foster (1971) and Hutchings & Turvey (1984) recognized *Aquilaspio* Foster, 1971, *Minuspio* Foster, 1971 and *Prionospio* Malmgren, 1867 as genera of the family Spionidae. Blake & Kudenov (1978) and Maciolek (1985) proposed these genera as subgenera of *Prionospio*. Wilson (1990) and Sigvaldadóttir (1998) considered the separation of subgenera within *Prionospio* as artificial groupings, and raised all subgenera to genus level. However, due to the large differences in the shape of the branchiae, we propose that the use of subgenera, although not supported by phylogenetic analysis, would be useful for grouping the species. The subgenus *Prionospio* is characterized by having apinnate and pinnate branchiae with digitiform pinnules, the subgenus *Minuspio* by having only apinnate smooth or wrinkled branchiae, and the subgenus *Aquilaspio* by having only pinnate branchiae with digitiform pinnules.

The genus *Prionospio* contains about 100 described species (Sigvaldadóttir 1998), 44 of which belong to the subgenus *Prionospio* (Laubier 1970; Blake 1983, 1996; Maciolek 1985; Wilson 1990; Imajima 1990a, 1990c; Mackie & Hartley 1990; Hylleberg & Nateewathana 1991; Zhou & Li 2009). This subgenus has been little studied in the Mediterranean Sea. Fauvel (1927, 1928), Tebble (1959), Laubier (1962, 1968, 1970), Bellan (1964), Maciolek (1985), Sigvaldadóttir (1992), Sigvaldadóttir & Mackie (1993), Ben-Eliahu (1995), Ben-Eliahu & Fiege (1995), Çinar & Ergen (1999), and Simboursa & Nicolaidou (2001) reported a total of