



<http://dx.doi.org/10.11646/zootaxa.3905.1.4>

<http://zoobank.org/urn:lsid:zoobank.org:pub:6C454B4B-E32D-4B55-B195-32A575BCC858>

***Prionospio* (Polychaeta, Spionidae) from the Grand Caribbean Region, with the descriptions of five new species and a key to species recorded in the area**

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Abstract

Six species of *Prionospio* are described from the Southern Gulf of Mexico and the Caribbean Sea. Five of these species, *P. austella* **sp. nov.**, *P. crassumbranchiata* **sp. nov.**, *P. jonatani* **sp. nov.**, *P. oligopinnulata* **sp. nov.**, and *P. rotunda* **sp. nov.** are new to science whereas *Prionospio cristata* Foster, 1971 has been previously described from the Grand Caribbean region. *P. austella* **sp. nov.** has a prostomium with a small medial peak on the anterior margin, low dorsal folds on chaetigers 6–11, rounded and subtriangular neuropodial lamellae on chaetigers 1 and 3, respectively, and all hooks lack a secondary hood. *P. crassumbranchiata* **sp. nov.** has a laterally separate peristomium partially fused dorsally with chaetiger 1, digitiform pinnules on the lateral and posterior faces of the first pair of branchiae and rectangular neuropodial lamellae on chaetigers 2–5. *Prionospio jonatani* **sp. nov.** has a narrow prostomium, subtriangular notopodial lamellae on chaetigers 6–21, notopodial prechaetal lamellae slightly basally fused with the notopodial postchaetal lamellae and square neuropodial lamellae on chaetiger 3. *P. oligopinnulata* **sp. nov.** has a square-shaped prostomium, high dorsal crests on chaetigers 7–8, low dorsal folds on chaetigers 9–14, subtriangular neuropodial lamellae on chaetigers 2–3, and branchial pairs 2 and 3 are triangular. *P. rotunda* **sp. nov.** has an anteriorly rounded prostomium, trapezoid neuropodial lamellae on chaetiger 3, high dorsal crests on chaetiger 7, and branchial pairs 2 and 3 are cirriform. A key is provided for all the species known from the Grand Caribbean region in the “*steenstrupi*-group” with four branchial pairs.

Key words: Annelida, morphology, Polychaeta, Spionidae, *Prionospio*

Introduction

Prionospio was established by Malmgren (1867) for *P. steenstrupi* Malmgren 1867, a spionid with branchiae on chaetigers 2–5, the first and fourth pairs pinnate, the second and third pair apinnate. With the discovery of new species, the diagnosis of the genus was widened to include species with different branchial shapes and arrangement. Variability has thus increased, making *Prionospio* a very heterogeneous genus with about 100 species (Sigvaldadóttir 1998). As a result, several authors have suggested that some of the species should be reclassified into new genera and/or subgenera (Foster 1971; Blake and Kudenov 1978; Maciolek 1985; Wilson 1990). As no consensus has been reached, I follow the taxonomic system of Foster (1971).

In the most recent revision of the genus *Prionospio*, Maciolek (1985) considered that species in the subgenus *Prionospio* as those with four or five pairs of branchiae, with the first and fourth pairs or the first, fourth and fifth pairs pinnate, and the second and third pairs apinnate. Within this subgenus, all species with the same branchial formula as *P. steenstrupi* form the so-called *steenstrupi*-group. To date, 35 *Prionospio* species have been recognized within this group (Wilson 1990; Sigvaldadóttir & Mackie 1993; Blake 1996; Sigvaldadóttir 1997; Zhou & Li 2009), and seven species with five pairs of branchiae (Delgado-Blas 2014).

Delgado-Blas & Salazar-Silva (2011) list six species of *Prionospio* that have been reported from the Grand Caribbean, including *Prionospio cristata* Foster, 1971 from Beaufort, North Carolina, USA, *Prionospio dubia* Maciolek, 1985 from South Africa, *Prionospio ehlersi* Fauvel, 1928 from Morocco, western Africa, *Prionospio fallax* Söderström, 1920 from Gullmaren, Islandsberg, Sweden, *Prionospio heterobranchia* Moore, 1907 from Woods Hole, Massachusetts USA, and *Prionospio steenstrupi* Malmgren, 1867 from Iceland. Of these, only *P.*

- Prostomium truncate anteriorly; neuropodial lamellae subrectangular on chaetiger 1 and subtriangular, dorsally pointed on chaetiger 3; second and third branchial pairs triangular; hooks with three to four pairs of teeth *P. fallax**
 - 9. Prostomium square-shaped, anteriorly truncate; notopodial postchaetal lamellae of chaetiger 1 moderate in size, not erect; high dorsal crests on chaetigers 7 and 8; low dorsal folds on chaetigers 9–14; anterior notopodial prechaetal lamellae short; neuropodial postchaetal lamellae subtriangular and ventrally pointed on chaetigers 2–3; notopodial and neuropodial lamellae neither touching nor overlapping on chaetiger 3; branchial pairs 2 and 3 apinnate, triangular. *P. oligopinnulata* **sp. nov.**
 - Prostomium subtriangular, anteriorly rounded; notopodial postchaetal lamellae of chaetiger 1 large and erect; high dorsal crests on chaetigers 7–9; low dorsal folds on chaetigers 10–12; anterior notopodial prechaetal lamellae large; neuropodial postchaetal lamellae of chaetiger 2 rounded, and neuropodium of chaetiger 3 trapezium-shaped, dorsally directed; notopodial and neuropodial lamellae overlapping on chaetiger 3; branchial pairs 2 and 3 apinnate, cirriform. *P. cristata*
- * Species not found during this study.

Acknowledgements

I would like to thank Vivianane Solis Weiss, Alejandro Granados Barba, and Pablo Hernández Alcantara (ICMyL) for making part of the material from their collections available for me to examine, Guadalupe Nieto (ECOSUR) for her help with the SEM pictures, and Luis F. Carrera-Parra and Sergio I. Salazar-Vallejo for giving me space in their laboratory during my sabbatical year which concluded with this paper. I would also like to thank the Universidad de Quintana Roo, México for allowing me the time to finish this investigation. Finally, I would also like to thank Jason D. Williams and an anonymous referee who carefully reviewed a previous version of this manuscript. Their comments certainly improved the quality of this paper.

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