



***Diopatra tuberculantennata*, a new species of Onuphidae (Polychaeta) from Belize with a key to onuphids from the Caribbean Sea**

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Abstract

A new species of the genus *Diopatra* Audouin & Milne-Edwards, 1833 from the intertidal zone in the vicinity of the Smithsonian field station (Carrie Bow Cay, Belize) is described. *Diopatra tuberculantennata* **sp. nov.** is identifiable by a combination of characters such as the presence of large lateral projections on both palpophores and antennophores, bidentate pseudocompound hooks with moderately long pointed hoods in the first five chaetigers, eyespots on the prostomium, nuchal organs forming almost a circle and very large sensory papillae on antennostyles and frontal and upper lips. Five 28-chaetiger juveniles were found inside the parental tube of one specimen. A pattern of anterior segment regeneration is described based on 12 specimens. A key for 20 species of onuphids known from the Caribbean Sea with the notes on their distribution is provided.

Key words: diversity; taxonomy; juveniles; regeneration; distribution

Introduction

Diopatra cuprea (Bosc, 1802) was the only species of *Diopatra* reported by Fauchald (1980) from Belize. The species was found in the vicinity of Carrie Bow Cay (Smithsonian Institution's Caribbean Coral Reef Ecosystems (CCRE) program) and near Colson's Point, both in Dangriga district (Fig. 1). Fauchald's and Meredith L. Jones' material from Belize demonstrated some differences from the original description of *D. cuprea* mostly in size and color pattern. Specimens that were obtained near the shoreline comply with the description of *D. cuprea*. However, specimens collected in coral reefs and fresh material collected at Carrie Bow Cay and three neighboring islands in November 2006 are obviously different from *D. cuprea* and are here described as a new species.

Diopatra contains approximately 50 species, widely distributed around the world, but typically inhabiting warm shallow waters. Although *Diopatra* has been historically clearly recognized by the presence of the spiraled branchiae and the peristomial cirri, the species of *Diopatra* demonstrate a wide range of intraspecific variability, and often lack distinct diagnostic characters (Paxton 1993; 2002). *Diopatra* species from Australia, Thailand, and complex of species frequently identified as *D. chiliensis* were recently revised by Paxton (1993; 1998; 2002).

The new species differs from *D. cuprea* by the presence of large lateral projections on both palpophores and ceratophores. Three other species of *Diopatra* have similar projections on prostomial appendages and are compared to the new species below.