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Podocoryna martinicana, a new species of athecate hydroid (Cnidaria: Hydrozoa: Hydractiniidae) from the Caribbean

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Abstract

A new species of hydroid, *Podocoryna martinicana* **sp. nov.**, is described from the Lesser Antilles. It lives symbiotically with *Iridopagurus caribbensis* (A. Milne-Edwards & Bouvier, 1893) (Decapoda: Paguridae) inhabiting various gastropod shells. Its colonies are highly organized and develop exclusively around the aperture of the host shell. A few large, columnar gastrozooids provided with numerous tentacles arise from a perisarc-covered stolonal mat on the inner lip of the shell, and appear to form a gate when the hermit is withdrawn, while numerous, small, highly prolific gonozooids dress a line on the edge of the outer lip. Slender, very contractile tentaculozooids occur variably among the colonies. The dispersive stage, a free-swimming medusa with four well-developed marginal tentacles and no ocelli, is solely described based on young, sexually immature specimens. The species is further characterized by the peculiar bright white tinge of the core of both hydroid and medusa tentacles. Rich illustrations, data on the nematocyst complement, as well as comparisons with related congeners are provided.

Key words: hydroid, medusa, athecate, Martinique, French West Indies, Lesser Antilles

Introduction

The highly speciose family Hydractiniidae L. Agassiz, 1862 has a notoriously unsettled taxonomy at both genus (see Calder 1988) and species levels (see Schuchert 2008). Multiple genera were either merged using classical approaches (*e.g.* Bouillon *et al.* 2006, Schuchert 2008), or resurrected and even created, based on data obtained from molecular studies (Miglietta *et al.* 2010, Miglietta & Cunningham 2012). In agreement with the latest evidence, and despite the numerous gaps that still exist in our understanding of the family, the usage of the generic name *Podocoryna* M. Sars, 1846 is adopted here for all species producing free-swimming, feeding medusae.

Records of hydractiniid hydroids from the Caribbean are rather scarce and scattered in a few taxonomical or ecological accounts. Wedler (1975) cited a hydroid from Colombia that he assigned to *Hydractinia echinata* (Fleming, 1828), a species whose area of distribution is however restricted to the NE Atlantic (Schuchert 2008). Subsequently, Flórez Gonzáles (1983) illustrated an unidentified species assigned to *Stylactis* Allman, 1864 from the same country, and described its gonophores as both sporosacs and medusoids. Wedler & Larson (1986) provided accounts on six species from Puerto Rico, of which one, *Stylactis sandrae* (presently included in *Hydractinia* van Beneden, 1841), was considered as new. Calder (1991) recorded *H. arge* (Clarke, 1882) from Belize, and Ortiz (2001) briefly described and illustrated a not yet identified species from Cuba. Finally, Galea (2013) documented several morphological aspects of an incompletely known species of *Hydractinia* from Martinique, which reproduces through medusoid gonophores.

A detailed account on a second, undescribed medusa-producing hydractiniid from Martinique, living in a symbiotic association with a hermit crab, is provided below.