



First record of a living ditaxiporine catenicellid in the Atlantic, with a description of *Vasignyella ovicellata* n. sp. (Bryozoa)

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Abstract

The genus *Vasignyella* Gordon, 1989 is recorded for the first time from the Atlantic Ocean, in the littoral zone of Alagoas, northeastern Brazil. It is only the second species attributed to the genus, the type species of which has never been seen in a reproductive state, and which has a colony form of uniserial chains of unizoidal internodes. The new species from Brazil, herein described as *V. ovicellata*, has a similar colony form in the infertile state, but has ovicells in multizoidal internodes. This character allows a reconsideration of the phylogenetic relationships of *Vasignyella*, which was previously the sole included genus in the catenicellid bryozoan subfamily Vasignyellinae. The nearest generic relative of *Vasignyella* was, however, considered to be the extinct genus *Ditaxiporina* Stach, 1935 (subfamily Ditaxiporinae), with near-identical autozooidal morphology, but with most internodes multizoidal and also having ovicells when reproductive. The discovery of ovicells in *Vasignyella* allows the subfamily Vasignyellinae to be discarded and the genus transferred to the Ditaxiporinae, a subfamily with an Atlanto-American record previously known to range from the Late Paleocene to the Early Oligocene.

Key words: Bryozoans, Catenicellidae, Ditaxiporinae, *Vasignyella*, ovicells, Brazil

Introduction

Gordon (1989) introduced the genus *Vasignyella* for the Indo-West Pacific cheilostome bryozoan *Catenaria otophora* Kirkpatrick, 1890. This species was previously included in *Savignyella* Levinsen, 1909 by several authors (e.g. Harmer 1957; Dumont 1981; Winston 1986), but this genus differs from *Vasignyella* in that the major part of the frontal shield is a pseudoporous cryptocyst, whereas that of *Vasignyella* is a foraminate gymnocyst. *Vasignyella* additionally has a sinusoid orifice with paired vestigial costal elements, paired lateral-oral avicularia, and no oral spines. At the time of its introduction, *Vasignyella* was retained by Gordon (1989) in the Savignyellidae. In a subsequent revision of multizoidal catenicellids, Gordon & Braga (1994) noted the striking similarity of zooids of *Vasignyella otophora* to those of species of *Ditaxiporina* Stach, 1935, which ranges from the European Eocene to the Early Oligocene of Arkansas, USA. Most *Ditaxiporina* species have only multizoidal internodes, but one, *D. septentrionalis* (Waters, 1891), has uni-, bi-, tri-, and multizoidal inter-nodes (the different internode types are found together in the same fossil assemblages). The similarity between the two species led Gordon & Braga (1994) to include *Vasignyella* in the Catenicellidae, but in its own new subfamily, characterized by having solely interzooidal internodes, no ovicells, and no cross-bars in the avicularia.