Taxonomy of recent Adeonidae (Bryozoa, Cheilostomata) from Brazil, with the description of four new species

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Abstract

Here we present the taxonomy of the cheilostome genera Adeonellopsis MacGillivray, 1886 and Reptadeonella Busk, 1884 in Brazil. Of the six species previously reported in Brazilian waters, we include redescriptions of Adeonellopsis subsulcata (Smitt, 1873), Reptadeonella bipartita (Canu & Bassler, 1928) and Reptadeonella costulata (Canu & Bassler, 1928). Four new species of Reptadeonella are described: Reptadeonella aspera n. sp., Reptadeonella brasiliensis n. sp. (previously misidentified as Reptadeonella violacea), Reptadeonella cucullata n. sp. and Reptadeonella leilae n. sp. Reptadeonella aspera n. sp., from Bahia State, is characterized by rugose frontal calcification, a tubular peristome, small suboral avicularium and elliptical spiramen. Reptadeonella brasiliensis n. sp. is the commonest intertidal species in NE Brazil; it is distinguished from other Brazilian Reptadeonella in having a nodular peristome, large subperistomial areolar pore and zooids with one or two frontal pores frequently replaced by a suboral avicularium and crescentic spiramen. Reptadeonella cucullata n. sp., from Espírito Santo and Bahia states, has a hood-like peristome, large subperistomial areolar pore, suboral avicularium with curved mandible and denticulate spiramen. Reptadeonella leilae n. sp., described from Bahia State, has a frontal shield with small granules, tubular peristome, semilunar to semicircular subperistomial areolar pore and circular spiramen. Diagnostic characters of Reptadeonella species are discussed.

Key words: Bryozoans, Adeonellopsis, Reptadeonella, Atlantic

Introduction

The family Adeonidae Busk, 1884 currently comprises ten genera (Bock & Gordon 2013) but only two, Adeonellopsis MacGillivray, 1886 and Reptadeonella Busk, 1884, are reported from Brazil. The actual number of adeonid species from the region, however, is difficult to estimate since many historical records of Reptadeonella have been attributed to Reptadeonella violacea (Johnston, 1847) (e.g. Smitt 1873; Marcus 1939, 1949; Souza 1989; Machado & Souza 1994), a species long considered widespread in warm to temperate waters but now recognized as restricted to the eastern Atlantic and Mediterranean (Winston 1986, 2005; Hayward & McKinney 2002; Cheetham et al. 2007). As pointed out by Winston (2005) and Vieira et al. (2008), records of R. violacea from the Western Atlantic, including those from Brazil, should be revised since, as we show in this paper, they represent undescribed species.

Recent Adeonellopsis and Reptadeonella currently comprise 17 species, distributed in the Atlantic, Indo-Pacific and Europe (Bock 2015). Vieira et al. (2008) listed five species of Adeonidae from Brazilian waters: Adeonellopsis subsulcata (Smitt, 1873), Reptadeonella bipartita (Canu & Bassler, 1928a), Reptadeonella costulata (Canu & Bassler, 1928a), Reptadeonella tubulifera (Canu & Bassler, 1930) and R. violacea. Recently Winston and Vieira (2013) described Reptadeonella granulosa from Southeast Brazil. The present paper includes redescriptions of Adeonellopsis subsulcata (Smitt, 1873) and the type specimens of R. bipartita and R. costulata, as well as descriptions of four new species of Reptadeonella.