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First record of the genus *Cladonema* (medusae and polyps) in Colombia

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Knowledge about the cnidarian class Hydrozoa in Colombia is very limited because there are few investigators researching this group. Studies on hydropolyps from the Colombian Caribbean include Wedler (1973, 1975), Bandel & Wedler (1987), Florez (1983) and Posada *et al*. (2010), whereas those focused on hydromedusae are Moncaleano-Niño (1976), who documented 20 genera and Dominguez (2002), who documented 6 families and 5 genera. On the Pacific coast, only Lopez and Baldrich (2010) have published on 12 families and 13 genera based on observations of hydromedusae. This paper reports for the first time in the Colombian Caribbean the hydrozoan genus *Cladonema* based on a colony of polyps and their medusae.

In December 2011 a hydromedusa was found in a seahorse tank on the nursery of Mundo Marino Aquarium, Santa Marta, Colombia. The medusa was collected and placed in a 250 ml glass jar with air for observation. In February 2012, several hydropolyps were found in the same tank. They were observed adhering to coral fragments and shells. Polyps were placed into another glass jar. The polyps were about 0.7 mm in height and possessed four capitate tentacles surrounding the hypostome and four small aboral filiform tentacles. One week later, buds at the base of the hydranth began to release young hydromedusae (Fig. 1) characterized by nine marginal tentacles and nine radial canals, sometimes branching, with cylindrical manubrium with 6 oral tentacles and marginal branching tentacles, each one ending in an organ of adhesion. The smallest medusa observed was about 0.8 mm in bell height and the largest about 1.14 mm (Fig. 2). Both polyps and medusae were fed with *Artemia* nauplii, which benefits the growth of the hydroid colony and the release of larger numbers of medusae (Costello, 1988). Both phases in all stages of development (polyps, young and adult medusae) were preserved for future reference and to be part of the Museo de Historia Natural Marina de Colombia (MHNMC).

Features of both phases indicate they belong to the family Cladonematidae and the genus *Cladonema*, in which there are six valid species (Schuchert, 2014). Characters that are used to distinguish these species are presented in Table 1, but the distinctions between the species appear to be uncertain. *Cladonema californicum* Hyman, 1947 and *C. myersi* Rees, 1949 were described from specimens in California, USA, whereas *C. pacificum* Naumov, 1955 is based on material from the northwest Pacific, *C. novaezelandiae* Ralph, 1953 from New Zealand and *C. timmsii* Gershwin & Zeidler, 2008 from Australia. C. *radiatum* Dujardin, 1843 has been widely reported from Europe, the Mediterranean Sea, Atlantic Ocean and Gulf of Mexico. The presence of filiform tentacles in the hydropolyp would rule out *C. pacifica* and *C. myersi* for the present material. A lack of bifurcated tentacles, as in C. *californicum,* and lack of simple radial canals, as in *C. timmsii*, suggest that the Colombian animals are not either of these species, which would narrow the known possibilities to *C. novaezelandiae* and C. *radiatum* (Rees, 1982). Both of these species have 7 to 11 radial canals (Rees, 1982), at least some branching, and have 4 to 6 oral tentacles (Gershwin & Zeidler, 2008). On geographical grounds, one would expect *C. radiatum* to be the most likely candidate for this material. This species has been reported for the Caribbean, in Mexico by Segura-Puertas *et al*. (2003) and Jamaica by Persad *et al*. (2003). Even though the distribution and morphology of the polyp and adult medusae found in the seahorse tank of Mundo Marino Acuario agrees with *C. radiatum*, its identity is not certain because unpublished work using 16S sequences suggests that some *Cladonema* species that occur in tropical fish tanks are quite distant from *C. radiatum*, despite being morphologically indistinguishable (Schuchert, Pers. Com).

This hydromedusa is characterized by a benthic mode of life and is able to locomote on the substrate due to specialized adhesive tentacles. This probably explains why this medusa has not been found in Colombian zooplankton samples.

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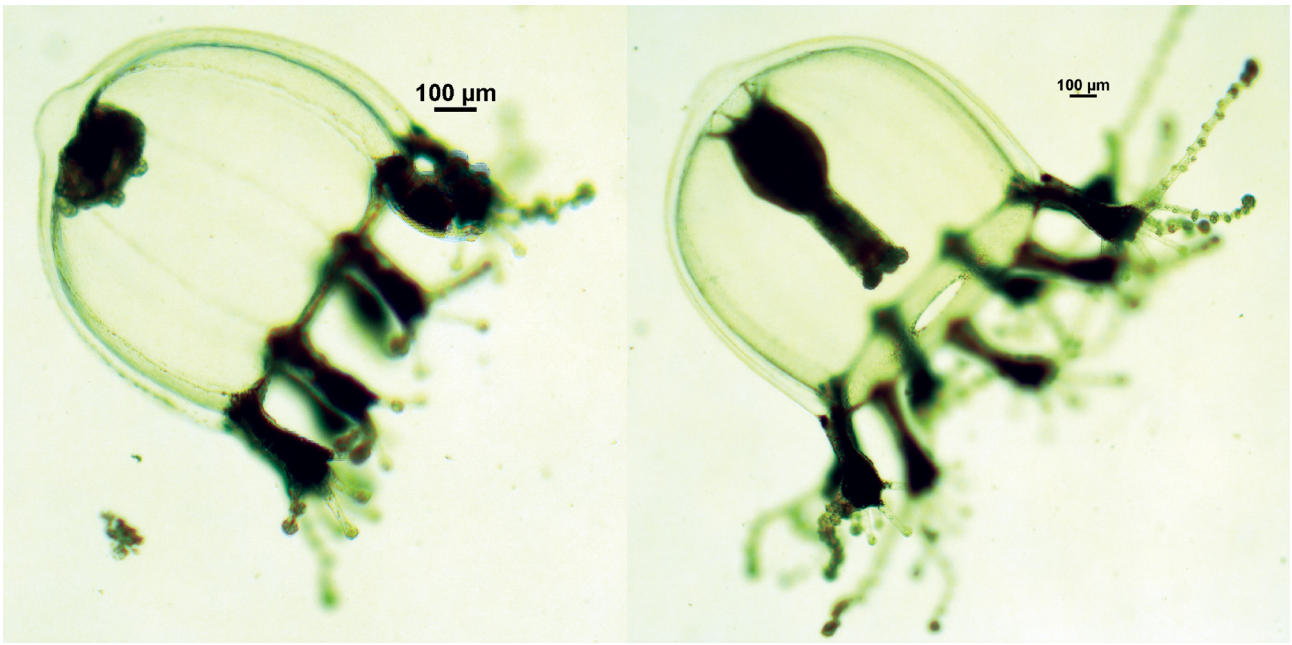

FIGURE 2. Cladonema sp. (Left) smallest and (Right) largest hydromedusae.

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