



New species and new records of hydroids (Cnidaria: Hydrozoa) from Chile

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Abstract

A large collection of shallow-water hydroids from various Chilean provinces, ranging from Taltal (25° S) in the North, to the Strait of Magellan (53° S) in the South, was studied, and a total of 30 species are discussed in the present report. Of these, eleven are new to science: *Candelabrum valdiviensis*, *Halecium erratum*, *H. humeriformis*, *H. maximum*, *H. modestum*, *H. platythecum*, *Hydrodendron chilense*, *Sertularella asymmetra*, *S. curta*, *S. pauciramosa*, and *Symplectoscyphus semper*. The nominal species *Halecium flexile* Allman, 1888, included for many decades in the synonymy of *H. delicatulum* Coughtrey, 1876, is resurrected based on distinctive features displayed by its newly discovered female gonothecae. A thorough discussion is provided on several morphologically related species of the genus from various localities around the world, and data on the nematocyst complement are emphasized, allowing the distinction of an as yet undescribed species, *H. tristaniensis*, from Tristan da Cunha, South Atlantic, and the resurrection of *H. balei* Fraser, 1911 from southern Australia. *Halecium tehuelchum* (d'Orbigny, 1842), a poorly known species considered as of doubtful validity, is redescribed based on fertile material of both sexes. A discussion on the taxonomy of several members of the genus *Hydrodendron* Hincks, 1874, including the first comprehensive account of their cnidome, is provided. The male and female gonothecae of *Halopteris plumosa* Galea & Schories, 2012 are described for the first time. A discussion on the genus *Silicularia* Meyen, 1834 is provided, and three subantarctic species are provisionally recognized based on the material in hand, viz. *S. bilabiata* (Coughtrey, 1875), *S. rosea* Meyen, 1834, and *S. hemisphaerica* (Allman, 1888). Four hydroids are new records for Chile: *Halecium corrugatissimum* Trebilcock, 1928, *Parascyphus simplex* (Lamouroux, 1816), *Symplectoscyphus unilateralis* (Lamouroux, 1824), and *Aglaophenia divaricata* Busk, 1852, the last two being accompanied by comments on their synonymy. Two additional hydroids are only tentatively identified, viz. *Hebella* cf. *scandens* (Bale, 1888) and the allusive benthic stage of *Phialella falklandica* (Browne, 1902).

Key words: Hydrozoans, taxonomy, new species, South America, southeastern Pacific

Introduction

The hydrozoan fauna of Chile, rather poorly investigated in the past, has received increasing attention during the last decade, and several taxonomic studies have been already published, namely Galea (2007), Galea *et al.* (2007, 2009), and Galea & Schories (2012a).

A considerable collection was gathered between 2010 and 2013. Part of the material originates from local explorations carried out around Taltal (Región de Antofagasta, ca. 25° S), Valdivia (Región de los Ríos, ca. 39°), and Punta Arenas (Región de Magallanes y Antártica Chilena, ca. 53°S). Additional samples from various localities have been obtained during several expeditions carried out by the Huinay Scientific Field Station in the fjords region of southern Chile. These expeditions have explored the exposed coast in the Northern Patagonian Zone (HF7), the interior northern fjords and the large channels of the far southern cone (HF9), the canals of the exposed northern Patagonian Zone (HF11), the inner fjords of the Central Patagonian Zone (HF13), and an area

was reexamined by Stechow (1919), who made available the name. Though only a microslide preparation containing a single hydrocladium is left¹⁹, the description and illustrations provided by Stechow leave little doubt about its conspecificity with the present species.

There has been extensive discussion in the past regarding the taxonomic status of several closely-related nominal species. Billard (1909c; 1910) sunk *A. acanthocarpa* and *A. laxa* Allman, 1876 in the synonymy of *A. divaricata*, while Bale (1924) kept them distinct from the latter. However, the description provided by Bale (1884) for *A. divaricata* does not differ from the one he gave later (Bale 1924) for *A. acanthocarpa*, though in the latter work several characters are emphasized in order to separate the species, such as the shape of the mesial nematotheca and the degree of immersion of the hydrotheca. Trebilcock (1928) found, in material assigned to *A. laxa*, a huge difference in the distance between successive hydrocladia (varying by twice as much), and the structure of the corbula was in agreement to that of both *A. divaricata* and *A. acanthocarpa*. Finally, Vervoort & Watson (2003, p. 277), recognized that the “*A. divaricata*–*A. acanthocarpa* group (including *A. laxa*) is in need of a detailed review”.

We share the same point of view as Billard (1910) and choose to use the oldest available name for the present material, until the taxonomy of this species group is clarified through molecular genetic studies.

Distribution in Chile. Only known from Talcahuano (Stechow 1919, as *Aglaphenia tenerrima*) and Corral (present record).

World records. Seas around New Zealand (Vervoort & Watson 2003), Tasmania, Bass Strait, and South Australia (Briggs 1914).

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19. "nur ein Hydrocladium in Form eines guten Präparates erhalten" (Stechow 1919).

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