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New records of deep-water Scleractinia off Argentina and the Falkland Islands

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Abstract

The twenty species of Scleractinia (all azooxanthellate) known to occur off Argentina and the Falkland Islands (the Atlantic component of the cold temperate Magellan Province) are discussed, 15 of which are documented by new records. Five new species are described: *Caryophyllia kellerae, C. coronula, Solenosmilia australis, Flabellum cinctutum*, and *Javania cristata*. Five geographic and nine bathymetric range extensions are also documented. A brief history of species discovery in this region is given, and a key to the species is provided.

Key words: Scleractinia, azooxanthellate coral, new species, zoogeography, Patagonia, Argentina, Falkland Islands, Magellan Province

Introduction

Although the history of the study of Argentinean azooxanthellate Scleractinia was largely tabularized by Cairns (1982: Table 1) as part of his review of the Antarctic and Subantarctic Scleractinia, some of the highlights and updates are presented here. The first species reported from this region was *Flabellum thouarsii* Milne Edwards & Haime, 1848 from the Falkland Islands. It was not for another 30 years (Studer 1878) that another specimen of the same species was reported from off Argentina proper, from relatively shallow water off Cabo Blanco. Moseley (1881), in his account of the deep-water Scleractinia collected by the *Challenger* expedition, reported three new species from one station (*Challenger* 320: 37°17'S, 53°52'W, 1097 m) from the northern border of the cold temperate Argentinean region: *Flabellum curvatum*, *Bathelia candida*, and *Crispatotrochus cornu*. After a long hiatus, Gardiner (1939) reported several species from the Falkland Islands, Burdwood Bank, and the Argentinean coast that were collected from the RSS *William Scoresby.* Most of his specimens subsequently re-identified by Cairns (1982).

In the first paper of the modern age of scleractinian taxonomy (Cairns 2001), Squires (1961), based on specimens collected by the R/V *Vema*, reported two new species from the southern cold temperate region of Argentina (*Sphenotrochus gardineri* and *Balanophyllia malouinensis*), reviewed the species known from this region, and discussed their zoogeography. Later, as part of the Antarctic Map Folio Series, Squires (1969) discussed and mapped the distribution of all scleractinian species known from the Antarctic and Subantarctic regions, reiterating much of what had been published in 1961. Furthermore, Keller (1974) reported additional specimens of *F. thouarsii* from off Tierra del Fuego.

Cairns (1979) designated and illustrated the lectotype of *Crispatotrochus cornu* (Moseley, 1881). Later, in the context of a revision of the Antarctic and Subantarctic Scleractinia, he (Cairns 1982) described and illustrated all species then known from the Subantarctic portion of Argentina, reporting Argentinean specimens collected by the research vessels: USNS *Eltanin*, ARA *Islas Orcadas*, R/V *Hero*, R/V *Vema*, R/V *Walther Herwig*, and *Calypso*. Later, in a field guide to the Antarctic Scleractinia, Cairns (1990) diagnosed, keyed, and illustrated the Antarctic species, including some that also occur in Subantarctic Argentina. Finally, Kitahara and Cairns (2005) described *Monohedotrochus capitolii*, known primarily from warm temperate Brazilian waters, but including one record from off central Argentina.

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