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MICROPORA FINISTERRAE SP. N. A NEW BRYOZOAN SPECIES FROM THE MAGELLAN STRAIT, CHILE

Micropora finisterrae n. sp. una nueva especie de briozoo del Estrecho de Magallanes, Chile

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ABSTRACT

A new species of the bryozoan anascan family Microporidae, *Micropora finisterrae* n. sp., from samples collected in the western part of the Magellan Strait is proposed and described. In having 8-10 opesiules it is simultaneously different from all known South American *Micropora* species and akin to *M. variperforata* from New Zealand but lacking the avicularia the latter does have.

KEYWORDS: Systematics. Bryozoa. Family Microporidae. New species. South Eastern Pacific.

RESUMEN

Se propone y describe una nueva especie de briozoo de la familia Microporidae: *Micropora finisterrae* sp. n., a partir de muestras recolectadas en la parte occidental del Estrecho de Magallanes. Al presentar 8-10 opesíulas difiere de todas las especies sudamericanas conocidas del género *Micropora*, pero se acerca a *M. variperforata* de Nueva Zelandia, de la que se diferencia por carecer de las avicularias que ésta posee.

INTRODUCTION

In recent years many new taxa including families, genera and species from antarctic and subantarctic regions have been described. These have shown the existence of a more diverse and endemic bryozoan fauna than ever realized (Hasting 1943; Hayward 1991, 1992, 1993, Hayward & Ryland 1991, 1993; Hayward & Winston 1994; Hondt 1979; López-Gappa & Lichtschein 1988; Moyano 1979, 1982, 1983, 1985, 1991, 1992; Rogick 1965; Winston & Hayward 1994). One of the unsuspectedly rich anascan cheilostome stock is the coilostegan family Microporidae. In the subantarctic magellanic region, this family includes the endemic genera *Andreella* Jullien, 1888 and *Flustrapora* Moyano, 1970; the austral amphipacific *Opaeophora* Brown, 1948 and the so-called cosmopolitan *Micropora* Gray, 1848. These have been recently reviewed in zoogeographical, taxonomic and primary evolutive terms (Moyano, 1994).

Micropora brevissima was the first species to be

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described by Waters in 1904 from antarctic waters. This and subsequent authors considered that magellanic and antarctic microporan specimens were the same species until recent years. Nevertheless Hayward & Ryland, 1993 described the magellanic populations as pertaining to a new species: *Micropora notialis*. Thus, before 1993 two vicariant *Micropora* species were thought to inhabit cold waters on both sides of the Drake Passage. However, several new *Micropora* species were discovered during the collecting activities of the "Italian Magellano I Expedition" to the Magellan Strait. Two of them *M. karukinkaensis* and *M. selknami* have been recently described (Moyano, 1994) and a new one yet undescribed is the aim of this work.

MATERIALS AND METHODS

The material for the description of the new species was collected in the Magellan Strait during the first Italian Magellanic Expedition (FIME), February-March 1991 from the station:

FIME 1, 23/02/91; 100 m depth, 52° 45,7´S; 74° 58,5´5W.

Photographs illustrating the taxonomic description were obtained at Universidad de Concepción Electronic Microscopy Laboratory following the standard techniques for coating and mounting bryozoan samples for SEM photography.

Type material is deposited in bryozoan collections at the Museo Zoológico de la Universidad de Concepción (UCCC). Chile.

SYSTEMATIC DESCRIPTION

Micropora finisterrae sp. n.

Pl. 1, figs. A-F

Diagnosis: Encrusting unilaminar, multiserial *Micropora* forming white sheets on solid substrates including large smittinid colonies. Zooids very well calcified, hexagonal, with elevated blunt wide borders encircling a slightly convex granulated cryptocyst irregularly pierced by pores centrally and proximally situated; with 8-10 lateral opesiules forming one circle, (occasionally duplicated in two circles); the second pair irregularly crescentic; oral aperture semicircular, wider than long with a nearly straight proximal rim, apparently lacking oral spines. Gymnocyst proximally developed, occasionally with one or two low irregularly round-triangular tubercles, Ovicell proportionally large *ca.* one third of the zoecial length, moderate bulging, smooth, with an irregular triangular fronto-proximal shield not always clearly marked. Avicularia seemingly wanting, transformed in an interzooidal kenozooid distal to an oral aperture or as an irregular proximal zooidal scar.

Ethymology: species name, from the latin words *finis* and *terra* meaning land´s end, alludes the southernmost part of the South American continent.

Types: Holotype UCCC 23143, western entrance to the Magellan strait, 100 m depth. Paratype UCCC 23144, western entrance to the Magellan strait, 100 m depth.

***Measurements in mm** (N = 20)	Min	Max	X	S
Zooecial length	0,450	0,650	0,530	0,059
Zooecial width	0,250	0,475	0,330	0,063
Oral aperture length	0.050	0.075	0,061	0.006
Oral aperture width	0,100	0,150	0,120	0,016
Ovicell length	0,175	0,250	0,213	0,024
Ovicell width	0,175	0,250	0,206	0,021

* all measurements from ovicellated zooids.

Remarks: The new species differs from all other Southamericans species of the genus *Micropora* in the large number of opesiular holes piercing the cryptocyst. It might be confused only with *Opaeophora lepida* from the eastern and western south Pacific, which has a similar number of opesiules, but this species shows instead large interzooidal avicularia having linguiform asymmetric mandibules. *M. finisterrae* sp. n. is akin to *M. variperforata* Waters from New Zealand South Island with which it shares: a) a similar number of opesiules and b) absence of oral spines; yet it differs from it in the well developed and common avicularia present in the former and apparently absent in the latter. *M. finisterrae* also resembles to *Micropora gracilis* (Uttley) in having many opesiules, but this species has instead many avicularia without a complete cross-bar.

The new species has the significance of a vicariant form linking both the eastern and western south Pacific and contributes to increase the large amount of marine animals that zoogeographically characterize the southern seas between Antarctica, South America and the New Zealand-Australian realm.

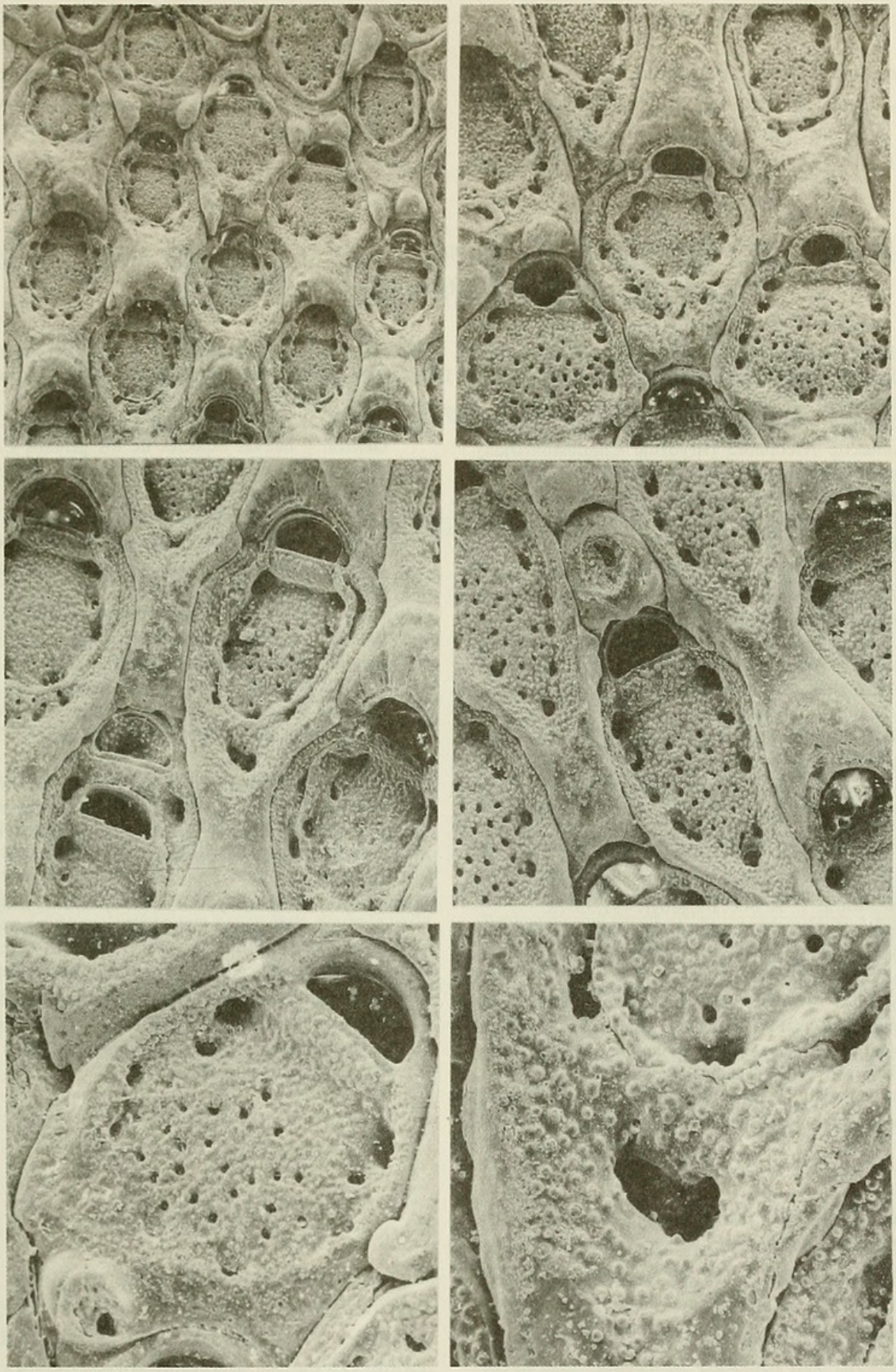

PLATE I. *Micropora finisterrae* n. sp.

Top left: General view of a colony showing reproductive and non reproductive zooids. Note the proximal knobs in some. x 48.
Top right: Ovicellated zooids with one or two sets of opesiules. x 72.
Middle left. Ovicellated zooids. The central-left zooid in the bottom, shows an apparently regenerated proximal zooid and a kenozooidal infilling of the primitive aperture. The central-left zooid in the top, has a long proximal gymnocyst x 96.
Middle right: Distal to the central inmature zooid there is a kenozooid in the place where normally an avicularium develops. x 96.
Bottom left: Inmature zooid showing the opesiular apparatus, the central pores piercing the crystocyst and a proximal irregular scar instead of an avicularium. x 180.
Bottom right: Detail of the proximal kenozooidal scar. x 360.

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