
SPONGES.

PART I.

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MONAXONIDA, *Ridley and Dendy.*

PART I.

(Plates xliii.-xliv.)

The collection obtained during the brief cruise of H.M.C.S. "Thetis" proved to be exceptionally rich in sponges; over one hundred and fifty species were procured, and approximately fully one half are either rare or new species.

The present paper deals with a little less than half of the *Monaxonida*, and includes nineteen new species, a number of others of great interest—hitherto only obtained by H.M.S. "Challenger"—and many other forms originally described by Dr. R. von Lendenfeld. The latter have been treated at some length, and have formed the basis of comparison between the types in the Australian Museum collection and the fragments received from Prof. A. Dendy, which were selected from the Lendenfeldian collection now in the British Museum. The material obtained enabled the writer to amend some of the descriptions and also the nomenclature of many of the exhibited specimens, as well as of those published in the "Catalogue of Sponges in the Australian Museum."

The new species herein described are as follows:—

- Gellius reptans.*
- Rhaphisia ramosa.*
- Chondropsis syringianus.*
- Esperella ancorina.*
- " *cylindrica.*
- " *textilis.*
- Esperiopsis canaliculata.*
- " *ferruginea.*
- Cladorhiza waiteri.*
- Phelloderma polypoides.*
- Desmacidon porifera.*
- " *hispidosa.*
- " *stelligera.*
- " *conulissima.*
- " ? *arenosa.*
- Dendoryx pumicea.*
- " *fusca.*
- Iotrochota arbuscula.*
- Yvesia commensalis.*

Of species previously described the following are the most worthy of note:—

Siphonochalina annulata, Ridley and Dendy.

Arenochalina mirabilis, Lendenfeld.

Ceraochalina levis, Lendenfeld (with its so-called algal pseudomorph).

Esperella murrayi, Ridley and Dendy.

Esperiopsis cylindrica, Ridley and Dendy.

Pseudohalichondria fibrosa, Whitelegge.

Amphilectus ceratosus, Ridley and Dendy.

Desmacidon fruticosa, Bowerbank.

Rhizochalina putridosa, Lamarek.

MONAXONIDA, *Ridley and Dendy.*

Order HALICHONDRINA, *Vosmaer.*

Family HAPLOSCLERIDÆ, *Topsent.*

Subfamily CHALININÆ, *Schmidt.*

CHALINA, *Grant.*

CHALINA MACROPORA, *Lendenfeld.*

Euchalina macropora, Lendenfeld, Zool. Jahrb., ii., 1887, p. 818.

Station 53.

A single example is here, somewhat doubtfully, referred to this species. A comparison with a fragment from the British Museum has been made, and it agrees with the "Thetis" specimen in external and general characters, but the spicules differ slightly in dimensions.

Sponge with numerous slender, erect, cylindrical branches; the latter are dichotomous at their origin, but when mature the lobes are unequal, their diameter varies from 5 to 10 mm., and they attain to a height of 220 mm. The surface is even, harsh to the touch, and exhibits a rather distinct reticulation, with abundant small pores and numerous shallow oscula; the latter are from 1 to 3 mm. in diameter, from 2 to 5 mm. apart.

The skeleton consists of an open network of fibre with the mesh mostly square, rarely oblong. The primary fibres are about 0.05 mm. in diameter and 0.2 to 0.3 mm. apart. The core of oxeote spicules is more or less plumosely arranged, with their basal ends approximated and their apices divergent; they vary