
THE
ALCYONARIANS OF THE "THETIS"
EXPEDITION.

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ALCYONARIA.

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(Plates lxi-lxxxii.)

The collection of Alcyonarians made by the "Thetis" includes thirty-five species, of which thirteen are new,—a large proportion. When the specimens are arranged in systematic order, it is seen at a glance that the collection has a very definite character, namely, the proportionately large number of Isidæ (e.g., six species of *Mopsea*, four new) and of Primnoidæ (e.g., five new species of *Plumarella*). These Isid and Primnoid colonies are extraordinarily beautiful, and their superficial resemblance to large fronds of Sertularians is striking. It is a matter for gratification that numerous specimens of some of the new species have been preserved, so that it was possible to make sure that one was not dealing with *individual* variations.

Another feature of the collection is the frequent occurrence of encrusting colonies of *Alcyonium* (*Erythropodium*) *membranaceum* and *A. reptans* described by Kükenthal, which grow over Gorgonid axes in a very misleading fashion. It is not too much to say that an unprejudiced observer, who had not seen the real state of affairs exposed in unmistakable cases, would describe these Gorgonid axes encrusted with *Erythropodium* as peculiar Axifera.

LIST OF SPECIES ¹.

Order I. STOLONIFERA, *Hickson*.

Family CORNULARIIDÆ.

Clavularia flava, *Hickson*.

Order II. ALCYONACEA, *Verrill* (pro. parte).

Family ALCYONIDÆ.

Alcyonium (*Erythropodium*) *membranaceum*, Kükenthal.

" " *reptans*, Kükenthal.

* " *etheridgei*, sp. nov.

¹ Those that are new are marked with an asterisk.

Family NEPHTHYIDÆ.

- Lithophytum flabellum* (Q.G.).
 **Dendronephthya waitei*, sp. nov.

Order III. PSEUDAXONIA, *G. von Koch*.

Family MELITODIDÆ

- Mopsella clavigera*, Ridley.
 " *textiformis* (Lamarck)
Psilacabaria gracillima, Ridley.
Parisis australis, Wright and Studer

Order IV. AXIFERA, *G. von Koch*.

Family ISIDÆ.

- Mopsea dichotoma* (Linné).
 " *encrinula* (Lamarck).
 * " *australis*, sp. nov.
 * " *flabellum*, sp. nov.
 * " *elegans*, sp. nov.
 * " *whiteleggei*, sp. nov.
Acanthoisis flabellum, Wright and Studer.

Family PRIMNOIDÆ.

- Stachyodes studeri*, Versluys (*S. regularis*, Wright and Studer).
 **Amphilaphis plumacea*, sp. nov.
 **Plumarella laevis*, sp. nov.
 * " *thetis*, sp. nov.
 * " *corruscans*, sp. nov.
 * " *filicoides*, sp. nov.
 * " *versluysi*, sp. nov.
Primnoella australasica, Gray.
 " *flagellum*, Studer.
 " *distans*, Studer.
 **Caligorgia laevis*, sp. nov.

Family GORGONIDÆ.

- Leptogorgia*, sp. (?)

Family GORGONELLIDÆ

- Ctenocella pectinata* (Pallas).

Order V. STELECHOTOKEA, *Bourne*.

Section ASI PHON ACEA.

Family TELESTIDÆ.

- Telesto trichostemma* (Dana).
 „ *arborea*, Wright and Studer.

Section PENNATULACEA.

Family KOPHOBELEMNONIDÆ.

- Kophobelemnion schmeltzii* (Kölliker), = *Sclerobelemnion schmeltzii*,
 Kölliker.

Family PTEROEIDIDÆ.

- Godeffroyia elegans*, Kölliker.
Sarcophyllum australe, Kölliker.

Of the thirty-five species in the collection, the following thirteen have been previously recorded from Australian seas:—

- Clavularia flava*, Hickson.
Mopsella clavigera, Ridley.
 „ *textiformis* (Lamarck).
Psilacabaria gracillima, Ridley.
Parisis australis, Wright and Studer.
Mopsea dichotoma (Linné).
 „ *encrinula* (Lamarck).
Acanthoisis flabellum, Wright and Studer.
Primnoella flagellum, Studer.
Primnoella australasiæ, Gray.
Ctenocella pectinata, Pallas.
Telesto trichostemma (Dana).
Sarcophyllum australe, Kölliker.

The most striking of the records of distribution are the following:—*Primnoella flagellum*, Studer, previously reported by Hickson from Australian seas, was originally found in the South Atlantic, off Patagonia; *Primnoella distans*, Studer, was previously found off the West Indies and Brazil; *Kophobelemnion schmeltzii* (Kölliker), was previously found off Formosa; *Godeffroyia elegans*, Kölliker, was previously recorded from the Gulf of Siam.