

Family VI. GORGONIDÆ, Verrill.

Gorgonidæ, Dana, *pro parte*, Zoophytes, p. 651.

Gorgoniaceæ, Milne-Edwards, *pro parte*, Hist. Nat. des Coralliaires, t. i. p. 144.

Gorgoniaceæ, Kölliker, *pro parte*, Icones Histiol., p. 139.

Gorgonidæ, Verrill, Trans. Connect. Acad., vol. i. p. 386 and footnote (reprint), 1869.

The group Gorgoniaceæ of Milne-Edwards included those Alcyonaria which possessed a solid axis, consisting of corneine and but very slightly effervescing on the application of a strong acid; in this differing from the forms of Gorgonellidæ; while they differed from the Primnoids and Muriccids in the nature of their spicules.

Kölliker separated the group into two divisions—the Euniceidæ and the Gorgoniaceæ.

Verrill, though as far as we know not characterising the group, has accepted Kölliker's division as equivalent to a family, in which sense it is taken here. He has well defined many of the genera belonging thereto.

Species of the following genera are to be found in the Challenger collection:—

Platycaulos, n. gen.

Callistephanus, n. gen.

Lophogorgia, Milne-Edwards.

Leptogorgia, Verrill.

Gorgonia, Auct.

Genus *Platycaulos*, n. gen.

Colony branched, the branches in one plane, anastomosing. The axis is horny, flattened; with a calcareous centre and calcareous particles interspersed amid the horny layer; the nutrient canals surrounding the central axis almost as in *Plexaura*. Polyps prominent, on the sides of the stem and branches; retractile within verrucæ. Cœnenchyma moderate, like shagreen. Spicules, straight and curved spiny spindles and stellate forms.

In their Memoire sur les Coralliaires des Antilles, Duchassaing and Michelotti established a new genus *Thesea* for the *Gorgonia exserta* of Ellis and Solander, placing this genus as "intermédiaire entre les genres *Muricea* and *Primnoa*." Afterwards in the Supplement to their work they state that they had confounded this species with another for which they had intended the genus *Thesea* (*Thesea guadalupensis*), and they make the genus *Swiftia* for the *Gorgonia exserta*, E. and S. Both these genera are placed in their division of the Primnoaceæ with scale-like spicules in the cœnenchyma.

The type specimens of *Swiftia exserta*, D. and M., not being at Turin it is not easy to say what form these authors referred to. The original description of Ellis and Solander¹ is as follows:—"Gorgonia teres sparse ramosa, ramulis alternis, osculis octovalvulis alternis, polypis octotentaculatis exsertis, carne squamulis albis vestita, osse subfuscocorneo." The specimen described was two feet in height, very loosely branched, with long slender

¹ Nat. Hist. of Zoophytes, p. 84.