

In general terms we may describe the Cornularidæ as a starting point from whence the higher orders of Alcyonaria have been differentiated.

The following genera have been hitherto distinguished :—

<i>Rhizoxenia</i> , Ehrbg.	<i>Gymnosarca</i> , Sav. Kent.
<i>Cornularia</i> , Lam.	<i>Telesto</i> , Lamx.
<i>Clavularia</i> , Quoy and Gaim.	<i>Pseudogorgia</i> , Köll.
<i>Sarcodictyon</i> , Forbes.	<i>Cælogorgia</i> , M.-Edw.
<i>Cyathopodium</i> , Verrill.	<i>Anthelia</i> , Sav.
<i>Scleranthelia</i> , Studer.	<i>Sympodium</i> , Ehrbg.
<i>Anthopodium</i> , Verrill.	<i>Erythropodium</i> , Köll.
<i>Cornulariella</i> , Verrill.	<i>Callipodium</i> , Verrill.

Many of the species of these genera are shallow-water forms, and the Challenger collection includes only representatives of *Clavularia*, *Telesto*, and *Sympodium*, of which several new species are described. We add to these a description of the hitherto very insufficiently known *Cælogorgia palmosa*, M.-Edw., of which we had fresh specimens from Madagascar.

#### Genus *Clavularia*, Quoy and Gaimard.

- Clavularia*, Quoy et Gaim. cf. Blainville, Dict. d. Sci. Nat., vol. lx. p. 499, 1820.  
 .. Milne-Edwards et J. Huime, Distrib. method. Polyp. foss. des terr. palæoz., p. 180.  
 .. Milne-Edwards, Hist. Nat. des Coralliaires, p. 106.  
 .. Studer, Alcyon. der "Gazelle," Monatsber. d. k. preuss. Akad. d. Wisa. Berlin, October 1878, p. 632.  
 non .. Duch. et Mich., Corall. des Antilles, nec Kölliker, Icon. Histiol., nec v. Koch, Morph. Jahrb., Bd. vii.

This genus was first established by Quoy and Gaimard for a Cornularid from the Pacific, and was briefly defined by Blainville (*loc. cit.*) as including *Cornularia*-like polyps in which the body-wall exhibited externally longitudinal ribs, and was encrusted with long navicular spicules. The polyps were said to be mutually united by stolons.

For the reception of species in which the polyps were seated on a basal membrane, Studer (*loc. cit.*) widened the generic diagnosis, and included within the genus those species in which the colony was crustaceous, the polyps having retractile tentacles, their outer walls being ribbed and furnished with spindle-shaped spiny spicules, the mutual connection being by stolons or by a basal membrane.

The polyp of *Clavularia* consists of a more or less elongated rigid calyx, and of a wide anterior portion which includes the tentacular and œsophageal regions, and which may be completely retracted within the calyx. The margins of the calyx close round the invaginated portion, forming an eight-rayed star. The wall of the calyx exhibits