

1. *Eunicea*, Lamouroux, Hist. des Polyp. flexibles, p. 431, 1816; Milne-Edwards, Hist. Nat. des Coralliaires, t. i. p. 146.

This genus is characterised by the polyps having prominent calyces, which usually have a projecting lip-like portion. The thick cœnenchyma has an outer cortical layer of foliaceous or spinose clubs, and an inner layer of spindles.

2. *Plexaura*, Lamouroux, Hist. des Polyp. flexibles, p. 424, 1816; Milne-Edwards, Hist. Nat. des Coralliaires, t. i. p. 152, 1857; Kölliker, *pro parte*, Icones histiologicæ, pt. ii. p. 138, 1865.

The genus has a horny axis, but the polyps have no projecting calyces. The cœnenchyma includes an outer cortical layer of club-shaped or spinose spicules, and an inner layer of spindles.

3. *Plexauroides*, n. gen.

The colony is branched, mostly in the one plane. The axis is horny, with a central calcareous portion. Cœnenchyma thin, outer layer of spicules foliaceous clubs, the folia of which project, forming a rough surface. There is an inner layer of irregular stellate forms. The polyps are numerous, fully retractile, the verrucæ are scarcely prominent, their edges are fringed with the projecting folia of the foliaceous clubs.

4. *Plexaurella*, Kölliker, Icones histiologicæ, pt. ii. p. 138.

This genus is distinguished from *Plexaura*, which it resembles in external habit, by the partially intercalified axis, and by the spicules. The latter consist of tri- and tetra-radiate forms, and of simple or foliaceous clubs. The spicules show a tendency to develop twin, triple or quadruple forms. The tentacles of the polyps contain spicules extending into the pinnae.

5. *Pseudoplexaura*, n. gen.

The colony is but feebly branched. The axis is horny, sometimes with calcareous particles interspersed. The cœnenchyma is thick, membranous, the outer layer is friable with colourless spiny spindles, the inner layer is thick with coloured stellate spicules. The polyps are numerous, arranged in a spiral manner. The polyps are completely retractile, without spicules in the tentacles.