

The axis is horny, feebly flexible, as in the former species, and of a yellow-brown colour. The colour of the stem, in spirit specimens, is whitish.

Habitat.—Kandavu Reef, Fiji.

Genus 10. *Echinogorgia*, Kölliker.

Echinogorgia, Kölliker, *Icones Histiologicæ*, vol. i. p. 136, 1856.

Professor Kölliker separated this genus from *Muricea*, and characterised it as consisting of "Primnoids with a horny axis, with small spiny spicules of a peculiar form; and polyps scarcely at all prominent." Kölliker places in this genus Esper's *Gorgonia sassapo*, *Gorgonia umbratica*, *Gorgonia purpuracea*, and *Gorgonia cerea*. *Gorgonia sassapo*, var. *reticulata*, Esper, is also included under the new name of *Echinogorgia pseudosassapo*, Köll.

Verrill, in his Notes on Radiata,¹ adds also to these species *Leptogorgia aurantiaca*, Milne-Edwards, from Callao. A new species, *Echinogorgia intermedia*, Studer, is described by Studer in the Alcyonaria of the voyage of the "Gazelle."² Lastly, Ridley thinks³ that *Antipathes flabellum*, Esp., = *Gorgonia cancellata*, Dana, should be placed in the genus, an opinion in which we concur.

All the above-enumerated eight species, with the exception of *Echinogorgia aurantiaca*, have been examined by us; all present upright colonies, for the most part branched in one plane. The branches are either free or anastomosing into a network. The axis is horny, sometimes flattened. The cœnenchyma is thick, not transparent. The polyps are small, but slightly prominent, papilliform, and usually in close spirals surrounding the stem. The operculum is, for the most part, feebly developed, and is sunk within the margin of the polyp calyx, over which it does not project. It is formed by two or three spicules at the base of each of the tentacles. The spicules of the cœnenchyma and of the polyps are very numerous. Kölliker describes them as unilateral spiny spindles, one-sided spiny clubs, echinulate discs, warty spindles, and double stars. Besides, there are also peculiarly formed "Blattkeulen," whose dentate folia project beyond the cœnenchyma, and give it a roughened prickly appearance. In the different species, sometimes one and sometimes another form of these spicules will be found to predominate. In those with a well-developed cœnenchyma, where the polyps are somewhat apart from one another, the one-sided spiny spindles predominate; while in others, with closely packed polyps, the "Blattkeulen" or the spiny discs are present. The axis is always horny and frequently compressed. All the species at present known belong to the Indo-Pacific Seas.

Two species were in the Challenger collection.

¹ *Trans. Connect. Acad.*, vol. i. pt. ii. p. 418.

² *Monatsber. d. k. preuss. Akad. d. Wiss. Berlin*, October 1878, p. 651.

³ *Zool. Coll. H.M.S. "Alert,"* p. 337.