

of a slender form of *Paramuricea*. This has also caused later investigators to include *Villogorgia nigrescens* amongst the Muriceidæ.

Ridley gives the name *Villogorgia* the priority over *Paramuricea*, and takes *Villogorgia nigrescens* as the type of the species of *Paramuricea* as definitely characterised by Kölliker.

An examination of the type specimen of the species described by Duchassaing and Michelotti establishes beyond a doubt that it is a true Muriceid. The branches, which are borne on a horny axis of a dark-brown colour, have the polyps cylindrical in shape, placed perpendicularly thereon; the polyp calyx, when retracted, is sunk down below the basal portions of the tentacles, which then form a low conical operculum. The cœnenchyma is thin, and armed with spicules, which are not closely crowded together, but are separated from one another by naked portions of the cœnenchyma.

The polyp calyx on the other hand appears thickly filled with spicules. The spicules of the cœnenchyma are four-, six-, or eight-rayed stars; in the polyp bodies there are for the most part tripartite spicules which are placed closely together, and the points of which interlock. The tentacular portion, which is very deeply drawn in, has at its base a colleret consisting of curved spiny spindles, placed as a ring upon which the tentacular operculum rests. This operculum is so formed that the portion of the tentacles which is not infolded is furnished with a series of two curved spicules, converging upwards; a third spicule is placed at the basal portion of the operculum, between the fork thus formed. The structure, it will be seen, differs in many important details from the diagnosis of the genus as given by Duchassaing and Michelotti; still the species cannot be placed in the genus *Paramuricea* of Kölliker, although no doubt there is a near relationship. The chief differences lie in the form of the spicules of the cœnenchyma, and especially in the structure of the tentacular operculum. In *Paramuricea* a larger portion of the basal portions of the tentacles form the opercular covering, and this is covered with whole rows of spicules placed *en chevron*. As nearly related forms there may be reckoned, as Ridley has rightly done, *Brandella intricata*, Gray; *Paramuricea gracilis*, Studer; *Villogorgia mauritiensis*, Ridley; and perhaps *Boarella flabellata*, Gray. Emended, the diagnosis of the genus may stand as follows:—

A Muriceid with a horny axis and a thin cœnenchyma; the polyps are cylindrical in shape, and placed perpendicularly on the stem. The tentacular operculum is shallow and conical; the spicules of the cœnenchyma are partly four- to eight-rayed stars, occasionally mixed with spindles. The polyp spicules are "Stachelplatten" and tripartite spindles. The basal portions of the tentacles which form the opercular covering contain a series of two spicules, converging to the apex, between which there is an odd intermediate spicule. There is always a ring-shaped colleret of spicules below the tentacles.