

On the outer part of the ray the spinelets on the centre of the tabulum become longer and more spiniform.

The infero-marginal plates are confined entirely to the actinal surface of the ray, and have a well-defined median keel. Each plate bears only one true spine, the lateral, placed at the outer extremity of the plate; it is short, thin, compressed and lancet-formed, the longest measuring about 1.5 mm. On the ridge are normally five equal-sized squamiform spinelets, about one-third the length of the lateral spine, compressed, tapering, sometimes pointed, but often obtusely rounded at the tip. These have the same direction in relation to the plate as the lateral spine, and consequently pass slightly over the aboral margin of the plate. A second series of smaller spinelets stands on the inner side of the series just described, and is usually directed along the median line of the plate; but this series is subject to much irregularity in the size, posture, and number of the spines, having sometimes one or more spinelets as large as the aboral series, sometimes directed towards one margin and sometimes towards the other. The margins of the keel are fringed with delicate cilia-like spinelets, those on the inner part of the plate having a thick and saccular investment, which gives them a robust papilliform appearance in comparison to the others.

The adambulacral plates carry an armature arranged in the following manner:—(1.) A single furrow spine, curved scimitar-like, delicate, compressed, obtuse at the tip. (2.) Immediately behind the furrow spine, a single spine slightly longer, more robust, slightly compressed or triangular, tapering, pointed, and slightly geniculate, the curvature being much less than that of the inner spine. (3.) Behind the foregoing stand either two straight spines side by side, or a spine and a pedicellaria of equal length and in the same relative positions. These are rather shorter than the second single spine above noticed; the spine is moderately robust, tapering, and pointed; and the pedicellaria has long delicate jaws, equal in length to the accompanying spinelet. The pedicellaria is usually on the adoral side, but not invariably. On a few of the plates on the inner part of the ray a second pair of spines may be present, but usually the outer part of the plate bears only two or three ciliary spinelets rather thickly invested.

The mouth-plates are prominent and extend far upward into the actinostome; each plate usually (in one example always) bears a single very large pedicellaria at its innermost point. The marginal and actinal or superficial spines are subequal in size; the former somewhat irregular in position, the latter in a series parallel to the median suture. The mouth-armature is difficult to formulate in the type specimen without preparation.

The actinal interradial areas are very small, and include only a pair of small intermediate plates, each of which bears one large pedicellaria, but shorter than those on the adambulacral plates and with more obtuse jaws. At the base of the pedicellaria are a few minute cilia-like spinelets. A small intermediate plate separates the infero-marginal plate from the adambulacral plate throughout the ray. A few of these plates on the inner-