

Rays elongate and tapering. Disk very small. Interbrachial arcs acute.

The paxillæ of the abactinal area are large, and form a compact surface. Each consists of four or five short granuliform spinelets in the centre of the tabulum, surrounded by a circle of a dozen or more short, delicate, obtuse spinelets, the central four having a rather isolated appearance within the circle. A large conical prominence is present in the centre of the disk.

The supero-marginal plates, which are forty-three in number from the median inter-radial line to the extremity, are rather higher than broad. Each plate bears on the outer abactinal margin; (or rounded angle that falls in the marginal contour) a single, small, delicate, conical and sharply pointed spine. The series of spines is continuous throughout the ray; and the two innermost spinelets are rather more robust than the others.

The infero-marginal plates are broader than high, and do not extend beyond the superior series. Each bears three lateral spines close together in transverse series; the outermost, or lateral spine proper, is long, delicate, cylindrical, tapering to a sharp point and slightly bent; the second, which stands immediately behind, is about two-thirds the length and precisely similar; the third spine is very small, not more than one-third the length of the preceding, and is hardly worthy of being ranked as a lateral spine. Sometimes a small spinelet, similar to the last-mentioned, stands by the side of the second lateral spine. No other spinelets are present on the infero-marginal plates, excepting a single isolated spinelet in the median line and near the inner end of the plate adjacent to the adambulacral plates. This spinelet is cylindrical, tapering, sharply pointed, and somewhat longer and more robust than the third lateral spine; its presence and isolation give a very characteristic appearance. The surface of the infero-marginal plates is covered with small and not very closely crowded papilliform squamules, which increase slightly in length and robustness at the inner end of the plate near the adambulacral plates.

The spines of the adambulacral armature are not very large or prominent. Those of the inner or furrow series are three in number, delicate, cylindrical and tapering; and the middle spine is slightly more prominent in the furrow than its companions. The outer spinelets on the actinal surface of the plate are difficult to formulate in consequence of the irregularity in their mode of arrangement. Normally a second and an outer series are present, having about three spinelets in each; but these are often placed in such a way as to appear to give two to the second series, and four, arranged diamond-wise, to the outer series; frequently also one or two small additional spinelets may be present, usually in the latter series, which then forms a group. The spines of the second series, which are shorter than those of the inner series, are slightly compressed and faintly subspatulate. The outer spinelets are shorter than the preceding ones, and are not flattened; their length near the middle of the ray is very slightly in excess of the length of the papilliform squamules of the adjacent infero-marginal plate.

Very few actinal intermediate plates are present, and these bear spinelets similar to