

Rays very elongate, narrow and depressed, tapering slowly from the base to the extremity; the outer part being very attenuate. Disk very small, abactinal surface more or less inflated, and with a well-defined tumidity at the base of the rays. Along the rays the abactinal surface is almost plane, being only very faintly convex along the median line. Lateral walls low, causing the rays to have a thin, flat appearance. Actinal surface of the disk prominent at the mouth-angles, and sloping thence to the margin. Interbranchial arcs wide and well-rounded.

The abactinal surface of the disk and rays is covered with a plating of small uniform spicules, overlaid with a membranous tissue. The spicules bear centrally one to four minute papilliform granules, scarcely worthy of being designated spinelets, but which are cylindrical and either truncate, denticulate, or subconical at the tip, with the membrane mounting their bases and more or less completely investing them. Those on the disk are scarcely larger than those on the rays. On the disk are ten short, cylindrical, tapering spinelets, about 3.5-4 mm. in length, regularly placed, their position probably marking the primary radial and basal plates. No other definite spines are present on the paxillar area. Upon the abactinal surface of the rays are a number of small pedicellarian apparatus, irregularly placed and consisting of two opposed series of three or four small spinelets, slightly longer than those on the spicules, the two series closing together against one another.

The supero-marginal plates, fifty-four or fifty-five in number from the median inter-radial line to the extremity, are elongate and confined entirely to the lateral wall of the ray. When viewed from the side their posture appears more or less oblique in consequence of the form of the infero-marginal plates. The length is greater than the height, and the upper margin of the plate, which alone forms the boundary of the abactinal surface, is slightly arched. Each plate bears centrally a well-developed tubercle upon which is articulated a tolerably robust, tapering, and pointed spine, the fourth or fifth from the interradial line measuring about 5 mm. in length. The surface of the plate is covered with membrane and there are usually four or five small, microscopic thornlets on the area intervening between the spine and the adoral margin of the plate, and occasionally one close to the base of the spine on the aboral side.

In the median interradial line there is one large high odd supero-marginal plate, which bears an elongate, cylindrical, tapering spine directed vertically, and larger than any of the other spines.

The infero-marginal plates correspond to the superior series, each being placed nearly exactly beneath its respective companion. They are elongate, but are higher than the supero-marginal plates and have a more or less subtriangular form when viewed from the side, the abactinal margin being angularly arched. Each bears a prominent tubercle, upon which is articulated an elongate, straight, cylindrical, tapering lateral spine, the fourth or fifth measuring about 6.5 mm. in length; the length diminishing slightly as they proceed along the ray. A second similar, but smaller and more delicate, spine, not more