

although there is no great disparity in the length of any of them excepting the first, which is very small. Two or three irregular rows, with the spinelets in each shorter than those in the preceding row, stand behind the lateral series, and form a gradual transition into the spiniform squamation of the plate. Consequent on this arrangement the lateral spines have a short, compact, and almost tufted appearance, whilst the series forms a thick and closely crowded fringe along the ray. The squamules of the infero-marginal plates are rather long, flat, and rounded, or obtusely pointed at the extremity, and although numerous they are not very closely placed. Three or four more prominent squamules, simulating spinelets, form a line along the aboral margin of the plate, and occasionally similar ones may be found here and there on other parts of the plate.

Not more than six or eight actinal intermediate plates are present, and they carry very small, short, and equal-sized papilliform spinelets, which appear to form a kind of pedicellaria.

The armature of the adambulacral plates consists of short spines, which are arranged in two series. The inner series consists of three spines, which are short, cylindrical, slightly taper and obtuse, the middle one being more robust, compressed laterally, geniculate and prominent in the furrow. The outer series near the middle of the ray has three spines which are equal to, or rather longer than, the inner series, but more robust, slightly compressed, and obtusely rounded at the tips; these run obliquely across the plate, the adoral spinelet often being in the position of a third series. On the inner portion of the ray one or two supplementary spinelets may be present, external to the oblique line of three spines above mentioned.

The mouth-plates are elongate, and form a long, prominent, narrow keel along the line of suture. Upon the keel there is a single line of spinelets on each plate, which are rather long, robust, compressed, and subpapilliform; these are seven to nine in number, and they diminish in size aborally. On the outer free margin of the plate there are about eight spinelets—the innermost three, which with the corresponding spinelets of the companion mouth-plate form the comb of spines projecting horizontally over the mouth, are longer than the rest, and are slightly curved inward at their extremities in the direction of the horizontal plane of the mouth-area. The remaining spinelets are much smaller and equal-sized, and the series does not reach beyond a line drawn at right angles through the middle of the median suture-line.

The armature of the first adambulacral plate beyond the mouth-plates consists of fifteen or more pairs of small, equal, papilliform spinelets, ranged in two parallel lines, and apposed to one another, which form a remarkably elegant organ, probably of pedicellarian functions. On the outer portion of the second adambulacral plate there is a partial repetition of this arrangement.

The madreporiform body is small, but tubercular, and is situated nearer the margin than midway to the centre.