

Actinocyclus pruinus, n. sp. (Plate IV. fig. 2.)

Valvis ad marginem dense deinde rarius punctulatis; centrum area hyalina nonnullis punctulis medio signata, a qua plurimæ punctulorum lineæ circum distribuuntur. Diametrum 100 μ . In mari Pacifico.

This very elegant form does not entirely satisfy the generic definition given by Ehrenberg. Thus, although a beautiful round hyaline pseudo-nodule occurs near the circumference, the disc, which is divided into thirty-five distinct segments by salient punctated radii, is but sparsely granulated, while, with the exception of a single fasciculus, the granules are densely disposed near the circumference and around the centre, but become more rare over a moderately wide subcentral or submedian area. The centre consists of an irregular smooth area, in the middle of which a small group of points occurs. The diameter of the valve, which was collected in the Pacific Ocean, is 100 μ .

Actinocyclus fasciculatus, n. sp. (Plate IV. fig. 8.)

Valvis cellulosus per lineas cellularum radiantes divisus; segmenta cellulis fasciculatim dispositis, ad marginem in punctis decussatim distributis transeuntibus, areola umbilicali tribus cellulis medio signatis; pseudonodulum submarginale evidens. Fossilis ad Richmond in Virginia.

The cellulated surface of this form is divided into segments by numerous radiating moniliform lines of equal size and originating from a small central area, the middle of which is occupied by three small cellules. The segments are ornamented by fasciculately disposed cellules of uniform size except in an outer zone, where the margin is provided with very minute granules arranged in a decussate manner. The submarginal pseudo-nodule is well seen. The frustule was found in a fossilised condition at Richmond, Virginia.

The specific name has reference to the fasciculate appearance of the sculpturing of the component segments of the valve.

From the consideration of this and the foregoing species it is manifest that the discoidal granulated form of the valve, combined with the presence of an intramarginal pseudo-nodule, can alone be regarded as absolutely distinctive of the present genus, the character of the granulation varying considerably between divergent extremes.

Actinocyclus fasciculatus, n. sp., var. nov. (Plate IV. fig. 8 bis.)

A frustule very similar to that last described is here shown. It differs, however, in its smaller size, and in its locality, having been collected in the Atlantic at lat. 37° 24' N. and long. 25° 13' W.