

The genus *Actinelius* comprises the most simple and primitive forms among all ACANTHARIA, and may be regarded as the common ancestral stock of this whole legion. The spherical central capsule is pierced by numerous simple radial spines of equal size, the pyramidal bases of which are supported one upon another with their triangular faces in the centre of the capsule. The number and position of the spines are quite indefinite and variable. We may derive *Actinelius* either from *Actissa* (Colloidea) by development of acanthinic radial spines, or directly from *Actinosphaerium* (Heliozoa) by formation of a central capsule.

Subgenus 1. *Actinelarium*, Haeckel.

Definition.—Radial spines cylindrical, conical, or spindle-shaped, their transverse section circular.

1. *Actinelius primordialis*, n. sp. (Pl. 129, fig. 1).

Spines sixty to eighty or more, cylindrical, at the distal end thickened, spindle-shaped. Apex simple. Base a small slender pyramid. Central capsule yellow. Granules of the sarcode colourless.

Dimensions.—Length of the spines 0·3 to 0·4, breadth in the distal part 0·02, in the basal part 0·008.

Habitat.—Central Pacific, Stations 265 to 274, surface.

2. *Actinelius purpureus*, Haeckel.

Actinelius purpureus, Haeckel, 1865, Zeitschr. f. wiss. Zool., Bd. xv. p. 364, Taf. xxvi. fig. 4.

Spines thirty to forty or more, cylindrical, very thin, a little thinner towards both ends. Apex simple. Base a small sulcate pyramid. Central capsule opaque, purple. Granules of the sarcode also purple.

Dimensions.—Length of the spines 0·2 to 0·3, breadth 0·002.

Habitat.—Mediterranean (Nice), Haeckel.

Subgenus 2. *Actinelidium*, Haeckel.

Definition.—Radial spines compressed, two-edged; their transverse section elliptical or lanceolate.

3. *Actinelius protogenes*, n. sp.

Spines fifty to sixty, compressed, two-edged, gradually broadened towards the truncated distal end. Basal or proximal end thin, pyramidal. The spines of this species are similar to those of