

1. *Doracantha dorataspis*, n. sp.

Spines compressed, two-edged, tapering from the broader middle towards the two ends. Apex simple. Base pyramidal, without leaf-cross. From the middle part of each spine arise two opposite forked apophyses; the neighbouring fork-branches are recurved and united in the tangential plane; so that each spine bears a plate or shield with two elliptical pores; the margin of the roundish plate bears a variable number of short teeth.

Dimensions.—Length of the spines 0·2, breadth 0·02.

Habitat.—Central Pacific, Station 271, surface.

Genus 329. *Astrolonche*,¹ Haeckel, 1881, Prodrömus, p. 465.

Definition.—*Astrolonchida* with numerous simple apophyses (four to eight or more on each radial spine), which are arranged in two opposite longitudinal rows (rarely in six such rows, opposite in three parallel planes).

The genus *Astrolonche* differs from the preceding Phractacanthida in the multiplication of the simple apophyses. Commonly these are opposite in pairs in two longitudinal rows (on the two edges of the compressed spine, at least two on each side). But sometimes (in the subgenus *Astrolonchidium*) there are six instead of two longitudinal rows of teeth, and these are placed in three parallel planes.

Subgenus 1. *Astroloncharium*, Haeckel.

Definition.—Each spine with two longitudinal rows of apophyses, opposite in one meridian plane.

1. *Astrolonche bicrucjata*, n. sp.

Spines compressed, two-edged, almost of equal breadth throughout their whole length, with simple apex and small leaf-cross at the base. From the two edges of the middle part of each spine arise two pairs of opposite apophyses, which are compressed and a little curved (convex on the distal, concave on the proximal margin). All four apophyses are of the same size and form; the radial distance of each pair much smaller than their common distance from the centre.

Dimensions.—Length of the spines 0·25, breadth 0·02.

Habitat.—Central Pacific, Station 270, surface.

2. *Astrolonche mucronata*, Haeckel.

Acanthometra mucronata, J. Müller, 1858, Abhandl. d. k. Akad. d. Wiss. Berlin, p. 49, Taf. x. fig. 9.

Aspidomma mucronatum, Haeckel, 1862, Monogr. d. Radiol., p. 424.

Spines conical, little compressed, with simple apex and small leaf-cross at the base. From the basal half of each spine arise two pairs of opposite apophyses, which exhibit a very different form.

¹ *Astrolonche* = Star-spear; ἀστρόν, λ' ὄχνη.