

Genus 324. *Zygacantha*,¹ J. Müller, 1858, Abhandl. d. k. Akad. d. Wiss. Berlin, p. 51.

Definition.—Astrolonchida with simple, compressed, and two-edged radial spines, without apophyses; their transverse section is elliptical or rhomboidal.

The genus *Zygacantha* comprised in the original definition of J. Müller only a single species, *Zygacantha furcata*, distinguished from the other *Acanthometra* by forked spines with two long parallel teeth. It seems now advisable to unite in this genus all those Astrolonchida in which the simple spines are two-edged, compressed, or leaf-shaped. The term *Zygacantha* may be conceived as the general expression of the important fact, that in all Icosacantha the twenty spines are opposite in pairs.

Subgenus 1. *Zygacantharium*, Haeckel.

Definition.—Spines at the central base without leaf-cross and without hollow pyramidal compartments, united by the opposed triangular faces of their pyramidal bases, resting one upon another.

1. *Zygacantha lanceolata*, Haeckel.

Acanthometra lanceolata, J. Müller, 1858, Abhandl. d. k. Akad. d. Wiss. Berlin, p. 48, Taf. xi. fig. 12.

Acanthometra lanceolata, Haeckel, 1862, Monogr. d. Radiol., p. 380.

Spines lanceolate, from the broader middle part equally thinned towards the two ends. Apex simple. Base pyramidal, without leaf-cross. Each flat lamellar spine exhibits an elevated middle rib (like a lanceolate leaf), and is therefore compressed quadrangular.

Dimensions.—Length of the spines 0·1 to 0·15, greatest breadth (in the width) 0·03 to 0·04.

Habitat.—Mediterranean (Saint Tropez, French shore), J. Müller; North Atlantic (Canary Islands), Haeckel, surface.

2. *Zygacantha costata*, n. sp.

Spines compressed, two-edged, linear, of nearly equal breadth in their whole length. Apex truncate. Base pyramidal, without leaf-cross. Each flat lamellar spine exhibits an elevated middle rib, which in the distal half is cleft into two divergent rods ending in the corners of the truncated apex. (Similar to *Zygacantha dicopa*, but with broader free spines, which are not grown together in the centre.)

Dimensions.—Length of the spines 0·1 to 0·15, breadth 0·02.

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

¹ *Zygacantha* = Spines opposite in pairs; ζυγά, ἀκάνθα.