

The genus *Staurotholonium* differs from the nearly allied *Staurotholus* (its probable ancestral form) only in the duplication of the cortical shell. The outer shell commonly repeats the cross-form of the inner, with four corresponding cupolas; but sometimes the four cupolas of the outer shell alternate in size and form with those of the inner, or the outer shell forms a simple lenticular envelope around the inner. From the similar *Tholoma*, *Staurotholonium* differs in the possession of a medullary shell in the central chamber.

Subgenus 1. *Staurotholodes*, Haeckel.

*Definition.*—Surface of the outer cortical shell smooth or rough, without radial spines.

1. *Staurotholonium biquadratum*, n. sp.

Outer cortical shell smooth, of the same regular crucial form as the inner, equidistant from it everywhere. Form and structure of both cortical shells nearly the same, but the outer about twice as large as the inner; both connected only by eight diagonal beams. All four cupolas of each cortical shell regular, of the same size. Pores regular, circular, twice as broad as the bars; six to eight in the basal semicircle of each cupola. Medullary shell square. (Similar to *Staurotholus quadratus*, but differs by the double cortical shell.)

*Dimensions.*—Diameter of the outer cortical shell 0.16, of the inner 0.08, of the medullary shell 0.04; pores of the inner cortical shell 0.006, bars 0.003.

*Habitat.*—South Pacific, Station 295, depth 1500 fathoms.

2. *Staurotholonium bicruciatum*, n. sp.

Outer cortical shell rough, twice as large as the inner, of the same form and structure, at an equal distance from it. In both shells the principal cupolas are larger than the lateral. Pores irregular, roundish, in the outer shell four times, in the inner twice as large as the bars; eight to ten in the basal semicircle of one cupola. (Similar to *Staurotholus cruciatus*, but differs mainly in the double cortical shell.) Medullary shell lentelliptical.

*Dimensions.*—Major (longitudinal) axis of the outer cortical shell 0.16, of the inner 0.08; minor (transverse) axis of the former 0.14, of the latter 0.07; medullary shell 0.03 to 0.04.

*Habitat.*—Pacific, central area, Station 267, depth 2700 fathoms.

3. *Staurotholonium alternatum*, n. sp.

Outer cortical shell smooth, very different from the inner; in the outer the two principal cupolas are larger than the two lateral; in the inner inversely smaller. Pores subregular, circular, in the outer shell four times, in the inner shell twice as broad as the bars; ten to twelve pores in the basal semicircle of one cupola.