

Subgenus 1. *Sphærozonactis*, Haeckel.

*Definition*.—Spicula radiate, not geminate, consisting of three, four, or more needles or shanks, radiating in different directions from one common central point.

1. *Sphærozoum triactinium*, n. sp.

Spicula all (or nearly all) triradiate, composed of three (or sometimes in few spicula four) needle-like shanks, diverging from one common point. Shanks straight or somewhat curved, smooth, pointed. Central capsules spherical, with one central oil-vesicle. This species may be regarded as the social form of *Thalassoxanthium triactinium*.

*Dimensions*.—Diameter of the central capsules 0·1 to 0·12, length of the spicula-shanks 0·05 to 0·1.

*Habitat*.—South Pacific, Station 295, surface.

2. *Sphærozoum medusinum*, n. sp.

Spicula all (or nearly all) quadriradiate, composed of four (or sometimes in few spicula three) needle-like shanks (mostly of unequal length), diverging from one common point. Shanks slightly curved, pointed, thorny, covered with small spinules. Central capsules ellipsoidal, containing several (four to eight) oil-vesicles. This species may be regarded as the social form of the solitary *Thalassoxanthium medusinum* (Pl. 2, fig. 5).

*Dimensions*.—Diameter of the central capsules 0·15 to 0·18, length of the spicula-shanks 0·08 to 0·12.

*Habitat*.—North Pacific, Station 236, surface.

3. *Sphærozoum hamatum*, n. sp.

Spicula all (or nearly all) quadriradiate, composed of four (or sometimes in few spicula three) needle-like shanks, mostly of very different size, diverging from one common point. Shanks strong, straight, curved, or hook-like; thorny, covered with small spinules on the distal extremity. Central capsules ellipsoidal, large, containing many (ten to twenty) oil-globules. This large species is distinguished by the very irregular form and size of the spicula.

*Dimensions*.—Diameter of the central capsules 0·2 to 0·25, length of the spicula-shanks 0·12 to 0·18.

*Habitat*.—Central Pacific, Station 265, surface.

4. *Sphærozoum hexactinium*, n. sp.

Spicula all (or nearly all) hexaradiate, composed of six (or sometimes in few spicula five or seven) needle-like shanks, mostly of equal size, diverging from one common point in two opposite hemispheres (three needles upwards, three needles downwards). Shanks somewhat curved, pointed,