

8. *Thalassoxanthium ovodimare*, n. sp.

Spicula all geminate, composed of a simple, very short axial rod and three diverging shanks or branches on each end of it; the shanks are very thin, straight, or little curved, and eight to ten times as long as the axial rod. The spicula are quite smooth, as in the similar *Sphærozoum ovodimare* (in which, however, the axial rod is much longer). Central capsule transparent, without oil-globules, twice as broad as the nucleus.

Dimensions.—Diameter of the capsule 0·4, of the nucleus 0·2, length of the spicula 0·1 to 0·2.

Habitat.—Central Pacific, Station 273, surface.

9. *Thalassoxanthium punctatum*, n. sp.

Spicula all geminate-triradiate, composed of a simple middle rod and of three diverging shanks on each end of it; the shanks are thorny with small spinules and shorter than the axial rod, very similar to the common *Sphærozoum punctatum*. Central capsule dark, with numerous (twenty to thirty) oil-globules on the inside of the membrane, three times as broad as the nucleus.

Dimensions.—Diameter of the capsule 0·3, of the nucleus 0·1, length of the spicula 0·05 to 0·2.

Habitat.—Central Pacific, Station 274, surface.

10. *Thalassoxanthium octoceras*, n. sp. (Pl. 2, fig. 6).

Spicula all geminate-quadriradiate, composed of a simple short middle rod and of four diverging shanks on each end of it; the shanks are quite smooth, irregularly curved or bent, and four to eight times as long as the middle rod. Central capsule dark, filled with pigment-granules, without oil-globules, four times as large as the nucleus.

Dimensions.—Diameter of the capsule 0·5, of the nucleus 0·12, length of the spicula 0·2 to 0·4.

Habitat.—Indian Ocean, Madagascar, Rabbe.

Genus 9. *Physematium*,¹ Meyen, 1834, Nova Acta Acad. Nat. Curios.,
vol. xvi., Suppl., p. 286 (p. 162).

Definition.—Thalassosphærida with large numerous alveoles within the central capsule (not in the calymma), and with numerous simple, needle-shaped spicula in the calymma.

The genus *Physematium* is, together with the colony-forming *Sphærozoum*, the first Radiolarian which was observed in the living state, described in 1834 by Meyen. It is most nearly allied to *Thalassolampe*, and has the same large roundish alveoles within the central capsule, which reaches therefore an extraordinary size, 5 to 10 mm. It

¹ *Physematium* = Small vesicle; Φυσημάτιον.