

1. *Thalassoxanthium triactinium*, n. sp.

Spicula all (or nearly all) triradiate, composed of three (or sometimes in a few spicula four) needle-like shanks of equal length, diverging from one common point. Shanks straight or somewhat curved, smooth, pointed. Central capsule pellucid, twice as broad as its dark nucleus, without larger oil-globules. Jelly-envelope very thin, with numerous xanthellæ.

*Dimensions*.—Diameter of the central capsule 0·1, of its nucleus 0·05, length of the spicule-shanks 0·6 to 0·8.

*Habitat*.—Central Pacific, Station 266, surface.

2. *Thalassoxanthium triradiatum*, n. sp.

Spicula all (or nearly all) triradiate, composed of three (or sometimes in a few spicula four) needle-like shanks of different length, diverging from one common point. Shanks curved or bent, covered with small conical thorns. Central capsule dark, three times as large as the nucleus, with numerous large oil-globules. Jelly-envelope thick, without xanthellæ.

*Dimensions*.—Diameter of the capsule 0·2, of the nucleus 0·07, length of the spicule-shanks 0·1 to 0·15.

*Habitat*.—South Pacific, Station 302, surface.

3. *Thalassoxanthium medusinum*, n. sp. (Pl. 2, fig. 5).

Spicula all (or nearly all) quadriradiate, irregular, composed of four (or sometimes in a few spicula three) needle-like shanks (mostly of unequal length), diverging from one common point. Shanks curved, pointed, thorny, covered with small spinules. Central capsule dusky, twice to three times as large as its dark central nucleus. On the inside of the membrane numerous large oil-globules. Jelly-envelope thin, with numerous xanthellæ.

*Dimensions*.—Diameter of the central capsule 0·45 to 0·5, of its nucleus 0·18 to 0·2.

*Habitat*.—North Pacific, Station 244, surface.

4. *Thalassoxanthium hexactinium*, n. sp.

Spicula all (or nearly all) hexaradiate, composed of six (or sometimes in a few spicula three) needle-like shanks, diverging in two opposite hemispheres (three needles upwards, three needles downwards). Shanks somewhat curved, pointed, smooth. Central capsule yellowish-brown, dark, four times as broad as its dark central nucleus. Jelly-envelope thick (about twice as broad as the capsule), with very numerous xanthellæ.

*Dimensions*.—Diameter of the central capsule 0·3 to 0·4, of its nucleus 0·1 to 0·12.

*Habitat*.—South Atlantic, Station 325, surface.