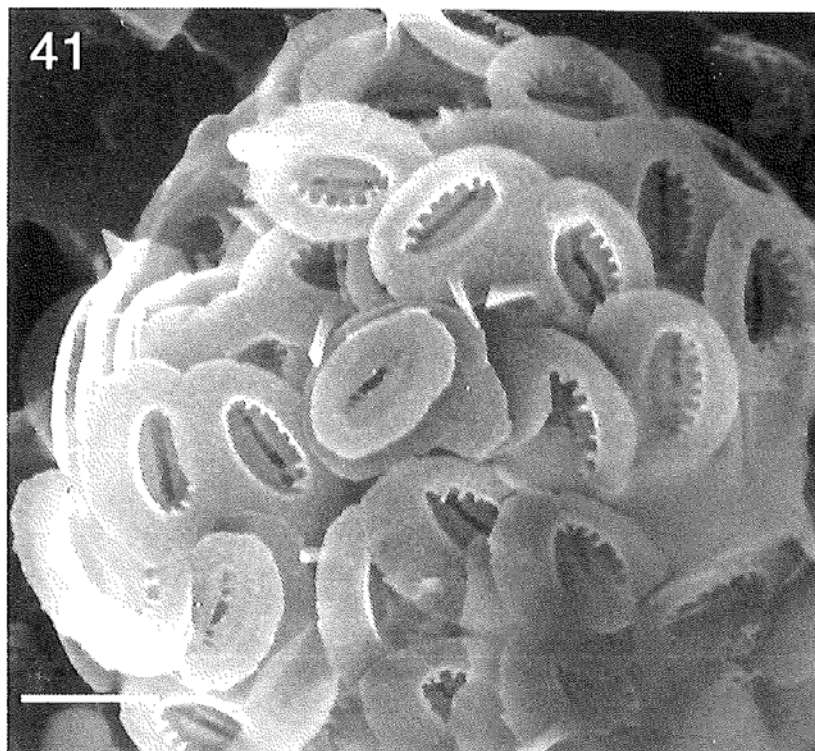
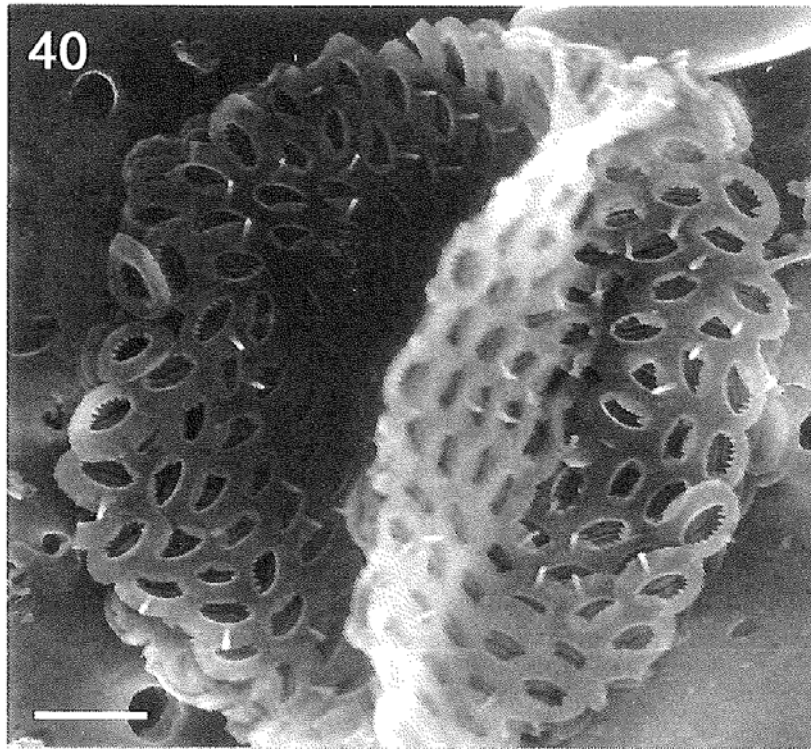
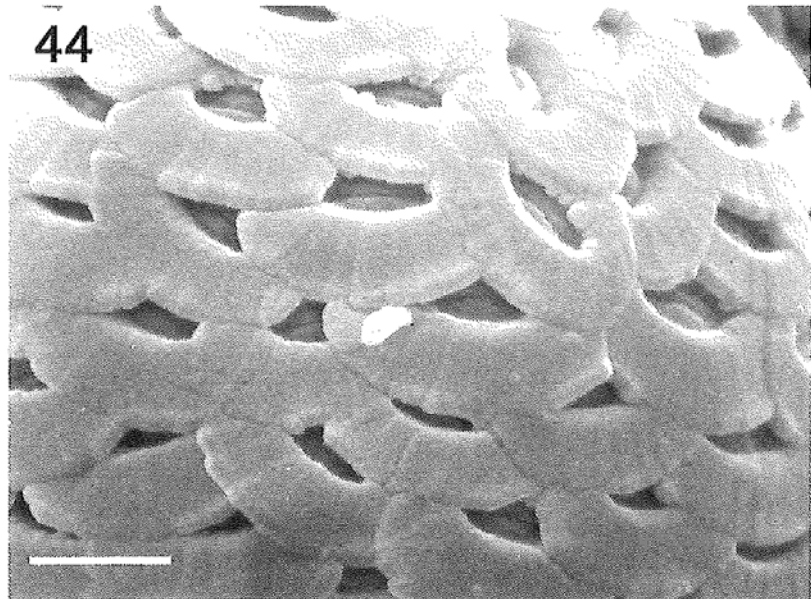
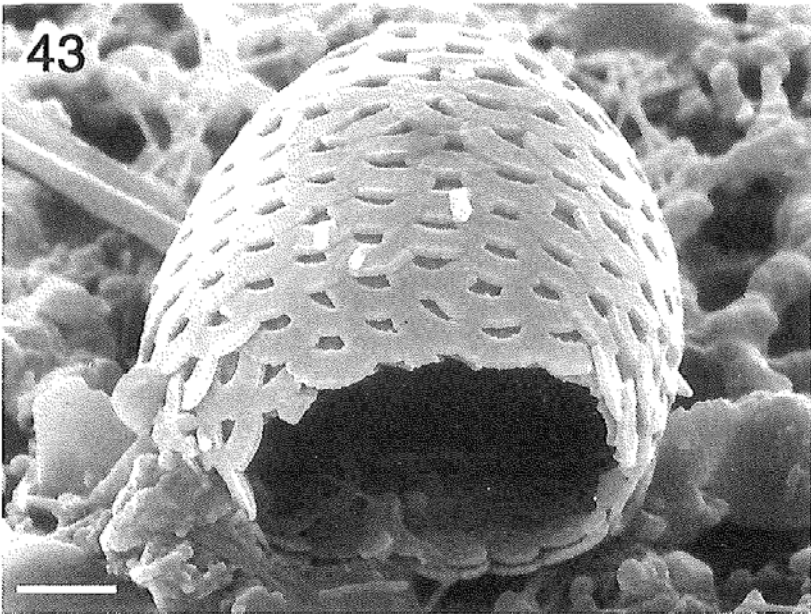
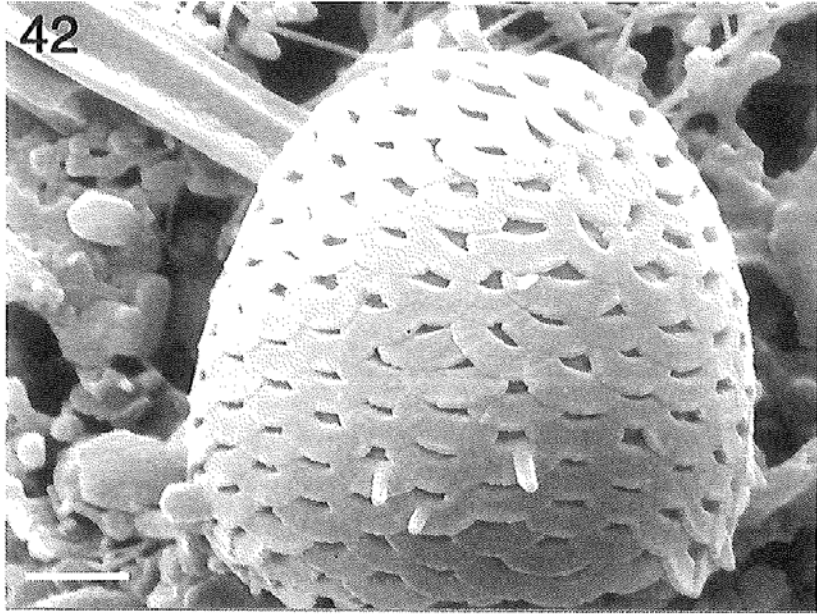
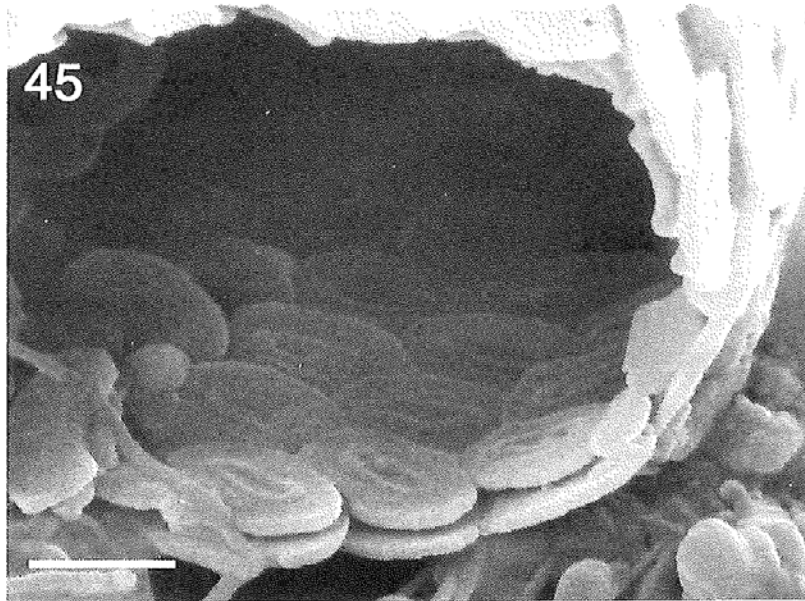


5. *Alisphaera pinnigera* Kleijne, Jordan, Heimdal, Samtleben & Chamberlain in Kleijne et al. (2002)







For figs 40, 42, 43 scale bars=2 μ m

For figs 41, 44, 45, scale bars=1 μ m

Figs 40-45

References: Kleijne (1993, p. 233, pl. 2, fig. 10, as *Alisphaera* sp. cf. *A. unicornis* Okada & McIntyre); Giraudeau & Bailey (1995, pl. 3, fig. 6, as *Alisphaera pinnigera* Jordan, Heimdal & Kleijne. Invalid).

Coccosphaera subglobosa, ferens plus quam 100 coccolithos dimorphos. Coccolithi communes constructionem adiunctivam non habent. Ceteri coccolithi, circiter quarta pars, ferunt constructionem generaliter extra medium positam super partem latiore fimbriarum distalium. Constructio accedit similitudinem trianguli recto angulo cuius latus brevius perpendicularare est margini exteriori fimbriarum. Area media coccolithi fissuram nodosque praeter marginem interiore partem oblongae strictaeque fimbriarum distalium habet. Magnitudo: coccosphaera diametro *c.* 10-13 μ m, coccolithi 1.3-2.0 μ m longi, 0.8-1.1 μ m lati; noduli ad 0.1 μ m longi.

Holotype: Negative A88/15 (Fig. 41), deposited at the Nationaal Herbarium Nederland, Universiteit Leiden branch (L), The Netherlands.

Type Locality: North-eastern Indian Ocean, depth 0-5 m (Station Gx-20; 1°51'9N, 93°16'2E; 19 June 1985).

Etymology: Latin *pinniger*, bearing fins.

Coccosphere subspherical, bearing more than 100 dimorphic coccoliths. Ordinary coccoliths without an additional structure. Other coccoliths, comprising approximately one quarter of the total, bear a structure on the wider part of the distal flange, which is in general placed eccentrically (Fig. 40). The structure resembles a right-angled triangle with its shortest side perpendicular to the outer margin of the

flange (Fig. 41). Coccolith central area with a fissure and nodules along the inner margin of the narrow elongate side of the distal flange. Dimensions: coccosphere c. 10-13 μm ; coccoliths 1.3-2.0 μm long, 0.8-1.1 μm wide; nodules up to 0.1 μm long.

Remarks: The description of this species is also based on the specimen shown in Fig. 40 (north-eastern Indian Ocean, Station Gx-23). A specimen from the Norwegian Sea has an extension on only some coccoliths (Figs 42-44) and shows that the proximal shield is flat (Fig. 45). Giraudeau & Bailey (1985) incorrectly used the name *A. pinnigera* for this species, which at that time was not yet validly described.

Distribution: (fig. 16): North-eastern Indian Ocean (four specimens, depth 0-5 m); Gulf of Aden (Station G0-106, one specimen, depth 0-5 m); Norwegian Sea (one specimen, depth 40 m); eastern North Atlantic (J.R. Young, personal communication); Equatorial Atlantic (Station 129-10548/13, one specimen, depth 50 m); Caribbean Sea (Puerto Rico, Station La Parguera-1, one specimen, depth 50 m); off south- western Africa (southern Benguela system, depth 25 m).

Kleijne, A., Jordan, R.W., Heimdal, B.R., Samtleben, C., Chamberlain, A.H.L. & Cros, L. (2002). Five new species of the coccolithophorid genus *Alisphaera* (Haptophyta), with notes on their distribution, coccolith structure and taxonomy. *Phycologia*, **40(6)**: 583-601.