

Papposphaera TANGEN, 1972

Description:

Latin diagnosis: Per microscopum ordinarium observata. Cellula globosa, numerosis uniformibus coccolithis tecta. Coccolithi hyalines, parte inferiore crenata et appendice papposformi compositi. Appendix est stilus tenuis ad partem inferiorem perpendicularis, distaliter amplam structuram infundibuliformem portans. Duae flagellae aequilongae, bis ad ter diametrum coccosphaerae. Duac chromatophorae, ut videtur.

Per microscopum electronicum observata. Coccolithi fortuiter orientati. Pars inferior coccolithi bractea fundalis elongata ad rotundam, sine structura, ut videtur, cum orbe marginali coronae simili, elementis pentagonalibus planis non imbricatis, distaliter versis, composito; orbis marginalis parte inferiore paulo, distaliter cono similis dilatatus. Appendix centralis stilus tenuis admodum cylindricatus ad quadratum, prope partem inferiorem cum quattuor decurrentibus cristis, axes longos et breves bractee fundalis sequentibus, ut videtur, et deminuentibus versus peripheriam; pars superior appendicis ampla structura infundibuliformis, admodum cylindricata ad quadrilobatam, plerumque leviter incisa.

Observations in LM. Cell spherical, covered with a large number of uniform coccoliths. Coccoliths hyaline, composed of crenated basal part and pappus-like appendix. Appendix a narrow rod perpendicular to basal part, distally bearing a wide funnel-shaped structure. Two flagella of equal length, two to three times coccosphere diameter. Apparently two chromatophores.

Observations in SEM. Coccoliths randomly oriented. Basal part of coccolith an elliptical to subcircular seemingly structureless bottom plate with crown-like marginal ring composed of non-overlapping, distally pointed pentagonal plate elements; marginal ring with narrow outward expansion at base and conically expanding distally. Centrally placed appendix a narrow subcylindrical to quadrangular rod, towards the base with four decurrent ridges apparently following long and short axes of bottom plate and tapering towards periphery of it; top of appendix a wide funnel-shaped structure, subcircular to four-lobate, mostly with shallow incisions.

Type species:

Papposphaera lepida TANGEN, 1972.

Author:

Tangen K., 1972, p. 171.

Reference:

Papposphaera lepida, gen. nov., n. sp., a New Marine Coccolithophorid from Norwegian Coastal Waters. Norwegian Journal of Botany, vol. 19, no. 3-4, pp. 171-178, figs. 1-14.