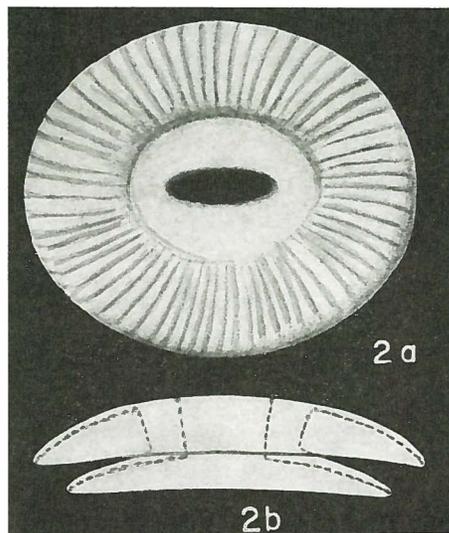


Tremalithus eopelagicus BRAMLETTE & RIEDEL, 1954

«Coccolith,» Jukes-Browne and Harrison, Quart. Jour. Geol. Soc., vol. 48, p. 178, fig. 8, 1892.



FIGS. 2a, b — *Tremalithus eopelagicus* n. cent.,
2a, vertical view of holotype; 2b, sketch of
lateral view showing an optical section. x 2500.

Description:

Placolith unusually large, elliptical, consisting of two curved plates of which the lower is slightly smaller than the upper. The plates are rather closely appressed, and therefore the thick-walled connecting tube is visible in side view only through the thin, curved edges of the plates. In surface view the plates show an elongated central slot and, peripherally, fine curved radiating striae. Major diameter usually 16—20 microns.

Remarks:

This placolith is larger than any other described form, except for the distinctive *Coccolithus grandis*, with which there are otherwise no similarities. Consistently smaller forms rather similar to *T. eopelagicus* are found in middle Tertiary and later strata.

The soft parts of most of the following “form genera”, which Deflandre places in his order Ortholithae, are quite unknown, and the skeletal remains of the various genera have practically nothing in common, apart from the individual parts having the optical properties of unit crystals. For these reasons, it seems premature to group them into a taxonomic order, and desirable to regard them for the present, as genera incertae sedes. Later investigations may reveal other forms (perhaps intermediate between known “genera”) providing a sounder basis for a classification.

Type level:

Upper Eocene.

Other Occurrences — This form is very common in the middle Eocene through lower Oligocene from many parts of the world.

No attempt is made in this paper to discuss the Tertiary rhabdoliths, lopadoliths and other types of coccoliths. However, when more work is done, they may prove useful stratigraphically. Among other rhabdoliths one large form (pl. 38, fig. 3) has been noted commonly in early Tertiary strata: this form may be closely related to *Rhabdolithus perlongus* DEFLANDRE (1952, fig. 362 I, from the Lutetian, figured without description or dimensions).

Some of the early Tertiary rhabdoliths, such as that figured (pl. 38, fig. 3), do not show the parallel extinction under crossed nicols which Kamptner (1952) found in the Recent *Rhabdosphaera claviger* MURRAY & BLACKMAN. Lopadoliths, of which one of the various forms is pl. 38, fig. 4, have been noted in many late Tertiary sediments, but have not been observed in rocks older than late Oligocene.

Type locality:

Middle of the exposed Oceanic formation at Bath, Barbados.

Depository:

U.S. National Museum, Washington, D.C.

Author:

Bramlette M.N. and Riedel W.R., 1954, p. 392; pl. 38, figs. 2a, b.

Reference:

Stratigraphic value of Discoasters and some other Microfossils related to recent Coccolithophores. J. Paleont., vol. 28, n^o 4, pp. 385-403, pls. 38, 39, text-figs. 1-3.