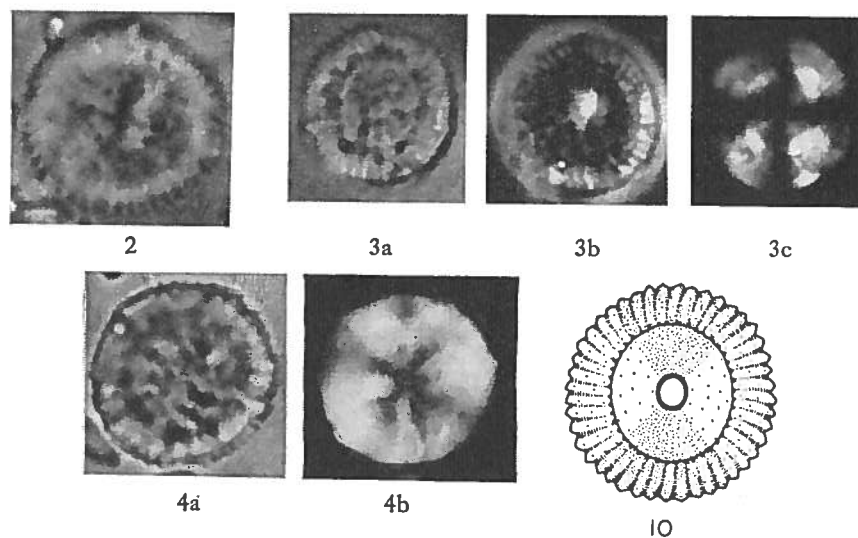


**Coccolithites circumradiatus** STOVER, 1966



FIGS. 2, 3a-c, 4a, b — *Coccolithites circumradiatus* STOVER, n. sp. x 2500 ca. 2, paratype, USNM 41477 sample 9, bright field. 3, holotype, USNM 41478, sample 29; a, bright field; b, phase contrast; c, x-nicols. 4, paratype, USNM 41479, sample 8; a, bright field; b, x-nicols.

FIG. 10 — *Coccolithites circumradiatus* STOVER. Distal view. Orientation: 0°-90°. The drawing is based primarily on the appearance of the microfossil under crossed nicols and with a Quartz Red I accessory plate. The drawing represents a composite of morphologic features observed on several well-preserved specimens of the species.

**Description:**

The coccoliths are nearly circular in proximal or distal view and have a more or less smooth, finely scalloped or serrate margin. The rim is of medium width, distinctly and finely ribbed. Grooves or striae between ribs are straight to arcuate with dextral curvature in distal view. The central area of the coccolith, which varies considerably in diameter, is thin and spherulitic, and may consist of an unbroken plate or of a nearly circular ridge and central perforation. Diameter 8-10  $\mu$ .

**Remarks:**

Comparison: *Coccolithites circumradiatus* differs from *Tremalithus dilucidus* GÓRKA in having striations only across the rim. The new species resembles *Markalius inversus* (DEFLANDRE) BRAMLETTE & MARTINI, but differs in having relatively thin plates with weakly curved striae on the distal plate only, rather than thick plates with strongly curved striae on the proximal and distal plates. In addition, the central area structure in *C. circumradiatus* is weakly birefringent, as is the rim.

Remarks: This species is unique in that it is the only non rhabdolithitic coccolith with an almost circular outline in the Cretaceous assemblages.

**Type level:**

Albian.

Occurrence: Albian-Turonian.

**Type locality:**

No. 2 Delft well, core at 1970 feet, Netherlands; medium gray shale (sample 29). *Scaphites geinitzi* beds 0,5 km. northwest of Villechien (France); Turonian; chalk (sample 9). *Micraster decipiens* beds along highway midway between Rosoy and Joigny, France; Coniacian (Senonian); chalk (sample 8).

**Depository:**

U. S. National Museum, Washington, D. C. Holotype: USNM 41478; paratypes: USNM 41477, 41479.

**Author:**

Stover L.E., 1966, p. 138; pl. 5, figs. 2, 3a-c, 4a, b; pl. 9, fig. 10.

**Reference:**

Cretaceous coccoliths and associated nannofossils from France and the Netherlands. *Micro-paleontology*, vol. 12, n° 2, pp. 133-167, pls. 1-9.