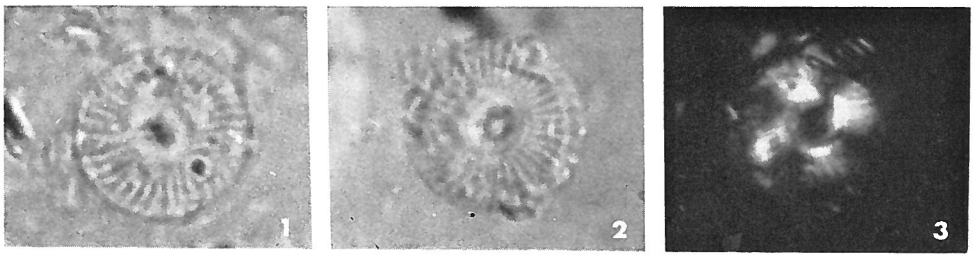
## **Cyclococcolithus macintyrei** BUKRY & BRAMLETTE, 1969

*Coccolithus leptoporus* (MURRAY & BLACKMAN) var. A, McIntyre, Bé and Preikstas, 1967, p. 9-10, pl. 4, figs. c-d. Progress Oceanography, vol. 4.
*Cyclococcolithus leptoporus* (MURRAY & BLACKMAN), Gartner, 1967, p. 1, pl. 1, figs. 1, 2, 4a-4c; pl. 2, figs. 1, 3a-3c, 4a-4d. Kansas Univ. Paleont. Contr. Paper 29.




Figs. 1-3 — *Cyclococcolithus macintyrei* BUKRY & BRAMLETTE, n. sp.; 1) holotype USNM 651407, type Plaisancian; 2) V12-5, 700 cm, USNM 651408; 3) cross-polarized. x 2000.

**Description:**

These large circular coccoliths are constructed of two shields with a connecting tube. Each shield is formed by a single cycle of about 40 elements. The interelement sutures are slightly curved on the distal surface of the distal shield; otherwise the sutures are radial and straight. In crosspolarized light only the smaller proximal shield is bright.

Size: 8-12 μ.

**Remarks:**

Although McIntyre, Bé, and Preikstas considered this to be one of three varieties of *Cyclococcolithus leptoporus* (MURRAY & BLACKMAN), *Cyclococcolithus macintyrei* may be easily distinguished by a consistently larger number of elements (approximately 40 versus about half that number in other varieties) and by its large size (approximately 11 microns versus about 6 microns). *C. macintyrei* is therefore distinguished as a new species.

**Type level:**

Lower Pliocene.

Distribution: Whereas *C. macintyrei* ranges only from middle Miocene to upper Pliocene, or sparsely to lowermost Pleistocene, other varieties of *C. leptoporus* range from lower Miocene to Holocene. *C. macintyrei* is abundant in samples from all oceans and from land strata. Much information on the taxonomic problems and distribution of *Cyclococcolithus leptoporus* has been presented by McIntyre, Bé, and Preikstas (1967) and by Gartner (1967).

**Type locality:**

Lugagnano, Italy.

**Depository:**

U. S. National Museum. Holotype: USNM 651407 (fig. 1); paratype: USNM 651408.

**Author:**

Bukry D. and Bramlette M.N., 1969, p1. 132; pl. 1, figs. 1-3.

**Reference:**

Some new and stratigraphically useful calcareous nannofossils of the Cenozoic. Tulane Studies in Geology and Paleontology, vol. 7, nº 3, pp. 131-142, pls. 1-3.