Cyclococcolithina protoannula GARTNER, 1971

Description:
Small to medium size species of Cyclococcolithina with large open center, narrow collar, and subequal narrow shields. The shields are constructed of about 45 slightly dextrally inclined elements. In cross-polarized light the collar of this species gives a strong interference figure, but the shield is less distinct. The proximal shield is slightly smaller than or the same size as the distal shield, and the periphery of the shields is nearly smooth.

Remarks:
This species is similar to Cyclolithella annula (COHEN), but the latter lacks a distinct interference figure on the collar, and in electron micrographs the shield elements are more clearly visible.

Type level:
Middle and upper Eocene.

Occurrence: Cyclococcolithina protoannula may be found in abundance throughout the middle and upper Eocene, although its areal distribution may be environmentally controlled. In

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the Blake Plateau core J-6B it is common in the upper Eocene, but in core J-3 it may be scarce or lacking in the same interval.

**Type locality:**


**Depository:**

Not given.

**Author:**

Gartner S., Jr., 1971, p. 109; pl. 5, figs. 1a-c, 2.

**Reference:**

Calcareaous nannofossils from the JOIDES Blake Plateau cores, and revision of Paleogene nannofossil zonation. Tulane Studies in Geology and Paleontology, vol. 8, n° 3, pp. 101-121, pls. 1-5, 5 figs.