
Pl. 2, figs 1-2, 5-6, 9-10, 13-14
**Derivatio nominis:** In honor of Elisabetta Erba, Professor at the Department of Earth Sciences “Ardito Desio”, University of Milano (Italy), geologist and calcareous nannofossil paleontologist.

**Diagnosis:** Medium to large circular placolith with a closed central area, very bright in cross polarized light (XPL).

**Description:** This circular placolith consists of two shields. The rim of the larger distal shield consists of ca. 60-62 slightly overlapping ray-shaped elements that are rounded at the periphery. The sutures are straight and almost radially arranged. Numerous irregular elements, forming a blanket, are disposed on more cycles covering the whole central area that, therefore, is closed. The rim of the smaller proximal shield is composed of ca. 60-66 ray-shaped elements bending downward and directed toward the central area to roughly resemble a funnel-shaped body. The elements show a faintly laevo gyre overlap. Numerous radial bars create a grill or a plate filling in the central area, that thus results to be characterized by a “plug”, strongly illuminated in XPL. The isogyres are bended and continuous from the center to the periphery, becoming broader toward the periphery. In XPL both the proximal and the distal shields are bright.

**Differentiation:** In the light microscope, *Cribrocentrum erbae* can be differentiated from *Cribrocentrum reticulatum* (Gartner and Smith 1967) Perch Nielsen 1971 (Plate 1, Fig. 5), by the latter’s open central area and distinctive extinction pattern and, sometimes, by thick “collar” with high birefringence surrounding the central area. Furthermore, *C. erbae* differs from *C. isabellae* in having a smaller size, a brighter central area and a thinner small birefringent “collar”.

**Size:** range approx 7-11μm (diameter). For details see Table B, Supplementary Data.

**Holotype:** Plate 2, Fig. 1 (SEM); Sample ODP 171B-1052B-10H-4W, 70.

**Holotype size:** Proximal view. Distal shield: total diameter = 9.0μm. Proximal shield: total diameter = 7.3μm.

**Paratype:** Plate 2, Fig. 5.

**Paratype size:** Plate 2, Fig. 5 (SEM); Distal view. Distal shield: total diameter = 10μm; diameter of central area= 5.8μm.

**Type locality:** Blake Nose, NW Atlantic Ocean, ODP Leg171B, Site 1052.

**Type level:** Zone MNP18A (this work; Catanzariti et al. 1997). Upper Eocene; Sample ODP 171B-1052B-10H-4W, 70 cm

**Range:** MNP16Bb-MNP19 (this work; Catanzariti et al. 1997), late middle Eocene-late Eocene.

**Remarks:** At Site ODP 1052, the presence of specimens with intermediate morphological features between *Cribrocentrum erbae* and *Cribrocentrum reticulatum* suggests that a
phylogenetic relationship between the two species probably exists. Strong overgrowth or dissolution can blur these distinguishing. In previous work, this species has probably been included in *C. reticulatum*.

**Occurrence:** The species occurs with high frequencies (acme) in the interval between the base of Chron C17n.2n and the base of Chron C17n.1n. Rare and scattered specimens of *C. erbae* have also been observed below and above the acme interval in the upper middle Eocene (upper part of Chron C18r) and in the late Eocene (middle part of Chron C15r), respectively.

**Repository:** Holotype and paratypes are deposited in the permanent collection of the Museo di Geologia e Paleontologia dell’Università di Padova (MGPD), Padova, Italy (protocol #MGPD31020).