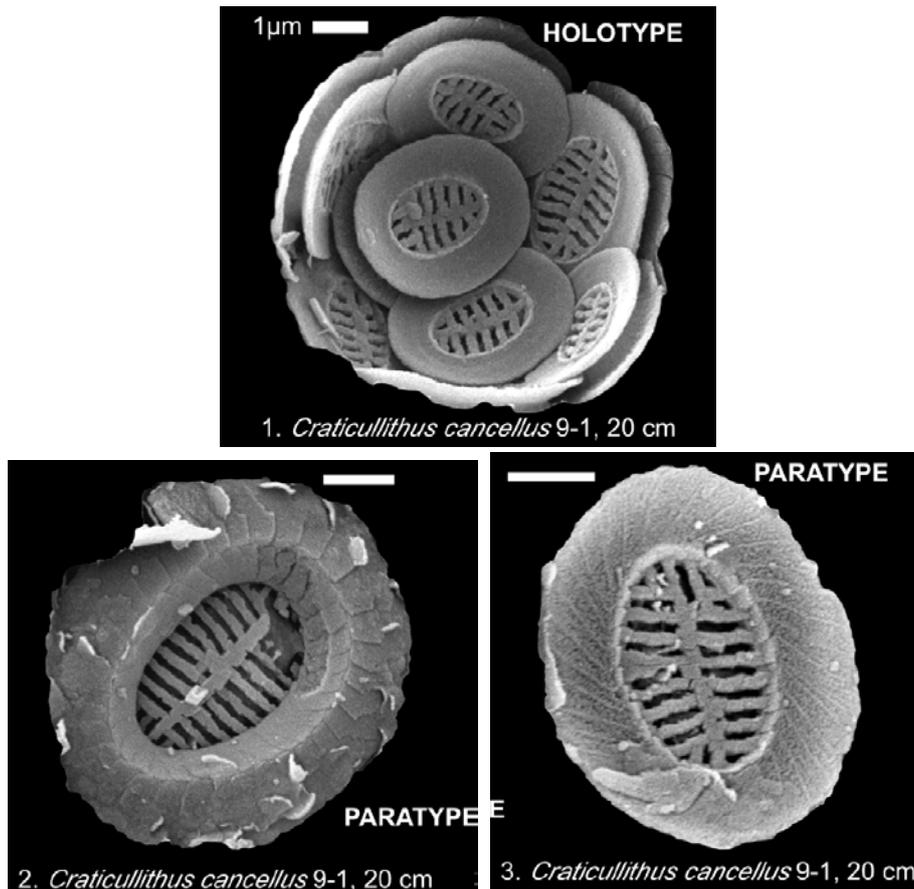


23. *Craticullithus cancellus* Bown (2010)



Pl. 4, figs 1-3

Derivation of name: From '*cancellus*', meaning 'lattice', referring to the diagnostic grill that spans the central area of this placolith coccolith.

Diagnosis: Medium- to large-sized, elliptical placolith coccoliths with broad central-areas spanned by lattice-like grills that are dominated by transverse bars. The distal shield is formed from elements with distinctly kinked and stepped sutures, and the proximal shield appears to be unicyclic and formed from elements joined along strongly clockwise-twisting sutures. Around 12-25 lath-like bars make up the central grill, with one central, longitudinal bar, several smaller longitudinal bars, and multiple transverse bars forming the rest of the structure. The coccoliths have not been unequivocally observed in the LM, but they may correspond to low-birefringence placoliths with open central areas, the central-area laths being too small or non-birefringent to be visible (*e.g.* Pl. 4, fig. 7).

Differentiation: One coccosphere has been found which shows consistent central-area morphology across the sphere, suggesting that the similar morphologies described below do represent separate morphospecies. The shields, in general, are similar to

Cruciplacolithus coccoliths, but with more complex central-area grills and a reduced centro-distal cycle. It is notable, however, that several *Cruciplacolithus* species with more complex central areas have been rarely documented, e.g. *C. inseedus* (see above) and *C. filigranus* (Mai, 2001), both originally from the Danian, but both species have been found in the Upper Paleocene and Eocene of the Kilwa Group (e.g. Pl. 3, figs 10-14 and Figure 2). The presence of these forms with dissolution-prone, delicate central grills is therefore most likely highly sensitive to preservation state.

Dimensions: L = 3.7-5.9 μ m.

Holotype: Pl. 4, fig. 1.

Paratypes: Pl. 4, figs 2, 3.

Type locality: TDP Site 14, Pande, Tanzania.

Type level: Upper Paleocene, Sample TDP14/9-1, 20cm (NP9).

Occurrence: NP9; TDP Site 14, 16B.

Bown, P.R., 2010. Calcareous nannofossils from the Paleocene/Eocene Thermal Maximum interval of southern Tanzania (TDP Site 14). *Journal of Nannoplankton Research*, **31 (1)**: 11-38.