
**Diagnosis.** Calyptrolith having a small, circular base and cone-shaped distal plate at the end of a parallel-sided distal process.

**Derivation of name.** Mitra is Latin for cap.

**Holotype.** Plate 4, Figs. 43a, 44a.

**Type level and locality.** Zone NP12, Lower Eocene, Sile, Istanbul.

**Dimensions of holotype.** Length = 10.0 µm. Width of basal plate = 3.8 µm. Width of distal plate = 3.8 µm. Width of stem = 1.2 µm.

**Description.** Calyptrolith with a small, circular base, a long parallel sided distal process and a cone-shaped distal plate. *Anacanthoica mitra* is strongly birefringent under cross-polarised light. In the light microscope usually several specimens found together, possibly part of the coccosphere. The circular base is always near the centre of the cluster whereas the cone-shaped plate is at the other end.

**Remarks.** *A. mitra* is the only known species of *Anacanthoica* of pre-Miocene age.

**Occurrence.** *A. mitra* is rare to frequent in Zone NP12.