

**Quadrum gartneri** PRINS & PERCH-NIELSEN, 1977

- 1968, *Tetralithus gothicus* DEFLANDRE, Gartner, p. 42; pl. 24, fig. 4a-d. Univ. Kansas Paleont. Contr., Protista 1.  
1974, *Micula staurophora* (GARDET) STRADNER, Thierstein, *partim*; pl. 12, figs. 4-8, non pl. 12, figs. 1-3, 9-11. Initial Reports DSDP, vol. 26.

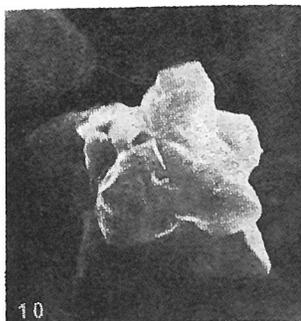


Fig. 10 — *Quadrum gartneri* n. sp.,  
× 7000. Turonian, El Kef, Tunisia

**Description:**

Diagnosis: A species of the genus *Quadrum* composed of one or two layers, each consisting of four big, and often high calcite units, separated by sutures, that run more or less perpendicular to the margin on the distal as well as on the proximal surface. The points of both outer ends of each unit are not clearly protruding.

Description: This more or less cubical species is composed of four columns, between each of which a strongly reduced element may occur, vaguely observable in the light microscope, but invisible in the electron microscope. The cube may be slightly constricted in the middle, but the points at the outer side of the big units are not clearly protruding. Occasional specimens with only three columns have been found.

**Remarks:**

In the literature this species has often been assigned to *Tetradithus pyramidus* Gardet or *Micula decussata* Vekshina. In the publication of Gardet (1955) the genus *Tetralithus* and thus *T. pyramidus*, the only species she included in the genus, is characterised by two bright and two dark quadrants when viewed under crossed polarised light. This differs markedly from *Quadrum gartneri*, in which the whole body is bright or dark in crossed polarised light, when the nicols are turned.

**Type level:**

Lower Turonian to ? Campanian.

Occurrence: *Quadrum gartneri* has its first occurrence in the Lower Turonian in the section of El Kef, Tunisia, and is reported from the Coniacian part of the Austin Chalk, U.S.A. (Gartner, 1968), from DSDP Leg 26, site 258, Indian Ocean (Thierstein, 1974), from Fretevou and the Paris Basin, France.

**Type locality:**

Type locality of the specimen illustrated by Thierstein, (1974): Indian Ocean, DSDP - Leg 26, Site 258.

**Depository:**

Not given.

Holotype: The specimen illustrated by Thierstein, 1974, pl. 12, fig. 4-8; Coniacian, DSDP Leg 26, Site 258, Sample 10-1, 119 cm., Indian Ocean.

**Author:**

Prins B. and Perch-Nielsen K. in Manivit H., Perch-Nielsen K., Prins B. and Verbeek J. W., 1977, p. 177; pl. 1, figs. 9, 10.

**Reference:**

Mid Cretaceous calcareous nannofossil biostratigraphy. Proc. Kon. Ned. Akad. Wetensch., ser. B., vol. 80, no. 3, pp. 169-181, 1 pl.