

101. *Helicolithus turonicus* Varol & Girgis (1994)

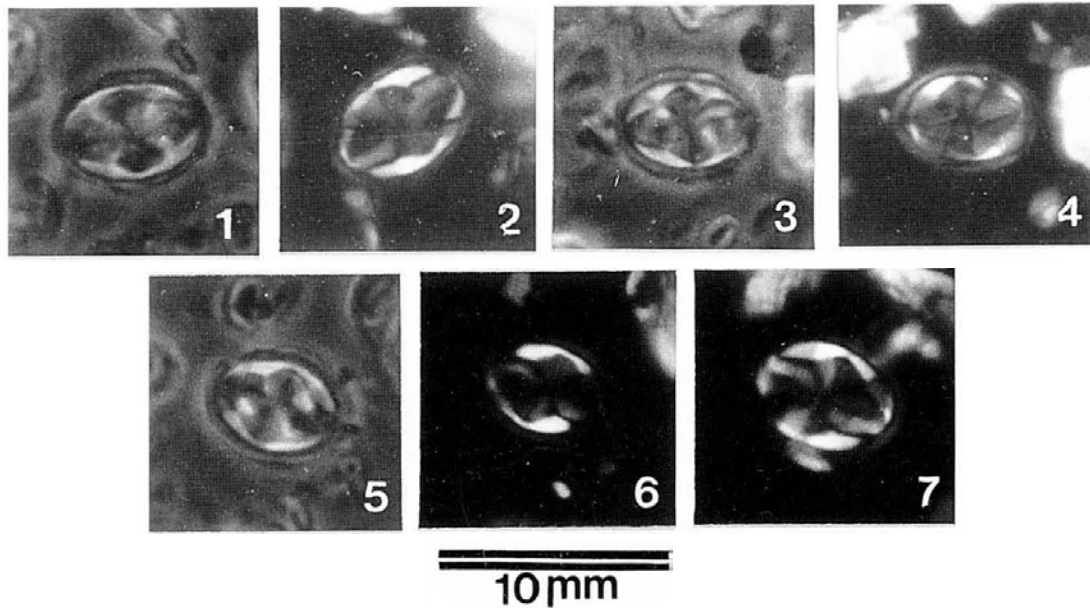


Fig. 10, 1-7

1969 *Vagalapilla compacta compacta*. -BUKRY: pl. 31, fig. 11, non pl. 31, fig. 10.

**Diagnosis:** A large species of *Helicolithus* (> 6µm) with an axial cross.

**Derivation of name:** Named after the Turonian stage in which this species attains its highest abundance in the Central North Sea area.

**Holotype:** Fig. 10 (3-4).

**Type level:** Upper Turonian (Zone NK14).

**Type locality:** Central North Sea area.

**Description:** *H. turonicus* has a zeugoid outer wall (made of dextrally imbricated elements), proximal rim, protolith inner wall (made of six to eight subquadrate elements) and an axial cross whose arms consist of two parallel elements. The inner wall and the axial cross are birefringent, whereas the outer wall and proximal rim are non-birefringent under cross-polarised light.

**Dimension of holotype:** Length: 6.6 µm, width: 5.0µm.

**Remarks:** *H. turonicus* is distinguished from the other species of *Helicolithus* by having an axial cross.

**Occurrence:** *H. turonicus* ranges in age from the Turonian (Zone NK14) to the Coniacian (Subzone NK13C) in the North Sea area. Its last high frequency occurrence is in the Turonian. Smaller, similarly constructed forms (<6µm) are assigned to *H. cf. H. turonicus* which range from the Turonian (Zone NK14) to the lower Maastrichtian (Zone NK7).

Varol, O., & Girgis, M.H., 1994. New taxa and taxonomy of some Jurassic to Cretaceous calcareous nannofossils. *Neues Jahrbuch für Geologie und Paläontologie, Abhandlungen*, **192(2)**: 221-253.