

194. *Radiolithus Stover (1966) emend. Varol (1992)*

Type species: *Radiolithus planus* STOVER, 1966.

Syn: *Rhombogyrus* BLACK, 1973.

Description: Polycyclolith having a wall with two cycles which are made up of nine to sixteen brick-like elements (Fig. 9). A large amedian diaphragm extends into a central opening from where two cycles of the wall are joined. The height of each cycle is unequal. The elements in the cycles of the wall may or may not be inclined but the cycles are slightly twisted along the diaphragm. In plan view it is almost circular and apparently rectangular elements may bulge outward.

Based upon the height of the wall two groups can be identified. Low wall group (<4 µm) as in *Radiolithus planus* and high wall group (> 4 µm) as in *Radiolithus orbiculatus*. These two groups can also be identified in plan view by their birefringence. The low wall group has a narrow wall which is weakly birefringent, appears greyish to whitish in colour and includes *R. planus*, *R. hollandicus* and *R. undosus*. The high wall group has a wider wall which is strongly birefringent, appears yellowish to reddish in colour and includes *R. orbiculatus* and *R. laingii*.

Remarks: Due to the diagenetic alteration one cycle of the wall may be removed and therefore the diaphragm may appear to be at the end of the wall (*Rhombogyrus*). *Radiolithus* differs from *Eprolithus* by having brick-like elements and an amedian diaphragm. *Radiolithus* is distinguished from *Farhania* by having a single tier diaphragm and lacking the clock-wise imbrication of wall elements.

Varol, O., 1992. Taxonomic revision of the Polycyclolithaceae and its contribution to Cretaceous biostratigraphy. *Newsletters on Stratigraphy*, **27(3)**: 93-127.