Zygrhablithales

Compiled data

Citation: Zygrhablithales Varol 2025
Taxonomic rank: order
Type species: Zygrhablithus
Described on page(s) : 93

Original Description

Diagnosis: Holococcoliths constructed from rhombohedral crystals and hexagonal prisms, which lack confirmed associations with heterococcoliths or for which holococcolith formation holds taxonomic priority, are classified within a single order, Zygrabhlithales. Holococcoliths are produced externally in the haploid life-cycle phase. They are composed of minute calcite rhombohedral crystals or hexagonal prisms, each approximately 0.1 μm in size, arranged in continuous arrays. The holococcolith order Zygosphaerales Hay in Ramsay (1977) is now considered a junior synonym of Syracosphaerales. This reclassification is due to the type species *Zygosphaera hellenica* being identified as part of the life cycle of *Syracosphaera mediterranea* (*Karatsolis* et al., 2014; Triantaphyllou et al., 2016). The rhomboidal crystal or hexagonal prism structure of taxa can be identified directly through SEM and indirectly through LM based on their optical properties. Rhomboidal crystals display inclined (oblique) or symmetrical extinction lines, while hexagonal prisms exhibit parallel (straight) extinction lines.

References:

Varol, O. (2025). A practical guide to optical studies of calcareous nannofossils. *Grzybowski Foundation Special Publication.* **29**: 1-222. gs

---

nannotax

Zygrhablithales: Farinacci & Howe Catalog entry.
PDF copy made: 19-11-2025