

48. Umbellosphaeraceae Young & Kleijne in Young et al. (2003)

Diagnosis: *Coccosphaera dimorpha*; coccolithi consistunt ex parte distali infundibiliformi in fundo plano. Infundibli elementa continua sunt cum elementis plani basalis area centralis; interdum annulus circumdat aream basalem, consistens ex separato elementorum cyclo. Coccolithi variabiles quoad mensuram.

Translation: Coccusphere dimorphic; coccoliths consist of a funnel-shaped distal part on a flat base. The funnel elements are continuous with the basal plate elements of the central area; a flange may be present around the basal plate, formed by a separate cycle of elements. Coccoliths are variable in size.

Type genus: *Umbellosphaera* Paasche, in Markali and Paasche 1955.

Remarks: Kleijne (1993) described a sub-family, the Umbellosphaeroideae, within the Syracosphaeraceae, including *Umbellosphaera* and *Gaarderia*. With higher resolution SEM observations and better understanding of *Syracosphaera* coccolith morphology it is now clear that *Gaarderia corolla* should be recombined into *Syracosphaera*, but that *Umbellosphaera* is not associated with the Syracosphaerales. For consistency of taxonomic usage, we have raised the taxon from sub-family to family status.

Jeremy Young, J.R., Geisen, M., Cros, L., Kleijne, A., Sprengel, C., Probert, M. & Østergaard, J., 2003. A guide to extant coccolithophore taxonomy. *Journal of Nannoplankton Research Special Issue*, **1**: 1-125.