

PROPOSED CHANGES TO THE CLASSIFICATION SYSTEM OF LIVING COCCOLITHOPHORIDS. II.

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Since the Florence INA meeting of 1989 and the publication of the workshop recommendations (Jordan & Young, 1990), two additional problems have been noted. This note deals with them.

NEW COMBINATIONS

Rhabdosphaera clavigera var. *stylifera* comb.nov. (1)

Basionym: *R. stylifera* Lohmann, 1902, p. 143, pl.5, fig.65.

Syracolithus ponticuliferus comb. nov. (2)

Basionym: *Corisphaera ponticulifera* Kamptner, 1941, p.90, pl.11, figs. 117-118.

TAXONOMIC NOTES

1) *Rhabdosphaera clavigera*: Murray & Blackman (1898) studied coccolithophores from net haul samples and reported living rhabdospheres for the first time, from which they described the genus and species *Rhabdosphaera clavigera*. Lohmann (1902) described a second species, *R. stylifera*, from the Mediterranean, differing from *R. clavigera* in its appendix shape. The former possesses a thin stem composed of fine elements, whereas the latter has a thicker, coarser stem. In recent taxonomic works (Okada & McIntyre, 1977; Hallegraeff, 1984) the two species have been regarded as conspecific, with *R. clavigera* having priority. Intermediate forms have been seen (Borsetti & Cati, 1972; Hallegraeff, 1984; Norris, 1984) but we believe that the stem types are distinct enough to be separated as varieties so that future distribution studies may provide useful information on their individual biogeographies.

2) *Corisphaera ponticulifera*. Kamptner (1941) described *Corisphaera ponticulifera* as a coccusphere consisting of zygoliths (i.e holococcoliths consisting of a tube, with the distal end spanned by a bridge). Although no stomatal coccoliths were observed, he placed it in the dimorphic genus *Corisphaera*. Deflandre (1952) created the genus *Homozygosphaera*, for zygolith-bearing monomorphic species, and Kamptner (1954) transferred *C. ponticulifera* to this genus. Modern illustrations (Okada & McIntyre, 1977, pl. 12, figs. 8-9) show that the coccoliths of this species are laminated discs, perforated by two large holes, with a pointed protrusion on the distal surface. These are laminoliths rather than zygoliths, so the species is transferred here to the genus *Syracolithus*.

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