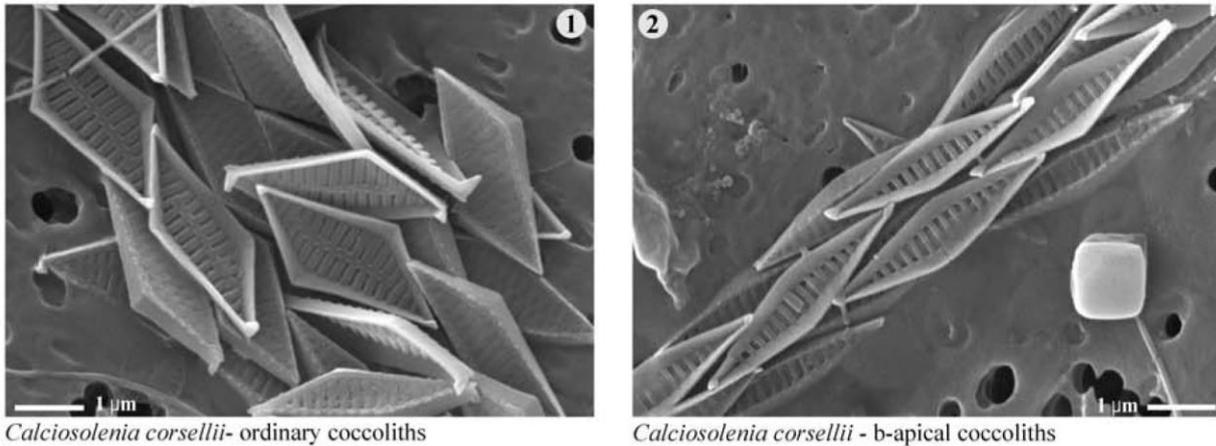


Calciosolenia corsellii Malinverno (2004)



Pl. 2, figs 1, 2

Pl. 2, figs 1, 2. *Calciosolenia corsellii* n. sp. SIN97-N03, 25m.

Calciosolenia murrayi (Gran) KNAPPERTSBUSCH 1990, plate 9, fig. 1.

A. brasiliensis (Lohmann) Deflandre – GIRAUDEAU and BAILEY 1995, plate 1, figs. 1, 2. – CROS 2001, plate 4, figs. 1-4.

Derivation of name: from Prof. Cesare Corselli, professor in Paleoecology and Marine Geology at the Department of Geological Sciences and Geotechnologies of Milano-Bicocca University.

Diagnosis: Cocosphaera varimorpha, cylindrata, elongata, carens spinis polaribus, angustior facta utraque parte, usque ad appendicem spiniformem, coccolithibus polaribus constitutam. Coccolithi murolithi sunt, rombi figura, haud congruentes, ex duabus formis. Coccolithi ordinarii longitudine 3.2-3.9µm, latitudine 1.5-1.6µm, altitudine 0.2-0.3µm; margo perifericus angustus et leviter ad partem externam distaliter inclinatus, duabus spinis acutis distaliter eminentibus ex extremo coccolitho. Area centralis secatur 14-20 lamellis transversis, exeuntibus invicem ab utroque latere coccolithi, linea media coniunctis ita ut cristam secundum axem maiorem forment.

Coccolithi apicibus proximi angustiores, longitudine 3.6µm, latitudine 0.85µm, altitudine 0.2-0.3µm, duabus spinis acutis similiter constructis; area centralis angusta, secatur 12-15 lamellis transversas, quae se prospiciunt ab utroque latere coccolithi, secundum lineam mediam coniunctae, partim aliae aliis impositae.

Long cylindrical varimorphic coccosphere, lacking of polar spines, tapering at both ends into a long horn, formed by apical coccoliths. Coccoliths are asymmetric rhombic muroliths, consisting of two types. Ordinary coccoliths are 3.2-3.9 μ m long, 1.5-1.6 μ m large, 0.2-0.3 μ m thick; the rim is thin and slightly flared, with two prominent spines extending distally at the ends of the coccolith; the central area is spanned by 14-20 transverse bars, alternated from the two sides, which meet in the middle forming a ridge along the long axis. Apical coccoliths are narrower, 3.6 μ m long, 0.85 μ m wide, 0.2-0.3 μ m thick, with prominent protrusions as in the ordinary coccoliths; the central area is narrow and spanned by transverse bars which face from the two sides and meet in the middle, partly overlapping.

Holotype: Plate 2, figs. 1, 2

Type locality: 35°47.89' N, 19°42.00' E (Station SIN97-N03, Ionian Sea, 21/11/97), 25m depth.

Remarks: this species is varimorphic, with two distinct coccolith types. Ordinary coccoliths are similar in construction to those of *C. murrayi* - type 1, with more asymmetric profile, more flared rim and more pointed spurs at the ends of the coccoliths.

Towards the end of the coccosphere, coccoliths become narrower (but not shorter), maintaining the overall ultrastructure described above. Apical coccoliths resemble those of *C. brasiliensis* found at the very end of the coccosphere (b-apical coccoliths), even if slightly smaller.

In general, this species shows some of the characteristics of both *C. brasiliensis* and *C. murrayi*, with peculiar characters, which allow to define it as a separate species; its taxonomic affinity is discussed below.

Malinverno, E., 2004. Morphological variability within the genus *Calciosolenia* (coccolithophorids) from the eastern Mediterranean Sea. *Micropaleontology*, **50(supplement no. 1)**: 81-91.