Rhomboaster BRAMLETTE & SULLIVAN, 1961

Description:

Forms with the basic symmetry of a rhombohedron but with the faces strongly depressed which, results in extended spine-like corners.

The ortholithid character, as a unit of calcite, is evident in polarized light. The edges of all sides are apparent in transmitted light, and in various orientations correspond to those of an oblate rhombohedron of calcite. This unusual form is perhaps more suggestive of an internal than an external skeletal element. The abundance of specimens and their occurrence only in association with abundant coccolithophorids, however, indicates derivation from some form of the nannoplankton, and their restricted occurrence in time and their associations disprove an inorganic origin even though the form is suggestive of some unusual habit of inorganic calcite crystal growth.

Remarks:

« *Discoaster* » *contortus* STRADNER, 1958 appears to be closely related to *Rhomboaster* but shows a peculiar contortion, as though twisted on an axis between opposite corners of the rhombic form. Topotype specimens of « *Trochoaster* » *duplex* KLUMPP, 1953 also appear to represent a related form, but the type species, *Trochoaster simplex* KLUMPP, 1953, is a complanate form and quite different from *Rhomboaster*.

Associated with an undescribed species of *Rhomboaster* in the Upper Cretaceous, there is a common form somewhat similar to the type species, particularly to that form illustrated in figure 17, but differing fundamentally in being constructed of at least two units of differently oriented calcite, evident in polarized light.

Type species:

Rhomboaster cuspis BRAMLETTE & SULLIVAN, 1961.

Author:

Bramlette M. N. and Sullivan F. R., 1961, p. 165.

Reference:

Coccolithophorids and related Nannoplankton of the early Tertiary in California. Micropaleontology, vol. 7, nº 2, pp. 129–188, pls. 1–14.