

Arkhangelskiella VEKSHINA emend. BRAMLETTE & MARTINI, 1964

Description:

Emended diagnosis: The elliptical form appears as two very closely appressed plates, although apparently joined centrally so that only a groove around the periphery is evident in examination of cross sections of broken specimens. No connecting tube, like that of a placolith, is present. The distal side (above the groove) is slightly larger than the proximal (concave) one. The central area (large in the type species) is of very distinctive character, and is divided along the longitudinal and shorter axis into four segments. Each of the four segments shows a less conspicuous radial subdivision with the larger wedge-shaped part (dextral part in proximal view) of each quarter showing strong birefringence and appearing like the blades of a windmill (pl. 1, fig. 4). Pores or deep pits are normal for well-preserved specimens; they are either in regular alignment or, more commonly, are rather irregularly spaced. Less well-preserved specimens, which are usual in much of the porous chalk of the Upper Cretaceous, do not show pores, presumably due to filling with excess calcite as they are otherwise identical.

Remarks:

Several distinctive and abundant species in the Upper Cretaceous have been assigned to the genus *Arkhangelskiella*, despite the poor illustrations and description of that genus given by Vekshina (1959). An emended description is needed, however, even though some features of the form and construction remain uncertain.

Distribution: The genus has not yet been observed earlier than the middle Cretaceous. Although very abundant through the late Maestrichtian, it seems to become extinct there.

Type species:

Arkhangelskiella cymbiformis VEKSHINA, 1959.

Author:

Bramlette M.N. and Martini E., 1964, p. 297.

Reference:

The great change in calcareous nannoplankton fossils between the Maestrichtian and Danian. *Micropaleontology*, vol. 10, n° 3, pp. 291-322, pls. 1-7.