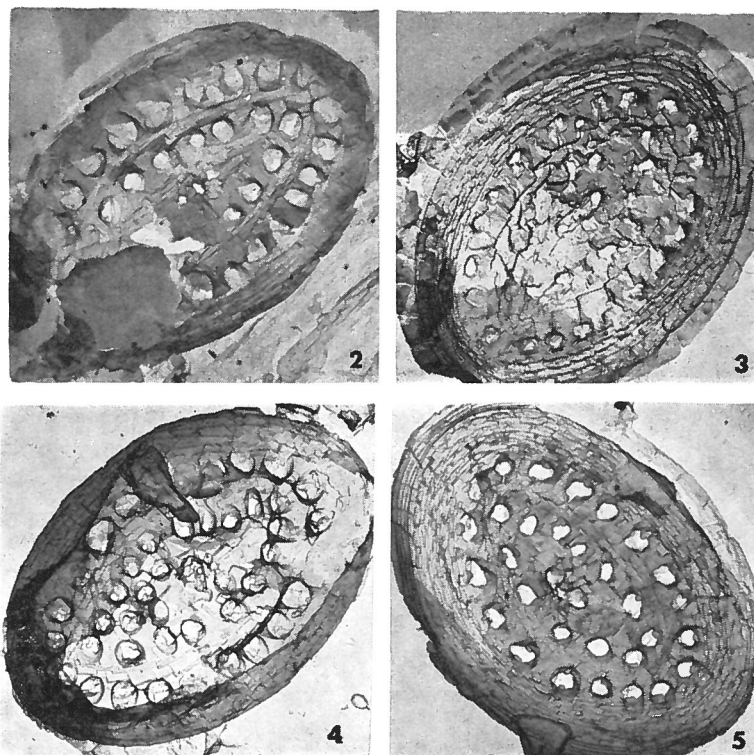


Percivalia porosa BUKRY, 1969



Figs. 2-5 — *Percivalia porosa* BUKRY, n. sp., 2) holotype, distal view, x 7050; 3) proximal, x 8850; 4) distal, x 7600; 5) proximal, x 7600.

Description:

This elliptical coccolith has eccentricities of 1.2 to 1.4. The outer rim cycle of about 35 elements is preserved only on specimens seen in proximal view in this study. Distinctive feature of the genus is the inner portion of the proximal rim. There are 6 to 11 (8 mean) narrow tiers of 30 to 42 (34 mean) elements in the abcentrally sloping portion of the rim. Adjacent tiers always have their elements offset, creating an overall «woven» effect. The distal surface of the inner portion of the rim is structurally indeterminate. Some specimens show 2 partial cycles: an outer cycle of about 30 dextrally imbricated elements inclined clockwise and an equally indistinct inner cycle of about 30 radial elements. Rim distinction of the new genus is based on the unique structure revealed in proximal view.

The central area of this species is quite distinctive. In distal view, the outer cycle of 15 to 23 (18 mean) perforations is formed by a series of radially aligned hourglass-shaped elements. One end of these elements meets the rim freely, while the other (inner) end joins adjacent elements to form a low ridge demarcating the remainder of the central area. A second circuit of perforations within the ridge is smaller, and numbers 8 to 17 (13 mean) perforations. Two

specimens have a third cycle of 9 perforations. The inner cycles are also constructed of hour-glass-shaped and smaller connecting elements. Overall, 24 to 44 (32 mean) total perforations occur in the central area. No crossbars, as such, are seen but a long-axis suture and in some specimens a short-axis suture is present. At the center a short slender stem in 16 of the specimens studied has a small perforation on either side within the long-axis suture.

Maximum diameter: 7.4 μ .

Remarks:

Perforations in one specimen have several processes, meeting at the centers to create a set of small perforations.

Type level:

Early Campanian (Lower Taylor Marl).

Known range: Campanian.

Type locality:

Lake Waxahachie, Ellis County, Texas, U.S.A.

Depository:

Geology Department of the University of Illinois, Urbana, Illinois. Holotype, UI-H-3373, distal view (fig. 2). Primary paratype, UI-H-3375, proximal view (fig. 3). Other paratypes, UI-H-3374 through UI-H-3380.

Author:

Bukry D., 1969, p. 54, pl. 31, figs. 2-5.

Reference:

Upper Cretaceous Coccoliths from Texas and Europe. Univ. Kansas Paleont. Contr., Art. 51, (Protista 2), 79 pp., 40 pls., 1 text-fig.