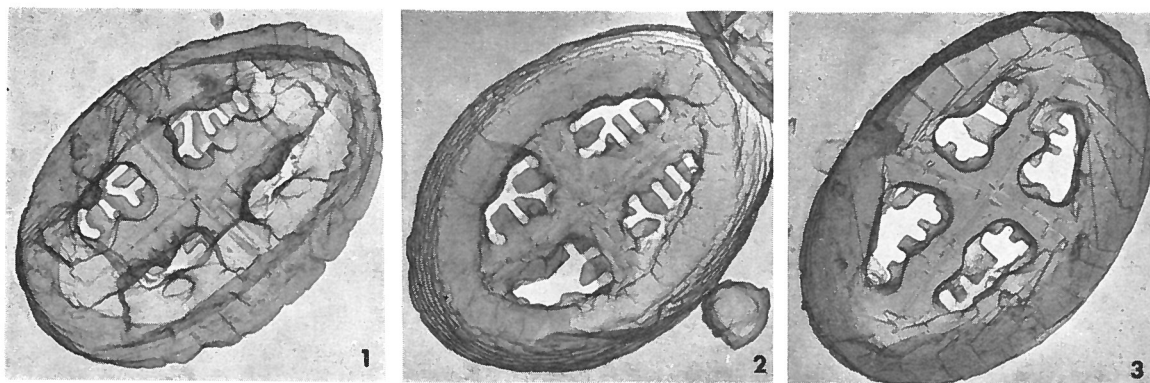


Vagalapilla dentata dentata BUKRY, 1969



Figs. 1-3 — *Vagalapilla dentata dentata* BUKRY, n. sp., n. ssp., 1) distal view, x 10,100; 2) proximal, x 12,800; 3) holotype, distal, x 13,800.

Description:

In distal view the smooth elliptical outline of this form has eccentricity of 1.2 to 1.5 (1.5 mean). The rim cycle contains 24 to 32 (29 mean) dextrally imbricated elements with a radial short margin and strongly clockwise inclined long inner margin. The central area occupies 59 to 69 percent of the coccolith length. Four broad, axial bars with median sutures divide the central area into quadrants. The straight-line sutures are formed by 1 or 2 long flat elements on either side. Each of the 4 kidney-shaped quadrant openings is invaded by 4 or 5 processes which arise from the crossbars. The processes are at the proximal level of the openings. In proximal view the outer rim cycle slopes adcentrally and the elements are dextrally imbricated and inclined counterclockwise. A secondary cycle of 28 radially oriented elements borders the central area. No stem structure is present.

Maximum diameter: 8.5 μ .

Remarks:

The central-area structure is similar to that of *Broinsonia dentata* BUKRY, but the rim structure is entirely different. Although the rim structure is typical of *Vagalapilla* species, the central area dentation is unique in this genus. Rim ribs (crystallite lamellae?) are commonly noted on specimens from sample LW-4.

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-3172, distal view (fig. 3). Primary paratype, UI-H-3173, proximal view (fig. 2). Paratypes, UI-H-3171, UI-H-3173 through UI-H-3177.

Author:

Bukry D., 1969, p. 56; pl. 32, figs. 1-3.

Reference:

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