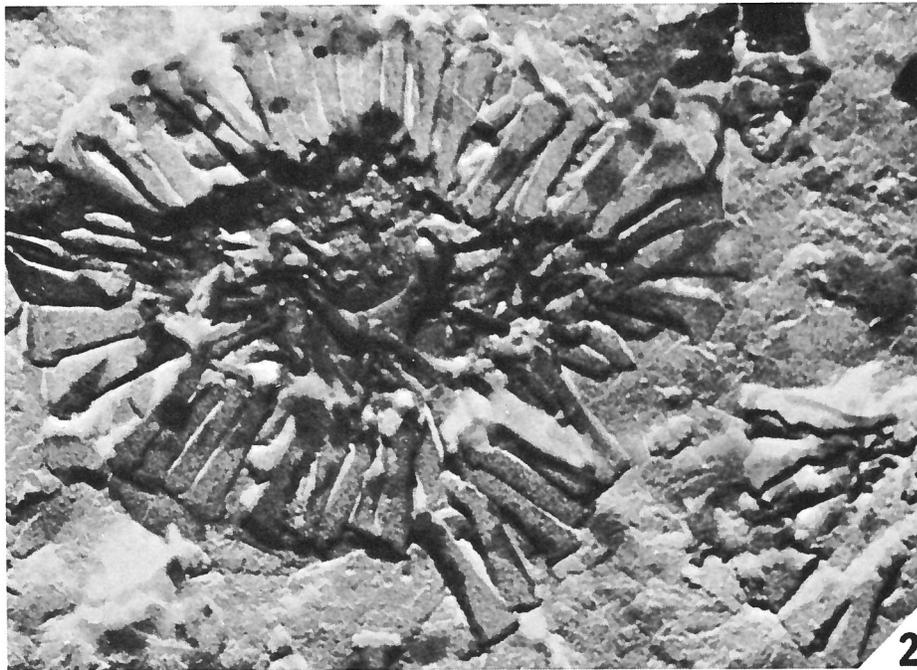# Paleococcolithus missouriensis Gartner & Gentile, 1972

Figs. 1-2 - *Paleococcolithus missouriensis* n. sp.
1) parts of three specimens on the cleavage surface of a piece of the Pennsylvanian Tecum-
seh Shale of Missouri. × 5000.   2) enlargement of the holotype. × 14000.

Description:

Diagnosis: Elliptical plate, about 3.5 microns across, constructed of radially arranged imbricating elements; central area containing randomly oriented smaller elements.

Description: The single visible shield is constructed of about 48 elements which imbricate slightly and are oriented nearly radially. Individual elements are about 0.7 micron long and from 0.2 to 0.3 micron across. The maximum diameter of the shield is about 3.5 microns, the minimum diameter about 1.7 microns. The central area appears to be partially filled by smaller and some-what irregular elements which appear to be randomly arranged. A second shield is not visible and may be lacking. No collar or central tube seems to be developed. The elements of the shield may have been held together along the sutures and the overlap, but they are also thickened on the interior end as if they had been cemented.

The elements also widen distally and on the peripheral tip have more or less well-developed lateral protrusions, similar to those of the late Pleistocene-Holocene species *Emiliania huxleyi* (LOHMANN).

Remarks:

Paleococcolithus missouriensis does not resemble closely any known coccolith. The disc resembles most closely the shields of *Emiliania huxley* (LOHMANN) or *Pseudoemiliania lacunosa* (KAMPTNER), but lack of a second shield or collar sets it apart completely.

Type level:

Pennsylvanian.

Type locality:

Tecumseh Shale, Virgilian Series, Missouri.

Depository:

Department of Geology and Geography, University of Missouri, Kansas City, Missouri.

Author:

Gartner S. & Gentile R., 1972, p. 404; pl. 1, figs. 1-2.

Reference:

Problematic Pennsylvanian coccoliths from Missouri. Micropaleontology, vol 18, no. 4, pp. 401-404, 1 pl.