

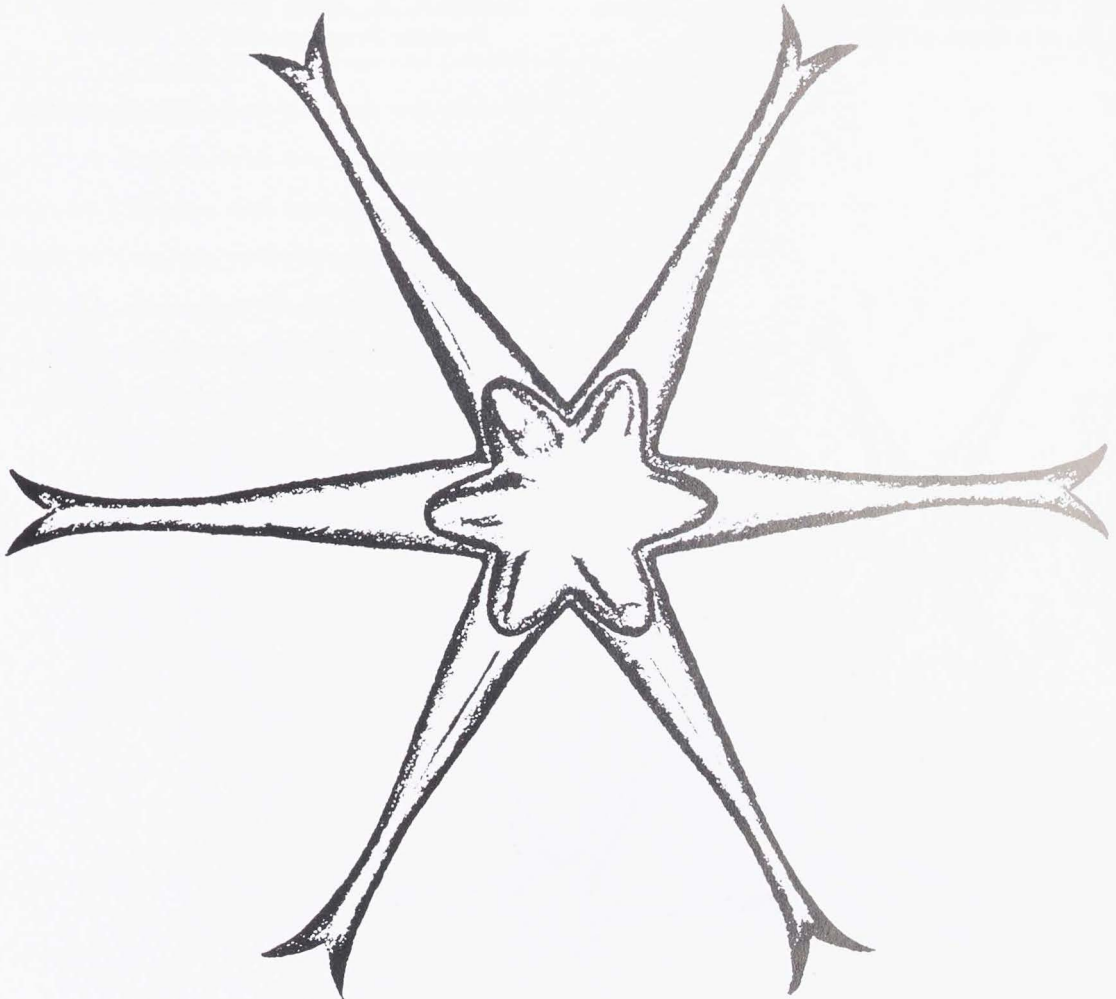
DISCOASTER PETALIFORMIS MOSHKOVITZ AND EHRLICK, 1984,
COINCIDENTALIS, A NEW SUBSPECIES
FROM THE SUBSURFACE OF LOUISIANA

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The purpose of this report is to delineate the range of a hitherto undescribed subspecies of *Discoaster* in the subsurface of the Louisiana Gulf Coast. The writer has found it useful for well-to-well correlation because of its short vertical range, which is the shortest of all calcareous nannoplankton and planktic foraminifera known to this author. The entire range is within Calcareous Nannofossil Zone 5, late Early Miocene (NN 5 = *Sphenolithus heteromorphus* Zone; see Tappan, 1980, table 9.4, Neogene biostratigraphic zonation based on calcareous nannoplankton). This subspecies has been identified from subsurface samples in the Shell Michel no. 1, 1-14S.-12E., Assumption Parish, Louisiana,

8395 to 8400 feet; the Mississippi River Fuel no. 3, State Lease no. 3403, Bay-23S.-15E., Pass Wilson Field, Terrebonne Parish, Louisiana; the Odeco-Murphy OCGS-5879, no. 2, Green Canyon Block 21, 12,540 to 12,570 feet; the Conoco no. 1, Mobile Area, Block 991; the Amoco no. 1, OCS-G-5956, North Padre 1008, 4980 to 5070 feet; and the Conoco no. 2, Mobile Area, Block 991, 4720 to 4930 feet. The last four occurrences were in ditch samples.

The author is grateful to his wife Beverly J. Pecunia, for illustrating the holotype, and to Joseph E. Boudreaux, New Orleans, Louisiana, for reading the manuscript and calling the writer's attention to the species of Moshkovitz and Ehrlick.



Text-figure 1. *Discoaster petaliformis* Moshkovitz and Ehrlick, 1984, *coincidental*is, n. subsp., X 325.

SYSTEMATIC PALEONTOLOGY

Order DISCOASTERACEA Hay, 1977
Genus DISCOASTER Tan Sin Hok, 1927

DISCOASTER PETALIFORMIS Moshkovitz
and Ehrlick, 1984

COINCIDENTALIS, new subspecies
Text-figure 1

Description: The subspecies typically has six rays with bifurcations forming an angle of forty-five degrees. The central knob is extremely high and is present on both distal and proximal sides. The knobs cover the central area and extend a short distance along the rays. They are also six-rayed but unbifurcated. The length of each ray is invariably twice the diameter of the central knob.

Holotype: USNM 487756; the longest dimension is along extremities of the opposing rays and is four microns.

Type locality: The holotype is from Odeco-Murphy, OCSG-5879, well no. 2, Green Canyon Block 21, at a depth of 12,540-12,570 feet.

Discussion: Most of the specimens figured by Moshkovitz and Ehrlick (1984, Unit 10, figs. 163-169) have rays that are only as long as the diameter of the central knob but some have rays twice the length of the diameter. The specimens observed in wells off the Louisiana Gulf Coast do not have this variation. Accordingly, the writer believes that the isolation of individuals in the Louisiana Gulf Coast Neogene from individuals in Israel gave rise to different gene pools for ray length. This difference indicates the validity of a geographic subspecies.

LITERATURE CITED

- MOSHKOVITZ, S., and A. EHRLICK, 1984, in M.P. AUBRY, Handbook of Cenozoic Calcareous Nannoplankton, Book 1: Ortholithae (Discoasters). Micropaleontology Press, American Museum of Natural History, New York.
- TAPPAN, H., 1980, The Paleobiology of Plant Protists. Freeman and Co., 1028 pp.

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