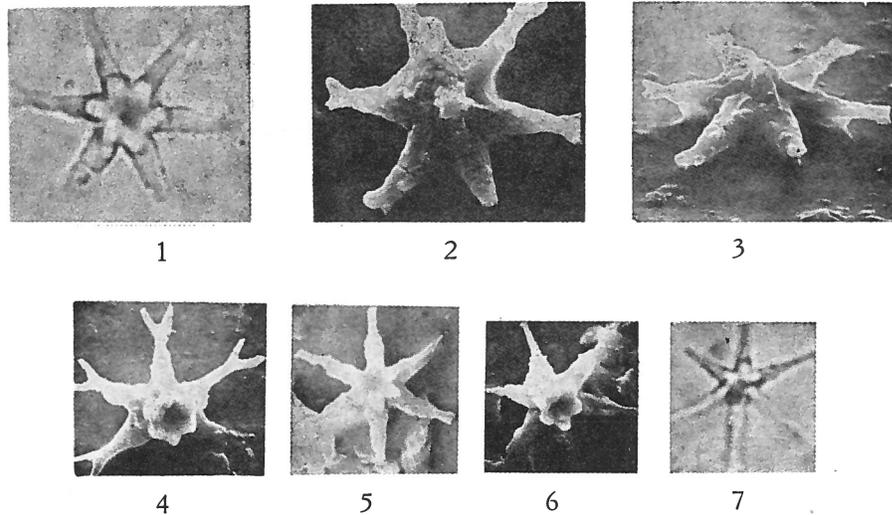


Discoaster petaliformis MOSHKOVITZ & EHRLICH, 1980



Figs. 1-7 — *Discoaster petaliformis* nov. sp., 1) N. 4842, core 10, focused on the proximal stem; Lm. 2) same specimen as in Fig. 1, distal face SEM. 3) same specimen as in Fig. 2, tilted SEM. 4) N. 4842, core 10, proximal face; SEM. 5) N. 4842, core 10, proximal face; SEM. 6) same specimen as in Fig. 5, tilted; SEM. 7) same specimen as in Figs. 5, 6; LM. $\times 2,000$.

Description:

Diagnosis: Discoaster with six main rays, widely bifurcated and a very pronounced stem in a form of small star, with petaloid, rounded tips.

Description: The proximal side of the discoaster is distinguished by a very pronounced and elevated stem that covers most of the central area. This stem in the form of a small star, with rounded, leaf-like rays, aligned with the main rays of the discoaster. The distal side bears a high narrow knob in its center, from which small ridges extend along the median lines of the rays. The extremities of the rays are widely bifurcated.

Dimensions: Length 8-17 μ (mean size 10-12 μ).

Derivation of name: Petal - "flower leaf".

Remarks:

D. petaliformis nov. sp. is very similar to *Discoaster tristellifer* BUKRY, 1976, except for the main rays which in the latter species are pointed or very slightly indented. *D. petaliformis* is somewhat similar to *D. bollii* MARTINI & BRAMLETTE, 1963, however, the central area of the latter is larger in relation to the length of the free rays and the stem is smaller. In both *D. formosus* MARTINI & WORSLEY, 1971 and in *D. altus* MÜLLER, 1974, the stem is prominent, but the central area is larger and the main rays have blunt to pointed ends, with no bifurcation.

Type level:

Middle Miocene (Langhian) -*Sphenolithus heteromorphus* (NN-5) zone.

Distribution: In the Jaffa-1 well, *D. petaliformis* nov sp. was found rather abundantly in the *Sphenolithus heteromorphus* (NN-5) zone, at depths between 1602,5-1608,5 m (core 10); a few specimens were also recorded at a depth of 1672 m, in the upper part of the *Helicopontosphaera ampliaperta* (NN-4) zone.

Type locality:

Jaffa-1 well, core 10, depth 1602-1608,5 m. Central Coastal Plain, Israel.

Depository:

Paleontological collection of the Geol. Surv. Israel, Jerusalem (GSI-N.4842, stub 366).

Holotype: Plate 6, Figs. 1-3 (stub 366/A4); paratype: Plate 6, Fig. 4 (stub 366/A4b).

Author:

Moshkovitz S. and Ehrlich A., 1980, p. 17; pl. 6, figs. 1-7.

Reference:

Distribution of the Calcareous Nannofossils in the Neogene sequence of the Jaffa-1 Borehole, Central Coastal Plain, Israel. Geol. Survey of Israel, Paleont. Div., Report PD/1/80, 25 pp., 7 pls.