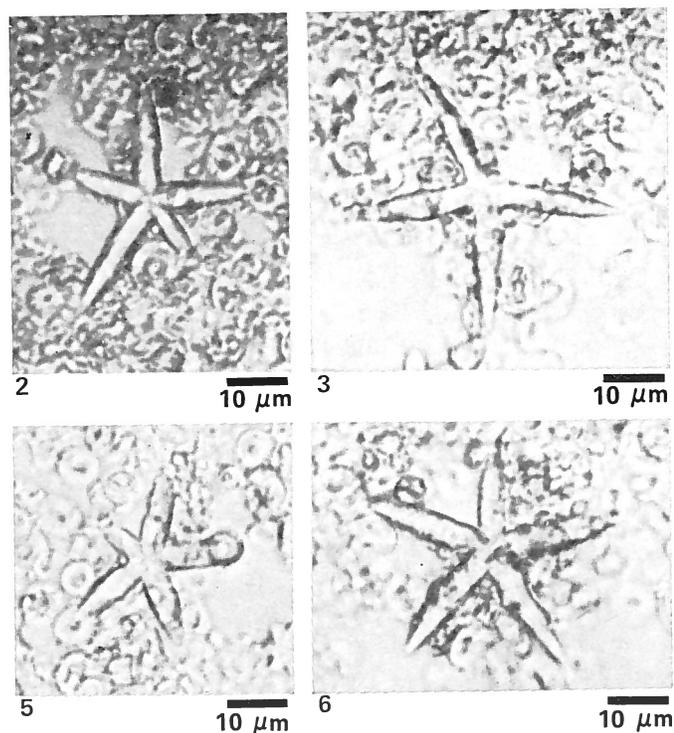


Discoaster okadai BUKRY, 1981

1979, *Discoaster* sp. 2, Okadai & Thierstein, p. 523; pl. 5, fig. 7; pl. 15, fig. 12. Init. Repts. DSDP, vol. 43.



Figs. 2, 3, 5, 6 — *Discoaster okadai* n. sp. DSDP Sample 47.2-8-6, 78-80 cm. (2) USNM 307298, (3) USNM 307299, (5) USNM 307301, (6) Holotype, USNM 307287.

Description:

Discoaster okadai is a very large 4- to 7-ray discoaster. The straight rays are long, thin, and tapered, with simple pointed tips. There is no apparent central area knob or ornamentation. Many specimens show asymmetry from regular equiangular arrangement of the rays. Five-rayed forms are most abundant, with 4-, 6-, and 7-rayed forms occurring in smaller quantities.

Size: Maximum diameter: 20 to 45 µm (holotype 39 µm).

Remarks:

Discoaster okadai was first observed in DSDP Hole 47.2 in the Pacific (Bukry, unpublished data, 1969) but was considered a local aberrant form. Publication

of an identical specimen of the same Paleocene age from Atlantic DSDP Site 384 (Okada and Thierstein, 1979), however, confirms a transoceanic significance for this species. *D. okadai* is distinguished from other large Paleogene species, such as *D. tanii* BRAMLETTE & RIEDEL and *D. nodifer* (BRAMLETTE & RIEDEL), by pointed tapering rays lacking any ornamentation, and from *D. lodoensis* BRAMLETTE & SULLIVAN by the straight, nonridged rays and lack of a central knob. Owing to overgrowth on discoasters at DSDP Sites 47.2 and 384, there is some resemblance to overgrown Neogene specimens of *D. hamatus* or *D. neo-rectus* BUKRY; larger central areas help to distinguish these later species. Because of the large size and distinctive, long, free rays of *D. okadai*, it is easily discriminated from other Paleocene discoasters.

Type level:

Upper Paleocene.

Occurrence: *Discoaster okadai* is known from the upper Paleocene Zone CP7 in Hole 47.2 in the North Pacific (Bukry, unpublished data, 1969) and from the same Zone CP7 at North Atlantic Site 384, with sparse specimens ranging into overlying Subzone CP8a (Okada and Thierstein, 1979). This close correlation in transoceanic occurrences suggests a biostratigraphic value for *D. okadai*.

Type locality:

Northwestern Pacific Ocean, DSDP Sample 47.2-8-6, 78-80 cm (82 m).

Depository:

United State National Museum.

Holotype: USNM 307287.

Isotypes: USNM 307288 to 307301.

Author:

Bukry D., 1981, p. 461; pl. 1, figs. 5-11; pl. 2, figs. 1-6.

Reference:

Pacific coast coccolith stratigraphy between Point Conception and Cabo Corrientes, Deep Sea Drilling Project Leg 63. Initial Reports of the Deep Sea Drilling Project, vol. 63, pp. 445-471, 6 pls., 14 text-figs.