

NEW COMBINATION OF THREE SPECIES OF ASTEROLITHS
ORIGINALLY ADSCRIBED TO *Discoaster* TAN, 1927

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THEODORIDIS (1983) presents an interesting work, broadened and - detailed in the later paper of 1984, in which in agreement with previous designations and other modified descriptions, this author concludes that the genus *Discoaster* TAN (extensively employed in the literature) may be separated into *Eu-discoaster* and *Helio-discoaster*. It is the structural characteristics which permit such a differentiation; in particular the rectilinear or curved trace of the sutures of the central area (see THEODORIDIS, 1984; pp.136-139) together with the general form of the asteroliths. To these determinant features, readily observable in most taxons, should be added the difference in chronostratigraphic distribution of the two Genera. In this sense, authors such as BUKRY (1971), although no explicit mention is made of this new terminology, point to these differences. THEODORIDIS (1984) refers literally to the realm of *Helio-discoaster* in the Paleogene and *Eu-discoaster* in the Neogene (pp. 135).

According to these premises, with reference to a large number of observations of samples taken from Neogene Sediments of the Guadalquivir Basin (SW Spain) and from some D.S.D.P. sites (135-3 and 2, 136-1, 416A-1, - 118-4 and 5, and 415-2), FLORES (1985) considers it of convenience to combine the following species*

Eu-discoaster adamanteus (BRAMLETTE & WILCOXON, 1967) n. comb.

Basionym: *Discoaster adamanteus* BRAMLETTE & WILCOXON, 1967: Tul. Stud. Geol. Paleont., 5(3); pp. 108, pl. 7, fig. 6

Eu-discoaster challengerii (BRAMLETTE & RIEDEL, 1954) n. comb.

Basionym: *Discoaster challengerii* BRAMLETTE & RIEDEL, 1954: J. Paleont., 28(4); pp. 401, pl. 39, fig. 10

Eu-discoaster icarus (STRADNER, 1973) n. comb.

Basionym: *Discoaster icarus* STRADNER, 1973: Init. Rep. DSDP, 13 (II); pp.1138-1139, tex. fig. 1; pl. 41, fig. 10

*) *Recombination presented in the author's Ph. D. Thesis. This work constitutes a review and summary of the new combinations presented in the Thesis.*

According to articles 29 and 33 of the ICBN, the present note may be considered official (for the purposes of publication and publicity) of the new term.

In the case of *Eu-discoaster adamanteus*, the regularity of recordings in the different cores and sections with different conservation states, together with the practically invariable morphology, have prompted us to accept the term as valid and it is not merely a product of diagenesis. However, we are aware that this point requires further confirmation using other types of exhaustive analyses which would offer better guarantees.

In the case of *Eu-discoaster challenger* and *Eu-discoaster icarus*, similar to *Eu-discoaster exilis* and/or *Eu-discoaster variabilis* and *Eu-discoaster parvus* and/or *Eu-discoaster variabilis*, respectively, we have observed evident differences which have previously been reported in the works of, MARTINI & BRAMLETTE (1963), COHEN (1964), BUKRY & PERCIVAL (1971), CLOCCHIATTI (1971), MARTINI & WORSLEY (1971), ELLIS et al. (1972), STRADNER (1973), LEHO TAYOVA (1975), SAN MIGUEL (1976, 1977) and HOJJATZEDEH (1978), among others, with which in general terms we concord.

CITED REFERENCES.-

- BRAMLETTE, M.N. & RIEDEL, W.R.(1954).- Stratigraphic value of Discoasters and some other microfossils related to recent Coccolithophores. J. Paleont., 28, 385-403
- BRAMLETTE; M.N. & WILCOXON, J.A.(1967).- Middle Tertiary calcareous nannoplakton of the Cipero section, Trinidad, W.I. Tul. Stud. Geol. Paleont. 5, 93-131
- BUKRY, D.(1971).- Discoaster evolutionary trends. Micropaleontology, 17, 43-52
- BUKRY, D. & PERCIVAL, S.F.(1971).- New Tertiary calcareous nanofossils. Tul. Stud. Geol. Paleont., 8, 123-146
- CLOCCHIATTI, M.(1971).- Contribution a l'etude du nannoplancton calcaire du Neogene d'Afrique du Nord. Mem. Mus. Nat. Hist. Nat. Ser. C,23, 7-135
- COHEN, D.(1964).- Coccolithophorids and Discoasters from Adriatic botton sediments. Leds. Geol. Medid. 35, 1-44
- ELLIS, C.H., LOHMAN, W.H. & WRAY, J.L.(1972).- Upper Cenozoic calcareous nanofossils from the Gulf of Mexico (Deep Sea Drilling Project, Leg 1, site 3). Quart. Colorado Sch. Mines, 67(3), 1-103
- FLORES, J.A. (1985).- Nanoplancton calcáreo en el Neógeno del borde noroccidental de la Cuenca del Guadalquivir (S.O. de España). Tes. Doct. Un. Salamanca. 1-714. Resumen. Ed. Un. Salamanca,1-37
- HOJJATZADEH, M.(1978).- Discoasters of the Blue Clay (Middle Miocene) of Malta and Gozo. Geol. Mag. 115(1), 1-19
- MARTINI, E. & BRAMLETTE, M.N.(1963).- Calcareous nannoplankton from the experimental Mohole drilling. J. Paleont. 37, 845-856
- MARTINI, E. & WORSLEY, T.(1971).- Tertiary calcareous nannoplankton from the Western Ecuatorial Pacific. In. E.L. Winterer et al. Init. Rep. DSDP, 7(II), 1471-1507
- SAN MIGUEL, M.(1976).- Estudio del nanoplancton calcáreo del Estrecho Nort-Bético. Mem. Tes. Doc. Un. Complutense Madrid, 1-334

SAN MIGUEL, M.(1977).- Contribución al estudio de los Discoastéridos. Bol.R. Soc.Esp.Hist.Nat. 75(1-4), 115-165

STRADNER, H.(1973).- Catalogue of Calcareous Nannoplankton from sediments of Neogene age in the Eastern North Atlantic and Mediterranean Sea. In: W.B.F. RYAN, K.J. HSU, et al. Init. Rep. DSDP, 13(II), 1137-1199

THEODORIDIS, S.A.(1983).- On the legitimacy of the generic name Discoaster TAN, 1927 ex TAN, 1931. INA newsl. 5(1), 15-21

-- (1984).- Calcareous nannofossil biozonation of the Miocene and revision of the Helicoliths and Discoasters. Utrecht Micro-pal. Bull. 32, 1-271

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UFO 3: A nannofossil found in the middle Eocene from the Aquitaine Basin, S.W. France.

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Tiny nannofossil, possibly barrel-shaped, with a circular, 5.3 μ wide basal disc consisting of 24 elements arranged in a subradial manner. The disc is gently depressed over 2/3 of its area. The structure of its center is unclear due to preservation. The side view was not observed but the lateral wall appears to be formed of overlapping plates.

Location: Found in middle Eocene blue marls exposed in the Miretrain Quarry (Aquitaine basin). The nannofossil assemblage found in these marls includes *Chiasmolithus gigas*, *Discoaster martinii*, *Nannotetrina cristata*, *N. fulgens* and *Rhabdosphaera gladius* and is diagnostic of Zone NP 15. The planctonic foraminifera indicate the *Globigerinata theka subconglobata subconglobata* Zone of Bolli (1957, 1966).

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PLATE 1

M. Jakubowski: New calcareous nannofossil taxa from the Lower Cretaceous of the North Sea.

Figs. 1, 10-11: *Eprolithus varolii* JAKUBOWSKI nov. sp.

Fig. 1: Holotype, B.P./Pal 2891; side view, x 10000; Sample OG 57, Otto Gott.

Figs. 10-11: Paratype, MJ/06/85/14-15; Fig.10, phase contrast. Fig.11, cross-polarized light, x 2400; Sample Sun Oil 20/7-A1, 6720'.

Figs. 2-3, 12-13: *Gartnerago praeobliquum* JAKUBOWSKI nov. sp.

Figs. 2-3: Holotype, MJ/N2/18-19; Fig.2, phase contrast, Fig.3, cross-polarized light, x 2400; Sample Occidental 13/28-1, 4780'.

Figs. 12-13: Paratype, MJ/06/85/8-9; Fig.12, phase contrast, Fig. 13, cross-polarized light, x 2400; Sample Sun Oil 20/7-A1, 7040'.