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NOTE ! ! !

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MEMBERSHIP

Applications for membership of the International Nannoplankton Association should be directed to the Secretary/Treasurer. Annual dues: Dfl. 35,-

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NEXT ISSUE

Contributions for the next issue of the INA Newsletter should be received before April 1984. Please send your contributions to: The editor of the INA Newsletter, S.E. van Heck (Address: see front page).

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INFORMATION FOR CONTRIBUTORS:

Manuscripts should not exceed four pages. They are being reproduced in the INA Newsletter without being re-typed. Hence the authors are entirely responsible for the contents and quality of their contributions. Manuscripts of poor quality can be refused by the Editor.
Format: Manuscripts should be typed on A4 (this format); a blank margin of at least 2,5 cm (1 inch) should border the upper, the left, and the right side of each page, and the margin along the lower side should be 3,5 cm (1,5 inch). DO NOT USE DOUBLE SPACING, as this takes up too much space!

EDITORIAL

The 'Handbook of Cenozoic Calcareous Nannoplankton' by Marie-Pierre Aubry, which was supposed to be published last summer, has not yet appeared. Therefore, the promised review of the first volumes could not be included in this issue of the Newsletter. Hopefully we can publish a review in our Spring issue.

A new edition of the International Code of Botanical Nomenclature is about to be published any moment now. We shall try to make a deal with the International Bureau for Plant Taxonomy to obtain a discount for our members. More news about this in the next Newsletter. In that issue we shall also publish a summary of the changes in the Code that are relevant for the nannoplankton section.

HELP - HELP - HELP - HELP - HELP - HELP - HELP - HELP - HELP - HELP - HELP

This notation will be used to draw your attention to requests of your colleagues. As pointed out before, any member who needs information or material can place a request in the Newsletter. such requests will be indicated with an arrow (➤) on the front page. So look for the arrows, and see if you can be of any help!

HAVE YOU ALREADY SENT THE REPRINTS OF YOUR LATEST PUBLICATIONS TO JOHN STEINMETZ? If not, please do so as soon as possible. We need your help to keep the Newsletter up-to-date!

DO NOT FORGET TO PAY YOUR DUES FOR 1984. See financial page.

FINANCES

Credits and debits in the period November 1982 - November 1983

Credit, 1-11-82: Dfl. 1.733.-

Out:	25-11-82	Dfl.	619.-	Printing costs vol.4-2
	30-11-82	Dfl.	240.-	Mailing costs
	26-3-83	Dfl.	500.-	Congress facilities, RCMNS/INA-congress
	28-5-83	Dfl.	300.-	Printing costs vol.5-1
	2-6-83	Dfl.	290.-	Mailing costs
	15-6-83	Dfl.	317.-	Printing costs back issues
		Dfl.	2.266.-	

In: Dues: Dfl. 4.091.-

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Members, 1-11-83: 200

DUES

The annual dues for 1984 are Dfl. 35,- ($12). If you wish to stay a member of INA and to receive the newsletter, PAY YOUR DUES BEFORE DECEMBER 31.

Members with U.S. dollars

Members who submit their annual dues in U.S. dollars are unwittingly contributing to the wealth of Algmene Bank Nederland; that is, the bank charges a substantial fee everytime money must be converted into Dutch Guilders. To remedy this, we have established a bank account in the United States. Those of you who submit their dues in U.S. dollars are urged to send them to John Steinmetz. Checks or money orders should be made out to the International Nannoplankton Association. No account number or bank number is necessary. Periodically, one very LARGE check of collected dues will be transferred to the Netherlands.

John C. Steinmetz.

RECONSTRUCTION OF MARINE PALEOENVIRONMENTS

The proceedings of the Utrecht meeting (March 21-25, 1983) entitled "Reconstruction of marine paleoenvironments" are NOW AVAILABLE; they are bundled in Bulletin 30 of the "Utrecht Micropaleontological Bulletins".

The bulletin (298 pp., price Dfl. 69.-) can be ordered at the UMB sales office, Single 105, 3984 NX Odijk, The Netherlands. After prepayment the bulletin will be sent by surface mail without further charges (Bank account 55 89 29 855 Algemene Bank Nederland, T. van Schaik, Odijk).

The secretary.

BIBLIOGRAPHY AND TAXA OF CALCAREOUS NANNOPLANKTON

Compiled by John C. Steinmetz

New data of the DSDP Init. Rep. volumes:

Volume	Publication date	Mailing date
59	Jan 1981	Jan 1981
60	Mar 1982 [sic]	Feb 1982
61	Aug 1981	Aug 1981
62	Nov 1981	Dec 1981
63	Sep 1981	Sep 1981
64 (1 & 2)	Oct 1982	Oct 1982
65	--------	--------
66	Feb 1982	Mar 1982
67	Nov 1982	Nov 1982
68	Oct 1982	Oct 1982
69	May 1983	

Effective Publication Date of DSDP Init. Reps.
According to the International Code of Botanical Nomenclature (Art.30), the effective publication date is that on which the printed matter became available (i.e., the date it was mailed or placed on sale). Mailing dates are, hence, more appropriate than publication dates in matters of establishing priority.

New Code Word
A new code word has been added to the list for cross-referencing:
Antarctica = The continent of Antarctica and regions south of 70° South Latitude.

A Continuing Reminder
To keep the Newsletter up to date and informative, we need your contributions. Please send reprints to John C. Steinmetz, Denver Research Center, Marathon Oil Company, P.O. Box 269, Littleton, Colorado 80160 USA.

New Developments

The transfer of all INA references onto magnetic tape is nearly complete. If you are interested in obtaining a copy for computer filing and sorting, contact John Steinmetz. You will need to provide him with the specifications of your computer system so that a program can be written to translate the INA file from the Burroughs 7900 Algol language to one which is compatible with your system. You will also need to supply a computer tape, and a one-time charge of U.S. $10 (payable to INA) will be made to provide you with a copy. Thereafter, yearly updates can be made at no extra charge (as long as you remain an INA member). Before sending any tapes or money, write to John Steinmetz with your computer and tape specifications.

Additional Notes on New Combinations
In some publications, new combinations have been introduced at rather unusual places, like plate explanations, in the synonymy list of another species, or in the text outside the chapter taxonomy. As a result, some new combinations have been overlooked, though the publications have been treated in the Newsletter. Please add these on the B- pages, with a *C explaining what happened.

Ericsonia robusta (BRAMLETTE & SULLIVAN 1961) PERCH-NIELSEN 1977; p.774 (ex Cyclolithus). A6-6

Pontosphaera excelsa (PERCH-NIELSEN 1971) PERCH-NIELSEN 1977; p.789 (ex Koczyia) A6-6

Pontosphaera labrosa (BUKRY & BRAMLETTE 1969) PERCH-NIELSEN 1977; p.789 (ex Syracosphaera) A6-6

Prinsius dimorphosus (PERCH-NIELSEN 1969) PERCH-NIELSEN 1977; p.794, (ex Biscutum ?) A6-6

Reticulofenestra minutula (GARTNER 1967) HAQ & BERGGREN 1978; p.1190, (ex Coccolithus) A17-2

CORRECTIONS

B43, A34-7: Caneosphaera GAARDER & HEIMDAL 1977
should be: Caneosphaera GAARDER 1977; In: Gaarder,K.R. & Heimdal,B.R.

B43, A 34-7: Caneosphaera halldalii (GAARDER 1971) GAARDER & HEIMDAL 1977
should be: Caneosphaera halldalii (GAARDER 1971) GAARDER 1977; In: Gaarder,K.R. & Heimdal,B.R.

B69, A104-7: Caneosphaera halldalii (GAARDER 1971) GAARDER & HEIMDAL 1977 f. dilatata HEIMDAL 1981
should be: Caneosphaera halldali (GAARDER 1971) GAARDER 1977 f. dilatata HEIMDAL 1981

B43, A34-7: Caneosphaera molischii (SCHILLER 1925) GAARDER & HEIMDAL 1977
should be: Caneosphaera molischii (SCHILLER 1925) GAARDER 1977; In: Gaarder,K.R. & Heimdal,B.R.

B44, A34-7: Coronosphaera GAARDER & HEIMDAL 1977
should be: Coronosphaera GAARDER 1977; In: Gaarder,K.R. & Heimdal,B.R.

B44, A34-7: Coronosphaera binodata (KAMPTNER 1927) GAARDER & HEIMDAL 1977
should be: Coronosphaera binodata (KAMPTNER 1927) GAARDER 1977; In: Gaarder,K.R. & Heimdal,B.R.

B44, A34-7: Coronosphaera maxima (HALLDAL & MARKALI 1955) GAARDER & HEIMDAL 1977
should be: Coronosphaera maxima (HALLDAL & MARKALI 1955) GAARDER 1977; In: Gaarder,K.R. & Heimdal,B.R.

B44, A34-7: Coronosphaera mediterranea (LOHMANN 1902) GAARDER & HEIMDAL 1977
should be: Coronosphaera mediterranea (LOHMANN 1902) GAARDER 1977; In: Gaarder,K.R. & Heimdal,B.R.

B45, A42-5: Ericsonia formosa (KAMPTNER 1963) ROMEIN 1979
combination had been introduced previously by Haq (1971); see Loeblich & Tappan index VII, 1973.

B23, A9-2: Nannotetrina alata (MARTINI 1969) HAQ & LOHMANN 1976
should be: Nannotetrina alata (MARTINI 1960) HAQ & LOHMANN 1976

B91, A116-6: Pontosphaera japonica (TAKAYAMA 1967) BURNS 1973
combination had been introduced previously by Nishida (1971); see Loeblich & Tappan index VII, 1973

B92, A127-4: Reticulofenestra dictyoda (DEFLANDRE & FERT 1954) ACHUTAN & STRADNER 1969 subsp. scissura etc.
should be: Reticulofenestra dictyoda (DEFLANDRE & FERT 1954) STRADNER 1968 subsp. scissura etc.

A168

1 AKERS,W.H. 1981 strat.
Planktic foraminifera and calcareous nannoplankton biostratigraphy of the Neogene of Mexico. Addendum to Part I. Some additional mid-Pliocene localities and further discussion on the Agueguexquite and Concepcion Superior beds. TERT.U. America.C.
-Tul. Stud. Geol. Paleont.; vol. 16(4), pp.145-148, 1 fig.

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Biostratigraphie de l'Éocéne de la région de Zougbonou (SW de la République Populaire du Bénin, Afrique Occidentale). TERT.L. Africa.CS.
-Cah. Micropaléont., vol. 2, pp. 81-90, 2 pls., 2 tbs.
(In French, with English abstract.)

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Site reports [Middle America Trench lower slope, Cocos Plate - Middle America Trench outer slope, Middle America Trench upper slope, middle America Trench Axis] QUAT. TERT. CRET.U. Pacific.C.
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Calcareous nannofossil biostratigraphy, Leg 64. QUAT. TERT.U. Pacific.N.
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Synthesis of Leg 64 biostratigraphy. QUAT. TERT.U. Pacific.N.
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Quantitative nannofossil correlation to open ocean deep-sea sections from Plio-Pleistocene boundary at Vrica, Italy. TECH.count. TERT.U. Europe.W. Pacific.C.
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7 BEIERSDORF,H. & NATLAND,J.H. 1983 strat.
Sedimentary and diagenetic processes in the Central Panama Basin since the Late Miocene: The lithology and composition of sediments from Deep Sea Drilling Project Sites 504 and 505. TERT.U. Pacific.C. DIAG. SEDIM.
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Eocene planktonic foraminifera and calcareous nannoplankton of the Paris Basin and Belgium. TERT.L. Europe.W.
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A169

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The Oligocene/Miocene boundary in the Equatorial Atlantic DSDP Site 354. Results of studies on planktic Foraminifera and calcareous nannofossils. TERT.
-Rev. Ital. Paleontol. Stratig., vol. 88, no. 1, pp. 113-132, 3 pls., 4 figs. Atlantic.C.

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Osservazioni sull'évoluzione dell'arco Calabro-Peloritano nel Miocene Inferiore: la formazione di Stilo-Capo d'Orlando. TERT.U.
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The calcareous nannofossils of the Lichi Melange and the Kenting Melange and their significance in the interpretation of plate-tectonics of the Taiwan region.
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Datation de termes aquitaniens et burdigaliens dans la zone prédorsalienne, bético-rifaine et ses couséquences. (Dating of Aquitanian and Burdigalian levels in the BeticRifian "Zone Prédorsalienne" and consequences).
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A172

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8	KENNETT, J.P. 1983 Paleo-oceanography: global ocean evolution. -Rev. Geophys. & Space Phys., vol. 21 (5), pp. 1258-1274.	OVERVIEW Worldwide
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10	LABORATORY OF MARINE MICROPALEONTOLOGY 1982 TONG - JI UNIVERSITY, SHANGHAI (Calcareous nannofossils) -China Ocean Press, Peking, 73 pp., 39 figs., 4 tbs. (In Chinese)	strat(syst) JURA-RECENT OVERVIEW

A173

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The geologic record of climatic change.
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B107 Archaeopontosphaera JAFAR 1983; pp. 237, 128. Type species: Archaeopontosphaera primitiva JAFAR 1983. A172-3

Archaeopontosphaera primitiva JAFAR 1983; pp. 237, 238, fig. 11/1; Austria, Rhaetian (C. marshi Zone), Type species of Archaeopontosphaera JAFAR 1983. A172-3

Braarudosphaera stylifera TROELSEN & QUADROS 1971; pp. 212, 213, pl. 1, fig. 8; Brazil, M. Eocene. A176-7

Citrocalculus TROELSESN & QUADROS 1971; p. 213. Type species: Citrocalculus minutus TROELSEN & QUADROS 1971. A176-7

Citrocalculus minutus TROELSEN & QUADROS 1971; pp. 213, 214, pl. 1, figs. 1-2; Brazil, U. Oligocene. Type species of Citrocalculus. A176-7

Crucirhabdus curvatus JAFAR 1983; p. 247; fig. 12/17; Germany, U. Norian (R. suessi Zone). A172-3

Crucirhabdus minutus JAFAR 1983; p. 247, fig. 12/8, Germany, U. Norian (R. suessi Zone). A172-3

Cyclococcolithus tropicus (KAMPTNER, 1955) GARTNER, CHEN, & STANTON 1983; p. 46; (ex Coccolithus). A171-4

Euconusphaera JAFAR 1983; p. 228. Type species: Euconusphaera tollmanniae JAFAR 1983. A172-3

Euconusphaera tollmanniae JAFAR 1983, pp. 228, 229, fig. 6/1; Austria, U. Norian (R. suessi Zone). Type species of Euconusphaera JAFAR 1983. A172-3

Eu-discoaster altus (MULLER 1974) THEODORIDIS 1983; p. 17 (ex Discoaster). A176-4

Eu-discoaster asymmetricus (GARTNER 1969) THEODORIDIS 1983; p. 17 (ex Discoaster). A176-4

Eu-discoaster bellus (BUKRY & PERCIVAL 1971) THEODORIDIS 1983; p. 17 (ex Discoaster). A176-4

Eu-discoaster berggrenii (BUKRY 1971) THEODORIDIS 1983; p. 17 (ex Discoaster). A176-4

Eu-discoaster brouweri (TAN 1927 ex TAN 1931) THEODORIDIS 1983; p. 17 (ex Discoaster). A176-4

Eu-discoaster bollii (MARTINI & BRAMLETTE 1963) THEODORIDIS 1983; p. 17 (ex Discoaster). A176-4

Eu-discoaster calcaris (GARTNER 1967) THEODORIDIS 1983; p. 17 (ex Discoaster). A176-4

Eu-discoaster decorus (BUKRY 1971) THEODORIDIS 1983; p. 17 (ex Discoaster). A176-4

B108	Eu-discoaster deflandrei (BRAMLETTE & RIEDEL 1954) THEODORIDIS 1983; p. 17 (ex Discoaster).	A176-4
	Eu-discoaster distinctus (MARTINI 1958) THEODORIDIS 1983; p. 17 (ex Discoaster).	A176-4
	Eu-discoaster druggii (BRAMLETTE & WILCOXON 1967) THEODORIDIS 1983; p. 17 (ex Discoaster).	A176-4
	Eu-discoaster exilis (MARTINI & BRAMLETTE 1963) THEODORIDIS 1983; p. 17 (ex Discoaster).	A176-4
	Eu-discoaster hamatus (MARTINI & BRAMLETTE 1963) THEODORIDIS 1983; p. 17 (ex Discoaster).	A176-4
	Eu-discoaster kugleri (MARTINI & BRAMLETTE 1963) THEODORIDIS 1983; p. 17 (ex Discoaster).	A176-4
	Eu-discoaster loeblichii (BUKRY 1971) THEODORIDIS 1983; pp. 17, 18 (ex Discoaster).	A176-4
	Eu-discoaster mendomombensis (WISE 1973) THEODORIDIS 1983; p. 18 (ex Discoaster).	A176-4 *C-1
	Eu-discoaster musicus (STRADNER 1959) THEODORIDIS 1983; p. 18 (ex Discoaster).	A176-4
	Eu-discoaster moorei (BUKRY 1971) THEODORIDIS 1983; p. 18 (ex Discoaster).	A176-4
	Eu-discoaster neohamatus (BUKRY & BRAMLETTE 1969) THEODORIDIS 1983; p. 18 (ex Discoaster).	A176-4
	Eu-discoaster neorectus (BUKRY 1971) THEODORIDIS 1983; p. 18 (ex Discoaster).	A176-4
	Eu-discoaster nonaradiatus (KLUMPP 1953) THEODORIDIS 1983; p. 18 (ex Discoaster).	A176-4
	Eu-discoaster pansus (BUKRY & PERCIVAL 1971) THEODORIDIS 1983; p. 18 (ex Discoaster).	A176-4
	Eu-discoaster pentaradiatus (TAN 1927 ex TAN 1931) THEODORIDIS 1983; p. 18 (ex Discoaster).	A176-4
	Eu-discoaster prepentaradiatus (BUKRY & PERCIVAL) THEODORIDIS 1983; p. 18 (ex Discoaster).	A176-4
	Eu-discoaster pseudovariabilis (MARTINI & WORSLEY 1971) THEODORIDIS 1983; p. 18 (ex Discoaster).	A176-4
	Eu-discoaster quinqueramus (GARTNER 1969) THEODORIDIS 1983; p. 18 (ex Discoaster).	A176-4

B109	Eu-discoaster signus (BUKRY 1971) THEODORIDIS 1983; p. 18 (ex Discoaster).	A176-4
	Eu-discoaster subsurculus (GARTNER 1967) THEODORIDIS 1983; p. 18 (ex Discoaster).	A176-4
	Eu-discoaster surculus (MARTINI & BRAMLETTE 1963) THEODORIDIS 1983; p. 18 (ex Discoaster).	A176-4
	Eu-discoaster tamalis (KAMPTNER 1967) THEODORIDIS 1983; p. 18 (ex Discoaster).	A176-4
	Eu-discoaster tristellifer (BUKRY 1976) THEODORIDIS 1983; p. 18, 19 (ex Discoaster).	A176-4
	Eu-discoaster variabilis (MARTINI & BRAMLETTE 1963) THEODORIDIS 1983; p. 18 (ex Discoaster).	A176-4
	Hayococcus JAFAR 1983; p. 229. Type species: Hayococcus floralis JAFAR 1983.	A172-3
	Hayococcus floralis JAFAR 1983; pp. 229, 231, fig. 6/4; Germany, U. Norian (R. suessi Zone). Type species of Hayococcus JAFAR 1983.	A172-3
	Helicosphaera moorkensii STEURBAUT 1983; pp. 328, 329, pl. 1, figs. 1-9; Aquitanian Basin, France, E. Oligocene.	A172-3
	Helio-discoaster barbadiensis (TAN 1927 ex TAN 1931) THEODORIDIS 1983; p. 19 (ex Discoaster).	A176-4
	Helio-discoaster bifax (BUKRY 1971) THEODORIDIS 1983; p. 19 (ex Discoaster).	A176-4
	Helio-discoaster binodosus (MARTINI 1958) THEODORIDIS 1983; p. 19 (ex Discoaster).	A176-4
	Helio-discoaster colletii (PAREJAS 1939) THEODORIDIS 1983; p. 19 (ex Discoaster).	A176-4
	Helio-discoaster diastypus (BRAMLETTE & SULLIVAN 1961) THEODORIDIS 1983; p. 19 (ex Discoaster).	A176-4
	Helio-discoaster elegans (BRAMLETTE & SULLIVAN 1961) THEODORIDIS 1983; p. 19 (ex Discoaster).	A176-4
	Helio-discoaster gemmeus (STRADNER 1959) THEODORIDIS 1983; p. 19 (ex Discoaster).	A176-4
	Helio-discoaster kuepperi (STRADNER 1959) THEODORIDIS 1983; p. 19 (ex Discoaster).	A176-4
	Helio-discoaster lenticularis (BRAMLETTE & SULLIVAN 1961) THEODORIDIS 1983; p. 19 (ex Discoaster).	A176-4

B110 Helio-discoaster lodoensis (BRAMLETTE & RIEDEL 1954) THEODORIDIS 1983; p. 19 (ex Discoaster). A176-4

Helio-discoaster mediosus (BRAMLETTE & SULLIVAN 1961) THEODORIDIS 1983; p. 19 (ex Discoaster). A176-4

Helio-discoaster mirus (DEFLANDRE 1952 ex DEFLANDRE 1954) THEODORIDIS 1983; p. 19 (ex Discoaster). A176-4

Helio-discoaster mohleri (BUKRY & PERCIVAL 1971) THEODORIDIS 1983; p. 19 (ex Discoaster). A176-4

Helio-discoaster multiradiatus (BRAMLETTE & RIEDEL 1954) THEODORIDIS 1983; p. 19 (ex Discoaster). A176-4

Helio-discoaster nobilis (MARTINI 1961) THEODORIDIS 1983; p. 19 (ex Discoaster). A176-4

Helio-discoaster nodifer (BRAMLETTE & RIEDEL 1954) THEODORIDIS 1983; p. 20 (ex Discoaster). A176-4

Helio-discoaster ornatus (STRADNER 1958) THEODORIDIS 1983; p. 20 (ex Discoaster). A176-4

Helio-discoaster pacificus (HAQ 1969) THEODORIDIS 1983; p. 20 (ex Discoaster). A176-4

Helio-discoaster perpolitus (MARTINI 1961) THEODORIDIS 1983; p. 20 (ex Discoaster). A176-4

Helio-discoaster saipanensis (BRAMLETTE & RIEDEL 1954) THEODORIDIS 1983; p. 20 (ex Discoaster). A176-4

Helio-discoaster splendidus (MARTINI 1960) THEODORIDIS 1983; p. 20 (ex Discoaster). A176-4

Helio-discoaster sublodoensis (BRAMLETTE & SULLIVAN 1961) THEODORIDIS 1983; p. 20 (ex Discoaster). A176-4

Helio-discoaster tani (BRAMLETTE & RIEDEL 1954) THEODORIDIS 1983; p. 20 (ex Discoaster). A176-4

Helio-discoaster wemmelensis (ACHUTHAN & STRADNER 1969) THEODORIDIS 1983; p. 20 (ex Discoaster). A176-4

Micrantholithus hayi (BUKRY 1969) TROELSEN & QUADROS 1971; p. 214, (ex Discoaster ?). A176-7

Prinsiosphaera JAFAR 1983; p. 232. Type species: Prinsiosphaera triassica JAFAR 1983. A172-3

Prinsiosphaera geometrica JAFAR 1983; p. 233, fig. 10/5; Germany, Rhaetian (C. marshi Zone). A172-3

B111	*Prinsiosphaera triassica* JAFAR 1983; pp. 232, 233, fig. 8/1; Austria, U. Norian (*R. suessi* Zone). Type species of *Prinsiosphaera* JAFAR 1983.	A172-3
	Prinsiosphaera triassica JAFAR 1983 ssp. *crenulata* JAFAR 1983; p. 235, fig. 8/8; Austria, U. Norian (*R. suessi* Zone).	A172-3
	Prinsiosphaera triassica JAFAR 1983 ssp. *hyalina* JAFAR 1983; p. 234, fig. 9/1. Austria, U. Norian (*R. suessi* Zone).	A172-3
	Prinsiosphaera triassica JAFAR 1983 ssp. *noeliae* JAFAR 1983; p. 234, fig. 9/89. Germany, Rhaetian (*C. marshi* Zone).	A172-3
	Prinsiosphaera triassica JAFAR 1983 ssp. *perforata* JAFAR 1983; pp. 234, 234, fig. 8/4; Austria, U. Norian (*R. suessi* Zone).	A172-3
	Prinsiosphaera triassica JAFAR 1983 ssp. *punctata* JAFAR 1983; pp. 235, 237, fig. 7/5, N. Italy, L. Carnian.	A172-3
	Rhagodiscus achylostaurion (HILL 1976) DOEVEN 1983; p. 50; (ex *Parhabdolithus*).	A171-1
	Tetralithus? cassianus JAFAR 1983; p. 239, fig. 11/11; N. Italy, L. Carnian.	A172-3
	Tetralithus pseudotrifidus JAFAR 1983; pp. 238, 239, fig. 11/13; Germany, Rhaetian (*C. marshi* Zone).	A172-3
	Transversopontis fibula GHETE 1976; p. 144, pl. 2, figs. 7-9; Roumania, M. Oligocene.	A171-5
	Vekshinella gausorhethium (HILL 1976) DOEVEN 1983; p. 50; (ex *Vagalapilla*).	A171-1
	Vekshinella thiersteinii JAFAR 1983; pp. 243, 244, fig. 12/1-3; Austria, Rhaetian.	A172-3 *C-2

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COMMENTS

1 - B108: *Eu-discoaster mendomombensis* (WISE 1973) THEODORIDIS 1983; *err. cit. pro. Eu-discoaster mendomobensis* (WISE 1973) THEODORIDIS 1983.
2 - B111: *Vekshinella thiersteinii* JAFAR 1983; according to the author possibly Hettangian (see p. 257).

Species names in alphabetical order.

achylostaurion, Rhagodiscus
altus, Eu-discoaster
asymmetricus, Eu-discoaster
barbadiensis, Helio-discoaster
bellus, Eu-discoater
berggrenii, Eu-discoaster
bifax, Helio-discoaster
binodosus, Helio-discoaster
bollii, Eu-discoaster
brouweri, Eu-discoaster
calcaris, Eu-discoaster
cassianus, Tetralithus?
colletii, Helio-discoaster
curvatus, Crucirhabdus
decorus, Eu-discoaster
deflandrei, Eu-discoaster
diastypus, Helio-discoaster
distinctus, Eu-discoaster
druggii, Eu-discoaster
elegans, Helio-discoaster
exilis, Eu-discoaster
fibula, Transversopontis
floralis, Hayococcus
gausorhethium, Vekshinella
gemmeus, Helio-discoaster
geometrica, Prinsiosphaera
hamatus, Eu-discoaster
hayi, Micrantholithus
kuepperi, Helio-discoaster
kugleri, Eu-discoaster
lenticularis, Helio-discoaster
lodoensis, Helio-discoaster
loeblichii, Eu-discoaster
mediosus, Helio-discoaster
mendomobensis, Eu-discoaster
minutus, Citrocalculus
minutus, Crucirhabdus
mirus, Helio-discoaster
mohleri, Helio-discoaster
moorei, Eu-discoaster
moorkensii, Helicosphaera
multiradiatus, Helio-discoaster
musicus, Eu-discoaster
neohamatus, Eu-discoaster
neorectus, Eu-discoaster
nobilis, Helio-discoater
nodifer, Helio-discoaster
nonaradiatus, Eu-discoaster
ornatus, Helio-discoaster
pacificus, Helio-discoaster
pansus, Eu-discoaster
pentaradiatus, Eu-discoaster
perpolitus, Helio-discoaster
prepentaradiatus, Eu-discoaster
primitiva, Archaeopontosphaera
pseudotrifidus, Tetralithus
pseudovariabilis, Eu-discoaster
quinqueramus, Eu-discoaster
saipanensis, Helio-discoaster
signus, Eu-discoaster
splendidus, Helio-discoaster
stylifera, Braarudosphaera
sublodoensis, Helio-discoaster
subsurculus, Eu-discoaster
surculus, Eu-discoaster
tamalis, Eu-discoaster
tani, Helio-discoaster
thiersteinii, Vekshinella
tollmanniae, Euconusphaera
triassica, Prinsiosphaera
triassica spp. crenulata, Prinsiosphaera
triassica spp. hyalina, Prinsiosphaera
triassica spp. noeliae, Prinsiosphaera
triassica spp. perforata, Prinsiosphaera
triassica spp. punctata, Prinsiosphaera
tristellifer, Eu-discoaster
tropicus, Cyclococcolithus
variabilis, Eu-discoaster
wemmelensis, Helio-discoaster

New genus names.

Archaeopontosphaera

Citrocalculus

Euconusphaera

Hayococcus

Prinsiosphaera

➤ HELP - HELP - HELP - HELP - HELP - HELP - HELP - HELP - HELP - HELP - HELP

We received the following request from Marie-Pierre Aubry, to which we hope you will give support, for the benefit of us all.

➤ HELP - HELP - HELP - HELP - HELP - HELP - HELP - HELP - HELP - HELP - HELP

➤ PREPARATION OF A REFERENCE COLLECTION FOR CENOZOIC CALCAREOUS NANNOFOSSIL TAXA.

We are all aware of the subjectivity of our taxonomic concepts and it has been one of the recommendations, again formulated during the calcareous nannofossil workshop held in Zürich last July during the first International Congress on Paleoceanography, that we should as often as possible refer to the original descriptions of the species and should make an effort to unify our taxonomic concepts. The various synonymic lists which are still published, varying from one author to the next, is proof enough of the need for developing a less subjective, more objective taxonomy. The handbook of Cenozoic calcareous nannofossils which is being published is one step towards this taxonomic objectivity, but yet is insufficient. There is no comparison between looking at pictures of a few illustrated well-chosen representatives of a taxon and having your own experience of a species of which you can study leisurely numerous specimens with your preferred technique (polarized light, phase contrast, gypsum slide...); and we each have our own subtle criteria, "le petit truc", which help us in differentiating between species. It is for these reasons that I started to put together a reference collection. It was first for my own use; but as many of you kindly sent me samples of the type materials from which you described species, I feel that I should deposit a reference collection in an appropriate university or museum where it can be easily consulted. At this point, I have made an agreement with Dr. J. Saunders to deposit a set of the reference collection at the Museum of Natural History in Basel (Switzerland), where facilities are excellent. The museum has a large depository where DSDP material is being curated, and where several large collections of Planktonic Foraminifera, among others, have been or will be deposited. Consequently, it seems appropriate to gather collections at the same place. Moreover, Basel has a central location and .. it is a nice city! Smear slides from the type materials that will be available until the early fall, will be deposited in the Museum of Natural History in Basel in the course of November. Hopefully a second batch of slides will be deposited next spring. Characteristic topotypes will be located using the universal slide. The library of the museum is rich and volumes of my handbook will be added as published. The microscope material available will be adequate for study and the microscope will be equipped with a camera so one can take his own pictures. I will keep another set of the reference collection at Woods Hole Oceanographic Institution where it can be consulted any time.

➤ NOW, WHAT I NEED IS YOUR HELP! To achieve a basic utility, the reference collection must gather type material, exclusively. This material is not accessible to me unless you can provide me with it. I realize that it is not fun to search for hidden, half forgotten samples in the darkness of a university or a museum cave, and it seems to be a waste of time. But it

is my hope that we can collaborate to bring this reference collection into being, in a common effort to help our colleagues, our students and, who knows? our children! Please, if you have not done it yet, send a sample of the type materials from which you have described new taxa to :

Marie-Pierre Aubry
Woods Hole Oceanographic Institution
Woods Hole, Massachusetts 02543, U.S.A.

I thank you very much. Marie-Pierre Aubry

➤ HELP - HELP - HELP - HELP - HELP - HELP - HELP - HELP - HELP - HELP - HELP

HAVE YOU ALREADY SENT YOUR REPRINTS TO JOHN STEINMETZ ??????

DO NOT FORGET TO PAY YOUR ANNUAL DUES FOR 1984 !!!!!

VALIDATION OF HOMOZYGOSPHAERA HALLDALII

by K.R. Gaarder

Miss S.E. van Heck has pointed out (INA Newsletter vol.3(2), p.85, 1981) that Homozygosphaera halldalii GAARDER (in: Heimdal & Gaarder 1980) should be treated as a new species. It is hereby reintroduced with an emended diagnosis in English and Latin.

Homozygosphaera halldalii GAARDER n. sp.

SYNONYMS: Zygosphaera wettsteinii KAMPTNER in part, excluding the type, 1941, pl.10, fig. 104 a,b, Homozygosphaera wettsteinii sensu Halldal & Markali 1955, p.9, pl.5.

DIAGNOSIS emend. GAARDER
Cell ellipsoidal, diameter 11.0-18.5 µm, with two flagella, short haptonema and characteristic organic scales.
Coccoliths zygoliths, built of rhombohedric crystals, length 1.9-3.0 µm, length/breadth ratio 1.3-1.6, total height 1.0-1.4 µm, proximal tube 6-8 crystal rings high, roof slightly vaulted with elevated ridge along long axis, highest in center, and connected with peripheral part by 4-7 arches of varying breadth. Ridge in coccoliths surrounding flagellar area sometimes higher than usual.

HOLOTYPE: Negative CIR, 235A (pl.5, fig.2 in Halldal & Markali 1955).

TYPE LOCALITY: Capri, Mediterranean.

Cella ellipsoidea, diametro 11.0-18.5 um, flagellis duobus, haptonema brevi, squamis characteristicis organicis obtecta.
Coccolithi zygolithi, crystallis rhombohedricis contructi, longitudine 1.9-3.0 µm, longitudine:latitudine 1.3-1.6, altitudine summa 1.0-1.4 µm; tubus proximalis 6-8 anulis crystallicis altis, tecto leviter convexo crista secundum axim longam elevata, centro altissimo, cum parte peripherali arcis 4-7 varie latitudine connecto. Crista coccolithorum circum aream flagellarem interdum altior quam solet.
HABITAT TYPI : Capreae, Mare medium.

References

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