

PALEONTOLOGICAL NOTES

STATUS OF THE CRETACEOUS PLANKTONIC
FORAMINIFERAL GENERA *ANATICINELLA*
AND *PSEUDOTICINELLA*

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The planktonic foraminiferal genus *Pseudoticinella* was recently described by Longoria (1973) with *Globorotalia? multiloculata* Morrow, 1934, selected as type species. Prior to the designation of this taxon as *Pseudoticinella multiloculata* (Morrow) by Longoria in 1973 the species has been assigned to other genera by various authors. Some of these generic assignments were to *Globorotalia?* by Morrow (1934); *Rugoglobigerina*, by Bermudez (1952); *Thalmaninella* by Bronnimann and Brown (1955); and *Ticinella* by Eicher and Worstell (1970). Longoria (1973) stated that *Pseudoticinella* could be differentiated generically from *Ticinella* by possessing an imperforate peripheral band and an umbilical cover plate, and from *Thalmaninella* by lacking a keel.

Globorotalia? multiloculata had also been selected as the type species for the genus *Anaticinella* by Eicher (1972). The genera *Anaticinella* and *Pseudoticinella* are congeneric, and *Anaticinella* is determined as the valid taxon on the basis of priority. As a result of this determination the new species *Pseudoticinella planoconvexa* is transferred to the genus *Anaticinella*.

Thalmaninella has been established as a junior synonym of *Rotalipora* by Loeblich and Tappan (1964). Eicher (1972) noted that *Anaticinella* could be separated from *Rotalipora* by the presence or absence of a keel, but he further noted the morphologic similarities between *Anaticinella* and *Ticinella*. He justified the erection of his new genus both on a morphologic basis with regard to *Rotalipora* (= *Thalmaninella*) and on phyletic distinctness with regard to *Ticinella*.

Ticinella is limited to the Albian and Aptian. This genus gave rise to *Rotalipora* in the Albian, which in turn gave rise to *Anati-*

cinella in the Cenomanian. Eicher (1972) suggested that *A. multiloculata* could not be a late Cenomanian extension of the *Ticinella* lineage, as no representatives of either of these genera occur in the stratigraphic interval between the late Albian and late Cenomanian.

The stratigraphic range of *Anaticinella* is questionable. Eicher (1972) regarded this genus basically as a late Cenomanian form, although he indicated that it ranges into the early Turonian. Longoria (1973) recorded *Pseudoticinella* (now = *Anaticinella*) from strata he regarded as early Turonian in age. This determination was made by Longoria on material corresponding to locality "D-2" of the First Interamerican Micropaleontological Colloquium; Dallas, Texas, 1970. Locality "D-2", Britton Member, Eagle Ford Formation, is regarded as late Cenomanian in age, the *Rotalipora* Assemblage Zone, *R. cushmani-greenhornensis* subzone. (See p. A28, IMC 1 Guidebook, Powell, 1970). The age range Longoria assigned to his genus, however, was late Cenomanian to early Turonian.

Microfaunal evidence for the placement of the Turonian-Cenomanian boundary has been fully discussed with reference to the Eagle Ford Group by Douglas and Sliter (1966) and need not be repeated here. It is sufficient to state that the genus *Anaticinella* has a stratigraphic range of late Cenomanian to early Turonian.

Anaticinella is sufficiently distinct both morphologically and phyletically to justify the erection of a new genus. *Pseudoticinella* does not fulfil these requirements and must be regarded as a junior synonym of *Anaticinella*.

ACKNOWLEDGMENTS

The writer is indebted to F.B. Bourgeois and B.R. Wilhoit for helpful discussions; to Dr. W. H. Akers for reading an earlier draft of the manuscript; to P. Haman for technical assistance and the Chevron Oil Company for publication permission.

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November 19, 1975

REVIEWS

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AN ATLAS OF BRITISH RECENT FORAMINIFERIDS, by John W. Murray. Published by American Elsevier Publishing Company, Inc., New York, 1971, xii + 244 pp., illus., \$22.50

This handsome book illustrates 129 foraminiferids from the seas around the British Isles. Each species is depicted in several views with scanning electron photomicrographs at magnifications from 6000X to 20,000X, displaying details of the aperture and the texture of the walls in addition to the external morphology of the test. The brief text includes information on the geographical distribution of the species and lists of the forms which characterize each environmental habitat. Relict sediments and anomalous records are discussed. Each plate is accompanied by a short description of the species, notes on important nomenclatorial changes, and reported distributions in western Europe.

MANUAL OF PLANKTONIC FORAMINIFERA, by J. A. Postuma. Published by Elsevier Publishing Company, Amsterdam, London, New York, 1971, vii + 420 pp., illus., \$29.00

This attractive volume presents an atlas of 160 species of planktonic foraminiferids selected by the author for their importance in correlation of Mesozoic and Cenozoic strata. The quarto format permits three (or four) large-scale photomicrographs of each species to be arranged in a vertical column with the corresponding view illustrated by an excellent artist's drawing alongside each photograph. A cross-sectional drawing of the species is added at the bottom of each plate to assist in recognition of these forms in thin-sections of limestones. Three folding range-charts add to the usefulness of this well-executed work. It deserves a place on the shelves of all active micropaleontologists.

NEW NAME FOR A WESTERN ATLANTIC MARGINELLID

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A recent publication (Kaicher, 1973) has illustrated for the first time several of the small marginellid species described by Dall (1927) from dredgings in deep water off Georgia and Florida. The name of one of the figured species is a primary homonym, preoccupied by Dall's own use of the same name for another taxon. Because the figure is this popularly oriented work is likely to lead to recognition of the species in museum and perhaps in private collections, this seems an appropriate time to provide a replacement for the preoccupied name.

VOLVARINA DISCORS Roth, nom. nov.

Marginella [*Marginella*] *inepta* DALL, 1927, U.S. Natl. Mus., Proc., v. 70, art. 18, no. 2667, pp. 4, 45.

Volvarina inepta (Dall). KAICHER, 1973, Card Cat. World-wide Shells, 1, Marginellidae, fig. 47 (holotype).

Not *Marginella bella* Conrad, var. *inepta* DALL, 1890, Wagner Free Inst. Sci., Trans., v. 3, part 1, p. 53, pl. 4, fig. 8d; DALL, 1915, U.S. Natl. Mus., Bull. 90, p. 53, pl. 15, fig. 2 (as *Marginella inepta* Dall).

Type locality: Recent, off Georgia and Fernandina [Florida], in 440 and 294 fathoms.

Holotype, USNM 107974.

Dall's name of 1927 is considered preoccupied by his earlier use of the same epithet at the varietal rank in accordance with Article 17 of the International Code of Zoological Nomenclature. Roth and Clover (1973, p. 208) discuss the application of the Code in comparable cases.

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November 19, 1975

REVIEW

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THE GEOLOGICAL STRUCTURE OF NEW ZEALAND, by Jacobus T. Kingma. Published by John Wiley & Sons, New York, London, Sydney, Toronto, 1974, xvii + 407 pp., illus., \$60.00

This is a volume of the *Regional Geology Series*, edited by L. U. de Sitter. It is a well-illustrated practical account of the geological history of the New Zealand area, including the sedimentary processes, tectonic unrest and mountain building, and crustal decay. This work provides a comprehensive modern account of the geology of New Zealand and its important role in the geolog-

ical history of the Southwest Pacific which fills a significant gap in the currently available literature.

Introductory chapters deal with the broad aspects of New Zealand geology and geosynclinal history, the origin of New Zealand and its solitary position in the South Pacific Ocean basin, and the gravity field of the area. Subsequent chapters review the geology in a logical stratigraphic order. Concluding chapters are concerned with igneous masses, geosynclinal sedimentaries, orogenic and diastrophic movements, and notes on the reconstruction of Gondwana in the South Pacific region.