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The Mesozoic Corals.
Bibliography 1758-1993.

Supplement 13 (-2007)

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Summary

This supplement to the bibliography (published in the Coral Research Bulletin 1, 1994) contains 19 additional references to literary material on the taxonomy, palaeoecology and palaeogeography of Mesozoic corals (Triassic - Cretaceous; Scleractinia, Octocorallia). The bibliography is available in the form of a data bank with a menu-driven search program for Windows-compatible computers. Updates are available through the Internet (www.cp-v.de).

Key words: Scleractinia, Octocorallia, corals, bibliography, Triassic, Jurassic, Cretaceous, data bank

Résumé

Le supplément à la bibliographie (publiée dans Coral Research Bulletin 1, 1994) contient 19 autres références au sujet de la taxinomie, paléoécologie et paléogéographie des coraux mesozoïques (Trias - Crétacé; Scleractinia, Octocorallia). Par le service de mise à jour (www.cp-v.de), la bibliographie peut être livrée sur la base des données avec un programme de recherche contrôlée par menu avec un ordinateur Windows-compatible.

Mots-clés: Scleractinia, Octocorallia, coraux, bibliographie, Trias, Jurassique, Crétacé, base des données

Zusammenfassung

Die Ergänzung zur Bibliographie (erschienen im Coral Research Bulletin 1, 1994) enthält 19 weitere Literaturzitate zur Taxonomie und Systematik, Paläoökologie und Paläogeographie der mesozoischen Korallen (Trias-Kreide; Scleractinia, Octocorallia). Die Daten sind als Datenbank zusammen mit einem menügeführten Rechercheprogramm für Windows-kompatible Computer im Rahmen eines Änderungsdienstes im Internet (www.cp-v.de) verfügbar.

Schlüsselworte: Scleractinia, Octocorallia, Korallen, Bibliographie, Trias, Jura, Kreide, Datenbank

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Preface

Numerous hints given by colleagues and new papers edited the previous year yield 19 references for a supplement to the bibliography. For the form of arrangement and abbreviations please refer to the bibliography itself (Coral Research Bulletin 1, 1994).

I am indebted to all colleagues who have sent me copies of their recently published papers for their help in completing the bibliography.

The supplement

BERNECKER, M.

2007. Facies architecture of an isolated carbonate platform in the Hawasina Basin: The Late Triassic Jebel Kawr of Oman. -- *Palaeogeography, Palaeoclimatology, Palaeoecology*, 252, 1/2: 270-280; Amsterdam. D • t • OM

In the oceanic realm of the southern Tethys, carbonate production of isolated platforms ceased after the end-Permian mass extinction and did not recover until the Late Triassic. The Misfah Formation (MF) at Jebel Kawr in the Oman Mountains is interpreted as a relic of such an isolated Late Triassic platform of the Hawasina Ocean, a part of the Neo-Tethys. Correlation of three sections at Jebel Kawr points to a sequence attached Arabian platform. The shallow-water carbonates of Jebel Kawr comprise a platform rim reef facies and bedded inner-platform facies characterized by stacked high-frequency cycles with subtidal to intertidal carbonate sequences. The depositional profile of this Late Triassic isolated platform evolved during Carnian and Norian time from a low-relief phase with volcaniclastic imcnuptions, followed by a carbonate bank stage with a shallow subtidal to peritidal interior and marginal oolite shoals. In the Norian vertical accumulation caused an increase of the platform height and developed a relief along the margins that progressively increased through the aggrading reef stage. The possibility that a reef rim existed and was later d by the Sint reef and olistoliths of similar reef limestones in the surrounding areas.

BLANCKENHORN, M.

1900. Neues zur Geologie und Paläontologie Aegyptens. -- *Zeitschrift der Deutschen Geologischen Gesellschaft*, 52, 1: 21-47; Stuttgart. C • k • ET

DENG, ZHAN-QIU

2006. Middle Triassic Corals from W. Guangxi and S. Guizhou. -- *Acta Palaeontologica Sinica*, 45, 1: 42-51, 3 pls.; Beijing. N • t • RC

KAUFFMAN, E.G., JOHNSON, C.C., COATES, A.G. & SOHL, N.F.

1989. A field guide to the Cretaceous carbonate platforms and rudistid reefs of Jamaica. -- *A University of Colorado Geological Sciences Publication*, 116 pp.. C • k • JA

LÖSER, H.

2007a. Morphology, taxonomy and distribution of the Cretaceous coral genus Preverastraea (Late Barremian-Cenomanian; Scleractinia). -- *Rivista italiana di paleontologia e stratigrafia*, 113, 1: 3-19; Milano. D • k • CZ/EAT/GR/I/IND/MEX/USA

The Cretaceous coral genus Preverastraea is being revised, mainly on the basis of sample material. This cerioid, occasionally astreoid or phaceloid, genus is characterised by round or polygonal calices, compact septa in a regular hexameral symmetry and lonsdaleoid septa. The wall is of the same structure as the septa. The genera Bogdanovicoenia, Paraacanthogyra, and Saxuligyra are considered synonyms of Preverastraea. Related genera are Aulastraeopora and Apoplacophyllia, which only differ by their solitary or dendroid growth forms. There are altogether 13 species of Preverastraea. The genus, which occurred worldwide, is restricted to the period from the Late Barremian to the Late Cenomanian, being most common in the Aptian to Early Albian. Eighty-three samples are either known from the literature or have been to hand. This makes Preverastraea a rather rare genus.

LÖSER, H.

2007b. Case 3386: Pseudocoenia d'Orbigny, 1850 (Coelenterata, Scleractinia): proposed conservation of usage by the designation of a lectotype for the type species. -- *Bulletin of Zoological Nomenclature*, 64, 2: 79-82. C • j

The purpose of this application, under Article 74.1 of the Code, is to conserve the name Pseudocoenia d'Orbigny,1850 in its accustomed usage by designating a new lectotype for its type species Pseudocoenia bernardina d'Orbigny, 1850.The present lectotype of the type species contradicts the original description of the type species as well as the concept of the genus as indicated by its author and as currently used.

LÖSER, H. & MINOR, K.

2007. Palaeobiogeographic aspects of Late Barremian to Late Albian coral faunas from Northern Mexico (Sonora) and the southern USA (Arizona, Texas). -- *Neues Jahrbuch für Geologie und Paläontologie, Abhandlungen*, 245, 2: 193-218; Stuttgart. C • k • MEX/USA

The taxonomy of Early Cretaceous shallow marine coral faunas from the Bisbee Basin (northwestern Mexico and Arizona, southwestern USA) and the Comanche Platform (Texas, USA) are compared to each other and to coral associations of the same age around the world. The analysis here employs a large, comprehensive computer database on Mesozoic corals. The database is used to develop a uniform palaeogeographic framework for the comparisons (300 palaeo-provinces are distinguished worldwide for the Cretaceous), and a distance matrix cluster analysis of shared presence is performed on the data to correlate coral faunas both within and outside of the study area. The study is based entirely on coral material recently collected in the field and studied in museum collections. Of the 754 coral samples examined, a total of 160 species is identified from 54 sample locations. This large total number is in contrast to the low to moderate number of species found in each locality, with a maximum number of 28 species from one locality in northwestern Mexico. This demonstrates that coral distribution was controlled by regional (even local) factors. Outside of the sample area, the coral faunas show a strong correlation to central Tethyan faunas, with strongest affinities to that of the Iberian Peninsula, and also to eastern Tethys and western Pacific faunas. This argues against the commonly held concept of a distinct New World coral faunal realm, and is explained by a west-to-east orientation of warm oceanic connections and the close proximity of the land masses during the Early Cretaceous.

MIŠÍK, M. & MORYCOWA, E.

2004. Upper Jurassic and Lower Cretaceous scleractinian corals from the exotic pebbles - Pieniny Klippen Belt, Slovakian West Carpathians. -- *Slovak Geological Magazine*, 10 (4): 313-321, 5 figs., 2 tab.; Bratislava. D • jk • PL

MORYCOWA, E., ŁABAJ, M. & SZULC, J.

2006. Calicular variation in Eckastrea prisca (Scleractinia) from the Middle Triassic (Anisian) of the Silesain region (SW Poland). -- *Neues Jahrbuch für Geologie und Paläontologie, Monatshefte*, 12: 705-720; Stuttgart. D • t • PL

MORYCOWA, E. & MIŠÍK, M.

2005. Upper Jurassic shallow-water scleractinian corals from the Pieniny Klippen Belt (western Carpathians, Slovakia). -- *Geologica Carpathica*, 56 (5): 415-432, 8 figs., 1 tab.; Bratislava. N • j • PL

MORYCOWA, E. & SZULC, J.

2006. New family Eckastraeidae, Scleractinia (Middle Triassic, Peri-Tethys, Central Europe). -- *Neues Jahrbuch für Geologie und Paläontologie, Monatshefte*, 12: 721-33; Stuttgart. N • t • PL

MORYCOWA, E. & SZULC, J.

2007. Remarks on Middle Triassic (Anisian) scleractinian corals from the Cracow-Silesian region, Poland (northern Peri-tethyan realm). [In:] HUBMANN, B. &

PILLER, W.E. [Eds.]: Fossil corals and sponges. -- *Schriftenreihe der Erdwissenschaftlichen Kommissionen der Österreichischen Akademie der Wissenschaften*, 17: 421-431; Wien. C • t • PL

PANDEY, D.K. & FÜRSICH, F.T.

2006. Jurassic corals from the Shemshak Formation of the Alborz Mountains, Iran. -- *Zitteliana*, 46: 41-74; München. D • j • IN

PANDEY, D.K., FÜRSICH, F.T., BARON-SZABO, R.C. & WILMSEN, M.

2007. Lower Cretaceous corals from the Koppeh Dagh, NE-Iran. -- *Zitteliana*, A47: 3-52; München. D • k • IR

A new section through parts of the Middle Aptian to Early Albian Sanganeh Formation at the southwestern margin of the Koppeh Dagh, NE-Iran, displays a succession of silty to fine-sandy marl between which limestone boulders and debris layers are intercalated at several levels. These boulders are olistoliths, derived from the edge of a nearby carbonate platform, long since eroded. Most of the olistoliths are reef limestones built of corals and calcareous sponges. At two levels, the reef fauna weathered out from the boulders and could be collected. Fourtyseven taxa of Scleractinia have been described and figured, which considerably extend our knowledge of the biodiversity of Cretaceous corals from the area. The corals show an interesting mixture of taxa known since the Middle Jurassic and those known only from the Cretaceous.

SCOTT, R.W., MOLINEUX, A., LÖSER, H. & MANCINI, E.A.

2007. Lower Albian Sequence Stratigraphy and Coral Buildups: Glen Rose Formation, Texas [In:] SCOTT, R.W. [Ed.]: Cretaceous rudists and carbonate platforms: environmental feedback. -- *Society of Economic Paleontologists and Mineralogists (SEPM). Special Publications*, 87: 181-191; Tulsa, Okla.. D • k • USA

The Glen Rose Formation of the Comanchean Series represents the second circum-Gulf carbonate shelf that extended from Florida to Mexico. The Glen Rose comprises limestone, dolomite, and thin interbeds of marl and calcareous shale that overlie the Hensel Sandstone and underlie the Fredericksburg Group in Texas. The Glen Rose is here formally divided into Lower and Upper, mappable members separated at the top of the regionally persistent Corbula Marker, and a boundary stratotype section is designated. The age of the Glen Rose Formation ranges from latest Aptian to near the end of the Early Albian, from approximately 113.3 Ma to 108.0 Ma, and encompasses four ammonite zones. Three local assemblage zones facilitate correlation of Glen Rose outcrops in Texas. The Salenia texana Credner Assemblage Zone spans a marl, 3 to 4 m thick, with a diverse shelf biota in the upper part of the Lower Member. The Corbula Range Zone is at the top of the Lower Member. The Loriola rosana Cooke Assemblage Zone is in the middle part of the Upper Member. The Glen Rose together with the underlying Hensel Sandstone comprise at least five medium-scale depositional cycles separated by transgressive disconformities. Two types of biotic accumulations are well developed in the Lower Glen Rose Member, coral-rudist assemblages and caprinid- dominated assemblages. Coral-rudist biostromes crop out at the Narrows of the Blanco River and had no bathymetric relief and do not qualify as reefs. Colonial corals are common and are part of a Tethyan fauna; toucasiids and other mollusks comprise a diverse assemblage. Coral diversity is underestimated because of incomplete preservation and sampling. These biostromes are overlain by grainstone capped by a subaerial contact that serves as a sequence boundary between cycles one and two. The younger caprinid bioherms at Pipe Creek have up to 10 m of depositional relief. The bioherm facies grade landward into shoreface grainstone and seaward into shelf wackestone. The caprinid species, Coalcomana ramosa, dominates this low-diversity assemblage and is endemic to the Caribbean Province. The bioherm facies are overlain by dolomitic, stromatolitic facies with dinosaur tracks. The contact with the overlying Salenia Zone is a sequence boundary between cycles two and three. Two more long-term cycles may be identified in the Upper Glen Rose Member. The coral-rudist biostromes and the caprinid bioherms formed paleocommunities on the landward ramp of the interior marine shelf. The coralrudist biostromes developed below normal wave base but above storm wave base and shoaled above wave base and were subaerially exposed. The caprinid bioherms formed on a ramp and grew into the zone of normal wave action in mainly normal marine salinities.

STEMANN, TH.A., GUNTER, G.C. & MITCHELL, S.F.

2007. Reef coral diversity in the Late Maastrichtian of Jamaica. [In:] HUBMANN, B. & PILLER, W.E. [Eds.]: Fossil corals and sponges. -- *Schriftenreihe der Erdwissenschaftlichen Kommissionen der Österreichischen Akademie der Wissenschaften*, 17: 455-469; Wien. C • k • JA

STOLARSKI, J., MEIBOM, A., PRZENIOSŁO, R. & MAZUR, M.

2007. A Cretaceous Scleractinian coral with a calcitic skeleton. -- *Science*, 318: 92-94. D • k • PL

It has been generally thought that scleractinian corals form purely aragonitic skeletons. We show that a well-preserved fossil coral, Coelosmilia sp.from the Upper Cretaceous (about 70 million years ago), has preserved skeletal structural features identical to those observed in present-day scleractinians. However, the skeleton of Coelosmilia sp. is entirely calcitic. Its fine-scale structure and chemistry indicate that the calcite is primary and did not form from the diagenetic alteration of aragonite. This result implies that corals, like other groups of marine, calcium carbonate producing organisms, can form skeletons of different carbonate polymorphs.

WILMSEN, M., NIEBUHR, B., WOOD, C.J. & ZAWISCHA, D.

2007. Fauna and palaeoecology of the Middle Cenomanian Praeactinocamax primus Event at the type locality, Wunstorf quarry, northern Germany. -- *Cretaceous Research*, 28: 428-460; London. D • k • D

A systematic account of the fauna from the early Middle Cenomanian Praeactinocamax primus Event, a 50e60-cm-thick marl bed, at the type locality, Wunstorf quarry, to the west of Hannover (northern Germany), is given. Numerous invertebrate taxa (over 50 in total) have been collected, including two species of belemnites, ten ammonites, at least 12 bivalves, a single scaphopod, five gastropods, at least eight brachiopods, two solitary corals, a single hydrozoan, four echinoids, and ten polychaetes. The benthic community of the primus Event clearly represents a soft-bottom fauna, with hard-bottom elements limited to secondary hard substrates. Most of the macrobenthic elements constitute suspension feeders; shallow-infaunal deposit feeders, grazers and microcarnivores occur as well, while deeper infaunal elements are largely missing. The nekton is represented by fish remains, belemnites, and planispiral and heteromorph ammonites with inferred nektobenthic modes of life. Both biofacies (absence of photic elements) and sedimentological evidence (fine-grained fabric, preservation of delicate faunal elements) suggest that deposition of the primus Event at the type locality occurred in a low-energy setting below the (eu-)photic zone and storm wave base in water depths of ca. 50e100 m. The cyclic and correlative nature of the precession-forced marl-limestone couplets of the interval containing the primus Event and the absence of sedimentological evidence for significant redeposition rules out ''snapshot preservation'' by obrution. Nor is the faunal richness of the primus Event related to time-averaging, because the bed accumulated with sedimentation rates of ca. 50 m/myr. The abundance of suspension- and deposit-feeding biota, however, indicates enhanced fluxes of organic carbon to the seafloor, probably related to high surfacewater productivity. The formation of the primus Event was also linked to transgressive depositional conditions after a pronounced sea-level lowstand across the Lower/Middle Cenomanian boundary. It should be noted that correlation of sections across northwest Europe clearly shows that the initial transgressive onlap onto the basin margins following the lowstand started considerably earlier than the primus Event, at the junction of marl-limestone couplets B40/B41 in the Anglo-Paris Basin cyclostratigraphic scheme. The primus Event (marl bed of couplet C1) thus represents a second transgressive pulse of a high-frequency (100 kyr short eccentricity) cycle within the transgressive systems tract (TST) of a thirdorder depositional sequence. ''Pulse faunas'' of northerly affinity (such as the Boreal belemnite P. primus) and published oxygen stable isotope records suggest a cool-water incursion during the ''primus transgression''. These special oceanographic conditions (sea-level rise, incursion of cool waters, high primary productivity, ample food supplies, limited physical disturbance) resulted in a diverse benthic (and nektobenthic) faunal community in the primus Event.

ŽÍTT, J., VODRÁŽKA, R., HRADECKÁ, L., SVOBODOVÁ, M. & **ZÁGORŠEK, K.**

2006. Late Cretaceous environments and communities as recorded at Chrtníky (Bohemian Cretaceous Basin, Czech Republic). -- *Bulletin of Geosciences*, 81, 1: 43-79; Praha. D • k • CZ