

Mesozoic Fishes – Systematics and Paleoecology

**Proceedings of the
international meeting
Eichstätt, 1993**

edited by
Gloria Arratia & Günter Viohl



**Verlag Dr. Friedrich Pfeil
München 1996
ISBN 3-923871-90-2**

Contents

Preface	7
Acknowledgments	7
The phylogenetic relationship of the Late Jurassic shark <i>Protospinax</i> WOODWARD 1919 (Chondrichthyes: Elasmobranchii). – Marcelo R. de CARVALHO & John G. MAISEY	9
The new genus <i>Iansan</i> (Chondrichthyes, Rhinobatoidea) from the Early Cretaceous of Brazil and its phylogenetic relationships. – Paulo M. BRITO & Bernard SERET	47
The extinct genus <i>Notidanodon</i> (Neoselachii, Hexanchiformes). – Alberto L. CIONE	63
Summary of Mesozoic elasmobranch remains from Japan. – Masatoshi GOTO, Teruya UYENO & Yoshitaka YABUMOTO	73
The scales of Mesozoic actinopterygians. – Hans-Peter SCHULTZE	83
A new polypteriform from the Late Cretaceous and the middle Paleocene of South America. – François J. MEUNIER & Mireille GAYET	95
Actinopterygian teeth from the Late Jurassic (Kimmeridgian) of N Germany. – Detlev THIES & Alexander MUDROCH	105
Distribution and ecology of pycnodont fishes. – J. Ralph NURSALL	115
The phylogeny of pycnodont fishes. – J. Ralph NURSALL	125
New data about the lepisosteids and semionotids from the Early Cretaceous of Chapada do Araripe (NE Brazil): Phylogenetic implications. – Sylvie WENZ & Paulo M. BRITO	153
<i>Paralepidodus ornatus</i> (AGASSIZ 1833-43): A semionotid from the Norian (Late Triassic) of Europe. – Andrea TINTORI	167
Using the extant <i>Amia calva</i> to test the monophyly of Mesozoic groups of fishes. – Lance GRANDE	181
The caudal skeleton of pachycormiforms: Parallel evolution? – Gloria ARRATIA & Paul LAMBERS	191
Reassessment of the phylogenetic relationships of certain Jurassic teleosts and their implications on teleostean phylogeny. – Gloria ARRATIA	219
The Jurassic and the early history of teleosts. – Gloria ARRATIA	243
Fossil “osteoglossomorphs” from East Asia and their implications for teleostean phylogeny. – Mei SHEN	261
Osteoglossids (Teleostei: Osteoglossomorpha) of the Mesozoic. Comments on their interrelationships. – Niels BONDE	273
A new species of Late Cretaceous osteoglossid (Teleostei) from the Oldman Formation of Alberta, Canada, and its phylogenetic relationships. – Guo-qing LI	285
The interrelationships of fossil and Recent gonorynchid fishes with comments on two Cretaceous taxa from Israel. – Terry GRANDE	299
A revision of <i>Rubiesichthys gregalis</i> WENZ 1984 (Ostariophysi, Gonorynchiformes), from the Early Cretaceous of Spain. – Francisco José POYATO-ARIZA	319
The phylogenetic relationships of <i>Rubiesichthys gregalis</i> and <i>Gordichthys conquensis</i> (Ostariophysi, Chanidae), from the Early Cretaceous of Spain. – Francisco José POYATO-ARIZA	329
New species of <i>Enchodus</i> (Aulopiformes: Enchodontidae) from the Northern Negev, Israel, with comments on evolutionary trends in the Enchodontoidei. – Yael CHALIFA	349

Early Cenomanian acanthomorph teleost in the Cretaceous Fish Scale Zone, Albian/ Cenomanian Boundary, Alberta, Canada. – Mark V. H. WILSON & Alison M. MURRAY	369
Cretaceous acanthomorphs of North America. – J. D. STEWART	383
A redescription of the coelacanth <i>Macropoma willemoesii</i> VETTER from the lithographic limestone of Solnhofen (Upper Jurassic, Bavaria). – Paul H. LAMBERS	395
Triassic lungfish from Gondwana. – Anne KEMP	409
Otoliths from the Maastrichtian of Bavaria and their evolutionary significance. – Werner SCHWARZHANS	417
Cretaceous fish otoliths – a synthesis of the North American record. – Dirk NOLF & Gary L. STRINGER	433
Mesozoic fish faunas of China. – Mee-mann CHANG & Fan JIN	461
Overview of systematics, paleobiology, and paleoecology of Triassic fishes of northwestern Madagascar. – Laurence BELTAN	479
A new fossil fish fauna from the Middle Triassic (Anisian) of North-Western Nevada. – Olivier RIEPPEL, René KINDLIMANN & Hugo BUCHER	501
The paleoenvironment of the Late Jurassic fishes from the southern Franconian Alb (Bavaria, Germany). – Günter VIOHL	513
An overview of the Cretaceous fishes of the quarries near Tepexi de Rodríguez, Puebla, México. – Shelton Pleasants APPLEGATE	529
A paleoecological model of the vertebrate bearing beds in the Tlayúa quarries, near Tepexi de Rodríguez, Puebla, México. – Luis ESPINOSA-ARRUBARRENA & Shelton Pleasants APPLEGATE	539
Environments and functional anatomy of certain Mesozoic fishes. – David G. SENN	551
Diversity in the feeding apparatus of perleidid fishes (Actinopterygii) from the Middle Triassic of Monte San Giorgio (Switzerland). – Toni BÜRGIN	555
The field excursion in Northern Italy. – Andrea TINTORI	567