

Zitteliana

The background of the cover is a detailed photograph of a fossilized trilobite. The trilobite is shown in a split view, with the left side showing the cephalon and thorax, and the right side showing the pygidium (tail shield). The fossil is embedded in a light-colored, textured rock matrix, likely limestone. The lighting highlights the intricate details of the trilobite's anatomy, such as the segments of its body and the spines on its head.

An International Journal
of Palaeontology and Geobiology

Series B/Reihe B
Abhandlungen der Bayerischen Staatssammlung
für Paläontologie und Geologie

26

4th International Symposium
on Lithographic Limestone and Plattenkalk

Eichstätt/Solnhofen, Germany

September 12th-18th, 2005

- Abstracts and Field Trip Guides -

München 2005

Zitteliana

An International Journal of Palaeontology and Geobiology

Series B/Reihe B

Abhandlungen der Bayerischen Staatssammlung für Paläontologie und Geologie

26

4th International Symposium on Lithographic Limestone and Plattenkalk

Eichstätt/Solnhofen, Germany

September 12th-18th, 2005

Organised by

Martina Kölbl-Ebert

Jura-Museum, Eichstätt

Martin Röper

Bürgermeister-Müller-Museum, Solnhofen

Reinhold R. Leinfelder

Staatliche Naturwissenschaftliche Sammlungen Bayerns,
^{LMU}München, Department für Geo- und Umweltwissenschaften, Sektion Paläontologie,
and GeoBio-Center^{LMU}

– Abstracts and Field Trip Guides –

Zitteliana	B 26	96 Seiten	München, 05.09.2005	ISSN 1612-4138
------------	------	-----------	---------------------	----------------

Editors-in-Chief/Herausgeber: Reinhold R. Leinfelder, Michael Krings

Volume Editor: Winfried Werner

Production and Layout/Bildbearbeitung und Layout:

Stefanie Klug

Bayerische Staatssammlung für Paläontologie und Geologie

Richard-Wagner-Str. 10, D-80333 München, Deutschland

<http://www.palaeo.de/zitteliana>

email: zitteliana@lrz.uni-muenchen.de

Für den Inhalt der Arbeiten sind die Autoren allein verantwortlich.

Authors are solely responsible for the contents of their articles.

Copyright © 2005 by Bayerische Staatssammlung für Paläontologie und Geologie, München

Die in der Zitteliana veröffentlichten Arbeiten sind urheberrechtlich geschützt.

Nachdruck, Vervielfältigungen auf photomechanischem, elektronischem oder anderem Wege sowie die Anfertigung von Übersetzungen oder die Nutzung in Vorträgen, für Funk und Fernsehen oder im Internet bleiben – auch auszugsweise – vorbehalten und bedürfen der schriftlichen Genehmigung durch die Bayerische Staatssammlung für Paläontologie und Geologie, München.

ISSN 1612-4138

Druck: Gebr. Geiselberger GmbH, Altötting

Published with the support of the
Deutsche Forschungsgemeinschaft (DFG)

Cover illustration: *Mesolimulus walchi* DESMAREST; horse-shoe crab with its trail; Lower Tithonian, Solnhofen (BSPG AS I 944).

Umschlagbild: *Mesolimulus walchi* DESMAREST; Pfeilschwanzkrebs mit Fährte; Lower Tithonian, Solnhofen (BSPG AS I 944).

Preface

Following the first International Symposium on 'Lithographic Limestone', held in Lyon in July 1991, a second meeting was organized in Cuenca during the summer of 1995, and a third in Bergamo in August 1999. It is now our pleasure to welcome the scientific community to the fourth sequel of these meetings held in the area of the type-locality of the Lithographic Limestone, well-known also for its famous fossils such as *Archaeopteryx*.

In a multidisciplinary approach, the meeting addresses various aspects of the study of lithographic limestone and Plattenkalk deposits, including palaeobiology and ecology of related fossiliferous sites, taxonomy, stratigraphy and taphonomy of excellently preserved fossils of the individual Plattenkalk deposits, and also sedimentological and geochemical aspects.

The scientific sessions will be organised by the Jura-Museum Eichstätt and held in historical rooms of the Bishop's Seminary in Eichstätt from September 14th through 16th, 2005.

This volume contains the abstracts of the oral and poster presentations of the meeting. The second part is dedicated to the pre- and post-symposium field trips. It begins with an introduction to the stratigraphy and facies development of the Upper Jurassic of southern Germany by D.U. SCHMID, R.R. LEINFELDER & G. SCHWEIGERT. Field trip A by R. KOCH and

C. WEISS takes to the Northern Franconian Alb. Main purpose of this excursion is to present new data and palaeogeographic models for the deposition of carbonate sands and the so-called 'sponge-algal reefs', as well as to demonstrate the facies zonation along a sedimentary ramp situation. Field trip B and C by M. RÖPER explore the tropical seas and lagoons around the 'Solnhofen archipelago' with its exciting wealth of different Fossiliferous sites. Both excursions focus on the peculiarities of each basin and sub-basin concerning its Plattenkalk-type and fossil content. Finally, the post-symposium field trip D by G. SCHWEIGERT, G. DIETL & R. KOCH takes to Nusplingen far to the west. The excavation campaigns of the last years revealed spectacular results with regard to the taxonomy, palaeoecology, and origin of this famous Fossiliferous site.

On behalf of the organization committee, it is our pleasure to present to you this volume. We wish you an agreeable meeting, many interesting talks, good weather for the plunge into the lagoons, and a safe trip home.

We greatly acknowledge the financial support provided by the Deutsche Forschungsgemeinschaft, the Bishop's Seminary in Eichstätt, the municipality of Solnhofen, and the "Freunde des Jura-Museums e.V."

Martina KÖLBL-EBERT
Winfried WERNER

Zitteliana

An International Journal of Palaeontology and Geobiology

Series B/Reihe B

Abhandlungen der Bayerischen Staatssammlung für Paläontologie und Geologie

26

CONTENTS/INHALT

MARTINA KÖLBL-EBERT & WINFRIED WERNER Preface	3
Abstracts	6
Geology and Field Trip Guides	
DIETER SCHMID, REINHOLD R. LEINFELDER & GÜNTER SCHWEIGERT Stratigraphy and Palaeoenvironments of the Upper Jurassic of Southern Germany	31
ROMAN KOCH & CHRISTIAN WEISS Field Trip A: Basin-Platform Transition in Upper Jurassic Lithographic Limestones and Dolomites of the Northern Franconian Alb (Germany)	43
MARTIN RÖPER Field Trip B: East Bavarian Plattenkalk – Different Types of Upper Kimmeridgian to Lower Tithonian Plattenkalk Deposits and Facies	57
MARTIN RÖPER Field Trip C: Lithographic Limestones and Plattenkalk Deposits of the Solnhofen and Mörnsheim Formations near Eichstätt and Solnhofen	71
GÜNTER SCHWEIGERT, GERD DIETL & ROMAN KOCH Field Trip D: The Nusplingen Plattenkalk and Other Fossil Sites in the Western Swabian Alb (SW Germany)	87

Zitteliana	B 26	96 Seiten	München, 05.09.2005	ISSN 1612-4138
------------	------	-----------	---------------------	----------------

ABSTRACTS

ARRATIA, G.: The Contribution of Late Jurassic Fishes from Germany to Understand the Evolutionary History of Teleosts	7
BAUSCH, W. M.: Geochemical Position of the Franconian Plattenkalk	7
BAUSCH, W. M.: Revision of the Age Relationships of Maxberg/Solnhofen	8
BENNETT, S. C.: A Review of <i>Ctenochasma</i> : Taxonomy and Ontogeny	8
BILLON-BRUYAT, J.-P.: Comparison of the Tetrapod Assemblages from the Late Jurassic Plattenkalk Deposits of Western Europe	9
BRITO, P. M.: The Lower Cretaceous Crato Formation's Ichthyofauna (Araripe Basin, Northeastern Brazil)	9
BURNHAM, D. A.: The Paleocology of <i>Archaeopteryx</i> - A Re-Evaluation	10
CARANNANTE, G., SIGNORE, M., SIMONE, L. & VIGORITO, M.: Vertebrate-fossil Rich Plattenkalk of Pietrarola (Southern Appennines, Italy). A Sedimentological and Taphonomical Approach	10
CHIAPPE, L. M. & GÖHLICH, U.: A new Theropod Dinosaur from the Upper Jurassic Limestones of Schamhaupten (Bavaria, Germany)	11
DIETL, G. & SCHWEIGERT, G.: The Upper Kimmeridgian Nusplingen Plattenkalk (W Swabian Alb, SW Germany)	11
FUCHS, D.: Coleoid Cephalopods from the Lithographic Limestones of Hâqel (Lebanon) - A Comparison with Solnhofen (Germany)	12
FÜRSICH, F. T., MÄUSER, M., SCHNEIDER, S. & WERNER, W.: Sedimentology and Palaeoecology of Laminated Limestones from the Kimmeridgian of the Northern Franconian Alb (Southern Germany)	13
GAILLARD, C.: Recent and Fossil Chelonian Kingdoms	13
GARASSINO, A., DE ANGELI, A. & SCHWEIGERT, G.: Brachyurans from the Upper Jurassic (Tithonian) of Pfalzpaint and Breitenhill (Bavaria, South Germany)	14
GARASSINO, A. & SCHWEIGERT, G.: The Upper Jurassic Solnhofen Decapod Crustacean Fauna: Review of the Types from Old Descriptions	15
IFRIM, C., STINNESBECK, W. & FREY, E.: Upper Cretaceous (Cenomanian-Turonian and Turonian-Coniacian) Open Marine <i>Plattenkalk</i> - Deposits in NE Mexico	15
JURKOVSEK, B. & KOLAR-JUROKOVSEK, T.: Fossil Assemblages from the Upper Cretaceous Carbon Rich Sediments of Kras, Slovenia	16
KEUPP, H.: Complete Ammonoid Jaw Apparatuses from the Solnhofen Plattenkalks: Implications for Aptychi Function and Microphage Feeding of Ammonoids	17
KLUG, C., SCHWEIGERT, G., DIETL, G. & FUCHS, D.: Coleoid Beaks from the Nusplingen Lithographic Limestone (Late Kimmeridgian, SW Germany)	17
KLUG, S. & KRIWET, J.: Occurrence and Diversity of Palaeospinacid Sharks (Neoselachii, Synechodontiformes) from the Upper Jurassic Lithographic Limestones of South Germany	18
KOCH, R.: New Data on Sedimentology of Upper Jurassic Carbonate Rocks from the Southern Franconian Alb	18
KOCH, R.: Characteristics of Solnhofen Monument Stones	19
KRIWET, J. & KLUG, S.: Late Jurassic Carpetsharks (Neoselachii, Orectolobiformes) from South Germany	19
MARTY, D.: Sedimentology and Taphonomy of Dinosaur Track-bearing Plattenkalke (Kimmeridgian, Canton Jura, Switzerland)	20
MICKLICH, N.: The Fish Fauna of the Messel Pit: Rule or Exception?	20
PAPAZZONI, C. A. & TREVISANI, E.: New Data about the Age and Palaeoenvironment of the „Pesciara di Bolca“ Fossil-Lagerstätte	21
RUSCONI, M., LOMBARDO, C. & TINTORI, A.: New Colobodontid (Actinopterygians) from the Carnian (Late Triassic) of Northern Italy	22
SCHWEIGERT, G.: Ammonite Biostratigraphy as a Tool for Dating Upper Jurassic Lithographic Limestones from South Germany - First Results and Open Questions	22
SCHWEIGERT, G. & GARASSINO, A.: The Lobster Genus <i>Squamosoglyphea</i> BEURLEN, 1930 (Crustacea, Decapoda, Glypheidae) in the Upper Jurassic Lithographic Limestones of Southern Germany	23
SKAWINSKA, J.: Development of a Jurassic Basin in Terms of Palaeohydrodynamic Reconstruction (Miechów Trough, Poland)	24
TINTORI, A., BONA, F. & ZORZIN, R.: Bolca (Eocene, Verona) Fossils under a New Light	24
TINTORI, A. & LOMBARDO, C.: The Middle Triassic Vertebrate Levels in the Western Tethys: Are Fossil Fishes Useful for Biostratigraphy?	25
TISCHLINGER, H.: Ultraviolet Light Investigations of Fossils from the Upper Jurassic Plattenkalks of Southern Franconia	26
VIOHL, G. & ZAPP, M.: Schamhaupten, an Outstanding Fossil-Lagerstätte in a Silicified Plattenkalk (Kimmeridgian-Tithonian Boundary, Southern Franconian Alb, Bavaria)	27
WEISS, C., KOCH, R. & HUANG, W.: Diagenesis of Thin Bedded Carbonate Rocks in the Cambro-Ordovician Sequences of the North China Carbonate Platform	28
WELLNHOFER, P. & RÖPER, M.: The Ninth Specimen of <i>Archaeopteryx</i> from Solnhofen	28
ZEISS, A., SCHULBERT, C. & VIOHL, G.: The Ammonites from Schamhaupten (Southern Franconian Alb, Bavaria) - An Interesting Faunal Association at the Boundary Upper Kimmeridgian/Lower Tithonian	29

ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Zitteliana Serie B](#)

Jahr/Year: 2005

Band/Volume: [26](#)

Autor(en)/Author(s): diverse

Artikel/Article: [Vorwort, Inhalt 3](#)