

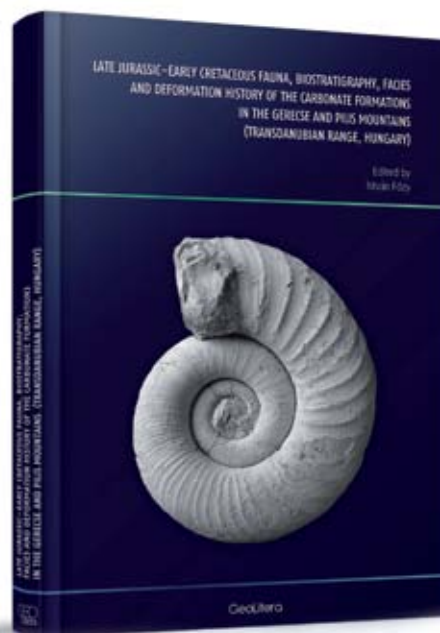
## Late Jurassic–Early Cretaceous fauna, biostratigraphy, facies and deformation history of the carbonate formations in the Gerecse and Pilis Mountains (Transdanubian Range, Hungary) by István Főzy (ed.)

Reviewed by Péter OZSVÁRT<sup>1</sup>

Főzy, István (ed.) 2013 — GeoLittera Publishing House, Institute of Geosciences, University of Szeged, Hungary. 424 pp. Maps, color and b&w figures, plates. HU ISSN 2060-7067. Hardcover.

This fine new thematic book sum up in twelve excellent sections the latest results of the Late Jurassic and Early Cretaceous regional geology, stratigraphy, microfacies studies and palaeontology from the Gerecse and Pilis Mountains, Hungary. These two low mountains belong to the northeastern part of the Transdanubian Central Range, although they consist dominantly of monotonous Upper Triassic dolomites and Dachstein Limestone, the relatively thin Late Jurassic and Early Cretaceous carbonate sequences contain well preserved various fossils. These fossils were a rich source of information for the solution of many geological problems on the investigated area. The authors provide an accurate and updated biostratigraphy for Oxfordian–Berriasian formations by macro- and microfauna. They documented diverse fossil content from the studied sections, with special focus on ammonites, bivalves, brachiopods and belemnites. Besides, they documented and construed a suitable tectonic, sedimentologic and basin evolution model for the region.

In detail, the book is divided into two parts: The first part (Part I) deals with general geology and stratigraphy of the Upper Jurassic and Lower Cretaceous carbonate formations of the region. The first chapter introduces the reader into geological and tectonic setting of Jurassic and Cretaceous of the Gerecse and Pilis Mountains in Alpine-Carpathian geotectonic framework. The second chapter contains 18 localities with detailed descriptions of macro- and microfauna, microfacies and stratigraphy. Numerous colour maps, colour pictures and simplified geological logs help to understand the complete geological setting of these mountains. In addition, the next chapters summarize stable isotope studies (from bulk carbonate) and detailed deformation history, basin evolution and tectonic results put into a wider geological context. All three studies suit



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perfectly among the palaeontological papers. The second part (Part II) is dedicated to descriptions and illustrations of the all important macrofossils, special attention is given to remarkable Oxfordian, Kimmeridgian, Tithonian and Berriasian ammonites which were illustrated in 63 high-resolution, perfect quality photo plates (in actual size, generally). Finally, three excellent studies deal with belemnites, bivalves, brachiopods and their palaeoenvironmental investigations. In addition, the book contains detailed description of 272 marine invertebrate species with three new ammonite and one new belemnite, brachiopod and bivalve species from the territory. The latest chapter is nice and interesting part of the book with brief presentation of the eleven authors from five various countries. In summary, this monograph is a comprehensive issue on current knowledge of the richly fossiliferous Upper Jurassic–Lower Cretaceous carbonate formation of the Gerecse and Pilis Mountains, Hungary. Overall, I would definitely recommend this nice book to palaeontologist and to anyone who has an interest in the Late Jurassic and Early Cretaceous invertebrate macrofossils or stratigraphy, this fairly exhaustive book will serve them well.