

Preface: Early Cretaceous ammonites from Colombia

Philip J. Hoedemaeker & Mikheil V. Kakabadze

Hoedemaeker, Ph.J. & Kakabadze, M.V. Preface: Early Cretaceous ammonites from Colombia. *Scripta Geologica*, **128**: 1-2, Leiden, December 2004.

Ph.J. Hoedemaeker, Department of Palaeontology, Nationaal Natuurhistorisch Museum, Postbus 9517, 2300 RA Leiden, The Netherlands (e-mail: hoedemaeker@naturalis.nnm.nl); M.V. Kakabadze, A. Janelidze Geological Institute of Academy of Sciences of Georgia, M. Alexidze str. 1/9, 0193 Tbilisi, Republic of Georgia (e-mail: imkakab@hotmail.com).

The Nationaal Natuurhistorisch Museum "Naturalis" (NNM) in Leiden, The Netherlands, has obtained a large collection of Cretaceous ammonites from Colombia collected by Peter Hans Creutzberg, a Dutchman who lives in Colombia. He is a biologist, and filmmaker of nature and its threats. Creutzberg, fascinated as he was by the beauty of ammonites, started to collect them and all other kinds of fossils he encountered. The majority of his fossils are from the Lower Cretaceous rocks of Colombia, mainly from the Barremian and Aptian Stages; a smaller part of his collection comes from Albian and Upper Cretaceous strata.

We obtained his marvellous collection in two shipments, in 1976 and 1998. The Early Cretaceous heteromorphic ammonites of the first shipment were studied and the results published in 1997 by M.V. Kakabadze & Ph.J. Hoedemaeker. In 1997 Hoedemaeker visited Colombia, accompanied Peter Creutzberg to several of his collecting sites, and made a sequence stratigraphic interpretation of the Barremian Stage in the neighbourhood of Villa de Leyva. In 1998 Hoedemaeker and four geological assistants returned to Colombia to do fieldwork. They did a sequence stratigraphic analysis of the Hauterivian stage, and collected many Barremian and Hauterivian ammonites *in situ*. The second shipment of the collection of Creutzberg, which arrived together with the ammonites collected during the 1998 fieldwork. The ammonites were studied by a "Research Group" consisting of M.V. Kakabadze, T.N. Bogdanova, and M.Z. Sharikadze. As a result, in the present publication almost all Barremian, Aptian and a several lower Albian ammonites of Creutzberg's collection are described, except those belonging to the family Pulchellidae, which are being investigated by Dr. J.J. Vermeulen and will be published later. Unfortunately, Peter Creutzberg mainly collected loose limestone concretions derived from Barremian and Aptian strata. From these concretions he skilfully prepared the generally undeformed and well-preserved fossils. He provided his samples with a rather precise geographical connotation, but his stratigraphical data are very imprecise and his age assignments limited to stage names, which were often merely inferred. Therefore, this volume contains not so much a biostratigraphic as a taxonomic and palaeobiogeographic study. Some ammonite genera and subgenera are characteristic for certain stages and substages, and some species are zonal guides. The studied collection may therefore be of importance to future biostratigraphic research in Colombia, and to stratigraphical correlation between the Caribbean, Mediterranean and other regions. Moreover, the material described in this volume is undoubtedly of importance for reconstructing Early Cretaceous palaeobiogeography, which is investigated here for the first time. This palaeobiogeographic

investigation is not based on the rich ammonite collection of Creutzberg alone, but also on the analysis of other palaeontological and stratigraphical data on the Barremian, Aptian and early Albian ammonites of Colombia and adjacent regions. The Colombian ammonite fauna of these stages is characteristic for the Caribbean Faunal Province. Thanks to the rich Colombian ammonite material, the important questions around the intrageneric and intraspecific variations among heteromorphic ammonites and their implications on the systematics of these groups are amply dealt with.

One hundred and sixty three ammonite species and subspecies (among which 49 are new) and 39 genera and subgenera (among which one is new) were described. The present volume contains the descriptions of new species, and of species that have not been described before or were less known from Colombia.

Acknowledgements

The study that resulted in this volume was financially supported by the NNM, the Netherlands Organization of Scientific Research (NWO), the Dr. Pieter de Koning Fonds and the Alida Buitendijk Fonds. We are grateful for the excellent photographs made by Mr. Adri 't Hooft and Photo Digital.

Reference

Kakabadze, M.V. & Hoedemaeker, Ph.J. 1997. New and less known Barremian-Albian ammonites from Colombia. *Scripta Geologica*, **114**: 57-117.