

Foreword

Catalogue of Mesozoic radiolarian genera

This volume represents the state of the art in the taxonomy of Mesozoic radiolarian genera carried out by the Mesozoic Working Group of the International Association of Radiolarian Palentologists (InterRad) and summarises the results of three years of intensive research on the systematics of Mesozoic radiolarians at generic and family levels.

Since the application of SEM techniques to the study of Mesozoic radiolarians, knowledge of this group of planktonic microfossils has spread rapidly and successfully on a worldwide scale during the past thirty years. Through this time the radiolarian bibliography has been enriched with many titles that have allowed us to better understand this group of protists. Unfortunately, as another effect of this increase in the number of publications, which did not always have the same impact on radiolarian community, we have experienced a great proliferation of new names that became difficult to survey. With the large number of Mesozoic taxa described during the last decades by a considerable number of investigators (up to 70 authors for genera and 195 for species), creation of synonyms at both generic or specific level became unavoidable.

In recent years, a point was reached that even for a specialist it became more and more complicated to keep in touch with the rapid proliferation in the number of genera. As a direct consequence it became apparent that some measures should be adopted to bring more order into the existing Mesozoic radiolarian taxonomy. This is one of the reasons for the construction of this catalogue. Moreover, it was

generally feared that without such a re-examination much of the stratigraphic usefulness of Mesozoic radiolarians would be lost, and in this way the revision of genera could represent a step forward that would improve the taxonomy and also our zonal biostratigraphic schemes. With this in mind, the Mesozoic Working Group promoted this daunting challenge during the 11th International Meeting of InterRad in New Zealand in 2006 and soon after, a group of colleagues strongly involved in radiolarian taxonomy joined the revision project.

During four meetings, two in Granada (2006, 2007) and two in Paris (2007, 2008), the Mesozoic Working Group has come to a consensus on 915 genera of Mesozoic radiolarians. The prime objective of their discussion was to agree on the systematics and to achieve a taxonomic consensus of all contributors. The final result is this volume presented as a database of all described Mesozoic radiolarian genera with re-illustration of their type species. Although the main purpose was to stabilize the systematics at generic level, suprageneric classification at order and family level were also examined and the biostratigraphic ranges of valid genera were fully reviewed.

Since a good taxonomy is prerequisite to implement significant biostratigraphic schemes, it is our hope that this publication will be a useful tool for improving future radiolarian researches on both the systematics and biostratigraphy of the Mesozoic Era, and will serve also as encouragement for other generic revisions of radiolarians, both in the Paleozoic and in the Cenozoic.

O'Dogherty L., De Wever P. & Goričan Š.