

Bivalvia neogenica (Lucinoidea–Mactroidea). Catalogus Fossilium Austriae, Band 1/Teil 2

SCHULTZ, O. & PILLER, W.E., Hg. 2003

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Bivalvia neogenica (Solenioidea–Clavagelloidea). Catalogus Fossilium Austriae, Band 1/Teil 3

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In 2001, there appeared a new volume of the *Catalogus Fossilium Austriae* dealing with Neogene bivalves of Austria, by Ortwin Schultz of the Naturhistorisches Museum in Vienna (edited by Werner E. Piller of Karl-Franzens University in Graz). That volume presented a clear arrangement of all literary data concerning the stratigraphy, systematics, and nomenclature of Neogene bivalves of the superfamilies Nuculacea–Unionacea from the present territory of Austria, including data regarding the Oligocene and references concerning materials from outside Austria. That publication was reviewed in the journal *Bulletin of Geosciences* (Hladilová 2003), in which it was mentioned that two more volumes of this monograph were being prepared for publication at that time. Since then, both of these volumes have been published: the second (*Lucinoidea–Mactroidea*) appeared in 2003, and the third and final part (*Solenioidea–Clavagelloidea*, List of Localities and Index) in 2005, successfully completing this monumental work.

The second volume of the catalogue is divided into five chapters, and the third one into seven. The introduction to the second volume (pp. V–VIII) contains Supplements (42 items) to the first volume, followed by Emendations (p. IX). The most important point in these introductory pages is the suffix change of the superfamilies: instead of the suffix *-acea*, which was originally used, *-oidea* is now used in accordance with the International Code of Zoological Nomenclature. Then there are Reference supplements (23 items) on p. X that complement the comprehensive list of cited literature in the first volume. Correspondingly, Emendations and Reference supplements (17 items) are also found at the beginning of the third volume (p. V).

Considering that all the data gathered in these volumes are permanently available in electronic form and on diskette, further corrections and supplements can be made fairly promptly. For example, while O. Schultz managed to incorporate literary data up to May 2000 into the final version of the first volume, the Reference supplements of the subsequent two volumes include references up to 2004.

The chapters on Systematics (second volume: pp. 381–690; third volume: pp. 691–1068), with their extensive photographic documentation (39 plates in the second volume, and 57 plates in the third volume), constitute the core of the two new volumes. They have the same structure as in the first volume: in addition to

the names and numbers of relevant images, they contain comprehensive synonymics, sometimes even diagnoses, notes, stratum typicum, locus typicus, data on Austrian holotypes, or syntypes, and data on occurrences in Austria and elsewhere. Once again, the author goes through the results of the latest revisions, clearly specifying in the notes any possibly contradictory or even erroneous data. Systematic classifications up to the subgeneric level are compiled according to Cox *et al.* 1969, 1971; the order is alphabetical within the genera, or subgenera. The data on occurrences are clearly arranged and ordered in terms of stratigraphy and geography; all localities (both in Austria and elsewhere) are provided with a detailed bibliography.

In the third volume, a detailed, alphabetically arranged List of Localities (pp. 1069–1126) follows the Systematics chapter. After the locality name there are (in parenthesis) abbreviations for the relevant geological area (basin) or Austrian federal regions, and the geographic co-ordinates of the locality (longitude, latitude). When the geographic position is known exactly, the co-ordinates are written in italics, otherwise they are in normal script (as some of the co-ordinates, such as those of the Vienna districts, are meant only as general references). After the parentheses, the stratigraphic position of the locality (underlined script) and the relevant page/volume number are given (each reference represents one taxon; the references of locus typicus are underlined). Two synoptic maps by A. Kroh (pp. 1127–1128) complement the List of Localities.

The end of the third volume (pp. 1127–1212) is comprised of a synoptic Index of all the taxa mentioned in synonymics (bold print indicates the taxa in titles and valid genera and subgenera; normal script signifies other taxa). There are also references to possible annotations on the relevant pages (B) or in the footnotes (F).

Due to the extent of the data included in the new volumes, it will not be possible to check the details until the volumes are put into use. Nevertheless, a few corrections and helpful comments can already be made.

The only figure in the text of the second volume (p. 510/2) is erroneously numbered as Fig. 8; it should be Fig. 9, as Fig. 8a+b was already used in the first volume (p. 379/1). For the same reason, the numbering of the figures in the third volume should also be reordered (Figs 10–61 instead of 9–60). Moreover, the total number of figures in the third volume is incorrectly stated as 51 on the front page, when there are actually 52 of them. Additionally, the Index for all three volumes appears only in the third volume, which can complicate the search for specific references in the first two volumes, as it is therefore always necessary to have the third volume at hand. It would have been more practical to include an index for each individual volume.

Despite the above remarks, we must appreciate the extraordinary amount of work that O. Schultz has put into the preparation of this monograph, as well as the scrupulousness, persistence, and accuracy that he has shown in this endeavour. The importance of the monograph consists primarily in its great informative value, and in the highly objective and detailed elaboration of all the chapters. All potential users – palaeontologists studying Neogene bivalves, and anyone else interested in this subject – have thus acquired a very useful aid for all kinds of scientific and bibliographic research. Considering its extensive pictorial documentation, this publication can also serve the purposes of identification, which is sure to considerably increase the number of potential users.

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