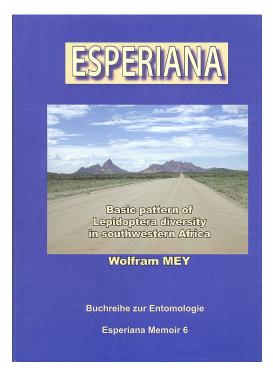


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Book review

Wolfram Mey, 2011. Basic Pattern of Lepidoptera Diversity in Southwestern Africa. Esperiana Memoir 6. Wissenschaftlicher Verlag − Peks, Schwanfeld. Hardback, 316 pages, 40 plates. ISBN 978-3-938249-02-4. Price € 125.00.



This book is a result of the German BIOTA South Africa Project, where the biodiversity of a transect from North Namibia to the Cape Province was studied. During the project it was realised that even at the level of the common Lepidoptera species, basic taxonomical knowledge was poor and often absent. The book also follows two earlier Memoirs on the Lepidoptera of the Brandberg, where Mey and several other authors described the fauna per family, albeit sometimes only using morphospecies. The author decided to carry out the huge task of describing 118 new species and 13 new genera throughout Lepi-

doptera, partly in co-operation with other specialists. Many of these were "leftovers" from the Brandberg project, others were newly collected.

The main part of this book is devoted to these descriptions. There is a risk in describing throughout so many taxonomic groups, and the author acknowledges that. The choice is being made to make the diversity known by these descriptions, even if there is a risk of creating some synonyms. The colour photographs of adults and the many genitalia drawings by the author, and photographs by others, will undoubtedly assist in recognising the species by others. However, the drawings are in some cases may be a bit too schematic. On the other hand, in contrast to many lepidopterists, Mey usually illustrates male genitalia in various views (ventral, dorsal, lateral), which provides additional characters. The majority of new taxa are in the so-called Microlepidoptera, a globally understudied group of families of small moths. Mey has a special eye for more primitive moths, and one of the most interesting discoveries here is the new species of Acanthopteroctetidae, a small family, previously only known from western North America and the Crimea.

Apart from the taxonomic treatments, there are general chapters on the history of the Lepidoptera research in this part of the world, interesting to read, chapters on methods, list of samples, and a discussion on the basic pattern of Lepidoptera diversity. Next to these, more than 100 pages are devoted to "Lepidoptera diversity of light trap samples". This chapter provides basic information on the sample localities, with lists of dominant plants, photographs and particularly long tables with numbers of collected species and specimens per family plus dominant Lepidoptera species. Although this kind of basal information is important to be accessible, I wonder if using so many pages in a book was the best solution. Many buyers are probably most interested in the taxonomic part and have to take this for granted. Internet technology is ideally suited for this kind of data, and digitally they are also more useful for those who are interested to carry out extra analyses. More modern biodiversity analyses are still lacking, probably also because the data do not allow such analyses.

Together with the two earlier Memoirs on the Brandberg Lepidoptera fauna, Mey has erected a monument for South African Lepidopterology. Now the field work has been carried out relatively recently, it would be an ideal collection for carrying out DNA barcoding this fauna. It would certainly provide extra

data for all those newly recognised species and allow easier identification of new material from this region.

Notwithstanding my mild critique, this book belongs on the shelves of lepidopterists interested in African Lepidoptera, or with a broad taxonomic interest.

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