

J. Balogh & P. Balogh
IDENTIFICATION KEYS TO THE ORIBATID MITES
OF THE EXTRA-HOLARCTIC REGIONS. VOLS. I–II.

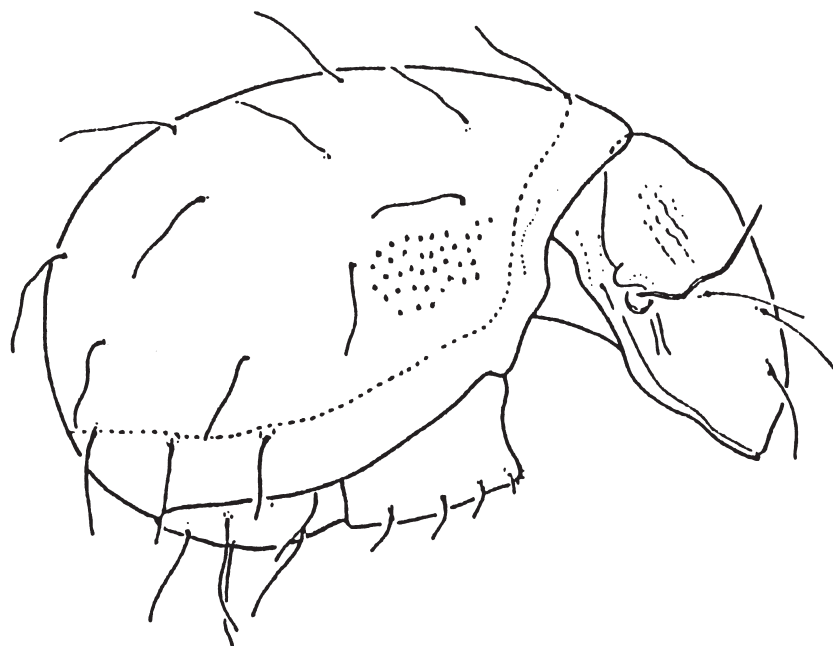
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The oribatid mites are one of the most speciose and most abundant group of arthropods living at the soil-, ground-, moss- etc. level. In spite of the extensive research of outstanding specialists in the last few decades, obviously, only a small fraction of extra-Holarctic species has hitherto been described, and the actual number of species can hardly be estimated. The identification of the species is rendered more difficult due to the great number of the species and also to the small number of synthesizing works. Therefore, the oribatid mites can be identified almost exclusively by very specialized zoologists, mostly taxonomists; it is in close connection with the fact that our data on the ecology of this group are very limited.

Prof. János Balogh and his son Dr. Péter Balogh, with their extensive experience on Oribatida, now present the first practical guide for identification of all hitherto described extra-Holarctic oribatid mites. The background of the authors on oribatids is indicated – among others – by the fact that they are the describers (as author or co-author) of about 970 species included in the book – nearly 25% of all hitherto known extra-Holarctic species. *Habent sua fata libelli* – it is particularly true for this book. Tragically, during the compilation of the book the senior author died. The keys processed by him were not ready for press. However, the junior author corrected and completed his manuscript.

The primary objective of this book is to present keys to all known species and thereby to facilitate their identification and future research. Two bulky paperback volumes, 378 pages of identification keys for 3929 oribatid species and subspecies in volume I, and more than 6000 figures combined into 499 tables in volume II – these are the main data of this grandiose work. The work aims at completeness and is strikingly up-to-date; unfortunately, it is not mentioned, up to which year has the literature been processed, but some species described in the year of 2000 are also included.

Volume I contains (after a very short introduction) the identification keys. The keys are brief and are based mostly on only a few distinguishing characters. For each species, the type localities are given. The authors – with few exceptions – practically do not use higher taxa above generic level, the species are grouped into „groups". These groups are based mostly on few easy-visible characters, therefore most of them are totally practical and without taxonomical value (species belonging to the same genus are often divided into two or more groups). This method often makes the use of the keys easy; however, sometimes it is difficult to follow the hierarchy of the diverse „groups", which are divided into other “groups" and so on. Furthermore, some subordinate groups are not included in the key of their superior group. Nevertheless, the book contains almost any information on the higher systematics of Oribatida. Therefore, it would be very important and helpful to present a systematic list of the species treated in this book. The volume is supplemented with an index to scientific names. Unfortunately, not the generic and specific



names but their combinations are listed, which sometimes makes the finding of a name extremely difficult.

Volume II consists of an enormous compilation of figures, which increase the practicability of the keys considerably. Altogether 3754 species are figured. The figures are taken mostly from the original descriptions of the species; mainly habitus illustrations, and also a great number of diagnostic characters. Unfortunately, some figures are of poor quality.

The value of the book is raised by 128 species inquirendae and presumable synonyms listed, as well as numerous taxonomical and nomenclatural remarks and changes incorporated. A species is downgraded to subspecies, 2 specific and 1 family names are placed in synonymy, new status is established for 4 taxa, 17 preoccupied names are recognized and replaced with new names. (Unfortunately, it is not pointed out which name is replaced with „*Paulinacarus sarkari* nom. nov.“.) The book also contains 7 „sp. n.“. It is to be regretted that no descriptions and diagnoses are presented for these species; they are only incorporated in the identification keys.

The book does not treat the basic external morphology of the Oribatida. The reason for this is easy to guess: this information is readily accessible in numerous other works. However, a brief survey – at least a glossary of the setation of the notogaster, which plays an especially important role in the taxonomy of Oribatida – would be helpful mainly for students in developing countries that are without library resources. The compilation of the list of references, the most important ones at least, would be also helpful for similar reasons.

It is a pity that the book contains several mistakes (even in scientific names!). Some keys can not or only with great difficulties due to their erroneous compilation (e.g. on pages 34, 111, 112, 179–180). Furthermore, some keys contain missing items (e.g. on

pages 304, 315, 317) or run out to missing specific names (e.g. on pages 106, 108, 110). The great number of mistakes as well as the numerous «???» insertions in the text suggest that the final proofing of the manuscript was not thorough enough.

In spite of all its faults, this work is highly recommended not only to all students and workers concerned with Oribatida but also to the ones interested in soil ecology. The advantages of the keys, completed with the extensively collected figures, are self-evident: having this information compiled together makes the identification of the species of this important group far easier, especially for non-specialists like ecologists – and the correct identification of species is the underpinning for all other zoological investigations. We are sure that this work could efficiently facilitate not only the taxonomical but the ecological investigations on this group of arthropodes in the future. Moreover, it would highly contribute to increasing our knowledge on the ecology of the soil-living animal communities.

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