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| Myrmecological News | 10 | 19-20 | Vienna, September 2007 |
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## Book review

**SEIFERT, B. 2007: Die Ameisen Mittel- und Nord-europas. – Iutra Verlags- und Vertriebsgesellschaft, Tauer, 368 pp. [€39.00; ISBN 978 3 936412 03 1]**

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Eager anticipation has captured the myrmecological community – at least the German speaking part of it – over the last few months. First it was only a rumour but now it is for sure: The "New Seifert" is published! Why is this remarkable? Why the excitement? The first edition of this book (SEIFERT 1996) was a great aid to many myrmecologists interested in the Central European ant fauna. Since many genus-groups have been revised and some new species have been identified (many of them by Bernhard Seifert himself; SEIFERT 1988a, b, 1992) in the years after the publishing of the keys by KUTTER (1977) and COLLINGWOOD (1979), the "Old Seifert" provided the first comprehensive key to the female castes of Central and Northern Europe. In addition, the book contained a very good introduction to ant biology and ecology in general and descriptions of the ecology and habitat preferences of many of the species in particular. While the sometimes difficult measurements and indices for species identification, especially for those with only ordinary optical equipment, did not improve the "fun factor" of ant taxonomy, the key nevertheless facilitated ant identification considerably. It also facilitated teaching of ant taxonomy to students and the use of Central European ants for ecological applications, such as monitoring or risk assessment. The very good close up pictures and the comprehensible language made the first edition of this book very popular among biologists and interested laymen. Thus, the 6,000 copies were rapidly sold out and even second hand copies were difficult to get. As the publisher owning the rights for the book refused to reprint it (which in my opinion was a good decision given the many errors by the publisher in the first edition), pressure on the author increased to write a new and revised version of the book. According to his own foreword (SEIFERT 2007), the author was reluctant to write a second "popular scientific" book in the German language because of the positive feedback he got from the international myrmecological community, which showed him that an even more comprehensive "scientific" key in English was urgently needed. Indeed, the only useful, but geographically more restricted, key in English that exists at the moment is the book by CZECHOWSKI & al. (2002) on the ants of Poland. So, the excitement about the appearance of a new comprehensive book about the ants of Central and Northern Europe is justified because it will further promote myrmecological interest and research in Europe. However, I

hope that the time Seifert has spent on this book will only result in a short delay in publishing the originally intended key in English.

The "New Seifert" retains the general outline and major content of the "Old Seifert", being subdivided into two major parts: A general part comprises chapters on morphology and functioning of the ant body, ontogeny and caste differentiation, habitats, nesting sites, density of ants in ecosystems, swarm flights and mating, colony foundation and life cycle, feeding strategies and interactions with other arthropods. These chapters briefly review the current knowledge on biology and ecology of Central European ants and their role in ecosystems. The concise text is enriched with fascinating and informative pictures and drawings.

The faunistic and systematic part of the book is prefaced by a chapter discussing sampling and preparation methods, including a description of the optical equipment necessary for ant identification. The following chapters on ant distribution and ecological characteristics, especially the identification key, are revised and extended. The geographical area covered by the key now includes Central Europe – bordered to the south by the southern borders of Switzerland, Austria and Hungary and to the east by the eastern borders of Hungary, Slovakia, and Poland –, the Benelux and Baltic States, the British Isles, and Scandinavia. Sixteen species found in the area for the first time and / or newly described are integrated. The basic structure of the key is dichotomous and for most species groups separate keys for the queen and the worker castes are provided. Nevertheless, the choice in each step is not based on single features, but combinations of several features are required, making the choices more elaborate and reliable. The slightly increased format of the book (15.5 × 21.5 cm) makes the handling of the key easier. The drawings of the key features are still a little small, but, therefore, they remain in close proximity to the description of the features in the text. Although the key facilitates ant identification by providing an exhaustive compilation of species and precise descriptions and drawings of their principle morphological features, this does not mean that ant identification itself becomes an easy task. Many species groups still can not be identified reliably without intensive initial training and the consultation of reference specimens. To prevent novices from becoming overly frustrated, the key provides some short passages, often introducing a subfamily or genus, explaining the taxonomic status and severity of identification.

The checklist of free living ants comprises 175 species and indicates the occurrence of individual species for Germany, Austria, and Switzerland or their closest occurrence in a neighbouring country. The biological characterization of each species is now more comprehensive and some new close up pictures taken from live specimens have been added. Newly included is a detailed table of ecological habitat preferences of ant species based on a standardised sam-

pling protocol for 200 study sites in Germany, Poland, Czech Republic, and Austria. Seifert uses "Ellenberg-like" indicator values to describe the niche space of ants. These valuable ecological and faunistic data are complemented by a table showing the distribution of ant species and their degree of exposure (Red List Status) within Germany. The information provided in these chapters in a very concise language is of utmost interest for practitioners in applied ecology. However, SEIFERT (2007) rightly states that it is still surprising how little is known about the ecology of most of our native ant species and that what we know is often anecdotal. Given the dire financial and personal situation at many natural history museums and the high-impact oriented research at universities, this situation will hardly change for the better. All the more important, then, to have a book like this that encourages laymen and students to study and observe ants. The latter type of myrmecologists may, in turn, compensate the disproportionately little pertinent output of "professional" research.

To sum up, this "New Seifert" contains a wealth of information on Central and Northern European ants and is an everyday tool for those who work with ants, either as taxonomists, ecologists, or practitioners. I can, therefore, highly recommend this book, which combines an appealing appearance, comprehensible language and dense information content, to a broad readership.

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