

BOOK REVIEW

Bernhard Seifert, The Ants of Central and North Europe Book review

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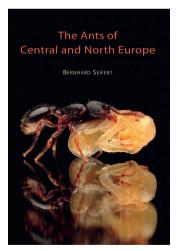
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Seifert B (2018) The Ants of Central and North Europe. lutra Verlags – und Vertriebsgesellschaft Tauer, Germany, 408 pp.

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Tăuşan

In 2007, Bernhard Seifert published a remarkable key for ants. Myrmecologists highly used those keys in their identification but had one major remark: the book was written in German. More than a decade later, this book is updated and is written in English, ensuring a wider audience from both amateur and professional myrmecologists.

The Ants of Central and North Europe is divided into two main parts: the general part and the special part. The so called "General Part" consists of 12 chapters dealing with different ant related topics such as: biology and ecology of ants (colony structure, caste structure, nests, interspecific relationships – mutualism, predatory, relationships with different groups of organisms, enemies of ants). This part of the book was translated from German by Elva Robinson (University of York) and sums up interesting facts about ants with high quality photos, ensuring the reader great insights of the "little things that run the world" (E. O. Wilson).

The second section, the "Special Part" is divided in two subparts. In the first subpart, consisting of seven chapters the author gives useful details on ant sampling, ecological preferences and discusses ant distribution in "Central and North Europe". Of course, this region is detailed and based on a map (page 62) that includes the central and northern part of Europe, namely the following countries: Switzerland, Liechtenstein, Germany, Austria, Poland, the Czech Republic, Slovakia, Hungary, Estonia, Latvia, Lithuania), Belgium, the Netherlands, Luxembourg, Finland, Sweden, and Norway. In addition, the author highlights various aspects concerning morphology, genetics and alpha taxonomy.

For taxonomists but also for young researchers, B. Seifert provides identification keys from subfamily to species level (for both gynes and workers) for an impressive 180 ant species. Moreover, there are additional nine Mediterranean species that may expand their distribution into Central and Northern Europe due to climate change. Invasive species, occurring mainly in buildings and greenhouses, are also included in the list.

The keys consist of useful and high-quality drawings for many morphological characters that make identification easy, at least in the case of several species. Yet, at first sight, these drawings may seem quite difficult for young entomologists, due to the high degree of details of the drawings (e.g. various antennal scapes, petiols and postpetiols, seen from different angles of *Myrmica* workers). With practice, these drawings will be very helpful and will allow identification to species level. Compared to Czechowski et al. (2012), keys, there are no SEM images, yet Seifert's drawings are nevertheless useful. As expected, when working with Seifert's keys, at least for some species morphometrics are needed (micrometer is required). However, this is not something new, most insect groups have this characteristic when dealing with taxonomy.

A detailed description of the life histories of all ant species covered in the book is given. Data on the distribution, habitat requirements, abundance, nest structure and behaviour are also presented in more than 200 pages of the book. The book last part consists of a glossary of scientific terms and a reference section that contains more than 1,000 titles.

Thus, the book is a great starting point for myrmecologists who want to know about the natural history of different ant species. The life history and reference sections are substantially improved and extended compared to the German version from 2007.

All in all, The Ants of Central and North Europe is a remarkable asset for both young researchers and specialists. It provides an excellent overview on ant ecology and taxonomy and can be also a starting point book for amateurs. Taxonomy is never easy but having these tools can provide guidance into the world of ants. For Romanian young researchers, this book is an important landmark, alongside books such as Radchenko and Elmes (2009) on *Myrmica* species and Czechowski et al. (2012).

References

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