

Book review

RADCHENKO, A.G. & ELMES, G.W. 2010: *Myrmica* ants (Hymenoptera: Formicidae) of the Old World

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It is not an easy task to write a monograph on any ant group, especially when the book is about a genus, which, although thoroughly dissected by a plethora of taxonomic works, is still subject to taxonomic debates, while missing types and "blank" regions hinder the process of clarification. *Myrmica* does not actually seem to be such a genus. Seemingly, it is a well-established group, and there is a more or less general consensus on the morphological characters needed to identify *Myrmica* species. But when seated in front of a nicely mounted specimen from the Mediterranean region or the Middle Asian mountains, fully armed with identification keys, any self-confident *Myrmico*-logist will be faced with hidden difficulties: Taxonomic inconsistencies and the rising number of new species present themselves as a Scylla and Charybdis (see SEIFERT 2002, RADCHENKO & ELMES 2009). It is in fact by no means an easy task to write a monograph on *Myrmica* ants. Nevertheless, in their book Alexander G. RADCHENKO and Graham W. ELMES successfully establish a ground zero for Old World *Myrmica* (the less numerous New World species are not treated because of the prevailing taxonomic chaos). Indeed, quite possibly no one else would have been able even to consider this undertaking, for it was Radchenko and Elmes who described ca. 40% of the extant *Myrmica* species of the Old World, and both have an impressive array of papers on almost any aspect of *Myrmica* biology.

The book begins with a comprehensive introduction to the biology of *Myrmica*. It is thus a "must" for any scholar intending to pursue research on any aspect of *Myrmica*. This chapter concludes with a brief history of *Myrmica* taxonomy and the presentation of identification tools (e.g., morphometrics). Uniquely, the last section features the biographies of all taxonomists working with *Myrmica*, beginning with Nylander and ending with Seifert.

In the following chapter, the authors give a precise description of the genus and an up-to-date overview of the species-group and species-complex concept within *Myrmica*. Admittedly, these groups do not necessarily correspond to clusters resulting from molecular studies, but there is a consistent morphological reasoning behind each group. The 142 extant plus five fossil species are described in the third

chapter. The extensive characterisations are accompanied by distribution maps and a huge number (322 plates) of original hand drawings. This chapter alone impresses upon the reader how much effort goes into the creation of a monograph.

In the frame of the extensive zoogeographic analysis of the fourth chapter the authors treat the possible origins of *Myrmica* diversity in different regions, and finally the origin of the genus itself. One reads with a sense of surprised delight the twist at the end of the chapter, where the European Myrmecologist finds out that exotic *Myrmica* species are not necessarily species that live in subtropical areas of Asia, but rather species that inhabit the temperate zones of Europe, for they are less representative of the genus *Myrmica*, due to their lifestyle.

For any faunist the most useful parts of a monograph are the identification keys. Instead of constructing a holistic key, the authors chose to offer separate keys for the seven major *Myrmico*-geographical areas in the last chapter. The true value of these keys is revealed by three non-negligible details: (a) Males and (b) fossil species are also included, while (c) the characteristics used for identification of a species occurring in more than one region change according to the species context.

The value of any such monograph is revealed by its reception. It can generate the discovery of new species, but also the appearance of new solutions to old debates. This monograph has already done this (see SEIFERT 2011, BHARTI 2012). It is a book any Old World myrmecologist should have at hand, alongside *The ants* and *Bolton's catalogue*.

References

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