

BOOK REVIEW

PUNZO F.: THE BIOLOGY OF CAMEL-SPIDERS (ARACHNIDA, SOLIFUGAE). Kluwer Academic Publishers, Boston, Dordrecht, London, 1998, 301 pp. ISBN 0-7923-8155-6. Price USD 135.00.

Of the ten orders of the class Arachnida (except Acari), comprehensive publications have been published for spiders (Foelix, 1996; about 35,000 species), pseudoscorpions (Weygoldt, 1969; about 3,100 species), scorpions (Polis, 1990; about 1,200 species) and excellent surveys are also available for the orders Schizomida (Reddell & Cokendolpher, 1995; 180 species) and Palpigradi (Condé, 1996; 80 species). The time was right to summarize our knowledge about the solifuges (900 species), and Punzo's book does just this.

The material is presented in eight chapters. (1) An introduction to the solifugae. (2) Functional anatomy and physiology. (3) Neurobiology. (4) Life history parameters. (5) Ecology. (6) Behavior. (7) Phylogeny, biogeography and taxonomy. (8) Field techniques and laboratory rearing methods. These are followed by a reference section of 35 pages and an index.

Numerous literature sources written in German, Russian, and also in English are omitted. Kästner's extensive chapter about solifuges consisting of 106 pages (Kästner 1933) should have been used and cited.

Chapters 1 and 2 contain numerous incorrect data about morphology. The prosoma of solifuges originates by fusion of six segments (and not of eight segments, as stated on page 11 and drawn in Fig. 2-1), which is accepted in all literature sources cited, e.g. in Brusca & Brusca (1990) (erroneously cited only as "Brusca, 1990" on pages 14 and 265). The chelicerae belong to segment I, and the fourth pair of legs belongs to segment VI. The tergite of segment VII (in generally accepted notation) has an advanced position, above the base of leg IV (Hammen, 1989, Fig. 2A) (cf. again with Fig. 2-1 in Punzo's book). Precheliceral metameres may exist in the Chelicerata, but their number is not specified and they are therefore never numbered (Hammen, 1989). "Prosomal carapace" (p. 11), should be replaced by pro-, meso-, and metapeltidium (as on pages 11 and 14), and the term "hypopharynx" (p. 11, Fig. 2-1) should be replaced by "labium" (as on p. 15). The abdomen consists of eleven segments (as can be seen in Fig. 1-2), not ten as stated on page 4.

The occurrence of solifuges in Italy is omitted in the text (p. 219), whereas the occurrence in Greece, mentioned in text, is not marked in the map (Fig. 7-11).

Chapters 4, 6, and 8, based on the own author's research, are of value. The keys of families are useful. However, a chapter with a systematic survey of families is totally missing! Muma (1982) published such a basic survey.

The index is not complete. For example, the item Eremobatidae includes only notes on pages 221 and 225. However, we can find other notes concerning this family on pages 84, 149, and the key to subfamilies and genera of this family starts on page 234!

The whole book deserves better typography. It is full of typographical errors and taken-over pictures should be redrawn in a unique style.

The book will be appreciated by all those interested in the arachnids. (And we wait for the monographs about the orders Opilionida, Ricinulei, Uropygi and Amblypygi.)

REFERENCES

- CONDÉ B. 1996: Les Palpigrades, 1885–1995: acquisition et lacunes. *Rev. Suisse Zool. (Hors Sér.)*: 87–106.
FOELIX R.F. 1996: *Biology of Spiders*. 2nd ed. Oxford University Press, New York, 330 pp.
HAMMEN L. VAN DER 1989: *An Introduction to Comparative Arachnology*. SPB Academic Publishing, The Hague, 576 pp.
KÄSTNER A. 1933: 6. Ordnung der Arachnida: Solifugae Sundevall., Walzenspinnen. In Kükenthal W. & Krumbach T. (eds): *Handbuch der Zoologie* 3(2). Walter de Gruyter, Berlin, pp. 193–299.
MUMA M.H. 1982: Solpugida. In Parker S.P. (ed.): *Synopsis and Classification of Living Organisms* 2. McGraw-Hill, New York, pp. 102–104.
WEYGOLDT P. 1969: *The Biology of Pseudoscorpions*. Harvard University Press, Cambridge, 145 pp.
POLIS G.A. (ed.) 1990: *The Biology of Scorpions*. Stanford University Press, Stanford, 588 pp.
REDELLE J.R. & COKENDOLPHER J.C. 1995: *Catalogue, Bibliography, and Generic Revision of the Order Schizomida (Arachnida)*. *Speleological Monograph No. 4*. Texas Memorial Museum, Austin, 170 pp.

J. Buchar & V. Růžicka