HANSEN M.: HYDROPHILOIDEA (S.STR.) (COLEOPTERA). IN: WORLD CATALOGUE OF INSECTS 2, Apollo Books, Stenstrup, 1998, 416 pp. ISBN 87-88757-31-5, Price DKK 690.00 (hardcover, excl. postage).

The two published volumes of the series "World Catalogue of Insects" could give the misleading impression that this series is a one-man affair as both volumes have been written by Michael Hansen of the Copenhagen Zoological Museum. The first volume dealt with the family Hydraenidae, whereas this volume is devoted to the superfamily Hydrophiloidea, which is understood in a strict sense, i.e., consisting of the families Helophoridae, Epimetopidae, Georissidae, Hydrochidae, Spercheidae and Hydrophilidae.

This time, Michael Hansen lists 2803 extant species in 168 genera (Appendix lists also fossil species of recent genera but these species are not included in the overview on p. 13, although this is not explicitly stated). The book is based on older catalogues, Zoological Record (through Vol. 135) and examination of about 2000 papers on the systematics of Hydrophiloidea.

The overall structure of the book is similar to volume 1: again a brief general introductory chapter and lists of standard nomenclatorial information on all names belonging to the taxon treated, including type locality and distribution data, are presented. The optional information on each species are references to lecto- or neotype designations, to the first use of all different generic combinations, and to the distributional data. The catalogue is again supplemented by a list of nomina nuda and a list of names of species originally described in hydrophiloid genera and later transferred to other groups (i.e., potential source of senior homonyms). An improvement over the first volume is that all nomenclatorial acts introduced in the catalogue are listed separately. They are also more numerous: 14 new replacement names, 4 new synonyms on the generic and 30 on the specific level and 34 new combinations.

As regards (Central) Europe, the catalogue proposes only few corrections. The species previously known as *Megasternum obscurum* (Marsham, 1802) is now *M. concinnum* (Marsham, 1802) and *Hydrochus crenatus* (Fabricius, 1792) replaces the familiar *H. carinatus* Germar, 1824. In addition, the catalogue accepts another relatively recent name change of *Laccobius biguttatus* Gerhardt to *L. colon* (Stephens). Hansen follows all recent taxonomic revisions except that for the genus *Helophorus*. He endorses his earlier usage of original subgeneric names *Trichohelophorus*, *Rhopalohelophorus* and *Atractohelophorus* (instead of *Trichelophorus*, *Rhopalhelophorus* and *Atractohelophorus*) and follows Smetana (1985) in regarding *Atractohelophorus* as synonym to *Rhopalohelophorus*; in both cases this differs from the view of Angus (1992).

The high number of replacement names indicates Hansen's meticulous treatment of the subject. He is not only the current leading authority on the phylogeny of the group but also a very active taxonomist. The relatively numerous replacement names may indicate the little attention that has been paid to this difficult group in the past. Even in Europe, the taxonomy of even most common species has only been solved very recently (*Berosus, Enochrus*). Some taxa probably still await adequate and extensive study, such as the possibly subspecific status of *Hydrobius subrotundus* Stephens and *H. rottenbergii* Gerhardt,

which are treated by most papers, including this catalogue, as synonyms of the common Holarctic species *H. fuscipes* (Linnaeus).

Although typographical errors are inevitable (here, e.g., "Ribeira", "Ribero" or "Ribeiro" instead of Ribera on pp. 192, 194, 196, 198, 231, 293 and 305, "Kallar Vall" instead of Kallar Valley in the type locality of *Pelthydrus indicus* Schönmann on p. 128 and the rather amusing mixture of English and Slovak in "W. Slovensko" in the type locality of *Laccobius thermarius jelineki* Gentili on p. 152), it is evident that the author has paid a great deal of attention to their eradication.

The data on the geographical distribution of each species constitute the most vulnerable point of the entire book, as was the case for the hydraenid catalogue. Hansen rightfully tries to avoid doubtful records but this approach may lead to an underestimation of the distribution of a species. Distributional data for the territory of the Czech and Slovak Republics show a remarkably high incidence of the collective term "Czechoslovakia", while more exact data are given mainly for groups whose taxonomy has recently been reviewed (Berosus, Laccobius). In fact, the species distribution, at least for Central Europe, often seems to be combined from data in these taxonomic papers and some generally accepted comprehensive treatments. However, it is frankly very difficult for a single author to keep track of all faunistic papers (e.g., Cercyon laminatus Sharp has been reported from the Czech Republic and from Slovakia by Karas (1977) and Kodada (1990), respectively, for the first time). Some other remarks have been raised by Foster (2000).

Despite these minor criticisms, the catalogue is undoubtedly a very important contribution to a better knowledge of Hydrophiloidea. Compared to the first volume, this one is at least equally good and probably even better. However, the main problem is in the future shape of the series. The first two volumes needed about 150 pages and 15 mm of book binding per 1000 species, and the ratio is going to rise for the more intensively studied groups. An on-line publication could solve this difficulty and keep the contents continuously updated. This approach has already been advocated by other authorities on aquatic beetles. Though on a smaller scale, a working example is provided by the catalogue of Palearctic Dytiscidae and Noteridae compiled by Anders Nilsson. Now, all that is needed is someone willing to do all the work.

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