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Book review

Valladares L.F., Díaz J.Á., Garrido J., Sáinz-Cantero C.E., Delgado J.A. (2018): Coleoptera Hydraenidae. Fauna Iberica, Volume 44, CSIC Madrid, 516 pp., ISBN 978-84-00-10405-4.

Hydraenidae is an important family of small-sized Polyphagan water beetles, associated with a wide variety of aquatic and semiaquatic habitats, including large rivers, small streams, ponds, springs, marine rock pools and even humicolous terrestrial habitats (Jäch et al. 2016). Worldwide, they include some 1500 described species, most of them present in temperate areas, and more abundantly represented in the Northern Hemisphere (Jäch & Skale 2016). Hydraenidae have a leading role in conservation planning and management of threatened water habitats, as well as in running water monitoring, since they combine a wide ecological spectrum at the family rank, with often highly specialized habitat selection and narrow ecological tolerance at the species rank (Ribera & Foster 1993; Ribera 2000; Trizzino et al. 2015). Considering the high level of endemization characterizing most species of the group, members of this family also represent an excellent series of model organisms for zoogeographic and evolutionary research (Ribera et al. 2011; Trizzino et al. 2011, 2013; Sabatelli et al. 2016).

Iberian Peninsula is particularly important for this interesting beetle group, including in this area over 160 species, most of them being endemic.

The book includes, in its first section, a remarkably interesting and thorough synthesis of the available information on phylogeny, ecology, geographic distribution, and collecting methods of the family, while the second section presents the keys to the identification of each Iberian genera and species, coupled with short treatments summarizing the available information on morphology, distribution and ecology, and very accurate drawings representing male genitalia and other significant traits of each species. The volume contains 206 original plates and 35 color photographs, and a large and updated bibliography.

Pending the desirable future publication of a comparable monograph covering the whole (ca. 500) known European species of Hydraenidae, this book, even if limited to the largest European peninsula, certainly represents the most important and modern contribution ever published on this family at the European level.

Our only minor complaint refers maybe to the otherwise good and highly representative color pictures, where the different genera and species have not been published in scale, the plates thus potentially resulting a little disorienting for non-specialist users; but this should be considered no more than a very small formal defect, not at all reducing the value and the usefulness of this very good monograph.

The book is easily available from the Consejo Superior de Investigaciones Cientificas, Madrid, at the price of 52,88 Euros.

Contact http://editorial.csic.es and publ@csic.es for information and queries.

References

Jäch M.A., Beutel R.G., Delgado J.A., Díaz-Pazos, J.A. 2016.
Hydraenidae. Pp. 316–345, in: Beutel R.G., Leschen R.A.B. (eds), Handbook of Zoology, Coleoptera, beetles. Volume 4, Arthropoda: Insecta. Part 38. Morphology and systematics (Archostemata, Adephaga, Myxophaga, Polyphaga partim). De Gruyter, Berlin.

Jäch M.A., Skale A. 2016. Hydraenidae. Pp. 130–162, in Löbl I., Löbl D. (Eds), Catalogue of Palaearctic Coleoptera, Vol. 2. Hydrophiloidea-Staphylinoidea. Revised and updated edition. ApolloBooks, Leiden.

Ribera I. 2000. Biogeography and conservation of Iberian water beetles. Biological Conservation, 92(2): 131–150.

Ribera I., Castro A., Díaz-Pazos J.A., Garrido J., Izquierdo A., Jäch M.A., Valladares L.F. 2011. The geography of speciation in narrow range endemics of the 'Haenydra' lineage (Coleoptera, Hydraenidae, Hydraena). Journal of Biogeography, 38: 502–516.

Ribera, I. & Foster, G.N. 1993. Uso de Coleópteros acuáticos como indicadores biológicos. Elytron, 6(1992): 61–75.

Sabatelli S., Audisio P., Antonini G., Solano E., Martinoli A., Trizzino M. 2016. Molecular ecology and phylogenetics of the water beetle genus *Ochthebius* (Hydraenidae) revealed multiple and independent shifts to marine rockpools lifestyle. Zoologica Scripta, 45: 175–186.

Trizzino M., Audisio P., Antonini G., Mancini E., Ribera I. 2011.
Molecular phylogeny and diversification of the 'Haenydra' lineage (Hydraenidae, genus Hydraena), a north-Mediterranean endemic-rich group of rheophilic Coleoptera. Molecular Phylogenetics and Evolution, 61: 772–783.

Trizzino M., Carnevali L., De Felici S., Audisio P. 2013. A revision of the *Hydraena* species of the '*Haenydra*' lineage. Zootaxa, 3607: 1–173.

Trizzino M., Bisi F., Maiorano L., Martinoli A., Petitta M., Preatoni D.G., Audisio P. 2015. Mapping biodiversity hotspots and conservation priorities for the Euro-Mediterranean headwater ecosystems, as inferred from diversity and distribution of a water beetle lineage. Biodiversity and Conservation, 24: 149–170.

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