

BOOK REVIEW

Alonso, M. 1996. Fauna Iberica. Vol. 7, Crustacea, Branchiopoda.—Museo Nacional de Ciencias Naturales, Consejo Superior de Investigaciones Científicas, Madrid, Spain. Pp. 1-486 [in Spanish]. 5,000 pesetas. ISBN 84-00-07571-4.

Alonso (1996) provides a comprehensive taxonomic analysis of the species of Branchiopoda occurring within Iberia and the Balearic Islands. The classification scheme proposed by Fryer (1987), in which 10 orders were established within the Class Branchiopoda, is used to define the organization and scope of the book. For each of the six orders that occur in Spain (Anostraca, Spinicaudata, Onychopoda, Ctenopoda, Anomopoda, Notostraca), a brief introduction is provided which includes: the morphology of the adult (with well-labeled diagrams), a description of developmental stages, natural history, and collection, preservation, and study techniques. A list of families, subfamilies, genera, and species follows, concluding with a key for identification of families in the order. Well-illustrated, detailed descriptions of genera and species are accompanied by corresponding keys. Illustrations for species generally include males, females (parthenogenetic and ephippial, where appropriate), and naupliar stages where they occur. The distribution and biology of each species inhabiting the Iberian Peninsula (Spain) and the Balearic Islands complete the coverage. Keys to headshields, carapaces, and ephippia/resting eggs, found in the appendices, are primarily useful for the delimited area and for the taxa in this fauna.

The excellent drawings and descriptions in this volume present extensive diagnostic details of carapace and appendage morphology, largely omitted from prior European faunas. Although five of the six orders were illustrated by D. Jaume and one, the Anomopoda, by M. Alonso, their styles are quite consistent and virtually seamless in presentation. The branchiopods described in Fauna Iberica differ somewhat from those appearing in the fauna by Flössner (1972); certain more northern species apparently do not occur in Iberia, whereas other, more southern ones, do. One might expect the cladoceran fauna of Italy (Margaritora, 1985) to correspond to that of

Iberia. However, each of these faunas lists about 25 taxa not found in the other. Newly described taxa (a list of new taxa would have been helpful), reassignments, and changes in synonymy and nomenclature account for some of the differences among cladocerans found in this taxonomic analysis and previous ones (cf. Lilljeborg, 1901; Flössner, 1972; Negrea, 1983; Margaritora, 1985).

As in other volumes in the Fauna Iberica, only the original description of a taxon is cited under its name in the body of the text. Synonymies and combinations are relegated to an appendix where they follow (with some exceptions) the order of presentation in the text. They are not as complete as in Flössner (1972) and Negrea (1983), since only the first instance of a synonym is cited. Some revisions in nomenclature are footnoted to an editorial comments section following the synonymies.

In collaboration with M. A. Alonso-Zaragoza, one of the consultants for nomenclature in the Fauna Iberica series, M. Alonso has made numerous changes in nomenclature among the Branchiopoda. In accordance with the International Code of Zoological Nomenclature (ICZN, 1985), changes may involve modified spelling, such as Macrothricidae to Macrotrichidae. Others involve name priority, such as revision of the family name Chydoridae Stebbing, 1902, to Euryercidae Kurz, 1875, on the basis of the latter's description of *Euryercus* (Alonso, personal communication); surprisingly, this is not remarked upon in the Editorial Comments. In the face of recently published field guides, such as Smirnov's Macrothricidae of the World (Smirnov, 1992) and Cladocera: the Chydorinae and Sayciinae (Chydoridae) of the World (Smirnov, 1996), it remains to be seen if these particular revisions become accepted. In other cases, where a name could have been changed in accordance with the ICZN, established usage has been retained. The author's rationale for decisions on whether to change names is not apparent.

Designated type species for some genera (e.g., *Daphnia*, *Ceriodaphnia*, and *Camptocercus*) have been changed without explanation. *Echinisca* has been synonymized with *Macrothrix*, as suggested by Smirnov (1992),

in the absence of definitive generic characters. *Biapertura* is synonymized with *Alona*, with no rationale presented. Errors in content, such as the placement of *Ceriodaphnia cornuta* G. O. Sars, 1885, as a synonym of *Ceriodaphnia rigaudi* Richard, 1894, because the wrong publication for the former species was cited, are relatively infrequent. The drawings lack scale bars, making comparison of features difficult.

For the taxonomist, the book is often frustrating to use, requiring much turning of pages to locate taxa, to follow synonymies, and to find pertinent literature. Curiously, in the index, species and their synonyms (in parentheses) are listed alphabetically by specific names, not as subheadings under generic names, making it tedious to ascertain if a particular species is described, synonymized, or absent from the text. The Bibliography omits references listed in Synonymies, and emphasizes literature pertinent to this work; very few publications since 1990 are included.

The above criticisms notwithstanding, *Fauna Iberica, Crustacea, Branchiopoda*, is an attractive, clearly written, and handsomely produced book. It appears to have few typographical errors. It is not only a useful complement to previously published European faunas, but also a valuable addition to the world literature on the Branchiopoda. At its very reasonable price (about U.S. \$40), it should be on the personal bookshelf of all branchiopod systematists, especially those working with cladocerans, and should become a standard reference in all systematics

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