

BOOK REVIEW

Galil, B., C. Frogliola and P. Noël. – 2002. *CIESM Atlas of exotic species in the Mediterranean. Vol. 2. Crustaceans: decapods and stomatopods*. F. Briand (ed.). CIESM Publishers, Monaco. 192 pp. ISBN: 92-990003-2-8

This is the second published volume of a new series launched by the International Commission for the Scientific Exploration of the Mediterranean Sea (CIESM). This series is devoted to providing the scientific community with a comprehensive survey of recent immigrant species into the Mediterranean, either by natural or direct, human-induced causes. Three main types of exotic species may be distinguished in the basin: those of Indo-Pacific origin having entered the Mediterranean via the Suez Canal, those of tropical Atlantic origin having entered the Mediterranean via the Strait of Gibraltar, and those of clear “accidental” introduction by man. This Atlas constitutes a guide to identifying (no keys are provided) these exotic species with the help of valuable drawings or pictures and succinct descriptions. Emphasis is given to distinguishing diagnostic characteristics that are useful for identifying the species in the field. Notes on habitat, distribution and importance to humans are also provided. When known, the mode of introduction is stated. The illustrations provided are useful, as are the distribution maps, which quickly give the reader the information on the relative importance of each species.

One of the problems the authors of this book have certainly encountered is the difficulty in obtaining all the available references. In fact, most of the faunistic reports are found in local journals with a restricted distribution, which makes it difficult to consult many articles. One of the most important characteristics of this kind of book, which render them most useful, is that they compile information from primary sources that are difficult to access. Also, publication of faunistic reports is difficult to achieve in many journals. Therefore, many reports may remain on the researchers’ desk or in their collections for a long time until global, multi-authorship works like the present book are made. The list of references made available to the readers can be considered as a treasure given the difficulties involved in compiling such a list. The availability of the updated information through the CIESM

website makes this piece of work even more useful.

The rationale for species exclusion is clear. A slight difference of criterion can, however, be perceived when the authors ascribe deep-sea fish or crustaceans as “exotic” species, in particular, with regard to Atlantic species entering the Mediterranean through the Strait of Gibraltar. Thus, for example, the scorpionfish *Trachyscorpia cristulata echinata*, which is recorded in deep water in the Alborán Sea (the westernmost part of the Mediterranean), is fully acknowledged as an immigrant species into the Mediterranean, therefore deserving its own page as an “exotic” species in the Atlas. Decapod crustacean species with a similar bathymetric and geographical distribution are not treated as such. Shallower water species, which may be affected to a greater degree by the warming climate trend in the Mediterranean, are considered as “exotic” (e.g. *Merhippolyte ancistrotata*, *Processa macrodactyla*, *Scyllarus posteli* or *Cryptosoma cristatum*) and are given their own page. The authors clearly and correctly state that the scarceness of deep-water studies in the area may have precluded the knowledge on the actual distribution of the species. Some, or all, of the deep-water Atlantic species with distribution restricted to the westernmost Mediterranean may therefore be proper inhabitants of the area and not be ascribed as “exotic”; this would, however, also hold true for fish, and also for shallow-water species. Given the hydrographical characteristics of surface Atlantic water entering the Mediterranean via the Strait of Gibraltar, the establishment of (deep-water) species through larval influx into the Mediterranean may be considered as a natural process, the species involved being then not considered as “exotic”.

The “Foreword to the Collection” by the series editor, F. Briand, is worth reading in detail, as is the specific “Introduction” by the authors of this volume. Both sections provide an excellent exposition and summary to the aims of the book and the series.

This book will certainly be very useful to all persons interested in crustaceans, whether they be scientists, fishers, policy makers and managers, or just lay-men interested in what is occurring on our beaches and coastal areas.

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