

BOOK REVIEW

Two books on Philippine seaweeds

CATALOG OF THE BENTHIC MARINE ALGAE OF THE PHILIPPINES. Paul C. Silva, Ernani G. Meñez, and Richard L. Moe. Smithsonian Contributions to the Marine Sciences, Number 27. Smithsonian Institution Press, Washington, D.C. 1987. iv + 179 pp. (Price: consult publisher) and, PHILIPPINE SEAWEEDS. Gavino C. Trono, Jr. and Edna T. Ganzon-Fortes. National Bookstore, Metro Manila, Philippines, 1988. x + 330 pp. 175 Pesos (approx. US\$9).

The identification and nomenclature of seaweeds in the western tropical Pacific has been hampered by the lack of either a catalog or a handbook. Now, fortunately we have both. Although both books concern the Philippines, they are very relevant to neighboring areas, including Guam and Micronesia.

The *Catalog* by Silva et al. bears the unmistakable stamp of Paul Silva's painstaking systematics, and is an authoritative list of species recorded from the islands. Its purpose, as noted by the authors, is "to integrate published information on the taxonomy and distribution of Philippine benthic marine algae and . . . to incorporate as much information as was pertinent to understanding the taxonomic structure and nomenclature adopted . . ." For each of 972 taxa the current name, synonymy, and Philippine distribution are listed. The genera are arranged into families and orders on the basis of the most recent information, such as Parkinson's (1983) change of Chaetangiaceae to Galaxauraceae. Indeed, Silva's recent order, Ctenocladales, Chlorophyceae, is validated with a Latin diagnosis in this catalog. Cyanophyceae (blue-green algae) are included in the catalog, and the authors give both the classical Geitlerian taxonomy and a reconciliation with Drouet's system. Moreover, Silva takes what he calls "the iconoclastic step" of basing the nomenclature of the blue-greens on the Linnaean starting date, 1753. The extensive literature cited includes all the Philippine literature, which is identified, as well as other pertinent taxonomic literature. Although this work is exhaustive, it does not include evaluation of the records, and the authors are quick to note that as taxonomy and systematics proceed the catalog will soon be out of date. Hopefully, therefore, the authors will provide periodic supplements to keep it current.

Trono & Ganzon-Fortes' book is altogether differ-

ent, for it is in part a seaweed flora, with descriptions and illustrations of the species, and keys to genera and species. For the rest, it is a textbook on economic aspects of seaweeds in the Philippines. Only 141 species are included, these being "those which are large and commonly encountered on beaches, reefs, and shallow waters with emphasis on the economically important ones. A large number of small and microscopic forms have been excluded." This means that blue-green algae and most turf-forming algae, such as *Pterocladia*, *Rhizoclonium*, and even the common *Centroceras* are not treated. The extent of the exclusion can be seen in the macroalgae in comparison with the number of taxa in Silva et al.'s *Catalog*. For example, Silva et al. list 54 specific or subspecific taxa of *Caulerpa*, whereas Trono & Ganzon-Fortes describe only 9 species. What make their flora useful are the keys and illustrations, but the keys should not be mistaken for comprehensive. Anyone seriously interested in identifying a Philippine seaweed should use the two books together, and not pick the best choice from the keys! Notwithstanding these comments, the book partially fills a major void, and the part that it covers is well done.

Philippine Seaweeds is designed for a broad spectrum of users. The descriptions are full and accurate without being highly technical, and the keys similarly rely on readily-seen features rather than microscopic or reproductive details. A glossary is included. The line drawings are well executed and printed, but alas the many color photos, which could have made this a spectacularly-illustrated book, have been so badly printed that in many cases they are utterly useless. Some photos came out very well, but in others the color alignments missed by as much as a millimeter. (On the other hand, you get what you pay for, and this book is very cheap by US/European standards.)

The last third of the book includes chapters on the economic importance of seaweeds in general, the seaweed resources and utilization of species in the Philippines, aquaculture, and the seaweed industry. Two appendices on methodology for *Eucheuma* and *Caulerpa* cultivation should be of great interest beyond the Philippines. To complete this practical book there is a small collection of local seaweed recipes.

Ultimately, perhaps, we will see a marriage between these two books, a complete seaweed flora of

the islands, but such is a major project, and those of us working with seaweeds in the western Pacific can be very thankful that in the meantime we now have these two useful books.

CHRISTOPHER S. LOBBAN, *The Marine Laboratory, University of Guam, UOG Station, Mangilao, Guam 96923*

