

Seaweeds in Color

MARINE PLANTS OF THE CARIBBEAN. A FIELD GUIDE FROM FLORIDA TO BRAZIL. Diane S. Littler, Mark M. Littler, Katina E. Bucher & James N. Norris. Smithsonian Institution Press, Washington, D.C. 1989. 263 pp. \$14.95 (paper).

Popular guides to seaweeds are not common, in contrast to the abundance of field guides to terrestrial plants and anything that moves. Until recently, popular seaweed guides—except for some Japanese books—followed the technical works in being illustrated with line drawings. As Roger Tory Peterson long ago proved, the average naturalist (and many professionals, too!) uses the picture-matching method and finds color illustrations much more useful. The increase in SCUBA-tourism has opened up markets for field guides to seaweeds illustrated in color. Magruder & Hunt's small book *Seaweeds of Hawaii* was one of the first, and Fuhrer *et al.*'s *Seaweeds of Australia* followed in 1981. [In fact, color seaweed guides with hand-colored drawings were popular in Victorian England, as the 3rd edition of the Rev. D. Landsborough's charming book (*A Popular History of British Seaweeds*, 1857) testifies, but tastes, the economy, and printing methods changed.] Now we have *Marine Plants of the Caribbean*, in which I think Diane Littler and her colleagues have set the standard for future works.

The book is relevant to the Micronesian region—indeed throughout the tropics—because many genera and even species are common to the Indo-West Pacific and the Caribbean-Atlantic (in contrast to fish and coral faunas which show very little overlap). *Marine Plants of the Caribbean* provides a collection of excellent, authoritatively-identified underwater photographs, and is a very useful (and attractive) supplement for phycologists in Micronesia, who must rely on very scattered literature for illustrations of our flora. It will be particularly useful to teachers and students. It is not suitable as a popular guide here, of course, because many species do not overlap.

Several features particularly recommend this pocket guide. The first is the superb underwater photography, and the matching quality of book production (printed in Hong Kong), that make the 209 marine plants "come to life" on the pages. Photographers who have tried to capture the textures and colors of seaweeds on film, whether in trays of water on a copy stand or un-

derwater, will especially appreciate the skill involved in the photography. Many small species are photographed sufficiently close up that one can see critical details (e.g., cell patterns in *Anadyomene* and *Microdictyon*); there are very few nondescript tufts (or, as pictures taken too far away are sometimes euphemistically called, habitat shots); the photo of *Bryopsis plumosa* is an exception. Perhaps the most striking photos are those that show iridescent species, such as *Dictyota bartayresii* and *Ochtodes secundiramea*. Iridescence is a brilliant phenomenon underwater but virtually disappears when the plants are taken out in air (one of the esoteric mysteries of phycology!). Besides the green, brown, and red seaweeds, the book illustrates the seagrasses and even acknowledges blue-green algae, colonial diatoms and zooxanthellae with one or two pictures each.

The book has a brief introduction to marine plants and tropical habitats, and a short concluding chapter on underwater photography. (The diagrams for use of flash and close-up lenses both unfortunately show animals as camera subjects!)

The text accompanying each photograph is intended to help the lay reader or student distinguish the common Caribbean species from one another. The descriptions are therefore less useful than the photographs outside the Caribbean area. There are no keys but similar morphologies are collected within each Phylum (as a result the sporophyte and gametophyte of *Derbesia* are in different places). Reproductive structures, often critical to identification, but requiring use of a microscope, are not mentioned or illustrated, nor is there mention of any similar but excluded Caribbean species. These deliberate omissions, and the choice of species to include, are appropriate to the nature of the book. Phycologists in the Caribbean can now have Littler, Littler, Bucher & Norris' spectacular book in one hand and W. R. Taylor's technical flora in the other. Littler *et al.* help by giving the name used by Taylor when it has been changed (e.g. the famous giant-celled alga once called *Valonia ventricosa* is now *Ventricaria ventricosa*).

The book is so attractive and so reasonably priced that I can recommend it to anyone interested in algae, to all tropical marine biologists no matter how zoologically inclined, and to underwater photographers.

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