

NEW BOOKS

Three useful books on seaweeds

Abbott, I.A. 1999. *Marine Red Algae of the Hawaiian Islands*. Bishop Museum Press, Honolulu, HI. 477 pp.

Littler, D.S. & M.M. Littler. 2000. *Caribbean Reef Plants*. Off Shore Graphics, Washington, D.C. 542 pp.

Payri, C., A. de R. N'Yeurt & J. Orem-puller. 2000. *Algues de Polynésie française / Algae of French Polynesia*. Editions Au Vent des Iles, Papeete, Tahiti. 320 pp.

Three recent books on marine algal floras are helpful in Micronesia, although they are about other areas. The objective of this short review is to note their utility in our region.

The main values of each are that they have accurate, up-to-date nomenclature, have good keys to genera, and are well illustrated. Since there is no published book on the algal flora of Micronesia (nor even an up-to-date checklist or keys, though these are in preparation), we rely on books from other areas and scattered literature. However, the choice in books so far has not been satisfactory. These three books greatly improve the situation. Of course, the keys must be used cautiously, since they are intended only to distinguish the genera and species in their own region, but we have found them very useful starting points for identifying seaweeds on Guam. All of these books include glossaries.

The most useful of these books is Abbott's, because it is the closest to our

region and, for the group it covers, the most comprehensive. Unlike the other two books, in which the color illustrations are a major focus, Abbott's *Marine Red Algae of the Hawaiian Islands* is in the tradition of her *Marine Algae of California* (University of California Press, 1976), except that it is illustrated with good photographs (mostly photomicrographs). There is extensive scholarly text, which makes this book the definitive flora for Hawaiian red algae. We look forward to companion volume(s) on the browns, greens, and bluegreens. The photographs are in black-and-white, and they are small, but the quality of the pictures is generally excellent and the distinctive features are clear. She provides a master key to all the genera, and then keys to genera under each of the lower taxa, finally to species. The Ceramiales occupy nearly half the book (about 120 species out of 343), and the thoroughness in this Order is very significant in comparison to the other two books, since many of these species are inconspicuous or uncommon, and thus are underrepresented in the other books, especially in Payri et al. (41 species).

Caribbean Reef Plants is a beautiful book that combines extraordinary underwater photography with an abundance of clear line drawings. In addition to photos of the species, there are informative photos of habitats and algal-animal interactions. There are master keys to genera in each Division, and (less useful to us) keys to species. Although this is a considerable expansion of their earlier book, *Marine Plants of the Caribbean* (Smithsonian Institution Press, 1989), it is still not intended to be exhaustive, but the authors

believe it shows 90–95% of the species one could expect to find.

One of several strengths of the Littlers' book is that it includes a scholarly treatment of the bluegreen algae (cyanobacteria), recognition of the importance of these diverse and abundant organisms on tropical reefs. The nomenclature is based on the recent major revision by Anagnostidis and Komárek, and they provide a key to genera. They are now at work on a flora of Fiji, and if that is comparable to the Caribbean book, it will be the best single choice for Micronesia.

Algae of French Polynesia—an entirely bilingual book—is much shorter than the Littlers' book, especially considering that half is in French, so that far fewer species are included. Again, color pictures are

accompanied by short descriptions and some drawings. Many of the illustrations are of living plants in situ or in an aquarium. Some of these photos are excellent and most are of high quality. For some species however, we are presented with a photo of a dried specimen or a miserably reproduced photomicrograph in which the details are lost and the colors grossly distorted. Line drawings are given only when the authors felt they were essential to show internal details, but this leaves too much reliance on the photographs. The species covered have more in common with our region than does the Caribbean flora. Payri et al. included a few bluegreen algae but without a key.

—Chris Lobban.