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Book review

Sri Lankan seaweeds: methodologies and field guide to the dominant species

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There is a mild difference of opinion on the status of this book to be found in the first pages: The honorary Head of Department at the Royal Belgian Institute of Natural Sciences describes it as ''a practical and comprehensive guide'' while the authors believe it is ''not at all a comprehensive Flora''. Given the fact that about 140 species are treated out of an estimated 440 described taxa for Sri Lanka, I tend to think the authors are closer to the mark. Even so, the book is very welcome, coming from an area where until now little has been available in the field of taxonomic phycology.

An ample section (73 pages), well illustrated, on various aspects of the island of Sri Lanka and its seaweeds, coastline, climate, biodiversity, and a useful chapter on zonation appear before the systematic section. There are methods for surveys of marine vegetation, preservation of specimens for various further uses, chapters on classification, morphology, life histories and reproduction, to name only a few.

There are few minor mistakes. ''Iridesce'' (p. 42) is to my knowledge not an English verb. The branching of *Ceramium* sp. is described as sympodial (p. 48) or pseudosympodial (p. 200 – here as *Ceramium marshallense*). ''Diplont'' generation (p. 58) probably means diploid generation, moreover the term diplont does not appear in the glossary. The difference between gonimoblasts and cystocarps is explained as ''globular'' vs. ''ball-like'' (p. 58); this will be difficult to understand if no additional information is given, even if gonimoblasts were truly globular all the time. The necessity of adaptive clothing (protection against sun/rain) as stressed on p. 64 apparently does not apply to the first author on the page opposite. Several photographs in this section are found again on a larger scale in the systematic section.

The locations visited for sampling were on most of the west and south coasts, the remainder of the island at the time being inaccessible to visitors due to political instability – although the island as a whole is within the tropics, this apparently meant that a number of (large) tropical species were missed during collecting. The authors indicate that the (non-visited) northern coast is slightly warmer than the southern areas.

The Chlorophyta (Ulvophyceae) is represented by 52 species and varieties, the Phaeophyceae by 23 species and the Rhodophyta by some 67 species.

Not surprisingly, considering the close vicinity of India and the central position in the northern Indian Ocean, there seem to be few species restricted to Sri Lanka. Of the ca. 20 species described originally from the island, only two (*Euryomma platycarpa*, *Champia ceylanica*) have not yet been found outside the area. Many species are distributed throughout the tropics or Indian Ocean/tropical (western) Pacific.

All species discussed are illustrated, usually with a photograph in the field, in some cases herbarium specimens or microscopic details. The photographs in general are of excellent quality, and in many cases they will help to identify species. But additional drawings (or photographs) of anatomy and reproductive structures [as for instance in Littler and Littler (2000): *Caribbean reef plants*] would in most cases have made identification easier. For some species, but in my opinion too few, microscopic details are shown; the reproductive structures of the red algae are even illustrated mainly by African species.

Naturally, in a field guide, species with a relatively large thallus are presented first: *Caulerpa* with 16 species or infraspecific entities, *Ulva* with 8 species (including former *Enteromorpha*) – it is of course questionable whether species with the type from Denmark or Sweden are really the same entity in a tropical environment. On the other hand, the ''Ceramiaceae'', now four families, a species-rich group almost anywhere, is represented by 7 species only. The authors indicate that at least *Ceramium* has several species present, but not described from the island. *Polysiphonia* is absent, the notoriously difficult species of ''Laurencioids'' being restricted to two identified entities.

There is a useful glossary at the end of the book. It is difficult to decide which terms to include in such a glossary, thus carpostome, ecomorph, interstice, papulose, (pseudo) parenchymatous though absent, are not more self-explanatory than many terms that are listed.

I disagree with the authors that in a selection as presented, keys are not necessary, or give a false impression of completeness.

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