MARINE PLANTS and MARINE ALGAE

(see also Sea-shore Plants)

Baldock RN *et al*. (2010-2015) Identification factsheets of the marine benthic flora (Algae) of South Australia. State Herbarium of South Australia. [Part of the *eFlora SA* website].

ELECTRONIC RESOURCE, ON-LINE (directory page and free PDF downloads): http://www.flora.sa.gov.au/algae_revealed/index.shtml

Comprising many taxonomically based separate PDF files, this identification system combines standard printed dichotomous keys with a heavily pictorial element (no separate text treatments of species apart from the key wording). A minimum of technical terms are used, and those that are, are well explained by illustration. A low-tech approach to getting out a very practical identification tool for a large and comples group of organisms. RECOMMENDED

Bennett I (1987) Australian Seashores. Angus & Robertson. 411 pp. ISBN 0207155615.

An updated version of WJ Dakin's classic field guide to sea-shore life. The chapter on 'Seaweeds of the rocky ocean coast' covers about 30 common or conspicuous species, with informative text and excellent colour photos. A good casual-interest resource.

Christianson IG, Clayton MN, & Allender BM (1988) Seaweeds of Australia. Reed Books, Frenchs Forest NSW. 112 pp. ISBN 0730102424.

Covers mainly the subtropical and temperate zones, with a few tropical species. 186 excellent colour photos, with very brief text. No keys. A good general-interest book.

Coleman N (2002) Lord Howe Island Marine Park – sea shore to sea floor. Neville Coleman's Underwater Geographic Pty Ltd, Springwood, Qld. 96 pp. ISBN 0947325271.

Chapters on the algae and seagrasses, with small colour photos and brief notes.

Cowan R (ed.) (2006-ongoing) Australian Marine Algal Name Index (AMANI). Murdoch University and Commonwealth of Australia. **ELECTRONIC RESOURCE, ON-LINE**: http://www.anbg.gov.au/amanisearch/servlet/amanisearch/index.html

A searchable database of the taxonomy (both accepted names and their synonyms), nomenclature and distribution of the Australian marine macro-algae and some of the marine protists. Searches can be conducted on taxon name at any rank or on distribution. As at July 2015, the last update to this site is shown as May 2006.

Cribb AB (1996) Seaweeds of Queensland – a naturalist's guide. Queensland Naturalists' Club Inc., Brisbane. (Queensland Naturalists' Club : Handbook No 2). 130 pp. ISBN 0959560718.

Good colour photos and brief notes on 168 species (of the 600 or so in the State).

Cribb AB & Cribb JW (1985) Plant life of the Great Barrier Reef and adjacent shores. University of Queensland Press, St Lucia, Qld. 294 pp. ISBN 0702219843.

Plain language species profiles, with good colour photos. Covers strand and dune plants, mangroves, some marine algae, and sea grasses.

Edgar GJ (2012) Australian marine life. Second edn. Reed New Holland, Chatswood, NSW. 624 pp. ISBN 9781921517174.

Covers both plants and animals, but with many common species of cyanobacteria and the algal groups, with brief sections on marine fungi, seashore lichens, the seagrasses, and seashore (mangrove and saltmarsh) land plants. Excellent colour photos, with brief notes.

Huisman JM (2000) Marine plants of Australia. University of Western Australia Press, Nedlands, WA / Australian Biological Resources Study, Canberra. 300 pp. ISBN 1876268336.

Introductory sections on the history of Australian marine botany, the uses of marine plants, and techniques for collecting and displaying them. These are followed by over 300 species of cyanobacteria, the algal groups, and seagrasses, with good colour photos of selected species, many line drawings of diagnostic features, and brief descriptions and notes; no keys.

Huisman Phillips J, & Parker C (2006) Marine plants of the Perth region. Western Australia. Department of Environment and Conservation, Kensington, WA. 72 pp. ISBN-10: 0730755665; ISBN-13: 9780730755661. [One of the *Bush Books* series, now distributed by WA Dept of Parks and Wildlife].

Paperback pocket guide to a selection of the more common marine plants (sea-grasses and algae) of the region. Descriptions and colour photos. [NOT SEEN].

Huisman JM (2006) Algae of Australia: Nemaliales. Algae of Australia Series.

CSIRO Publishing / Australian Biological Resources Study (ABRS). 164 pp. ISBN 9780643093782.

Documents the three families, 20 genera and 55 species of the red algae Order Nemaliales that occur in Australia (often conspicuous in the inter- and sub-tidal zones). A detailed introduction to the history, structure, reproduction and relationships of the order is followed by identification keys to families, genera and species, with comprehensive descriptions of each taxon. Includes practical guidance on the examination of specimens, and good colour photos and line drawings.

RECOMMENDED

Huisman JM (2015) Algae of Australia: Marine Benthic Algae of North-western Australia 1. Green and Brown Algae. Algae of Australia Series. CSIRO Publishing.

328 pp. ISBN 9781486304493.

An authoritative floristic account of the marine green and brown algae of north-western Australia including 68 genera and 171 species; detailed descriptions and diagnostic keys,illustrations, maps, photographs. RECOMMENDED

Huisman JM (2018) Algae of Australia: Marine Benthic Algae of North-western Australia 2. Algae of Australia Series. CSIRO Publishing. 688 pp. ISBN 9781486309542

Describes the 158 genera and 351 species of marine benthic red algae of north-western Australia. Iuustrations,maps,photographs. RECOMMENDED.

Huisman J (2015) Algae of Australia: Marine benthic algae of north-western Australia: 1.

Green and Brown Algae. Algae of Australia Series. Australian Biological Resources Study (ABRS), Canberra / CSIRO Publishing, Melbourne. 320 pp. ISBN: 9781486304493.

Covers 68 genera and 171 species. All taxa are described, with nomenclatural details, keys, and many good black and white line illustrations and photos, and more than 60 colour photos of species. RECOMMENDED

Kraft GT (2007) Algae of Australia: Marine Benthic Algae of Lord Howe Island and the Southern Great Barrier Reef: 1. Green Algae. Algae of Australia Series.

Australian Biological Resources Study / CSIRO Publishing. 356 pp. ISBN 9780643094321.

A description of the habitats and biogeographic factors is foillowed by keys to and detailed descriptions of genera, and where these have more than one species a key to that level is also provided. 117 species are treated in total, some with subspecies, varieties, or forms. Good colour illustrations and a good glossary. RECOMMENDED

Kraft GT (2009) Algae of Australia: Marine benthic algae of Lord Howe Island and the Southern Great Barrier Reef: 2. Brown Algae. Algae of Australia Series. CSIRO Publishing / Australian Biological Resources Study (ABRS). 370 pp. ISBN 9780643097377

Covers 7 orders, 12 families, 38 genera and 92 species, with an introduction to the islands, identification keys to genera and species, and a comprehensive description and discussion of each taxon. Many photos. RECOMMENDED

Littler DS & Littler MM (2003) South Pacific reef plants – a diver's guide to the plant life of South Pacific coral reefs. OffShore Graphics Inc., PO Box 6139, Washington DC 2004-6139, USA. 332 pp. ISBN 0967890195.

Keys and good plain-English descriptions, with brief habit and distribution notes, for many common of conspicuous species of the algal groups and seagrasses, with 440 excellent colour photos.

McCarthy PM & Orchard AE (eds) (2007) Algae of Australia: Introduction. Algae of Australia Series, ABRS. CSIRO Publishing / Australian Biological Resources Study. 744 pp. ISBN 9780643093775.

Introductory volume to the authoritative *Algae of Australia* series. Includes essays on the classification of Australian algae, research history, fossil record, systematic relationships, ecology, biogeography and economic significance. Keys to the identification of the orders of algae are accompanied by an extensive bibliography, and 29 synoptic chapters provide an overview of the biology of the algal classes. Also includes colour photographs, line illustrations, and a glossary of more than 1500 technical terms. RECOMMENDED.

National Herbarium of New South Wales (1999 – ongoing) Marine Algae.

ELECTRONIC RESOURCE, ON-LINE: http://plantnet.rbgsyd.nsw.gov.au/other1.htm

[also known as 'Aussie Algae' resource pages, http://www.aussiealgae.org/]

A miscellany of marina algal information, some of it assisting identification (e.g. species lists from 13 commonly collected NSW localities; and searchable image sets from Harvey's *Phycologia Australica and Australian exsccatae*). Site now static (2015).

Sainty G, Hosking J, Carr G, & Adam P (eds.) (2012) Estuary plants and what's happening to them in south-east Australia. Sainty & Associates (www.sainty.com.au). 652 pp. ISBN 0958105538.

First half of the book is a field guide to estuarine areas, covering seagrasses, algae, mangroves, and lowmarsh and highmarsh plants. Second half is on ecology and management. No keys, but excellent colour photos and good plain-language descriptions. RECOMMENDED

Waycott M, McMahon K, Mellors J, Calladine A, & Keline D (2004) A guide to tropical seagrasses of the Indo-West Pacific. James Cook University, Townsville, Qld. 74 pp. ISBN 0864437279.

Easy-to-use pictorial key, and for each species a summary of distinctive features with good notes on taxonomy, ecology and reproduction, with colour photos and very good colour paintings.

Waycott M, McMahon K, & Lavery P (2013) A Guide to Southern Temperate Seagrasses.

CSIRO Publishing, Collingwood, Vic. 112 pp. ISBN: 9781486300150 pbk.

Describes the diverse seagrasses in the temperate parts of the southern hemisphere. Introductory sections on their evolution, biology and ecology, followed by a visual key for species identification, using easily observed features. Detailed diagnostic information on each species or species-complex, with distribution maps and brief notes on taxonomy, reproduction and ecology. High- to variable quality colour illustrations photos. RECOMMENDED

Western Australian Herbarium (ongoing) Florabase. Department of Parks and Wildlife – WA Herbarium. **ELECTRONIC RESOURCE: ON-LINE**:

http://florabase.dpaw.wa.gov.au/marineplants/

Western Australia's plant information system *Florabase* includes variable levels of information on species of marine angiosperms and the red, green, and brown alagae and cynanophyta.

Wheeler J & Chalmers L (1997) Native vegetation of estuaries and saline waterways in south Western Australia. Water & Rivers Commission**,** East Perth. 32 pp. ISBN 0730972451.

Useful booklet covering 28 species of emergent and waterside plants. Short descriptions, useful line drawings.

Wilson A (ed.) (2011) Flora of Australia. Volume 39 - Alismatales to Arales. Flora of Australia Series. Australian Biological Resources Study (ABRS) / CSIRO Publishing. 320 pp. ISBN: 9780643104235 hbk, 9780643104242 pbk.

This volume of the *Flora of Australia* series covers 17 vascular plant families (76 genera and 256 species), some with a high proportion of marine and coastal aquatic, semi-aquatic, or strand species, including the Sea-grass families Posidoniaceae, Cymodoceaceae, and Zosteraceae. Keys to genera and species, nomenclature, descriptions, distribution statement and map, and habitat information. RECOMMENDED

Womersley HBS (1984-2003) The marine benthic flora of southern Australia.

- **(1984) Part 1: Chlorophyta and seagrasses**. DJ Woolman, SA Government Printer, Adelaide. 329 pp. ISBN 0724345523.

Covers the marine Green Algae (Chlorophyta) and vascular plants (in this context seagrasses).

- **(1987) Part II: Phaeophyta and the genus *Vaucheria* of the Chrysophyta**. DJ Woolman, SA Government Printer, Adelaide. 484 pp. ISBN 072436501X.

  Covers the Brown Algae (Phaeophyta) and one genus of the Golden Algae (Chrysophyta).

- **(1994) Part III A – Rhodophyta**: **Bangiophyceae and Florideophyceae (the orders Acrochaetiales, Nemaliales, Gelidiales, Hildebrandiales, and Gigartinales *sensu lato*)**. Australian Biological Resources Study, Canberra. 508 pp. ISBN 0642198071.

  The Red Algae (Rhodophyta) in part.

- **Part III B – Rhodophyta: Gracilariales, Rhodomeniales, Corallinales and Bonnemaisoniales.** Australian Biological Resources Study, Canberra. 392 pp. ISBN 0642248494.

  The Red Algae (Rhodophyta) continued.

- **Part III C – Ceramiales: Ceramiaceae, Dasyaceae**. State Herbarium of South Australia, Adelaide. 535 pp. ISBN 0730862151.

  The Red Algae (Rhodophyta) continued.

- **Part IIID. Ceramiales — Delessariaceae, Sarcomeniaceae, Rhodomelaceae.** Flora of Australia Supplementary Series 18. Australian Biological Resources Study (ABRS) / State Herbarium of South Australia. 533 pp. ISBN 9780642568267

  The Red Algae (Rhodophyta) continued and concluded.

This exhaustive work provides identification keys, nomenclatural and distributional information, and detailed species descriptions. Many line drawings of diagnostic cellular structures and good halftones of complete plants and reproductive structures. RECOMMENDED in conjunction with the more recent ABRS resources listed here.

ELECTRONIC RESOURCE: ON-LINE, free html downloads.

A digitised version of all volumes, parsed into fact-sheet format but retaining the full technical text, and accessed via a master list of scientific names, is available on the *eFlora SA* website (http://www.flora.sa.gov.au/algae_flora/The_Marine_Benthic_Flora_of_SA_static_index.shtml)