## Chapter 23 Taxonomy of Australian Seagrasses



John Kuo, Marion L. Cambridge, Len J. McKenzie and Robert G. Coles

**Abstract** This chapter lists all Australian seagrass species with their synonyms, which are currently accepted by the *IPNI* (International Plant Name Index) and the *Plant List*; the world authority of plant taxonomy. It also briefly reviews taxonomic studies on the Australian seagrasses and includes keys to all Australian seagrass species, with the practical goal of providing botanists with a name for seagrass species based on morphological characteristics. With their limited range of morphological characters, even constructing a morphological key presents some difficulties. The Australian waters are rich in seagrass species (33), with more than one third of the described seagrass species in the world. The majority of Australian temperate species are endemic, while those occurring in Australian tropics are also distributed in the Indo-Pacific region. Where possible we consider the results of molecular phylogenies but at present these are incomplete, and have only focused on a limited range of species.

J. Kuo (🖂)

Centre for Microscopy, Microanalysis and Characterization, The University of Western Australia, Crawley, Perth, WA 6009, Australia e-mail: john.kuo@uwa.edu.au

## M. L. Cambridge

The Oceans Institute and School of Plant Biology, The University of Western Australia, Crawley, Perth, WA 6009, Australia e-mail: marion.cambridge@uwa.edu.au

## L. J. McKenzie · R. G. Coles

Centre for Tropical Water and Aquatic Ecosystem Research, James Cook University, Cairns Campus, 14-88 McGregor Road Smithfield, PO Box 6811, Cairns, OLD 4878, Australia

e-mail: len.mckenzie@jcu.edu.au

R. G. Coles

e-mail: rob.coles@jcu.edu.au

© Springer International Publishing AG, part of Springer Nature 2018 A. W. D. Larkum et al. (eds.), *Seagrasses of Australia*, https://doi.org/10.1007/978-3-319-71354-0\_23