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Morphological and phylogenetic analysis for endemic seagrass species *Halophila ovalis bullosa* from the Fiji Islands

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Seagrasses are coastal marine flowering plants with worldwide distribution that provide over 25 key ecosystem services to humans. Rapid declines in seagrass species richness and coverage have been reported over recent years, however many aspects of their ecology remain unknown, particularly species relationships between closely related taxa. This holds true in Fiji, where seagrass species have been described on the basis of morphological characteristics yet their taxonomic identity remains doubtful. For example, the genera Halophila is convoluted due to overlapping leaf morphologies. This study examines material (total n = 95 from 22 sites) comprising four species (*H. ovalis, H. uninervis, H. pinifolia,* and *Syringodium isoetifolium*),

and one subspecies (*H. ovalis bullosa*) that is endemic to Fiji. Phylogenetic reconstructions (ML and Bayesian) on nuclear (ITS2) and chloroplast markers (matk & trnHpsbA) were generated, and vegetative and reproductive morphology were examined for *H. ovalis* and *H. ovalis bullosa*. Morphological analyses demonstrated that H. ovalis bullosa possesses characteristics within the range of those previously described for *H. ovalis*, except for blister-like (bullate) features on both sides of the leaf blade. Monophyletic clustering also showed that H. ovalis bullosa plants were indeed *H. ovalis*. Our study recommends the revision and merger of the endemic *H. ovalis bullosa* with *H. ovalis*.

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