Morphological and molecular studies of undescribed Kappaphycus species Abstract

Morphological and molecular studies were carried on an undescribed species of Kappaphycus (AS 12) from Sabah, Malaysia. The species displays unique and different physical characters from Kappaphycus alvarezii, K. striatus, K. malesianus and Eucheuma denticulatum in terms of branching patterns, thalli texture and colors. The phylogenetic position of this plant was inferred by cox2-3 spacer, intergenic transcribed spacer (ITS) region and RuBisCo spacer. Based on the results from this study, it is clear that the specimen AS 12 pointed to significant differences from K. alvarezii, K. striatus, K. malesianus and E. denticulatum as supported by both morphological and molecular analyses.