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Abstract

We compared the depth of horizontal rhizomes of small seagrass species to the depth of dugong feeding trails in seagrass meadows on the southeast coast of Talibong Island, Trang Province, Thailand, from 27 to 30 October 2005. The horizontal rhizomes of *Halophila ovalis* were within the depth range that was almost completely grazed by dugongs. *Halophila ovalis* populations in seagrass meadows appear to be maintained by their fast rate of growth. On the other hand, the horizontal rhizomes of *Thalassia hemprichii*, which has a slower growth rate, were deeper than the dugong grazing depth, thus reducing grazing pressure on *T. hemprichii*.