

Biological Aspects of an Intertidal Dugong Grass
Thalassia hemprichii
in Port Dickson, Negeri Sembilan, Malaysia

Abuhena, Mustafa. Kamal Misri, K. Japar. Sidik B. Hishamuddin, O. Hidir, H.

Department of Biology, Universiti Putra Malaysia, Selangor, Malaysia

Seagrass is one of the valuable components, which contribute significantly in coastal productivity and stabilising sea floor sediments in the shallow marine water ecosystems. The present field case study was conducted in a monospecific patches intertidal seagrass bed in Port Dickson, Malaysia. Shoot density and biomass of this species was detected by placing 20x20 cm quadrat. Leaf growth and productivity of *Thalassia hemprichii* was detected by leaf marking method. During low tide period (≥ 0.2 m), the habitat of this species was observed by snorkelling. The mean shoot density of *Thalassia hemprichii* was 632.14 ± 113.77 shoots/m², whereas, mean above and below ground biomass were 13.87 ± 1.17 g AFDW (Ash Free Dry Weight)/m² and 40.19 ± 7.93 g AFDW/m², respectively. The maximum leaf growth and leaf production of this species were 11.45 mm/shoot and 1.00 g AFDW/m²/day, with the mean value of 7.04 ± 1.35 mm/shoot and 0.56 ± 0.17 g AFDW/m²/day, respectively. Turnover rate and relative production rate were found 3.68 ± 0.79 percent/day and 0.07 ± 0.03 g/g AFDW/day, respectively. Plastochrone interval of leaf was 12.03 ± 1.01 days during the study time. This is an important seagrass parameter, which provides attachment for epiphytes that supply food source for marine fishery resources. Leaves of *Thalassia hemprichii* beneath the shading of macroalgae (sargassum) were comparatively longer than those exist without shading condition. However, the range of number of horizontal rhizome nodes of this grass was 8-19 between two shoots, this could indicate that two shoots are separated by approximately 8-19 horizontal nodes. It is hoped that the data obtained from this study could be used for better understanding of the dynamics, habitat of a biological community and its contribution in a shallow marine coastal ecosystem.