

ABSTRACT

Seagrasses are marine flowering plants which are part of a highly productive coastal ecosystem and play a key role in the coastal processes. In Bayas Island, Estancia, Iloilo, the tape seagrass *E. acoroides* thrives in the intertidal areas around the island. With the increasing population and demand for food, the seagrass areas are constantly exposed to poaching, gleaning, fishing, and recreational activities which could likely affect its condition. Despite the benefits that seagrasses contribute to the daily lives of the locals, seagrasses in the area are poorly understood. Three sampling stations were chosen at random in the study area. Station 1 is located in purok Rosas de Baybayon, station 2 is located in purok Bougainvillea, and station 3 in purok Santan. The transect-quadrat method was used in assessing the seagrass beds. A 0.5 m x 0.5 m (0.25 m²) steel quadrat and three 50 m transects were used. The results showed that the *E. acoroides* has a patchy distribution across stations. Among the three sampling stations, station 2 had the highest seagrass percent cover of 36±8.14%, followed by station 3, with 30.13.58%, and station 1 with the lowest seagrass percent cover of 22±3.61%. Station 2 had the highest shoot density of 17±2.65 shoots m⁻², followed by station 3 with 14 ±6.03 shoots m⁻², and station 1 with 11 ± 1.73 shoots m⁻². Station 1 seagrass cover status is poor, whereas station 2 and 3 are less rich/less healthy. Station 2 had the highest shoot density of 17 ±2.65 shoots m⁻², followed by station 3 with 14 6.03 shoots m⁻², and station 1 with 11 ± 1.73 shoots m⁻². The physico-chemical parameters of seawater showed minimal variations across sampling stations. Station 2 had the highest canopy height of 940 cm, and station 1 and 3 had a canopy height of 92 ± 1.73 cm. The results provide baseline data on the biological and ecological aspects of the tape seagrass *E. acoroides* in Bayas Island which could serve as reference for future conservation and management efforts on seagrasses in the area.

Keywords: *Enhalus acoroides*, parameters, quadrat, density, distribution, Bayas Island