

ABSTRAK

Riyani Ridwan, NPM 05181511049, Distribution and Density of Seagrass Species at the Dugong Feeding Ground in Hiri Island, North Maluku Province. Supervised by Ikbal Marus, S.P, M, Si. As mentor I and Nebuchadnezzar Akbar S.Pi.M.Si as mentor II.

Seagrass is a flowering plant (Angiosperms) which consists of 4 families, 12 genera and 60 species that live and thrive in shallow marine environments, estuarines that have high salinity, areas that always get waterlogged or open at low tide, in the substrate. sand, muddy sand, soft mud and coral. Juraij (2014) states that seagrass is one of the feeding grounds for dugongs. The feeding trail or feeding trail left by the dugong can be used as an indicator of its existence. Dugong (Dugong dugon), is a plant-eating mammal or herbivorous mammal, whose main food is seagrass.

This study aims to determine the distribution of seagrass species on the coast of the Tafraka Village, to analyze the density of seagrass on the coast of the Tafraka Village, to determine the presence and traces of eating dugong on the coast of the Tafraka Village. Data collection was done using the method using the transect line method and quadratic transect (observation plots). At each station transects are made which are drawn along 50 m perpendicular to the coastline with the distance between the transects being 50 m. On each transect, a square of observation (observation points) measuring 0.5 m x 0.5 m is placed with a distance between the observation points of 10 m as many as 4 quadrants in a transect. At each observation point, data was collected, namely the distribution of seagrass and the density of the seagrass. There are 2 methods used to record the emergence of dugongs, namely, the first method, diving to find the presence of dugongs and feeding trail in the seagrass area. The second method is to conduct interviews with fishermen who carry out activities in the feeding area.

Seagrass species in the waters of Tafraka Village based on the results of research at 3 representative stations were found 6 seagrass species, namely *Cymodocea rotundata*, *Cymodocea serrulata*, *Halophila spinulosa*, *Halodule pinifolia*, *Halodule uninervis* and *Enhalus acoroides*. . In the research location, *Cymodocea rotundata* generally has a random distribution pattern, *Cymodocea Serrulata* has the same pattern, namely random distribution, *Halodule uninervis* has a clustered distribution pattern, *Halodule pinifolia* has a clustered distribution pattern, *Halophila spinulosa* has a clustered distribution pattern and the *Enhalus acoroides* type has a clustered pattern random distribution. Based on the results of the analysis, the highest value of the dominance index for seagrass species was found at station 2, namely the *uninervis Halodule* type with a value of 0.19, and the lowest was *Enhalus acoroides* with a value of 0.03 at station I. This species exists at each station because at the research location most of the substrate is mud and sandy, while the lowest density value is found in the *Enhalus acoroides* species, namely 3.50 ind / m². This is because this type is found at every station but is very low.

Keywords: Distribution, Seagrass Density at the Dugong Feeding Ground on Hiri Island