

ABSTRACT

ANDRIAWAN ISMAIL. 05161611009. Analysis of Conditions and Habitat Characteristics of Seagrass Beds in Tafaga Village, Moti District, Ternate City. Supervised by **SALIM ABUBAKAR and RINA.**

Seagrass (seagrass) is a flowering plant (Angiospermae), all seagrass plants are one (monocot) which has roots, leaves, flowers and fruit, seagrass plants are like hairy plants that live on land. Seagrass ecosystems are one of the coastal ecosystems that have a high level of biodiversity and most of them contribute nutrients that have great potential for coastal waters. The seagrass ecosystem in Tafaga Village, Moti Island, has a wide distribution in almost all coastal areas of Tafaga Village, and grows on several types of substrates, namely mud, sandy and rocky mud and also seagrass beds associated with mangrove forests and coral reefs where each is a different place of association. Seagrasses also differ in their sediments and characteristics of the substrate type. This research was conducted in August-September 2021 and took place in Tafaga Island Moti Village, Ternate City District, North Maluku Province. The method used in this research is the Line transect method. Data analysis used species density, species diversity, species dominance, evenness index, niche width, tumpatindi of micro-habitat niches. The results showed that the seagrass species found consisted of 3 families, namely Hydrocharitaceae, Potamogetonaceae and Hydrocharitales. The species included in the Hydrocharitaceae family were *Enhalus acoroides*, *Halophila minor*, *Syringodium isoetifolium*. Meanwhile, the Potamogetonaceae family consists of *Halodule uninervis*, *Cymodocea serrulata*, *Halophila dicipines*. The seagrass species with the widest habitat niche was *Halodule uninervis* with a value of 0.672, followed by *Syringodium isoetifolium*, *Halophila decipiens*, *Cymodocea serrulata*, *Enhalus acoroides*, *Halophila minor* 0.078. The sufficient niche or overlapping of microhabitat niches by *Enhalus acoroides* against *Halodule uninervis* is 1,108. Meanwhile, the overlap between *Halophila decipiens* and *Syringodium isoetifolium* was 0.036. The condition of the seagrass beds on Moti Island, Tafaga Village, found that seagrass cover at station I was in good/healthy condition, which was 75.57%, stations II and III were in unfavorable/unhealthy condition, which was 58.90% -55.87%.

Keywords: Analysis, condition, habitat, seagrass, Moti.