

Dhea Ayu Ananda Putri NPM 20.03.5.1.100002, Laju Pertumbuhan Lamun (*Seagrass*) Di Perairan Pesisir Labuhan, Kecamatan Sepulu, Kabupaten Bangkalan Dibawah Bimbingan **Dr. Haryo Triajie, S.Pi., M.Si**

ABSTRAK

Penelitian ini bertujuan untuk mengetahui laju pertumbuhan dan kerapatan lamun *Thalassia hemprichii* di perairan pesisir Desa Labuhan, Kecamatan Sepulu, Kabupaten Bangkalan. Penelitian ini dilaksanakan pada bulan September-Desember 2023. Penentuan titik sampling menggunakan metode *Purposive Sampling*. Lokasi penelitian di bagi menjadi 3 stasiun 9 titik, titik di ambil dekat daratan dan dekat dengan laut. Pengukuran laju pertumbuhan daun lamun dilakukan 2 kali pengukuran dengan jarak waktu 20 hari. Kualitas air dilakukan secara in situ dan ex situ, in situ meliputi pH, DO, suhu, dan salinitas, sedangkan ex situ meliputi substrat, klorofil, biomassa, nitrat dan fosfat. Nilai rata-rata laju pertumbuhan daun lamun *Thalassia hemprichii* jarak waktu 20 hari yaitu 0,02 mm/hari. Nilai rata-rata kerapatan lamun dengan transek 1x1 yaitu 82,3 ind/m². Nilai rata-rata klorofil-a pada daun lamun yaitu 0,31 mg/g, sedangkan rata-rata klorofil-b pada daun lamun yaitu 0,40 mg/g. Nilai rata-rata biomassa lamun setelah rumpun lamun dikeringkan yaitu 74,7 gbk/ind. Nilai rata-rata nitrat perairan yaitu 3,7 mg/l. Nilai rata-rata nitrat substrat yaitu 0,003 mg/l. Nilai rata-rata fosfat perairan yaitu 4,09 mg/l. Nilai rata-rata fosfat substrat yaitu 0,103 mg/l. Dari hasil analisis dapat diketahui bahwa yang mempengaruhi laju pertumbuhan daun lamun *Thalassia hemprichii* yaitu suhu, DO, klorofil, nitrat dan fosfat dengan tingkat hubungan sedang serta terdapat perbedaan pertumbuhan daun lamun *Thalassia hemprichii* pada pengukuran kedua.

Kata kunci : Kerapatan, Laju Pertumbuhan, *Thalassia hemprichii*, Perairan Sepulu Bangkalan

Dhea Ayu Ananda Putri NPM 20.03.5.1.100002, Growth Rate of Seagrass in Labuhan Coastal Waters, Sepulu District, Bangkalan Regency Under the Guidance of **Dr. Haryo Triajie, S.Pi., M.Si**

ABSTRACT

This research aims to determine the growth rate and density of *Thalassia hemprichii* seagrass in the coastal waters of Labuhan Village, Sepulu District, Bangkalan Regency. This research was carried out in September-December 2023. Determination of sampling points used the Purposive Sampling method. The research location was divided into 3 stations with 9 points, points taken near land and close to the sea. The growth rate of seagrass leaves was measured twice with an interval of 20 days. Water quality is carried out in situ and ex situ, in situ includes pH, DO, temperature and salinity, while ex situ includes substrate, chlorophyll, biomass, nitrate and phosphate. The average value of the growth rate of *Thalassia hemprichii* seagrass leaves over a period of 20 days is 0.02 mm/day. The average value of seagrass density with a 1x1 transect is 82.3 ind/m². The average value of chlorophyll-a in seagrass leaves is 0.31 mg/g, while the average value of chlorophyll-b in seagrass leaves is 0.40 mg/g. The average value of seagrass biomass after the seagrass clumps were dried was 74.7 gbk/ind. The average value of water nitrate is 3.7 mg/l. The average value of substrate nitrate is 0.003 mg/l. The average value of water phosphate is 4.09 mg/l. The average value of substrate phosphate is 0.103 mg/l. From the results of the analysis, it can be seen that what influences the growth rate of *Thalassia hemprichii* seagrass leaves are temperature, DO, chlorophyll, nitrate and phosphate with a moderate level of relationship and there are differences in the growth of *Thalassia hemprichii* seagrass leaves in the second measurement.

Keywords : Density, Growth Rate, *Thalassia hemprichii*, Sepulu Bangkalan Waters