

RINGKASAN

KELVIN IMANIAR YOENKY. Pertumbuhan dan Produksi Bunga Lamun *Enhalus acoroides* dan *Thalassia hemprichii* di Perairan Pulau Dompak. Dibimbing oleh ADITYA HIKMAT NUGRAHA dan JELITA RAHMA HIDAYATI

Lamun merupakan tumbuhan terstruktur yang memiliki akar, batang, daun, bunga, dan buah. Produktivitas lamun di alam sangat dipengaruhi oleh laju pertumbuhan dan reproduksi lamun. Pulau Dompak merupakan wilayah padang lamun dengan jenis lamun *Enhalus acoroides* dan *Thalassia hemprichii* yang mendominasi, dimana keduanya bereproduksi secara seksual. Tujuan penelitian ini untuk mengetahui laju pertumbuhan daun lamun dan produksi bunga lamun *Enhalus acoroides* dan *Thalassia hemprichii* di perairan Dompak. Penelitian ini dilaksanakan di Pulau Dompak pada bulan Februari- Maret 2023 dengan 2 stasiun penelitian yang memiliki kerapatan berbeda. Metode pengukuran laju pertumbuhan lamun dilakukan menggunakan metode penandaan (*tagging*) pada daun lamun, pengamatan laju pertumbuhan daun lamun dan produksi bunga setiap 1 minggu selama 2 bulan. Nilai kerapatan jenis lamun *Enhalus acoroides* dan *Thalassia hemprichii* pada stasiun 1 48.33 ind/m² dan 106.33 ind/m² sedangkan pada stasiun 2 nilai kerapatan jenis lamun *Enhalus acoroides* dan *Thalassia hemprichii* 102.33 ind/m² dan 152.33 ind/m². Laju Pertumbuhan daun lamun *Enhalus acoroides* dan *Thalassia hemprichii* tertinggi terdapat pada stasiun 2, dengan nilai rata-rata *Enhalus acoroides* 0.6 cm/hari dan *Thalassia hemprichii* 0.07 cm/hari. Sedangkan laju pertumbuhan daun *Enhalus acoroides* dan *Thalassia hemprichii* terendah di stasiun 1, dengan nilai rata-rata *Enhalus acoroides* 0.53 cm/hari dan *Thalassia hemprichii* 0.06 cm/hari. Produksi bunga untuk kedua jenis lamun *Enhalus acoroides* dan *Thalassia hemprichii* tertinggi di stasiun 2 diperoleh hasil persentase bunga *Enhalus acoroides* 48% bunga betina, 20% bunga jantan, 32 % tidak berbunga, persentase produksi bunga *Thalassia hemprichii* 56% bunga betina, 24% bunga jantan, 20 % tidak berbunga. Persentase produksi bunga lamun *Enhalus acoroides* dan *Thalassia hemprichii* terendah di stasiun 1 dengan persentase bunga *Enhalus acoroides* 32% bunga betina, 16% bunga jantan, 52 % tidak berbunga, persentase bunga *Thalassia hemprichii* 36% bunga betina, 20% bunga jantan, 44 % tidak berbunga.

Kata kunci: *Enhalus acoroides*, *Thalassia hemprichii*, Laju Pertumbuhan, Bunga lamun

SUMMARY

KELVIN IMANIAR YOENKY. Growth and Production of Seagrass Flowers *Enhalus acoroides* and *Thalassia hemprichii* in the Waters of Dompak Island. Supervised by ADITYA HIKMAT NUGRAHA and JELITA RAHMA HIDAYATI

Seagrass is a structured plant that has roots, stems, leaves, flowers, and fruits. The productivity of seagrass in nature is highly influenced by its growth and reproductive rates. Dompak Island is a seagrass meadow area dominated by two seagrass species, *Enhalus acoroides* and *Thalassia hemprichii*, both of which reproduce sexually. The aim of this research was to determine the leaf growth rate and flower production of *Enhalus acoroides* and *Thalassia hemprichii* in the waters of Dompak. This research was conducted on Dompak Island from February to March 2023 at two research stations with different seagrass densities. The method used to measure seagrass growth rate was the tagging method on seagrass leaves, with observations of leaf growth rate and flower production conducted weekly over a period of two months. The density values for *Enhalus acoroides* and *Thalassia hemprichii* at station 1 were 48.33 individuals/m² and 106.33 individuals/m², respectively, while at station 2, the density values were 102.33 individuals/m² and 152.33 individuals/m², respectively. The highest leaf growth rates for *Enhalus acoroides* and *Thalassia hemprichii* were found at station 2, with average values of 0.6 cm/day for *Enhalus acoroides* and 0.07 cm/day for *Thalassia hemprichii*. In contrast, the lowest leaf growth rates for *Enhalus acoroides* and *Thalassia hemprichii* were recorded at station 1, with average values of 0.53 cm/day for *Enhalus acoroides* and 0.06 cm/day for *Thalassia hemprichii*. The highest flower production for both seagrass species was observed at station 2, with *Enhalus acoroides* showing 48% female flowers, 20% male flowers, and 32% non-flowering, while *Thalassia hemprichii* showed 56% female flowers, 24% male flowers, and 20% non-flowering. The lowest flower production percentages for *Enhalus acoroides* and *Thalassia hemprichii* were found at station 1, with *Enhalus acoroides* showing 32% female flowers, 16% male flowers, and 52% non-flowering, while *Thalassia hemprichii* showed 36% female flowers, 20% male flowers, and 44% non-flowering.

Keywords: *Enhalus acoroides*, *Thalassia hemprichii*, Growth Rate, Seagrass flowers