

RINGKASAN

Iqbal Maulana Yusuf Sanjaya. 190254241056. Struktur Komunitas Lamun di Pulau Dompok, Kota Tanjungpinang. Dibimbing oleh ARIEF PRATOMO dan TRY FEBRIANTO

Ekosistem padang lamun di Pulau Dompok, Kota Tanjungpinang berperan penting sebagai tempat tinggal, mencari makan, dan pemijahan berbagai biota laut, namun kondisinya rentan terhadap gangguan aktivitas antropogenik di sekitar pesisir. Penelitian ini bertujuan menganalisis persentase tutupan dan struktur komunitas lamun di perairan Pulau Dompok. Penelitian dilaksanakan pada Juni–Juli 2026 dengan metode deskriptif kuantitatif pada tiga stasiun yang ditentukan secara *purposive sampling* berdasarkan perbedaan aktivitas masyarakat. Data dikumpulkan menggunakan transek kuadrat 50×50 cm sepanjang garis transek 100 meter, dilanjutkan analisis persentase tutupan, kerapatan jenis, indeks keanekaragaman, keseragaman, dan dominansi. Ditemukan lima jenis lamun, yaitu *Enhalus acoroides*, *Thalassia hemprichii*, *Cymodocea rotundata*, *Halophila ovalis*, dan *Halodule pinifolia*, dengan seluruh lima jenis hanya dijumpai di stasiun 2. Tutupan lamun tertinggi terdapat di stasiun 1 sebesar 50,64% dengan kategori sedang, kondisi kurang sehat, sedangkan stasiun 2 sebesar 15,15% dan stasiun 3 sebesar 1,74% tergolong jarang dengan kondisi miskin. Kerapatan jenis tertinggi ditemukan di stasiun 2 dengan nilai 226,30 tegakan/m² karena dominannya *Halophila ovalis* dan *Cymodocea rotundata* yang berukuran kecil namun tumbuh rapat, sedangkan kerapatan terendah di stasiun 3 dengan nilai 18,42 tegakan/m². Indeks keanekaragaman stasiun 1 dan 2 tergolong sedang, sedangkan stasiun 3 tergolong rendah akibat tekanan aktivitas jalur kapal ro-ro. Indeks keseragaman stasiun 1 dan 2 tergolong tinggi, sedangkan stasiun 3 tergolong sedang. Indeks dominansi stasiun 1 dan 2 tergolong rendah, sedangkan stasiun 3 tergolong tinggi akibat dominasi *Halophila ovalis*. Kondisi ekosistem lamun di Pulau Dompok dipengaruhi oleh perbedaan intensitas aktivitas masyarakat serta karakteristik substrat pada tiap stasiun, sehingga diperlukan pengelolaan pesisir yang baik guna mencegah penurunan kondisi ekosistem lamun di wilayah tersebut.

Kata kunci: Kerapatan Lamun, Pulau Dompok, Struktur Komunitas, Tutupan Lamun

SUMMARY

Iqbal Maulana Yusuf Sanjaya. 190254241056. Seagrass Community Structure in Dompak Island, Tanjungpinang City. Supervised by ARIEF PRATOMO and TRY FEBRIANTO

The seagrass ecosystem in Dompak Island, Tanjungpinang City, plays an important role as a habitat, feeding ground, and spawning site for various marine organisms, yet its condition is vulnerable to disturbance from anthropogenic activities along the coast. This study aimed to analyze the percentage of seagrass cover and the community structure of seagrass in the waters of Dompak Island. The research was conducted from June to July 2026 using a descriptive quantitative method at three stations determined through purposive sampling based on differences in community activity. Data were collected using a 50×50 cm quadrat transect along a 100-meter transect line, followed by analysis of cover percentage, species density, diversity index, evenness index, and dominance index. Five seagrass species were found, namely *Enhalus acoroides*, *Thalassia hemprichii*, *Cymodocea rotundata*, *Halophila ovalis*, and *Halodule pinifolia*, with all five species found only at station 2. The highest seagrass cover was recorded at station 1 at 50.64%, classified as moderate category with a less healthy condition, while station 2 (15.15%) and station 3 (1.74%) were classified as sparse with a poor condition. The highest species density was found at station 2 with a value of 226.30 shoots/m², due to the dominance of *Halophila ovalis* and *Cymodocea rotundata*, which are small in size but grow densely, while the lowest density was at station 3 with a value of 18.42 shoots/m². The diversity index at stations 1 and 2 was classified as moderate, while station 3 was classified as low due to pressure from ferry (roro) route activity. The evenness index at stations 1 and 2 was classified as high, while station 3 was classified as moderate. The dominance index at stations 1 and 2 was classified as low, while station 3 was classified as high due to the dominance of *Halophila ovalis*. The condition of the seagrass ecosystem in Dompak Island is influenced by differences in the intensity of community activities and substrate characteristics at each station, so proper coastal management is needed to prevent the decline of the seagrass ecosystem condition in the area..

Keywords: *Community Structure, Dompak Island, Seagrass Cover, Seagrass Density*