

ABSTRAK

STRUKTUR KOMUNITAS LAMUN DI PERAIRAN PANTAI PANCUR PERMAI, DESA SUKARAME, KECAMATAN PUNDUH PIDADA, KABUPATEN PESAWARAN, LAMPUNG

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Ekosistem lamun memiliki fungsi ekologi dan manfaat ekonomi bagi lingkungan. Kondisi ekosistem perairan dipengaruhi oleh banyak faktor antara lain dampak masukan sedimen dan nutrisi dari daratan dan aktivitas manusia. Tujuan penelitian ini menganalisis struktur komunitas ekosistem lamun dengan kualitas perairan di Pantai Pancur Permai. Pengambilan lamun menggunakan metode transek garis dengan sampling kuadran pada 9 garis transek pengamatan dengan karakteristik berbeda (tambak, alami, dan wisata). Analisis data menggunakan teknik analisis komponen utama dan analisis statistik multivariat dengan software XL-STAT. Jenis lamun yang ditemukan terdiri dari 4 spesies, yaitu *Enhalus acoroides*, *Thalassia hemprichii*, *Halodule pinifolia*, dan *Halophila ovalis*. Nilaiutupan yang didapat *E. acoroides* 40 %, *H. pinifolia* 0,6 %, *H. ovalis* 0,48 %, dan *T. hemprichii* 1,89 % yang tergolong kurang sehat dan miskin. Hasil analisis PCA, nilai *eigenvalue* komponen utama yang > 1 , terdapat empat komponen utama dipilih karena mereka mampu menjelaskan total variansi data. Variabel yang memiliki peranan penting dalam struktur komunitas lamun terdapat pada komponen utama F1 dalam data seperti suhu, pH, salinitas, DO, nitrat, fosfat, dan lempung berpasir.

Kata kunci: Aktivitas, Kualitas, Lamun, Punduh Pidada, Tutupan.

ABSTRACT

THE COMMUNITY STRUCTURE OF SEAGRASS IN PANCUR PERMAI BEACH, SUKARAME VILLAGE, PUNDUH PIDADA SUB-DISTRICT, PESAWARAN DISTRICT, LAMPUNG

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Seagrass ecosystems have ecological functions and economic benefits for the environment. The condition of aquatic ecosystems is influenced by many factors, including the impact of sediment and nutrient inputs from land and human activities. The purpose of this study was to analyze the seagrass ecosystem community structure with water quality at Pancur Permai Beach. Seagrass collection used the line transect method with quadrant sampling on 9 observation transect lines with different characteristics (ponds, natural, and tourism). Data analysis used principal component analysis techniques and multivariate statistical analysis with XLSTAT software. Seagrass species found consisted of 4 species, namely *Enhalus acoroides*, *Thalassia hemprichii*, *Halodule pinifolia*, and *Halophila ovalis*. The cover value obtained by *E. acoroides* 40%, *H. pinifolia* 0.6%, *H. ovalis* 0.48%, and *T. hemprichii* 1.89% which is classified as less healthy and poor. The results of PCA analysis, four principal components with eigenvalues greater than 1 were selected, as they were able to explain a substantial proportion of the total variance in the dataset. Variables that significantly contribute to the structure of the seagrass community are primarily associated with the first principal component (F1), including temperature, pH, salinity, dissolved oxygen (DO), nitrate, phosphate, and sandy-mud substrate.

Keywords: Activity, Cover, Punduh Pidada, Seagrass, Quality.