

ABSTRAK

STRUKTUR KOMUNITAS ECHINODERMATA PADA EKOSISTEM LAMUN DI PULAU MAHITAM DAN PANTAI KETAPANG, KABUPATEN PESAWARAN, LAMPUNG

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Ekosistem lamun menjadi tempat tinggal dan tempat mencari makan bagi beberapa spesies echinodermata, sebaliknya echinodermata adalah pendaur ulang nutrisi yang pada akhirnya akan bermanfaat bagi ekosistem padang lamun. Penelitian ini bertujuan untuk menganalisis struktur komunitas echinodermata dan lamun serta hubungan antara kelimpahan echinodermata, kerapatan lamun, dan kualitas perairan di Pulau Mahitam dan Pantai Ketapang. Pengamatan meliputi jenis dan jumlah individu echinodermata, jenis, jumlah individu, dan jumlah tegakan lamun. Kualitas perairan yang diamati adalah suhu, salinitas, pH, DO (*dissolved oxygen*), kecepatan arus, kecerahan, dan BOT (bahan organik terlarut) serta diamati tipe substrat di kedua lokasi. Sembilan spesies echinodermata dan 4 spesies lamun ditemukan di kedua lokasi penelitian. Nilai rata-rata indeks keanekaragaman echinodermata di Pulau Mahitam dan Pantai Ketapang tergolong rendah. Nilai rata-rata indeks keseragaman echinodermata di Pulau Mahitam tergolong sedang dan Pantai Ketapang tergolong rendah. Nilai indeks dominansi echinodermata di Pulau Mahitam tergolong rendah dan Pantai Ketapang tergolong tinggi. Terdapat dominansi suatu spesies echinodermata di beberapa stasiun. Hubungan antara kelimpahan echinodermata, kerapatan lamun, dan kualitas perairan di kedua lokasi menunjukkan hubungan positif serta dipengaruhi oleh parameter kualitas perairan perairan, yaitu suhu dan bahan BOT (bahan organik terlarut).

Kata kunci: Echinodermata, lamun, keanekaragaman, keseragaman, dominansi.

ABSTRACT

THE COMMUNITY STRUCTURE OF ECHINODERMS IN THE SEAGRASS ECOSYSTEM AT MAHITAM ISLAND AND KETAPANG BEACH, PESAWARAN REGENCY, LAMPUNG

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Seagrass ecosystem is a habitat and feeding ground several species of echinoderms. Echinoderms are nutrient recyclers which will ultimately give benefit the seagrass ecosystem. This study aimed to analyze the community structure of echinoderms and seagrasses and the relationship between echinoderms, seagrass density, and water quality on Mahitam Island and Ketapang Beach. The observations included the types and number of individual echinoderms, as well as the types, number of individuals, and total number of seagrass stands. The qualities of the waters observed were temperature, salinity, pH, DO (dissolved oxygen), current velocity, brightness, and DOM (dissolved organic matter) and also observed the type of substrate for both locations. Nine species of echinoderm and 4 species of seagrass were found in both research locations. The average value of the echinoderms diversity index on Mahitam Island and Ketapang Beach were low. The average echinoderms uniformity index on Mahitam Island was moderate and Ketapang Beach was low. The value of the dominance index of echinoderms on Mahitam Island was low and on Ketapang Beach was high. There were a dominance of an echinoderm species at several stations. The relationship between echinoderm abundance, seagrass density and water quality on both locations showed a positive relationship and influenced by water quality parameters, namely temperature and DOM (dissolved organic matter).

Keywords: Echinoderm, seagrass, diversity, evenness, dominance.