

STRUKTUR KOMUNITAS DAN ASOSIASI GASTROPODA PADA EKOSISTEM LAMUN DI PULAU HARAPAN, KEPULAUAN SERIBU

Intisari

Gastropoda adalah biota air yang banyak hidup di daerah intertidal seperti lamun sebagai komponen rantai makanan namun belum banyak mendapatkan perhatian sehingga diperlukan penelitian untuk upaya konservasi. Tujuan penelitian ini untuk mengetahui struktur komunitas, kelimpahan, dan asosiasi gastropoda pada ekosistem lamun di Pulau Harapan. Penelitian dilakukan bulan Oktober 2020 dengan metode *purposive sampling* menggunakan transek kuadrat. Lokasi penelitian dibagi menjadi 3 yaitu stasiun 1 di selatan pulau dekat rumah warga dan jalan lingkar, stasiun 2 di sisi timur yang terdapat mangrove, dan stasiun 3 di utara dekat pembuangan sisa limbah rumah tangga. Pengamatan setiap kuadrat plot meliputi jenis dan jumlah gastropoda serta pengukuran kualitas air yaitu salinitas, suhu, pH, dan DO. Parameter pengamatan meliputi kelimpahan, indeks keanekaragaman, indeks kemerataan, indeks dominansi, indeks nilai penting, pola distribusi spesies, persentase tutupan lamun, dan asosiasi gastropoda dengan lamun meliputi asosiasi tutupan lamun dengan indeks keanekaragaman, kelimpahan, dan kemerataan gastropoda. Spesies gastropoda yang ditemukan yaitu sebanyak 15 spesies. Rata-rata indeks keanekaragaman kategori sedang yaitu 1,60, indeks kemerataan kategori sedang yaitu 0,672, indeks dominansi kategori sedang yaitu 0,319, dan rata-rata kelimpahan sebesar 11.878 ind.m⁻². Pola distribusi gastropoda di Pulau Harapan yaitu acak, seragam, dan mengelompok. Asosiasi lamun dengan kelimpahan, keanekaragaman, dan kemerataan menunjukkan asosiasi rendah dan bernilai negatif. Kelimpahan tertinggi yaitu spesies *Terebralia palustris*. Berdasarkan hasil penelitian, secara umum kondisi perairan Pulau Harapan masih mendukung kehidupan gastropoda.

Kata kunci : distribusi, dominansi, keanekaragaman, kemerataan, tutupan

COMMUNITY STRUCTURE AND ASSOCIATION OF GASTROPODS IN THE SEAGRASS ECOSYSTEM IN HARAPAN ISLAND, SERIBU ISLANDS

Abstract

Gastropods are aquatic biota that lives in intertidal areas such as seagrass. Data related to gastropods' presence is still limited and has not received much attention, so research is needed for conservation efforts. The study aimed to determine the community structure, abundance, and association of gastropods in the seagrass ecosystem in Pulau Harapan. The study was conducted in October 2020 with a purposive sampling method using quadratic transects. The research location is divided into 3, namely south, east, and north. Observation of each square plot includes the type and number of gastropods and measurements of water quality, namely salinity, temperature, pH, and DO. Observation parameters include abundance, diversity index, uniformity index, dominance index, importance value index, species distribution pattern, percentage of seagrass cover, and gastropods association with seagrass, including an association of seagrass cover with diversity index, abundance and evenness of gastropods. There were 15 gastropod species found. The average category diversity index was 1.60, the uniformity category index was 0.672, the dominant category index was 0.319, and the abundance index was 11.878 individual.m⁻². The distribution patterns of gastropods in Harapan Island are random, uniform, and clustered. The association of seagrass with abundance, diversity, and uniformity shows a negative but weak association. The highest quantity is the species *Terebralia palustris*. The Pulau Harapan waters' condition still supports the life of gastropods.

Keywords: cover, distribution, diversity, dominance, uniformity