

Ilham Krisna Putra NIM 170341100065. Struktur Komunitas Gastropoda Pada Ekosistem Mangrove Di Pantai Kasoghi Kecamatan Saronggi Kabupaten Sumenep. Pembimbing Wahyu Andy Nugraha, ST., M.Sc., Ph.D

ABSTRAK

Gastropoda merupakan biota penting bagi ekosistem mangrove karena berperan sebagai detritus yaitu merobek dan mereduksi serasah sehingga lebih cepat terurai oleh mikroorganisme. Struktur komunitas merupakan komunitas yang berupa beberapa spesies yang meliputi komposisi spesies, indeks keanekaragaman, indeks keseragaman, dan indeks dominansi. Tujuan penelitian untuk mengetahui struktur komunitas gastropoda yang terdapat pada ekosistem mangrove di Pantai Kasoghi Sumenep. Pada penelitian ini menggunakan transek mangrove berukuran $10 \times 10 \text{ m}^2$ dengan 2 plot pada setiap stasiun, dan untuk gastropoda menggunakan transek berukuran $1 \times 1 \text{ m}^2$. Penelitian ini dilaksanakan pada bulan Oktober 2023. Gastropoda dan mangrove yang ditemukan diambil sampelnya untuk diidentifikasi berdasarkan jenisnya. Berdasarkan hasil analisis yang dilakukan di 3 stasiun penelitian di pantai Kasoghi Sumenep ditemukan 11 spesies gastropoda yaitu *Cerithideosilla alata*, *Terebralia palustris*, *Terebralia sulcata*, *Telescopium telescopium*, *Planaxis Sulcatus*, *Clypeomorus bifasciata*, *Chicoreus virgineus*, *Casidulla sp.*, *Cerethium echinatum*, *Pirenella cingulate*, dan *Cerethium scabidum*. Jenis gastropoda yang paling sering muncul adalah *Terebralia sulcata* dan *Telescopium telescopium*. Jenis mangrove yang ditemukan 4 spesies yaitu *Rizophora apiculate*, *Aegiceras corniculatum*, *Avicenia alba*, dan *Sonneratia alba*. Indeks keanekaragaman gastropoda berkisar antara 1,34-2,00, indeks keseragaman gastropoda berkisar antara 0,83-0,97 dan indeks dominansi gastropoda berkisar antara 0,15-0,26 dengan kategori ekosistem stabil. Hubungan kelimpahan gastropoda dengan kerapatan mangrove dianalisa dengan menggunakan metode analisis sekunder. Struktur komunitas gastropoda yang diteliti termasuk dalam kategori ekosistem stabil.

Kata Kunci : Struktur Komunitas, Gastropoda, Ekosistem Mangrove di Pantai Kasoghi

Ilham Krisna Putra NIM 170341100065. Structure Of The Gastropod Community In The Mangrove Ecosystem On Kasoghi Beach, Saronggi District, Sumenep Regency. Advisor Wahyu Andy Nugraha, ST., M.Sc., Ph.D

ABSTRACT

Gastropods are important biota for the mangrove ecosystem because they act as detritus, namely tearing up and reducing litter so that it is decomposed more quickly by microorganisms. Community structure is a community consisting of several species which includes species composition, diversity index, uniformity index and dominance index. The aim of the research is to determine the structure of the gastropod community found in the mangrove ecosystem at Kasoghi Beach, Sumenep. In this study, a 10x10m² mangrove transect was used with 2 plots at each station, and for gastropods a 1x1m² transect was used. This research was carried out in October 2023. Samples were taken of the gastropods and mangroves found to be identified based on their type. Based on the results of the analysis carried out at 3 research stations on the Kasoghi beach, Sumenep, 11 species of gastropods were found, namely *Ceritideosilla alata*, *Terebraliapalustris*, *Terebralia sulcata*, *Telescopium Telescopium*, *Planaxis Sulcatus*, *Clypeomorus bifasciata*, *Chicoreus virgineus*, *Casidulla sp.*, *Cerethium echinatum*, *Pirenella cingulate*, and *Cetrethium scrabidum*. The types of gastropods that appear most frequently are *Terebralia sulcata* and *Telescopium telescopium*. There were 4 types of mangroves found, namely *Rizophora apiculate*, *Aegiceras corniculatum*, *Avicenia alba*, and *Soneratia alba*. The gastropod diversity index ranges between 1.34-2.00, the gastropod uniformity index ranges between 0.83-0.97 and the gastropod dominance index ranges between 0.15-0.26 with the stable ecosystem category. The relationship between gastropod abundance and mangrove density was analyzed using secondary analysis methods. The structure of the gastropod community studied is included in the stable ecosystem category.

Keywords: *Community Structure, Gastropods, Mangrove Ecosystem at Kasoghi Beach Sumenep*