

RINGKASAN

MHD IQBAL RIZKY PRATAMA. Pola Sebaran Bivalvia dan Kondisi Lingkungan. Dibimbing oleh FALMI YANDRI dan RIKA KURNIAWAN.

Desa Malang Rapat merupakan salah satu wilayah yang berada di Kecamatan Gunung Kijang Kabupaten Bintan. Perairan di Desa Malang Rapat ini memiliki wilayah pasang surut terluas yang biasa disebut dengan zona intertidal. Bivalvia merupakan hewan bentik yang memiliki dua cangkang yang umumnya hidup dengan cara membenamkan diri, melekat pada batu ataupun kayu yang sering ditemukan di daerah intertidal. Penelitian ini bertujuan, struktur komunitas Bivalvia, hubungan struktur komunitas Bivalvia terhadap tutupan lamun di Perairan Desa Malang Rapat. Penelitian ini dilakukan pada bulan November 2024. Penentuan lokasi dengan metode *purposive sampling*. Pengambilan data tutupan lamun dan Bivalvia dilakukan sejalan dengan metode transek garis sepanjang 100 m dan transek kuadran 50x50 cm untuk tutupan lamun serta pengamatan Bivalvia dilakukan sejalan dengan transek lamun. Bivalvia yang berada kedalaman kurang lebih 20 cm didalam substrat diambil menggunakan pipa paralon diameter 10 cm panjang 30 cm yang ditancapkan ke dalam substrat. Analisis data meliputi kepadatan Bivalvia, indeks keanekaragaman, indeks keseragaman, indeks dominansi. Di perairan Desa Malang Rapat ditemukan 7 jenis Bivalvia yaitu *Tellina timorensis*, *Gafrarium pectinatum*, *Modiolus capax*, *Pitar citrinus*, *Anadara antiquata*, *Trachycardium flavum* dan *Tellina virgata*. Kepadatan Bivalvia tertinggi pada stasiun 1 sebesar 12,12 ind/m² dan terendah stasiun 3 sebesar 3,75 ind/m². Berdasarkan hasil pola sebaran pada stasiun 1 berkreteria mengelompok dan pada stasiun 2 dan 3 berkreteria seragam. Hasil analisis korelasi PCA hubungan kepadatan Bivalvia terhadap tutupan lamun terbagi menjadi 3 kelompok dan setiap kelompok menunjukkan karakteristik lingkungan masing masing stasiun. Kelompok 1 berkarakteristik lingkungan salinitas, kepadatan, suhu dan kerikil, kelompok 2 berkarakteristik lingkungan ph, pasir dan Do. Sedangkan kelompok 3 berkarakteristik lumpur.

Kata kunci: Bivalvia, Malang Rapat, Pola Sebaran, PCA

SUMMARY

MHD IQBAL RIZKY PRATAMA. The Relationship of Bivalve Community Structure to Seagrass in the Waters of Malang Rapat Village, Bintan Regency. Supervised by FALMI YANDRI and RIKA KURNIAWAN.

Malang Rapat Village is one of the areas in Gunung Kijang District, Bintan Regency. The waters in Malang Rapat Village have the widest tidal area, which is usually called the intertidal zone. Bivalves are benthic animals that have two shells that generally live by immersing themselves, attached to rocks or wood which are often found in intertidal areas. This research aims to determine the structure of the Bivalvia community, the relationship between the structure of the Bivalvia community and seagrass cover in the waters of Malang Rapat Village. This research was conducted in November 2024. Location was determined using the purposive sampling method. Data collection on seagrass cover and Bivalves was carried out in line with the 100 m line transect method and 50x50 cm quadrant transects for seagrass cover and Bivalvia observations were carried out in line with the seagrass transects. Bivalves that were approximately 20 cm deep in the substrate were taken using a 10 cm diameter 30 cm long paralon pipe that was plugged into the substrate. Data analysis includes Bivalvia density, diversity index, uniformity index, dominance index. In the waters of Malang Rapat Village, 7 types of Bivalves were found, namely *Tellina timorensis*, *Gafrarium pectinatum*, *Modiolus capax*, *Pitar citrinus*, *Anadara antiquata*, *Trachycardium flavum* and *Tellina virgata*. The highest density of Bivalves at station 1 was 12.12 ind/m² and the lowest at station 3 was 3.75 ind/m². Based on the results of the distribution pattern at station 1 the criteria are clustered and at stations 2 and 3 the criteria are uniform. The results of the PCA correlation analysis of the relationship between Bivalvia density and seagrass cover are divided into 3 groups and each group shows the environmental characteristics of each station. Group 1 is characterized by salinity, density, temperature and gravel environments, group 2 is characterized by pH, sand and Do environments. Meanwhile, group 3 is characterized by mud.

Keywords: Bivalves, Malang rapat, Distribution Pattern, PCA