

Rifani Dwi Tauriqie NPM.180351100016. Hubungan Kerapatan dan Persentase Tutupan Kanopi Mangrove Terhadap Kelimpahan Makrozoobenthos di Kawasan Ekowisata Mangrove Pantai Lembung, Kecamatan Galis, Kabupaten Pamekasan. Dibawah Bimbingan **Dr. Akhmad Farid, S.Pi., M.T.**

RINGKASAN

Ekosistem mangrove berada di daerah yang dipengaruhi oleh aktivitas pasang surut air laut. ekosistem mangrove menjadi habitat bagi berbagai macam biota, salah satunya adalah makrozoobenthos. makrozoobenthos berperan makrozoobenthos berperan untuk membantu mempercepat proses dekomposisi dan mineralisasi materi organik, selain itu makrozoobenthos dapat dijadikan sebagai bioindikator akibat pola hidupnya yang menetap. Ekowisata merupakan transformasi suatu wilayah yang memberikan jasa dari sumberdaya alam untuk kepuasan manusia, salah satunya adalah Ekowisata Mangrove Pantai Lembung Kecamatan Galis, Kabupaten Pamekasan. Penelitian ini dilakukan guna mengetahui struktur komunitas dan kelimpahan makrozoobenthos, kualitas perairan dan hubungan kerapatan mangrove terhadap kelimpahan makrozoobenthos serta hubungan persentase tutupan mangrove terhadap kelimpahan makrozoobenthos di kawasan Ekowisata Mangrove Pantai Lembung Kecamatan Galis, Kabupaten Pamekasan. Makrozoobenthos yang ditemukan di seluruh stasiun pengambilan sampel terdiri dari 19 spesies dengan jumlah individu sebanyak 1285. Nilai tertinggi kelimpahan individu dan relatif adalah spesies *Cerithium corallium*. Indeks ekologi yang didapat menunjukkan kriteria indeks keanekaragaman (H') sedang, di setiap stasiun, indeks keseragaman (E) sedang hingga tinggi dan nilai indeks dominansi (C) rendah. Seluruh hasil pengukuran kualitas air yang terbatas pada salinitas, suhu, DO dan pH perairan masih memenuhi baku mutu yang tertera pada Keputusan Menteri Lingkungan Hidup No. 51 Tahun 2004. Sehingga kualitas perairan ekowisata mangrove lembung masih memenuhi kriteria baik. Hasil regresi hubungan kerapatan mangrove terhadap kelimpahan makrozoobenthos mendapat hasil Koefisien determinasi (R^2) yang diperoleh adalah $R^2 = 0,4491$. Yang berarti kekuatan kerapatan mangrove memiliki pengaruh sebesar 44,9% terhadap kelimpahan makrozoobenthos. Nilai korelasi (r) yang diperoleh adalah $r = 0,669330114$. Berdasarkan nilai korelasi $r = 0,669330114$ termasuk pada korelasi kuat sehingga kerapatan mangrove di ekowisata mangrove lembung memiliki pengaruh yang kuat terhadap kelimpahan makrozoobenthos. Hasil regresi hubungan persentase tutupan kanopi mangrove terhadap kelimpahan makrozoobenthos mendapat hasil koefisien determinasi (R^2) yang diperoleh adalah $R^2 = 0,0203$. Yang berarti tutupan kanopi mangrove memiliki pengaruh sebesar 2,03% terhadap kelimpahan makrozoobenthos. Nilai korelasi (r) yang diperoleh adalah $r = 0,142432016$. Berdasarkan nilai korelasi $r = 0,142432016$ termasuk pada korelasi sangat lemah.

Kata Kunci : Mangrove, Struktur Komunitas, Makrozoobenthos, Ekowisata, Desa Lembung

Rifani Dwi Tauriqie NPM.180351100016. Relationship between density and percentage of mangrove canopy cover on macrozoobenthos abundance in the mangrove ecotourism area of Lembung Beach, Galis District, Pamekasan Regency. Under the guidance of **Dr. Akhmad Farid, S.Pi., M.T.**

ABSTRACT

Mangrove ecosystem is located in an area affected by tidal activity. Mangrove ecosystem is a habitats of a varous kind of biota, one of them is macrozoobenthos. In the ecosystem, macrozoobenthos play a role in helping to accelerate the process of deomposition and mineralization of organic matter. In addition macrozoobenthos can be used as bioindicator due to their lifestyle that stay in a location for such a long time. Ecotourism is the transformation of an area that provides services from natural resources for human satisfaction as eexample is ecotourism on Lembung Beach, Galis District, Pamekasan Regency. This research was conducted to determine the community structure and abundance of macrozoobenthos, water quality, and the relationship of mangrove density to the abundance of macrozoobenthos and the relationship of the percentage from mangrove cover to the abundance of makrozoobenthos in the Mangrove Ecotourism area of Lembung Beach, Galis District, Pamekasan Regency. The results is 19 species of macrozoobenthos were found with the number of individuals as much as 1285. The highest value of individual and relative abundance is the species *Cerithium corallium*. The ecological index obtained shows the criteria for the diversity index (H') being moderate, at each station, the uniformity index (E) is moderate to high and the dominance index value (C) is low. All water quality measurement results, which are limited to salinity, temperature, DO and pH of the waters still meet the quality standards stated in the Keputusan Menteri Lingkungan Hidup No. 51 Tahun 2004. So that the water quality of the mangrove ecotourism still meets the good criteria. The results of the regression of the relationship between mangrove density and the abundance of macrozoobenthos obtained the coefficient of determination (R^2) obtained is $R^2 = 0.4491$. Which means that the strength of the mangrove density has an influence of 44.9% on the abundance of macrozoobenthos. The correlation value (r) obtained is $r = 0.669330114$. Based on the correlation value of $r = 0.669330114$, it is included in a strong correlation so that the density of mangroves in ecotourism mangrove lembung has a strong influence on the abundance of macrozoobenthos. The regression results of the relationship between the percentage of mangrove canopy cover and the abundance of macrozoobenthos obtained the coefficient of determination (R^2) obtained was $R^2 = 0.0203$. Which means that the mangrove canopy cover has an effect of 2.03% on the abundance of macrozoobenthos. The correlation value (r) obtained is $r = 0.142432016$. Based on the correlation value $r = 0.142432016$, the correlation is very weak.

Keywords: *Mangrove, Community Structure, Macrozoobenthos, Ecotourism, Lembung Village*

