

ABSTRAK

Lokasi penelitian ini terletak di Pesisir Batah Timur, Kecamatan Kwanyar, Kabupaten Bangkalan. Kawasan pesisir Batah Timur merupakan kawasan yang memiliki potensi besar dalam tangkapan hasil perikanan laut yaitu makrozoobentos, yang didukung adanya lokasi wisata panen kerang. Tujuan dari penelitian ini untuk mengetahui kondisi kualitas perairan, kelimpahan makrozoobentos yang terdapat di kawasan pesisir Batah Timur Kwanyar serta status ekologis berdasarkan keberadaan makrozoobentos dengan melihat tingkat sensitivitas organisme. Metode penelitian ini menggunakan metode deskriptif kuantitatif dengan dilakukan pengukuran kualitas air secara *insitu* dan *exsitu* dan pengambilan sampel makrozoobentos dengan sekop sedalam 5-10 cm yang dibatasi oleh transek kuadran 1 x 1 m. Data dianalisis menggunakan struktur komunitas, AMBI dan M-AMBI. Pengukuran kualitas air memperoleh nilai pada suhu antara 35–35,6°C, TSS sebesar 528,75-1438,8 mg/L, pH 8,54-8,71, DO 3,54-4,32 mg/L, salinitas 7,25-15,75 ppt, dan TOM sedimen 39,54-42,33%. Hasil pengamatan menunjukkan ditemukan makrozoobentos sebanyak 23 spesies dari 6 kelas yaitu Gastropoda, Bivalvia, Thecostraca, Malacostraca, Sipuncula dan Holothuridae. Kelimpahan individu tertinggi diperoleh pada stasiun 2 pengulangan 3 yaitu sebesar 3.728 (ind/m²) yang didominasi oleh spesies *Meretrix meretrix*, sedangkan kelimpahan terendah diperoleh di stasiun 3 pengulangan 2 dengan nilai 42 (ind/m²). Hasil analisis AMBI diperoleh nilai berkisar 0,104-1,149 menunjukkan kondisi lingkungan di Pesisir Batah Timur, Kwanyar berdasarkan tingkat sensitivitas makrozoobentosnya dikategorikan tidak terganggu. Nilai M-AMBI yaitu 0,53 < M-AMBI < 0,77 dengan kategori bagus hingga tinggi, sehingga didapatkan ekosistem perairan tersebut terganggu ringan namun masih dalam status kondisi tergolong baik.

Kata kunci : AMBI, Indeks Kelimpahan, Kualitas Air, Makrozoobentos, Pesisir Batah Timur

Puteri Amalia Hasanah NPM 21.03.5.1.1.00031. Analysis of the aquatic environment based on the presence of macrozoobentos on the coast of Kwanyar, Bangkalan Regency, Madura. Under the guidance of **Febi Ayu Pramithasari, S.Pi., M.Si**

ABSTRACT

The location of this research is located on the East Batah Coast, Kwanyar District, Bangkalan Regency. The coastal area of East Batah is an area that has great potential in catching marine fishery products, namely macrozoobentos, which is supported by a shellfish harvesting tourist location. The purpose of this study is to determine the condition of water quality, the abundance of macrozoobentos found in the coastal area of East Batah Kwanyar and the ecological status based on the presence of macrozoobentos by looking at the level of sensitivity. This research method uses a quantitative descriptive method by taking insitu and exsitu water quality measurements and sampling macrozoobentos with a shovel 5-10 cm deep which is limited by a 1 x 1 m quadrant transect. The data were analyzed using community structures, AMBI and M-AMBI. Water quality measurements obtained values at temperatures between 35–35.6oC, TSS of 528.75-1438.8 mg/L, pH 8.54-8.71, DO 3.54-4.32 mg/L, salinity 7.25-15.75 ppt, and sediment TOM 39.54-42.33%. The results of observations showed that 23 species of macrozoobentos from 6 classes were found, namely Gastropoda, Bivalvia, Thecostraca, Malacostraca, Sipuncula and Holothuridae. The highest individual abundance was obtained at station 2 repetition 3 which was 3,728 (ind/m²) which was dominated by the species *Meretrix meretrix*, while the lowest abundance was obtained at station 3 repetition 2 with a value of 42 (ind/m²). The results of the AMBI analysis obtained a value of 0.104-1.149 showing that the environmental conditions in the East Batah Coast, Kwanyar based on the sensitivity level of macrozoobentos are categorized as undisturbed. The value for M-AMBI is 0.53 < M-AMBI < 0.77 with good to high categories. Thus, the results of the AMBI and M-AMBI analysis show that this ecosystem is slightly disturbed but is still in a relatively good condition.

Keywords : AMBI, Abundance Index, Water Quality, Macrozoobentos, East Batah Coast