

## **ABSTRAK**

### **KUALITAS PERAIRAN DI PANTAI ANCOL GEN, PESAWAHAN, TELUK BETUNG SELATAN, BANDARLAMPUNG BERDASARKAN KOMUNITAS MAKROZOOBENTOS**

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Pantai Ancol Gen merupakan daerah pesisir yang sudah mengalami banyak perubahan lahan pesisir akibat reklamasi pantai dan kegiatan masyarakat yang ada di Pantai Ancol Gen. Tujuan dari penelitian ini yaitu mengidentifikasi dan mengkaji komunitas makrozoobentos serta menentukan kualitas perairan di Pantai Ancol Gen. Penelitian ini dilaksanakan pada bulan Februari–Maret 2022 dengan metode analisis kurva *abundance and biomass comparison* (ABC) dan *principal component analysis* (PCA). Berdasarkan hasil penelitian ini ditemukan 27 jenis spesies makrozoobentos dengan 4 kelas berbeda yaitu asteroidea, bivalvia, gastropoda dan malacostraca. Kelimpahan tertinggi yaitu sebesar  $1.979,67 \text{ ind/m}^3$  dengan kategori keanekaragaman sedang, keseragaman tinggi dan dominansi rendah. Hasil dari analisis kurva ABC menunjukkan kondisi perairan di Pantai Ancol Gen tercemar karena nilai biomassa lebih rendah daripada kelimpahan. Hasil dari analisis PCA menunjukkan bahwa variabel yang paling berpengaruh pada bulan Februari yaitu pH, kecerahan, dominansi, *dissolved oxygen* (DO), bahan organik total (BOT), dan suhu, sedangkan variabel yang paling berpengaruh pada bulan Maret yaitu kelimpahan, keanekaragaman, keseragaman dan salinitas.

**Kata kunci:** Bahan organik total (BOT), biomassa, *dissolved oxygen* (DO), keanekaragaman, keseragaman.

## **ABSTRACT**

### **WATER QUALITY IN ANCOL GEN BEACH, PESAWAHAN, TELUK BETUNG SELATAN, BANDAR LAMPUNG BASED ON MACROZOOBENTHOS COMMUNITY**

**By**

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Ancol Gen Beach has experienced many changes of coastal land due to beach reclamation and community activities. The purposes of this research were to identify and study the macrozoobenthos community and to determine the quality of the waters at Ancol Gen Beach. This research was conducted in February–March 2022 using the abundance and biomass comparisson (ABC) curve analysis and principal component analysis (PCA). The result showed that there were 27 types of macrozoobenthos species found with 4 different classes, namely asteroidea, bivalves, gastropods and malacostraca. The highest abundance obtained was 1,979.67 ind/m<sup>3</sup> in the category of moderate diversity, high uniformity and low dominance. The results of the ABC curve analysis showed that the condition of the waters at Ancol Gen Beach was polluted due to lower value of biomass compared to the value of than abundance. The results of the PCA analysis showed that the most influential variables in February were pH, brightness, dominance, dissolved oxygen (DO), total organic matter (TOM), and temperature, while the most influential variables in March were abundance, diversity, uniformity and salinity.

**Keyword:** Abundance, biomass, dissolved oxygen (DO), diversity, total organic matter (TOM).