

HUBUNGAN ANTARA BAHAN ORGANIK, TEKSTUR TANAH, DAN KERAGAMAN MAKROBENTOS DI KAWASAN TAMBAK DAN MANGROVE

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ABSTRAK

Penelitian dilakukan di kawasan tambak dan mangrove Kelurahan Bebanga (Ahuni, Kampung Baru) Kecamatan Kalukku, Kabupaten Mamuju, Sulawesi Barat. Tujuan penelitian ini adalah menelaah perbedaan jumlah individu, indeks keragaman jenis, indeks dominansi, dan indeks keseragaman makrobentos serta hubungannya dengan kandungan bahan organik dan tekstur (kandungan debu) tanah. Pengambilan sampel tanah pada plot-plot ukuran 25 x 25 x 10 cm³ yang mewakili tambak dekat kebun/sawah, tambak daerah peralihan, dan tambak dekat dengan hutan mangrove serta di areal kawasan mangrove. Sampel tanah disaring menggunakan *seive net* No. 32. Makrobentos yang diperoleh diidentifikasi sampai ke tingkat spesies. Hasil penelitian menunjukkan bahwa jumlah individu makrobentos di Perairan Ahuni lebih tinggi dibandingkan dengan di Perairan Kampung Baru ($P < 0,05$) tetapi keragaman jenis, dominansi, dan keseragaman makrobentos tidak berbeda nyata ($P > 0,05$). Hubungan antara keragaman, dominansi, dan keseragaman dengan bahan organik serta debu yang terkandung di dalam tanah mangrove dan tanah tambak dianalisis. Hasilnya terdapat kecenderungan adanya peningkatan keragaman ($R^2 = 0,1938$) dan keseragaman ($R^2 = 0,1046$) apabila terjadi peningkatan bahan organik, tetapi hal ini tampak stabil pada hubungan dengan kandungan debu ($R^2 = 0,0441$). Hal yang berlawanan terjadi pada hubungan antara dominansi, yaitu semakin menurun apabila kandungan bahan organik semakin meningkat ($R^2 = 0,1565$), tetapi hal ini tetap stabil pada hubungannya dengan debu di dalam tanah mangrove dan tambak ($R^2 = 0,521$).

ABSTRACT: *Relationship among organic matter, texture, and diversity of macrobenthos in the brackishwater pond and mangrove areas. By: Andi Marsambuana Pirzan, Gunarto, Rohama Daud, and Burhanuddin*

The research was conducted in the brackishwater pond and mangrove areas in Bebanga Village (Ahuni, Kampung Baru) Kalukku District, Mamuju Regency, West Sulawesi. The aim of this research was to study the differences of individual number, diversity indices, dominance indices, and evenness indices and relationship among organic matter content, silt content with the diversity of the macrobenthos. Sampling to obtain the macrobenthos in the soil was conducted through grabbing the soil in the plots size of 25 x 25 x 10 cm³ representing stations which are including; the pond area closes with the rice field, the pond in transition area, the area close to the mangrove, and inside mangrove area. Results of this research showed that the individual number of macrobenthos in Ahuni waters was higher than that of in Kampung Baru waters ($P < 0.05$) while the diversity, dominance, and evenness values were not significantly different ($P > 0.05$). The macrobenthos diversity, dominance and evenness were analyzed in relation with organic matter and silt contents in the mangrove and pond soil. The result showing that there were tend to increase of macrobenthos diversity ($R^2 = 0.1938$) and evenness ($R^2 = 0.1046$), when the organic matter in the mangrove and pond soil was increasing. However, these were stable in the relation with silt content in mangrove and pond soil ($R^2 = 0.044$). Contrary the relation to the macrobenthos dominance, that there were showing tend to decreasing ($R^2 = 0.1565$) with increasing of organic matter and there were showing stable in the relation with silt content in the mangrove and pond soil ($R^2 = 0.0521$).

KEYWORDS: *macrobenthos, diversity, organic matter, mangrove, brackishwater*