

Herdi NPM 210351100008 Hubungan Tekstur Sedimen Terhadap Vegetasi Mangrove Di *Education Park* Desa Labuhan, Kecamatan Sepulu, Kabupaten Bangkalan Dibawah Bimbingan **Fitria Hersiana Afifa, S.Pi., M.Pi**

ABSTRAK

Penelitian ini bertujuan untuk mengetahui hubungan tekstur sedimen terhadap vegetasi mangrove Di *Education Park* Desa Labuhan, Kecamatan Sepulu, Kabupaten Bangkalan. Metode yang digunakan dalam penelitian ini adalah metode kuantitatif. Pengambilan sampel dilakukan dari 3 stasiun yang terbagi dalam 3 wilayah yaitu daratan, dekat aliran sungai dan daerah garis pantai yang meliputi pengukuran vegetasi mangrove, sampel sedimen dan pengukuran parameter kualitas air. Analisis tekstur sedimen dengan metode Buchanan dengan dua analisa yaitu analisa kering (*sieve shaker*) dan analisa basah (pemipetan). Tekstur sedimen yang diketahui pada stasiun 1 dan 2 terdapat *sand* (pasir), *silt* (lumpur) dan *clay* (liat), sedangkan stasiun 3 hanya terdapat *Gravel* (kerikil) dan *sand* (pasir). Hasil kerapatan mangrove pada stasiun 1 sebesar 1800 dengan vegetasi mangrove *Avicennia marina*, *Rhizophora mucronata* dan *Sonneratia alba*. Stasiun 2 memperoleh sebesar 4633 dengan vegetasi mangrove *Rhizophora mucronata*, sedangkan pada stasiun 3 memperoleh sebesar 767 dengan vegetasi mangrove *Sonneratia alba*. Hasil uji korelasi pearson menunjukkan bahwa hubungan tekstur sedimen *sand* (pasir), *silt* (lumpur) dan *clay* (liat) terhadap kerapatan mangrove stasiun 1 memperoleh koefisien korelasi sebesar 0,936 (sangat kuat), stasiun 2 hubungan antara tekstur sedimen *sand* (pasir), *silt* (lumpur) dan *clay* (liat) terhadap kerapatan mangrove memperoleh nilai koefisien korelasi pearson sebesar 0,903 (sangat kuat) dan stasiun 3 hubungan antara tekstur sedimen *gravel* (kerikil) dan *sand* (pasir) terhadap kerapatan mangrove memperoleh nilai koefisien korelasi sebesar 0,942 (sangat kuat).

Kata kunci: Tekstur sedimen, Mangrove, Kerapatan, *Education Park* Labuhan

Herdi NPM 210351100008 The Relationship of Sediment Texture to Mangrove Vegetation in the Education Park of Labuhan Village, Sepulu District, Bangkalan Regency Under the Guidance of **Fitria Hersiana Afifa, S.Pi., M.Pi**

ABSTRACT

This study aims to determine the relationship between sediment texture and mangrove vegetation in the *Education Park*, Labuhan Village, Sepulu District, Bangkalan Regency. The method used in this study is a quantitative method. Sampling was carried out from 3 stations divided into 3 areas, namely land, near the river flow and coastal areas which include measurements of mangrove vegetation, sediment samples and measurements of water quality parameters. Sediment texture analysis using the Buchanan method with two analyzes, namely dry analysis (sieve shaker) and wet analysis (pipetting). The known sediment texture at stations 1 and 2 is sand, silt and clay, while station 3 only contains Gravel and sand. The results of mangrove density at station 1 were 1800 with mangrove vegetation *Avicennia marina*, *Rhizophora mucronata* and *Sonneratia alba*. Station 2 obtained 4633 with *Rhizophora mucronata* mangrove vegetation, while station 3 obtained 767 with *Sonneratia alba* mangrove vegetation. The results of the Pearson correlation test showed that the relationship between the texture of sand, silt and clay sediments to the density of mangroves at station 1 obtained a correlation coefficient of 0.936 (very strong), station 2 the relationship between the texture of sand, silt and clay sediments to the density of mangroves obtained a Pearson correlation coefficient value of 0.903 (very strong) and station 3 the relationship between the texture of gravel and sand sediments to the density of mangroves obtained a correlation coefficient value of 0.942 (very strong).

Keywords: *Sediment Texture, Mangrove, Density, Labuhan Education Park*