

KARAKTERISASI FISIK DAN KIMIWI PADA LAHAN PERTANIAN PESISIR PANTAI SELATAN (PANTAI BUGEL) DAN PANTAI UTARA (PANTAI IDOLA) PULAU JAWA

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ABSTRAK

Tanah di daerah pesisir pantai utara dan pesisir pantai selatan memiliki jenis tanah yang berbeda. Jenis tanah di daerah pesisir pantai utara yaitu inceptisol sedangkan jenis tanah di daerah pantai selatan yaitu entisol. Penelitian ini bertujuan untuk mengetahui karakterisasi sifat fisik dan kimia tanah pada lahan pesisir pantai selatan dan utara serta bagaimana perbandingan lahan bugel (Pantai Selatan) dengan lahan Idola (Pantai Utara). Pengambilan sampel dilakukan dengan metode *purposive sampling*. Analisis Laboratorium meliputi tekstur, pH, DHL, Nitrogen, Na-Tersedia, K-Tersedia, Fosfor, C-Organik, KPK, Kalsium dan Mg. Manfaat dari penelitian ini yaitu dapat memberikan informasi dan referensi mengenai beberapa sifat fisik dan kimia tanah pada lahan pertanian pesisir pantai selatan dan pantai utara. Hasil penelitian lahan pertanian Pantai Bugel menunjukkan bahwa tekstur *Sandy*, pH 5,88-6,67 (masam ke netral), DHL T1 5mS/cm sedang, T2-T3 3-4 mS/cm (rendah) dan T4,T5,T6 8-13mS/cm (tinggi), C-Organik 0,35%-1,39% (rendah), Nitrogen 0,02%-0,06% (sangat rendah), Na-Tersedia 0,4me%-0,1me% (rendah), K-Tersedia 0,02me%-0,34me% (sangat rendah), Fosfor 35,02ppm-118,68ppm (sangat tinggi), Kalsium 0,56me%-0,78me% (rendah), Mg 0,33me%-0,42me% (rendah), KPK 0,18 -7,13 cmol(+)kg⁻¹ (sangat rendah -rendah). Hasil penelitian lahan pertanian di Pantai Idola menunjukkan bahwa tekstur tanah *Sandy loam*, pH 7,14-7,48 (netral) , DHL 17-26 mS/cm (sangat tinggi), C-Organik 1,28%-1,91% (rendah), Nitrogen 0,2%-0,31% (sedang), Na-Tersedia 0,7me%-0,96me% (tinggi), K-Tersedia 0,42me%-0,59me% (sedang), Mg 2,15me%-1,95me% (sedang), KPK 35-37,8 cmol (+)kg⁻¹

Kata Kunci : Pertanian pesisir pantai , sifat fisik tanah , sifat kimia tanah , inceptisol , entisol.

PHYSICAL AND CHEMICAL CHARACTERIZATION OF COASTAL AGRICULTURAL LAND ON THE SOUTH COAST (BUGEL BEACH) AND NORTH COAST (IDOLA BEACH) OF JAVA ISLAND

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ABSTRACT

The soil in the northern and southern coastal areas has different types. The soil type in the northern coastal area is inceptisol, while the soil type in the southern coastal area is entisol. This study aims to determine the physical and chemical characteristics of soil in the southern and northern coastal areas and to compare the Bugel area (South Coast) with the Idola area (North Coast). Samples were collected using purposive sampling. Laboratory analysis included texture, pH, DHL, nitrogen, available Na, available K, phosphorus, organic C, KPK, Calcium, and Mg. The benefits of this study are that it provides information and references regarding several physical and chemical properties of soil in agricultural land on the southern and northern coastal areas. The results of the Bugel Beach agricultural land study show that the soil texture is sandy, pH 5.88-6.67 (acidic to neutral), DHL T1 5 mS/cm (moderate), T2-T3 3-4 mS/cm (low), and T4, T5, T6 8-13 mS/cm (high), C-Organic matter 0.35%-1.39% (low), Nitrogen 0.02%-0.06% (very low), Available Na 0.4me%-0.1me% (low), Available K 0.02me%-0.34me% (very low), Phosphorus 35.02ppm-118.68ppm (very high), Calcium 0.56me%-0.78me% (low), Mg 0.33me%-0.42me% (low), KPK 0.18 -7.13 cmol(+)kg⁻¹ (very low - low). The results of agricultural land research on the Idola Coast show that the soil texture is sandy loam, pH 7.14-7.48 (neutral), DHL 17-26 mS/cm (very high), C-Organic 1.28%-1.91% (low), Nitrogen 0.2%-0.31% (moderate), Available Na 0.7 me%-0.96 me% (high), Available K 0.42 me%-0.59 me% (moderate), Mg 2.15 me%-1.95 me% (moderate), CEC 35-37.8 cmol (+)kg⁻¹.

Keywords: Coastal agriculture, soil physical properties, soil chemical properties, inceptisols, entisols.