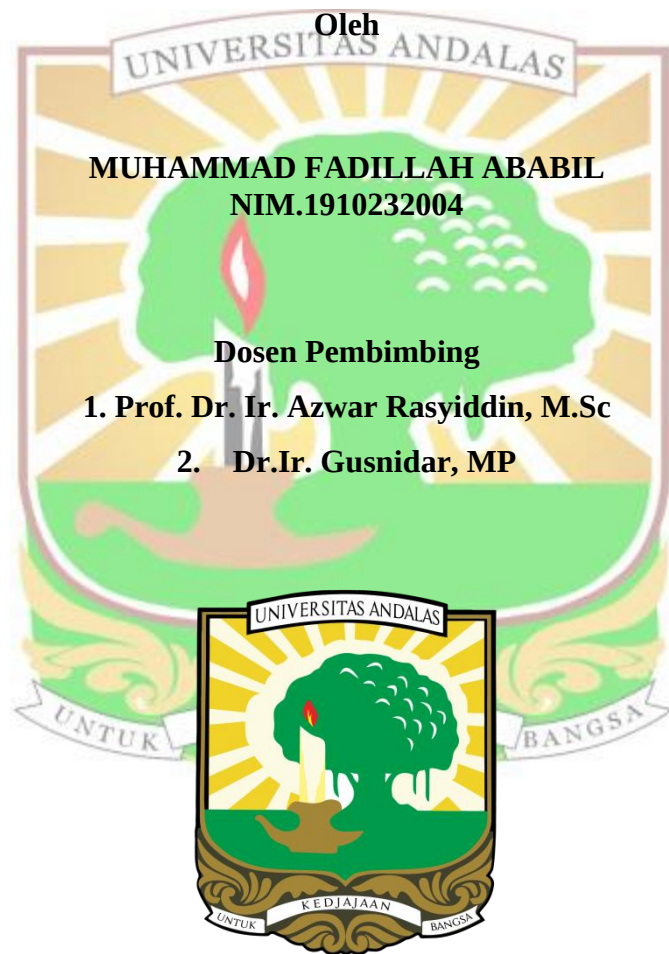


**KAJIAN UNSUR HARA MIKRO (Fe, Cu dan Zn) PADA TANAH
SAWAH DI NAGARI ANDURING KECAMATAN 2X11 KAYU
TANAM KABUPATEN PADANG PARIAMAN**

SKRIPSI



**FAKULTAS PERTANIAN
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Abstrak

Budidaya padi secara terus-menerus dapat menyebabkan degradasi tanah dan penurunan produktivitas lahan. Penggenangan sawah dapat merubah sifat kimia tanah, mempengaruhi unsur hara mikro yang dibutuhkan padi, seperti Fe, Cu, dan Zn. Petani di Nagari Anduring mengandalkan Batang Anai sebagai sumber irigasi yang mempengaruhi unsur hara mikro di sawah. Tujuan dari penelitian ini adalah untuk mengkaji beberapa unsur hara mikro (Fe, Cu dan Zn) pada tanah sawah di Nagari Anduring Kecamatan 2 x 11 Kayu Tanam Kabupaten Padang Pariaman. Penelitian ini dilakukan dengan menggunakan metode survei dengan pengambilan sampel *purposive sampling* berdasarkan pola aliran sungai yang dibagi menjadi bagian hulu, tengah, dan hilir. Sampel tanah sawah diambil pada kemiringan 0-8% (datar) dan kedalaman 0-20 cm sebanyak 3 kali pengulangan pada. Parameter yang dianalisis yaitu pH, C-organik, P-tersedia, KTK, BV, P-total, unsur mikro (Fe, Cu, dan Zn). Hasil penelitian menunjukkan nilai pH tanah sawah bervariasi antara masam hingga agak masam, dengan nilai tertinggi 6,33 di bagian hulu. Nilai BV berkisar dari rendah hingga tinggi, dengan nilai tertinggi 1,15 g/cm³ di bagian hilir. Kandungan C-organik rendah, tertinggi 1,90% di bagian hulu. Kandungan P-tersedia dan P-total sangat tinggi, masing-masing 37,23 mg/100 g dan 236,43 ppm di bagian hulu. Nilai KTK sedang, tertinggi 23,59 cmol/kg di bagian hilir. Kandungan Fe berada di kriteria sedang hingga tinggi (71,68 ppm di hilir), Cu sangat rendah hingga sedang (6,84 ppm di hilir), dan Zn sedang (4,54 ppm di tengah). Berdasarkan penelitian yang telah dilakukan disarankan untuk memanfaatkan sisa panen dengan cara pengembalian ke tanah dalam bentuk kompos, menambahkan pupuk mikro, menambahkan pupuk kandang, serta mengurangi dosis pemupukan P.

Kata kunci: Aliran sungai, Inceptisol, Sifat kimia tanah, Tanah sawah, Unsur hara mikro.

STUDY OF MICRO NUTRIENTS (Fe, Cu and Zn) ON PADDY SOILS IN NAGARI ANDURING DISTRICT 2 X 11 KAYU TANAM PADANG PARIAMAN REGENCY

Abstract

Continuous rice cultivation can lead to soil degradation and decreased land productivity. Inundation of rice fields can change the chemical properties of the soil, affecting the micro nutrients needed by rice, such as Fe, Cu, and Zn. Farmers in Nagari Anduring rely on the Batang Anai River as a source of irrigation which affects micro nutrients in rice fields. The purpose of this study was to assess several micro nutrients (Fe, Cu and Zn) in paddy field soil in Nagari Anduring District 2 x 11 Kayu Tanam Padang Pariaman Regency. This research was conducted using a survey method with a purposive sampling system based on river flow patterns divided into upstream, middle and downstream sections. Paddy field soil samples were taken on a slope of 0-8% (flat) and a depth of 0-20 cm for 3 repetitions in each section. The parameters analyzed in this study were pH, C-organic, P-available, CEC, Bulk density, P-total, micro nutrients (Fe, Cu, and Zn). The results showed that the pH value of paddy field soil varied from acidic to slightly acidic, with the highest value of 6.33 in the upstream part. Bulk density values ranged from low to high, with the highest value of 1.15 g/cm³ in the downstream. C-organic content was low, with the highest being 1.90% in the upstream section. P-available and P-total contents were very high, 37.23 mg/100 g and 236.43 ppm respectively in the upstream section. CEC values were moderate, the highest being 23.59 cmol/kg in the downstream section. Fe content was moderate to high (71.68 ppm in the downstream), Cu very low to moderate (6.84 ppm in the downstream), and Zn moderate (4.54 ppm in the middle). Based on the research conducted, it is recommended to utilize the harvest residue by returning it to the soil in the form of compost, adding micro fertilizers, adding manure, and reducing the dose of P fertilization.

Keywords: Inceptisol, , Micro nutrients, Paddy soil, River flow, Soil chemical properties.