

**KAJIAN BEBERAPA UNSUR HARA MAKRO PADA DAERAH
DATARAN BANJIR BAGIAN HILIR DAS TARUSAN NAGARI
NANGGALO KABUPATEN PESISIR SELATAN**

SKRIPSI

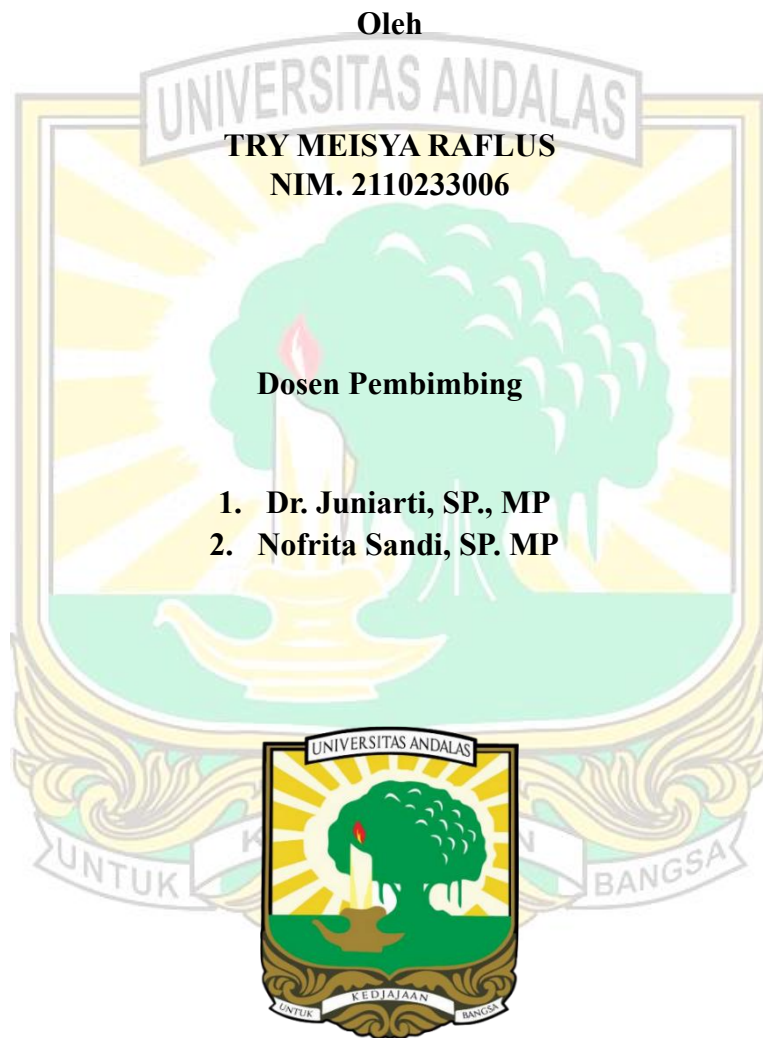
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ABSTRAK

Dataran banjir adalah area yang terletak di daerah rendah dan sering kali tergenang air akibat banjir, yang dapat mempengaruhi sifat fisik dan kimia tanah, termasuk ketersediaan unsur hara. Penelitian ini bertujuan untuk mengkaji beberapa kandungan unsur hara makro pada daerah dataran banjir bagian hilir DAS Tarusan, Nagari Nanggalo, Kabupaten Pesisir Selatan. Penelitian ini menggunakan metode survei dengan sistem pengambilan sampel secara purposive sampling, 6 titik pada dua kedalaman, yaitu 0-30 cm dan 30-60 cm, di lahan yang terdampak banjir dan lahan kontrol yang tidak terdampak banjir. Parameter yang diamati meliputi pH, C-organik, N-total, P-tersedia, K-total, kapasitas tukar kation (KTK). Hasil analisis menunjukkan bahwa daerah yang terdampak banjir menyebabkan pH tanah menjadi masam (4.77-5.19) kandungan C-organik tergolong rendah (1,47-2,00%) dan N-total rendah (0,11-0,19%), C/N sedang-rendah (10.49-13.83), P-tersedia rendah (5.72-7.80 ppm), K-total rendah (15.72-20.29 mg/100g) dan KTK rendah (10.72-15.71 cmol/kg). Sementara itu, pada lahan kontrol yang tidak terdampak banjir pH tanah agak masam (5.60-5.86), C-organik sedang-rendah (1.86-2.23%), N-total sedang (0.21-0.24%), P-tersedia rendah-sedang (7.24-8.68 ppm), K-total sedang (22.85-26.86 mg/100g), KTK rendah-sedang (16.47-20.04 cmol/kg). Secara umum, kandungan unsur hara makro di lahan yang terdampak banjir cenderung lebih rendah dibandingkan lahan kontrol akibat dari erosi dan hilangnya lapisan *top soil*. Lahan yang terdampak banjir menyebabkan kadar unsur hara makro di daerah dataran banjir DAS Tarusan Nagari menjadi rendah.

Kata Kunci : *Dataran Banjir, Erosi, Unsur Hara Makro, Tanah.*

STUDY ON SEVERAL MACRO NUTRIENT ELEMENTS IN THE FLOODPLAIN AREA OF THE DOWNSTREAM TARUSAN IN NANGGALO, PESISIR SELATAN REGENCY

ABSTRACT

Floodplains are low-lying areas that are frequently inundated by floods, which can alter the physical and chemical properties of soils, including the availability of essential nutrients. This study was aimed to assess the content of several macro nutrients in the downstream floodplain area of the Tarusan Watershed, located in Nagari Nanggalo, Pesisir Selatan Regency. A survey method was employed using purposive sampling at six sampling points. Soil samples were taken at two soil depths (0–30 cm and 30–60 cm) in both flood-affected and non-affected (control) areas. The observed parameters included soil pH, organic C, total N, available P, total K, and cation exchange capacity (CEC). The results showed that flood-affected soils had acidic pH (4.77–5.19), low organic C (1.47–2.00%), low total N (0.11–0.19%), medium to low C/N ratio (10.49–13.83), low available P (5.72–7.80 ppm), low total K (15.72–20.29 mg/100g), and low CEC (10.72–15.71 cmol/kg). In contrast, soils in the control areas were slightly acidic (pH 5.60–5.86), had medium to low organic C (1.86–2.23%), medium total N (0.21–0.24%), low to medium available P (7.24–8.68 ppm), medium total K (22.85–26.86 mg/100g), and low to medium CEC (16.47–20.04 cmol/kg). Overall, the macro nutrient content in flood-affected soils tended to be lower than that in control soils. This was mainly due to erosion causing the loss topsoil loss. Macro nutrient levels in the flood plain area of the Tarusan Nagari watershed were low.

Keywords : *Floodplain, Erosion, Macro Nutrients, Soil.*