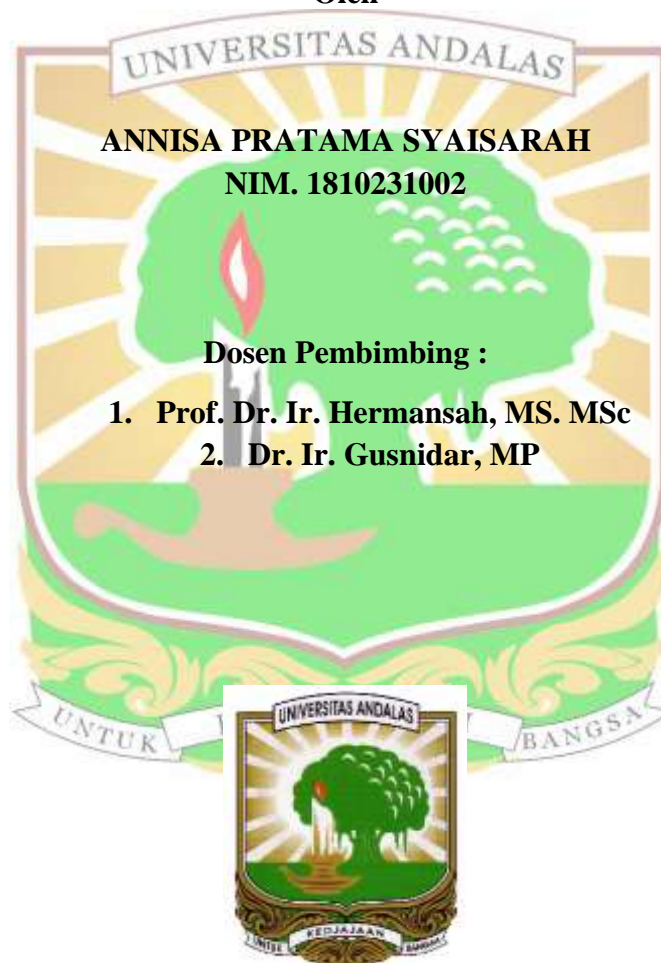


**KAJIAN STATUS HARA N, P, K TANAH DAN SERASAH
PADA PERKEBUNAN KAKAO (*Theobroma cacao L.*) RAKYAT
DENGAN KELERENGAN YANG BERBEDA DI NAGARI
BALIMBING KECAMATAN RAMBATAN KABUPATEN
TANAH DATAR**

SKRIPSI

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KAJIAN STATUS HARA N, P, K TANAH DAN SERASAH PADA PERKEBUNAN KAKAO (*Theobroma cacao L.*) RAKYAT DENGAN KELERENGAN YANG BERBEDA DI NAGARI BALIMBING KECAMATAN RAMBATAN KABUPATEN TANAH DATAR

Abstrak

Unsur hara makro yang dibutuhkan kakao, diantaranya unsur hara N (nitrogen), P (fosfor), dan K (kalium). Unsur hara yang bersumber dari hasil dekomposisi serasah, dapat meningkatkan ketersediaan hara kakao di lapangan. Penelitian bertujuan untuk mengkaji status hara N, P, K tanah dan serasah pada perkebunan kakao (*Theobroma cacao L.*) rakyat dengan kelerengan yang berbeda di Nagari Balimbing Kecamatan Rambatan Kabupaten Tanah Datar. Penelitian dilakukan dengan menggunakan metode survei (*purposive sampling*) berdasarkan kemiringan lahan 8-15%; 15-25%; 25-45% dan semak belukar lereng >45% sebagai kontrol. Pengambilan sampel dilakukan pada kedalaman 0-30 cm dan 30-60 cm dengan masing masing 3 ulangan pada setiap lereng dan 1 sampel komposit setiap lereng untuk serasah. Hasil penelitian menunjukkan sifat kimia tanah pada lahan kakao memiliki nilai pH 4,66-5,51; C-organik berkisar 0,22%-0,26%; N-total 0,10%-0,19%; rasio C/N tanah yaitu 1,23-2,27; P-tersedia berkisar 3,78 ppm-17,87 ppm; KTK tanah yaitu 11,67 me/100g-18,40 me/100g; K-dd tanah berkisar 0,21 me/100g-0,31 me/100g; dan nilai BV tanah yaitu 1,29 g/cm³-1,45 g/cm³. Untuk status hara serasah yaitu N-total dengan kriteria sedang pada keempat kemiringan lahan, P-total serasah dengan nilai tertinggi terdapat pada lereng 15-25%. Kadar K serasah dengan nilai tertinggi terdapat pada semak belukar lereng >45%. Sifat kimia tanah pada lereng 25-45% lebih tinggi daripada lereng 8-15%; 15-25%; dan semak belukar lereng >45%. Dengan demikian, status kesuburan Inceptisol di Nagari Balimbing tergolong sangat rendah.

Kata kunci : Kakao, Kelerengan, Sifat kimia tanah, Status hara.

**STUDY ON N, P, K NUTRIENT STATUS OF SOIL AND LITTER AT
SMALLHOLDER COCOA (*Theobroma cacao* L.) PLANTATIONS WITH
DIFFERENT SLOPE LEVELS IN NAGARI BALIMBING, RAMBATAN
DISTRICT, TANAH DATAR REGENCY**

Abstract

Cocoa is a kind of plantation crop, which needs a lot of N, P, and K for its growth. Nutrients source from litter decomposition can increase the availability of cocoa nutrients in the field. This study was aimed to examine the N, P, K from soil and litter from smallholder cocoa (*Theobroma cacao* L.) plantations with different slope levels in Nagari Balimbing, Rambatan District, Tanah Datar Regency. The research was conducted using a survey method (purposive sampling) based on slope levels (8-15%, 15-25%, 25-45%) and shrubs (>45%) as the control. Soil was sampled at 0-30 cm and 30-60 cm depth with 3 replicates on each slope and the litter samples were composited for each slope. The parameters analyzed were soil pH, organic-C, total-N, C/N ratio, CEC, available-P, K-exchangeable, BD, total-P, and total-K. The results showed that the soil in cocoa fields had pH value between 4.66-5.51, organic-C between 0.22% -0.26%, total-N between 0.10%-0.19%, C/N ratio between 1.23-2.27, available-P between 3.78-17.87 ppm, CEC between 11.67-18.40 cmol/kg, K-exchangeable between 0.21 -0.31 cmol/kg, and BD value was 1.29-1.45 g/cm³. The nutrient status of the crop, especially total-N was at moderate criteria on the four slope levels, total-P was the highest value were found on slopes of 15-25%. The litter K level was the highest on the shrubs (>45%). Soil chemical properties on slopes 25-45% were better than those on slopes 8-15%, 15-25%, and shrubs (>45%). Therefore, the fertility status of the Inceptisols in Nagari Balimbing was classified as very low.

Keywords : Cocoa, Nutrients, Slope, Soil chemical properties

