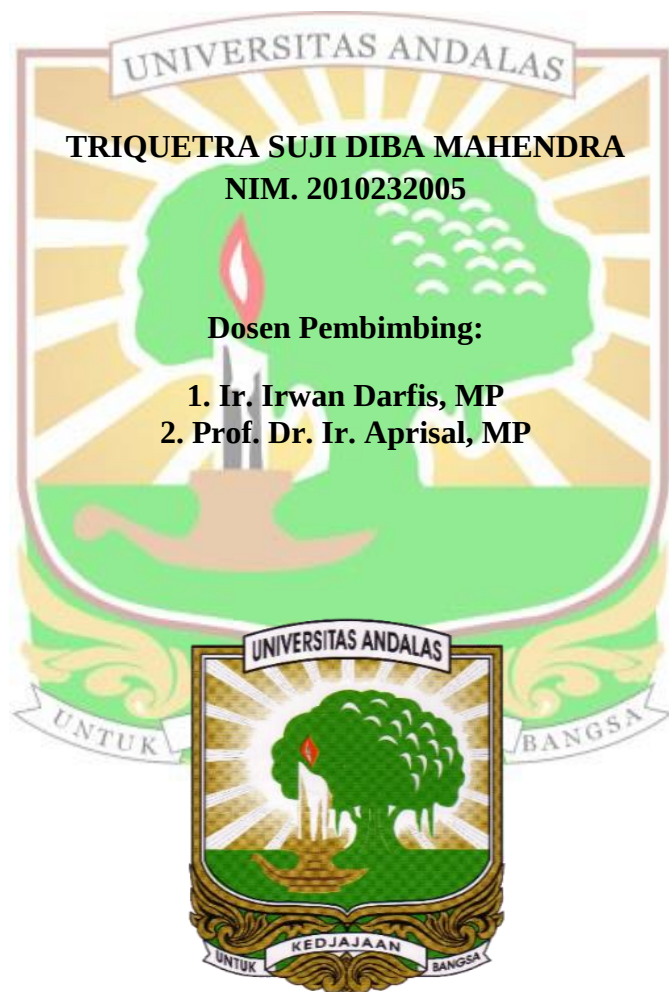


**LAJU INFILTRASI PADA BEBERAPA KELAS LERENG
LAHAN SERAI WANGI (*Cymbopogon nardus*) DI DESA BALAI
BATU SANDARAN KECAMATAN BARANGIN KOTA
SAWAHLUNTO**

SKRIPSI

Oleh:



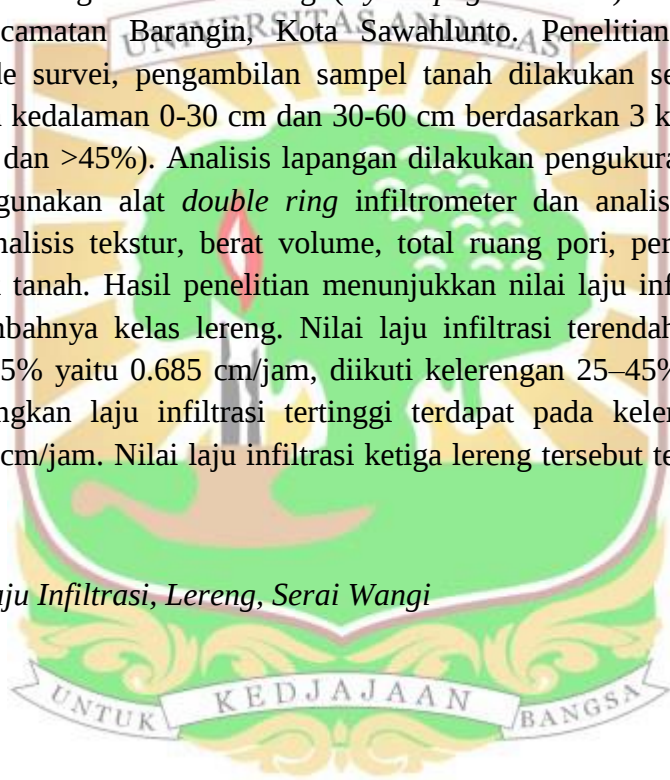
**FAKULTAS PERTANIAN
UNIVERSITAS ANDALAS
PADANG
2025**

**LAJU INFILTRASI PADA BEBERAPA KELAS LERENG LAHAN SERAI
WANGI (*Cymbopogon nardus*) DI DESA BALAI BATU SANDARAN
KECAMATAN BARANGIN KOTA SAWAHLUNTO**

ABSTRAK

Infiltrasi adalah proses masuknya air hujan ataupun air permukaan ke dalam tanah melalui celah atau ruang pori tanah. Lereng yang terjal cenderung menurunkan laju infiltrasi karena air hujan lebih mudah mengalir di permukaan daripada diserap tanah. Penelitian ini bertujuan untuk mengetahui laju infiltrasi pada beberapa kelas lereng lahan serai wangi (*Cymbopogon nardus*) di Desa Balai Batu Sandaran, Kecamatan Barangin, Kota Sawahlunto. Penelitian ini dilakukan dengan metode survei, pengambilan sampel tanah dilakukan secara *purposive sampling* pada kedalaman 0-30 cm dan 30-60 cm berdasarkan 3 kelas lereng (15-25%, 25-45% dan >45%). Analisis lapangan dilakukan pengukuran laju infiltrasi dengan menggunakan alat *double ring* infiltrometer dan analisis laboratorium diantaranya analisis tekstur, berat volume, total ruang pori, permeabilitas, dan bahan organik tanah. Hasil penelitian menunjukkan nilai laju infiltrasi menurun seiring bertambahnya kelas lereng. Nilai laju infiltrasi terendah terdapat pada kelerengan >45% yaitu 0.685 cm/jam, diikuti kelerengan 25–45% sebesar 0.966 cm/jam, sedangkan laju infiltrasi tertinggi terdapat pada kelerengan 15-25% sebesar 1.052 cm/jam. Nilai laju infiltrasi ketiga lereng tersebut termasuk kriteria agak rendah.

Kata kunci: *Laju Infiltrasi, Lereng, Serai Wangi*



**INFILTRATION RATE ON SEVERAL SLOPE CLASSES UNDER
CITRONELLA (*Cymbopogon nardus*) CULTIVATION IN BALAI BATU
SANDARAN VILLAGE, BARANGIN DISTRICT, SAWAHLUNTO CITY**

ABSTRACT

Infiltration is the process of rainwater or surface water entering the soil through cracks or pore spaces in the soil. Steep slopes tend to reduce the rate of infiltration because rainwater flows more easily on the surface than it is absorbed by the soil. This study was aimed to determine the infiltration rate on several classes of slope under citronella (*Cymbopogon nardus*) in Balai Batu Sandaran Village, Barangin District, Sawahlunto City. This study was conducted using a survey method. The soil samples were taken using purposive sampling at depths of 0-30 cm and 30-60 cm at three slope classes (15-25%, 25-45%, and >45%). Field analysis was conducted by measuring the infiltration rate using a double ring infiltrometer. The laboratory analysis conducted were soil texture, bulk density, total soil porosity, permeability, and soil organic matter. The results showed that the infiltration rate decreased as the slope class increased. The lowest infiltration rate was found on slopes >45%, which was (0.685 cm), followed by slopes of 25–45% (0.966 cm), while the highest infiltration rate was found on slopes of 15–25% (1.052 cm). The infiltration rates of the three slopes were classified as moderately low.

Keywords: Infiltration Rate, Slope, Citronella

