

Ruhyat, Windi Wardani, 2022. Kajian Infiltrasi tanah Pada Berbagai Kemiringan Lereng di Kelurahan Fitu. Skripsi. Program Studi Ilmu Tanah Fakultas Pertanian, Universitas Khairun Ternate. Pembimbing: (I) Dr. Ir Tri Mulya Hartati, MP. (II) Idris Abd. Rachman SP, M.Si

RINGKASAN

Laju Infiltrasi tanah adalah proses aliran air vertikal di dalam tanah karena adanya potensi gravitasi. Ada beberapa faktor yang mempengaruhi infiltrasi, seperti jenis tanah, kerapatan tanah, kelembaban tanah dan tanaman, tetapi kelembaban tanah juga meningkat sehingga mengurangi infiltrasi tanah. Pengukuran laju infiltrasi menggunakan infiltrometer yaitu suatu tabung baja silinder pendek, berdiameter besar yang mengitari suatu daerah dalam tanah. Pengklasifikasian mengenai pengaruh kemiringan lereng terhadap laju infiltrasi menggunakan klasifikasi berdasarkan Departemen Kehutanan yakni : Kelas I Kemiringan Lereng kurang dari 8 yakni datar, kelas II Kemiringan Lereng 8-15 yakni landai, kelas III Kemiringan Lereng 15-25 yakni bergelombang dan yang terakhir kelas IV Kemiringan Lereng 25-40 yakni curam. Penelitian ini bertujuan untuk menyelidiki bagaimana pengaruh laju infiltrasi di Kelurahan Fitu pada setiap kemiringan lerengnya. Penelitian ini dilakukan di kelurahan Fitu Kecamatan Ternate Selatan Kota Ternate. Penelitian ini menggunakan jenis penelitian kuantitatif dengan metode yang digunakan adalah metode sampel cincin ganda (double ring penetrant) untuk mengetahui besarnya permeabilitas. Adapun teknik pengumpulan data diperoleh dengan persiapan dan pengukuran infiltrasi. Hasil Penelitian menunjukkan bahwa laju infiltrasi pada lokasi Kelurahan Fitu tergolong cepat pada semua tingkat kemiringan lereng, nilai laju infiltrasi pada kemiringan lereng 4% 245,4 mm/jam, kemiringan 20% 162,0 mm/jam dan kemiringan 40% 206,4 mm/jam Faktor-faktor yang mempengaruhi laju infiltrasi di lokasi penelitian selain kemiringan lereng adalah penggunaan lahan, tekstur, BD, PD dan Porositas.

Kata Kunci: Kajian Infiltrasi tanah, Kemiringan Lereng, Kelurahan Fitu

Ruhyat, Windi Wardani, 2022. Soil infiltration studies on various slope slopes in the Fitu village. Thesis. Faculty of Agricultural Sciences Studies Program, Khairun University Ternate. Supervisor: (I) Dr. Ir Tri Mulya Hartati, MP. (II) Idris Abd. Rachman SP, M.Si

SUMMARY

Soil infiltration rate is the process of vertical water flow in the soil due to the potential for gravity. There are several factors that affect infiltration, such as soil type, soil density, soil moisture, and plants, but soil moisture also increases thereby reducing soil infiltration. Measurement of the infiltration rate using an infiltrometer, which is a short cylindrical steel tube, large diameter that surrounds an area in the soil. Classification of the influence of slope on infiltration rate using calcification based on the Ministry of Forestry, namely: class I slope of less than 8 which is flat, class II of slope 8-15 which is gentle, class III slope of 15-25 which is wavy, and finally class IV slopes of 25-40 i.e. steep. This study aims to investigate how the influence of the infiltration rate in Fitu Village on each slope. This research was conducted in the Village of Fitu, District of South Ternate, Ternate City. This research uses quantitative research with the method used is the double ring penetrant sampling method to determine the amount of permeability. The data collection technique was obtained by preparation and measurement of infiltration. The results showed that the infiltration rate at the Fitu Village location was fast at all levels of slope, the value of the infiltration rate at a slope of 4% was 245.4 mm/hour, a slope of 20% was 162.0 mm/hour and a slope of 40% was 206.4 mm. /o'clock. Factors that affect the rate of infiltration at the study site in addition to slope are land use, texture, BD, PD and porosity.

Keywords: Study of Soil Infiltration, Slope Slope, Kelurahan Fitu