

INTISARI

Penelitian terkait kestabilan lereng pada lahan bekas longsor telah banyak dilakukan, namun kajian mengenai pengaruh karakteristik tanah terhadap kestabilan lereng belum banyak dilakukan. Evaluasi mengenai tingkat stabilitas lereng dapat ditentukan menggunakan metode SSEP (*Slope Stability Susceptibility Evaluation Parameter*). Penelitian ini bertujuan untuk (1) mengidentifikasi berbagai macam parameter-parameter intrinsik dan ekstrinsik longsor yang mempengaruhi kestabilan lereng longsor; (2) mengkarakterisasi parameter-parameter intrinsik dan ekstrinsik longsor; (3) mengevaluasi tingkat stabilitas lereng berdasarkan parameter-parameter intrinsik dan ekstrinsik longsor; serta (4) mengkaji kaitannya sifat-sifat tanah dengan stabilitas lereng. Pengumpulan data yang dilakukan, meliputi kegiatan pra-lapangan, lapangan, dan analisis data. Penentuan titik sampel menggunakan metode *purposive* berdasarkan bentuklahan dengan metode tpi. Sebelas longsor dipilih secara acak pada bagian puncak perbukitan, lereng atas perbukitan, lereng tengah perbukitan, dan lereng bawah perbukitan. Sampel tanah diambil di bagian gawir longsor pada kedalaman 0–50 cm. Analisis data dilakukan secara deskriptif kualitatif untuk mengetahui kondisi morfologi lahan pada setiap longsor dan secara deskriptif kuantitatif dengan uji determinasi untuk mengetahui pengaruh karakteristi lahan terhadap parameter SSEP. Hasil penelitian menunjukkan parameter intrinsik yang sangat berpengaruh didaerah penelitian adalah material tanah. Masing-masing parameter saling berkaitan dalam tingkat kestabilannya. Lahan yang memiliki tingkat stabilitas lereng paling tinggi adalah bagian lereng atas perbukitan.

Kata kunci: karakteristik tanah, longsor, gawir, intrinsik, ekstrinsik, SSEP

ABSTRACT

Several research about slope stability in post landslide has been conducted. However, few research studies on the influence of soil characteristics on slope stability. Evaluation of the level of slope stability can be determined using the SSEP (Slope Stability Susceptibility Evaluation Parameter) method. This research aims to (1) identify various kinds of intrinsic and extrinsic parameters of landslides that affect the stability of landslide slopes; (2) characterizing the intrinsic and extrinsic parameters of landslides; (3) evaluate the level of slope stability based on the intrinsic and extrinsic parameters of the landslide; and (4) assessing the relationship between soil properties and slope stability. Data collection was carried out, including pre-field, field, and data analysis activities. Determination of sample points using the purposive method based on landforms with the TPI method. Eleven landslides were selected randomly at the peak, top, middle, and bottom of the hill. Soil samples were collected at the landslide escarpment at a depth of 0–50 cm. Data analysis was carried out qualitative descriptive to determine land morphology conditions in each landslide and quantitative descriptive with a determination test to determine the effect of land characteristics on SSEP parameters. The results showed that the intrinsic parameter that was very influential in the research area was the soil material. Each parameter is related to the other in the level of stability. This research found that the top slope of the hills had the highest level of slope stability.

Keywords: soil characteristics, landslide, scarp, intrinsic, extrinsic, SSEP