Intisari

Analisis kondisi lahan dan karakteristik tanah pada lahan bekas longsor belum banyak dilakukan. Kajian kondisi morfologi lahan dan tanah pada lahan bekas longsor mempunyai manfaat untuk kegiatan pengelolaan lahan yang tepat di lahan bekas longsor. Penelitian bertujuan untuk (1) mengidentifikasi morfologi lahan pada setiap bagian longsor, (2) menganalisis karakteristik tanah pada setiap bagian longsor, (3) menilai potensi reaktivasi longsor berdasarkan morfologi lahan dan karakteristik tanah, serta (4) membuat usulan pengelolaan lahan berbasis tanaman untuk pengendalian reaktivasi longsor. Pengumpulan data yang dilakukan, meliputi kegiatan pra-lapangan, lapangan, dan analisis data. Penentuan titik sampel menggunakan metode s*tratified random sampling* berdasarkan aktivitas longsor oleh peneliti sebelumnya menurut bagian-bagian longsor. Tiga longsor dipilih secara acak dan setiap longsor dibedakan menjadi tiga bagian, mahkota, badan, dan kaki longsor. Titik pengambilan sampel berjumlah 9 titik dengan pengambilan sampel tanah pada jeluk 0–30 cm dan 30–90 cm. Analisis data dilakukan secara deskriptif kuantitatif dengan standar deviasi untuk mengetahui variasi karakteristik tanah pada setiap longsor dan secara deskriptif kualitatif untuk mengetahui kondisi morfologi lahan pada setiap longsor. Hasil penelitian menunjukkan kondisi morfologi lahan dan karakteristik tanah setiap longsor beragam acak menurut bagian-bagian longsor yang dibuktikan dengan nilai bervariasi dari mahkota, badan, hingga kaki longsor. Potensi reaktivasi longsor tinggi berdasarkan kondisi morfologi lahan dan karakteristik tanah. Sistem penanaman tanaman dengan kombinasi jenis perakaran dan sistem agroforestri merupakan pengelolaan lahan yang dimungkinkan paling sesuai guna mengurangi potensi reaktivasi longsor.

Kata kunci: karakteristik tanah, kondisi lahan, longsor reaktivasi, potensi reaktivasi

Abstract

Analysis of land morphology conditions and soil characteristics of landslide has not been widely carried out. Study of land and soil conditions of landslide has benefits to proper land management activities in landslide area. The research aims to (1) identify land morphology in each part of landslide, (2) analyze soil characteristics in each part of landslide, (3) assess the reactivation landslide potential based on land morphology conditions and soil characteristics, and (4) propose land management based on vegetation to control landslide reactivation. Data collection include pre-field activities, field activities, and data analysis. Determination of sample points used the stratified random sampling method based on landslide activity by previous researchers according to the part of landslide. Three landslide were selected randomly and each landslide was divided into three parts, the crown, main body, and foot of landslide. The sampling points were 9 points with soil sampling at a depth of 0–30 cm and 30–90 cm. Data analysis by quantitatively descriptive with standard deviation to determine the variation of soil characteristics in each landslide and qualitatively descriptive to determine the land morphology conditions in each landslide. The result showed the land morphology conditions and soil characteristics of each landslide varied randomly according to the part of landslide as evidenced by the varying values from the crown, main body, to foot of landslide. The potential for landslide reactivation is high based on land morphology conditions and soil characteristics. Planting system with a combination of root types and agroforestry systems are the most suitable possible land management to control the potential of landslide reactivation.

Keywords: soil characteristics, land conditions, landslide reactivation, reactivation potential