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# Experimental Investigation of the Effect of Material Composition on Landslides

**Authors :** Mengqi Wu, Haiping Zhu, Chin J. Leo

**Abstract :** In this study, six experimental cases with different components (dry and wet soils and rocks) were considered to elucidate the influence of material composition on landslide profiles. The results show that the accumulation zone for all cases considered has a quadrilateral shape with two different bottom angles. The asymmetry of the accumulation zone can be attributed to the fact that soils in different parts of the landslide sliding can produce different speeds and suffer different resistances. The higher soil moisture can generate stronger cohesion between soils to reduce the volume of the sliding body during the landslide. The rock content can increase the accumulation angles to improve slope stability. The interaction between the irregular shapes of rocks and soils provides more resistance than that between spherical rocks and soils, which causes the slope with irregular rocks and soils to have higher stability.

**Keywords :** landslide, soil moisture, rock content, experimental simulation
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