地工織物應用於坡面抗沖蝕之效益評估

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摘　要　降雨所形成之地表逕流除對土壤邊坡產生沖蝕外，亦可能因為沖蝕溝產生集流，導致入滲影響坡面整體穩定性。於工程實務上，為避免地表逕流所引至之土壤沖蝕，可在邊坡表面鋪設地工合成材料予以減緩。本研究探討不同結構型態的地工織物抑制坡面沖蝕之成效，利用人工降雨設備進行土壤沖蝕試驗，以表面粗糙度、結構型態、厚度等材料特性為分類依據，探討試驗類型之地工織物，於坡度及降雨強度均為試驗變化因子時，其坡面抗沖蝕之效果。同時，量化試驗所得之數據且明確定義各特徵數據所表示之功能特性，並且考量沖蝕力及材料結構型態因素得到最佳化之地工織物鋪設於坡面抗沖蝕組合。

關鍵詞：地工織物、地表逕流、抗沖蝕。

The Benefits of Geotextiles on Slope Resistance to Erosion.

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ABSTRACT Addition to erosion of soil slopes, surface runoff formed by rainfall may also erosion ditch and Infiltration, which affects the overall stability. In practice, order to avoid the soil erosion caused by runoff, geosynthetics can be laid on the surface of the slope for resistance to erosion. This study explores the effectiveness of geotextiles with different types in inhibiting soil erosion. Based on the material characteristics, such as material surface roughness, material production methods and thickness, soil erosion test was conducted by using artificial rainfall equipment to change the effect of slope and rainfall intensity test factors on the resistance to erosion of geotextiles. Quantify the data obtained from the experiment, the functional characteristics represented by each characteristic data are clearly defined, and the erosion resistance factor of geotextiles with optimized erosion factor is considered.

***Keyword*:** Geotextiles、Runoff、Resistance to Erosion.

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