植生鋪網應用於陡坡地之抗蝕性探討

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摘　　要　本研究乃運用日本多功能資材公司提供之新研發植生鋪網為試驗材料，以屏東科技大學後山的第一試驗區坡度 60%、坡長 22.13 公尺之紅土礫石試區為試驗地，測試不同網目密度鋪網(SP-45、SP-60)之防沖蝕及植物入侵的情形。並以室內、外試驗觀測暴雨後之逕流量、土壤沖蝕量、邊坡穩定以及試驗草種百慕達草的生長情形，以檢測不同植生資材對抗沖蝕性影響。結果顯示鋪設多功能資材試區均有明顯的抗沖蝕效果，且 SP-60 較 SP-45 之效果更佳，而自然導入的植物生長茂密甚至已有小灌木的侵入，又資材密度高者降雨吸水較多可降低短期逕流量，惟於陡坡時暴雨逕流量的減少有限，試驗結果將可提供未來植生鋪網工程設置之規劃及參考。

關鍵詞：人造被覆資材、百慕達草、土壤沖蝕、逕流量。

The Erodibility Investigation of Artificial Textile Applications on the Steep Slope

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ABSTRACT This study used the new of artificial textile multifunctional vegetation network which created and developed by Multifunctional Materials Company in Japan, to take the experiment of erodibility and plant invasion of growth on the steep slopeland surface at the first experimental site in Pingtung University of Science and Technology with slope 60% and slope length 22.13 meters. This experiment include observed the runoff after heavy rainfall, soil erosion, slope stability and bermuda grass growth situations in the outdoor situation, and compared the inference of erodibility by different vegetation network materials(SP-45,SP-60). The results showed that the laying of multifunctional materials test area have significant anti-erosion effect and import of natural lush plant growth has been even small shrub invasion, and high density materials(SP-60) can be reduced more runoff water in the short term, but in the steep slope reduce storm runoff one not significant.The research hope to provide the references from this experiment result on future control work planning and project setting.
Key Words: Artificial textile, bermuda grass, soil erosion, runoff.

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