

## 崩塌地植生復育適用評估因子之分析研究

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**摘要** 近年處理坡地崩塌問題，常採用植生工程之方式以達穩定邊坡的功效，然而坡地植生的生長情況尚無具體量化的標準，以致不易客觀評估坡地植生復育成效。爰此，本研究於石門水庫集水區以及臺中雙崎崩塌地，共選擇 43 處坡地，設置 70 個植物樣區進行調查，並以列表比較法進行植被類型之分類，採用降趨對應分析 (DCA) 將樣區依物種組成進行排序，藉由降趨對應分析之樣區排序結果，將樣區分布之第 1 及第 2 序列軸與植生調查因子進行皮爾森相關性檢定，找出具鑑別不同植物社會能力之因子作為評估指標。坡地植生分析結果將植物社會分類為初期向陽森林、初期背陽森林、過渡時期草地、人工噴植草生植被以及拓殖期草地，並分別找出其指標植物種群。植生指標篩選出 5 類適用之項目，共含括 11 個評估因子，分別為(1)覆蓋度指標：包含綠覆蓋、木本植物覆蓋度、地被植物覆蓋度及層次累計覆蓋度；(2)物種多樣性：包含植生種數以及辛浦森指數；(3)原生種比例：包含樣區原生種覆蓋度以及原生種相對覆蓋度；(4)植物層次：植物社會層次；(5)演替序列：包含演替階段以及演替度，用以建置完整與簡易評估表格。依據完整或簡易評估方式將植生現況分類為不理想、尚可、次理想以及最理想之等級。評估結果「最理想」與「次理想」等級的植生多為自然演替或以木本植物噴植工法處理之地區，多已恢復至森林狀態；「尚可」與「不理想」等級之植生，多為地被裸露程度較高，或具外來種等議題的植被狀態。

**關鍵詞**：植生、評估指標、崩塌、坡地、復育。

## Research on Evaluating Factors for Vegetation Restoration of Landslide Area

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**ABSTRACT** In recent years, many landslide areas have undergone vegetation projects for slope stabilization and restoration. However, it is not easy to objectively estimate the effects of vegetation restoration on a slopeland without proper quantitative criteria. This study selected 43 cases from Shihmen Reservoir Watershed and Shuangchi, setting up 70 vegetation plots and survey. Data from the vegetation plots were analyzed by tabular comparison and detrended correspondence analysis (DCA) to find the indicator species of vegetation and select the criteria for the revegetation effects. According to the results of tabular comparison, 70 plots can be classified into five vegetation types: (1) primary forest on sunny slope. (2) primary forest on shady slope. (3) transitional grassland. (4) artificial grassland. (5) colonizing grassland. Indicator species groups were also found from

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