

## 九芎植生木樁之生長與根系力學之研究

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**摘 要** 本研究選取崩場地植生工法中之打樁編柵常使用的九芎植生木樁，於網室、野外試驗地及崩場地，進行木樁萌芽生長調查，其結果分別利用相關分析、迴歸分析以及卡方檢驗等統計方法，來探討植生木樁地上部與地下部之生長情形、根系之力學效應以及提昇成活率之可行方式，俾提供打樁編柵施工效益之參考。

**關鍵詞：**九芎、植生木樁、剪力增強、根系。

## The Growth and Root Strength of *Lagerstroemia subcostata* Vegetation Stake

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**ABSTRACT** The *Lagerstroemia subcostata* vegetation stake is the most important and often used plant material of the staking and wattling method in Taiwan. Their planting datum was collected from the nethouse, experimental area and the Nantou Puli No.96 landslide area. The relationship between the stake's sprout rate, growth of dry materials and the root tensile strength were discussed by correlating analysis, regression and Chi-square test methods. Besides this, the root shear strength of vegetation stake was also estimated under different growth conditions. The obtained results are useful for any researchers looking to understand the advantages of the staking and wattling method.

**Key Words:** *Lagerstroemia subcostata*, vegetation stake, shear strength, root system.

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