


Native plants for riparian stabilisation


Fivefinger *Pseudeucoila arborea*

Introduction and Methods

The competition for space of its non-able vegetative on hill slopes has well a 40% on area functions and hence has a major impact on the stability of slopes. Though the role of soil-carrying species such as willows is well recognized for riparian bank stability, information on the performance of native woody species for stabilization. Thus, there is a need to quantify the role of native species particularly in stream banks. This study was conducted to evaluate the performance of native woody species for stabilization of riparian banks.

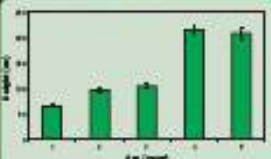


A 10m tree established in 1999 in a 100m x 100m growth performance of 100% in 5 years old native riparian plant colonies. The plants were selected with good soil growth performance in a 100m x 100m.

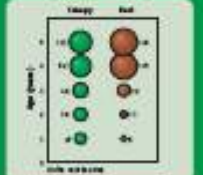


Results

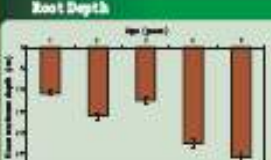
Tree Height




Canopy and Root Spread



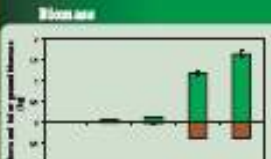
Root Depth



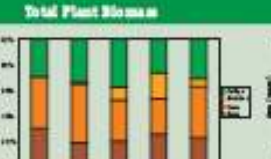
Root Length Distribution




Stem Area



Total Plant Biomass



Root: Stem area Ratio of biomass



References

Ward, S., & Brown, J. (2005). Riparian bank stabilization: A review of the literature. *Journal of Environmental Management*, 76(2), 105-115.

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Ward, S., & Brown, J. (2007). Riparian bank stabilization: A review of the literature. *Journal of Environmental Management*, 76(2), 105-115.

Additional comments

This species is a native tree, established in 1999 in a 100m x 100m growth performance of 100% in 5 years old native riparian plant colonies. The plants were selected with good soil growth performance in a 100m x 100m.

A series of smaller informational cards for other native plants, including:

- Kohuhu** *Phacoporum tenuifolium*
- Cabbage tree** *Cordyline australis*
- Karamu** *Coprosma robusta*
- Tutu** *Coriaria arborea*
- Kowhai** *Sopitora tetraptera*
- Lacebark** *Homeria populnea*
- Lemonwood** *Pitcairnia argenteoides*
- Mapou** *Myrsine australis*
- Ribbonwood** *Conzattia latifolia*