



Investigations on the selection of plants for soil bioengineering measures in South Brazil

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Soil bioengineering measures for bank protection along rivers and creeks are commonly used in Europe and North America, since they offer long-term stability, they can be established using renewable material and - provided a proper construction and maintenance - can be of ecological value as well. To implement these environmentally friendly and resource sparing techniques to Brazil, appropriate tree species' have to be selected and investigated and various bioengineering methods must be adapted to the local climate and working conditions. The presentation shows the results from the selected species which were tested in regard to their capability to develop adventitious roots and shoots. Among the studied species, *Calliandra sp.*, *Morus nigra*, *Pouteria salicifolia* and *Terminalia australis* showed not to be promising as engineering material. *Phyllanthus sellowianus*, *Salix humboldtiana*, *Salix x rubens* and *Sebastiania schottiana*, are promising engineering material.