

Effect of available rooting volume on seedling growth

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Abstract

During the early establishment phase of *Rhizophora mangle* L. seedlings, a consistent positive relationship between available soil volume (varying from 2–9 l) and growth rate of *Rhizophora mangle* has been established under greenhouse conditions. As soil volume increased, root systems were larger and consistently less dense. From the results obtained it may be concluded that for optimal growth of *Rhizophora mangle* seedlings, the volume of soil per plant should approach that volume associated with the growth of the plants in natural habitats. Root volume appears to be a very significant index of plant growth, even under saline, flooded conditions.