EFFECT OF SOIL MOISTURE ON THE GROWTH OF SEEDLINGS OF ACACIA ALBIDA (Del) AND ACACIA SEYAL (Del)

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Abstract

Potted seedlings of Acacia albida (Del) and Acacia seyal (Del) in a green house condition were subjected to three soil moisture regime, namely 0.0mPa, -0MPa and 0.7MPa to test their growth responses such as leafliness, sterm diameter, seedling height, seedling dry weight as well as the sized. Seedling morphological characteristics were highest on soils at matric potential of 0.2MPa. Seedling leaf water potential was reduced and root growth hindered on soils at 0.7MPa.

Result indicated that the drought tolerance level Acacia Albida and Acacia Seyal seedlings is leaser than expected of tree species indigenous to semi-arid environment.

Keyword