EVALUATION OF TREE SEED GERMINATION CAPACITY: *EUCALYPTUS MICROCORYS* IN SOUTHERN PROVINCE OF RWANDA

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Abstract

In Rwanda, most trees and shrubs are propagated using seeds but seed germination information is limited due to inadequate research. Most of people claim that after acquiring tree seeds they meet problems comprising low germination rates of seeds, abnormality of seedlings, impurity and others constraints. The aim of this study was to evaluate the germination capacity of tree seeds. *E. microcorys* was used in the experiments which consisted of three treatments (T1: Rwasave nursery soils, T2: Ruhande Arboretum soils and T3: Sterilized sandy soils) with three replications. The temperature has been controlled at 25-35°C at laboratory level. All tests were examined daily to ensure that the moisture content of the substrate is near optimum. The laboratory germination began after three days while the nursery started in nine days after sowing. It was recommended to all foresters and farmers that to ensure the germination of seeds, they must consider the type of seeds, the limiting environmental factors distinguished as edaphic (soil depth, fertility, texture and structure, presence of excessive assimilable carbonates or chlorides); climatic (temperature, aridity and humidity) and biotic (pests, diseases and competition from vegetation) and reflect on all silvicultural management practices.

**Keywords:** Silviculture, *Eucalyptus microcorys* seeds, Germination capacity, Tree nursery