

THE EFFECT OF SITE CONDITIONS ON BARK YIELD IN *PRUNUS AFRICANA*

(HOOK. F.), KALKMAN (ROSACEAE) TREES

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ABSTRACT

The objective of the study was to assess the effect of site conditions on bark yield by assessing variation in bark thickness and relative bark thickness among populations of *Prunus africana* in two closed canopy natural forest (Kakamega and Elgeyo) and adjacent farmland. Other factors being equal bark thickness is an indicator of bark yield per tree. The study showed how Bark thickness (BKT) and relative bark thickness (BKR) vary among populations from closed canopy forests and open habitats, and the influence some factors have on them. Bark thickness (BKT) and relative bark thickness (BKR) in *Prunus africana* is strongly influenced by diameter at breast height (DBH). The influence of habitat on BKT and BKR is significant with constant DBH they are higher in open habitats than in closed canopy forests. The information obtained will guide in designing appropriate silvicultural and management methods to increase bark production by planting *Prunus africana* at wider spacing than would ordinarily be found in a closed canopy forest.

KEYWORDS: Diameter at Breast Height (DBH), Bark Thickness (BKT), *Prunus*, Canopy