

## Abstract

In a study to domesticate the species *Calotropis procera*, for wool production in drylands, investigations were done to determine the effects of seed transfer distance on the growth of the species in a typical farm setting. The objectives of the research were to determine the growth of three provenances of *C. procera* and to determine the influence of seed transfer distance on the growth parameters. Diameter and height data were used to generate horizontal and vertical growth curves respectively and further subjected to Duncan Multiple Range Test (DMRT) to isolate existence of significant differences across the three provenances. Pearson correlation analysis was used to establish existence of relationships across the growth parameters. Results showed that *C. procera* is a multi-stemmed plant. Duncan Multiple Range Test (DMRT) showed no significant statistical differences ( $p < 0.5$ ) in diameter growth though Pearson correlation analysis, showed strong positive correlations (Pearson,  $p < 0.01$ ) between branching and DBH Test of homogeneity of variances showed significant statistical differences ( $p < 0.5$ ) in vertical growth The study concluded that *C. procera* is a multi-stemmed plant that can reach a height of 4.48m and a diameter of 7.4cm in two years. It is recommended that *C. procera* seeds for raising nursery stock should be sourced from the nearest source possible. This will reduce the environmental and climatic effects associated with long distance seed transfers and ensure the species benefits from home-site advantages.