

Evaluation of Selection Criteria In *Abelmoshus Caillei* Using Correlation Coefficients and Path Analysis

***C. O. Alake¹, M. A. Ayo-Vaughan¹ and I. Adetiloye²**

¹Department of Plant Breeding & Seed Technology,

Federal University of Agriculture, P.M.B. 2240, Abeokuta, Nigeria.

²National Centre for Genetic Resource and Biotechnology, Ibadan, Oyo State, Nigeria.

***Correspondence:** alakeolusanya@yahoo.com

Abstract

Understanding interrelationships among various economic traits is vital to plan an effective breeding programme in West African okra (*Abelmoschus caillei*). This study was undertaken to evaluate the selection criteria in West African okra using correlation coefficients and path analysis. A replicated field experiment was carried out in the Teaching and Research Farm of the University of Agriculture, Abeokuta for a period of two years, using eleven genotypes of West African okra obtained from germplasm collection of the National Centre for Genetic Resource and Biotechnology. Observations were made on nine morphological characters. Genotypic and phenotypic correlation coefficients analysis revealed that number of ridges per pod, number of leaves at flowering, height at flowering and number of seeds per pod had significant and highly significant relationship with seed yield per plant. The path coefficient analysis for seed yield per plant also revealed that number of leaves at flowering: pod width and ridge per pod were the most important determinants of seed yield. It was concluded that, due to the positive correlation and positive direct influence on Seed yield per plant, these characters could be the most suitable selection criteria for improved seed yield in the improvement of West African okra.

Keywords: West African okra, Correlation coefficients, Path analysis; Selection criteria; Seed yield
