

Comparative Performances of Progenies from Crosses Between Some Open-Pollinated Maize (*Zea Mays* L) Varieties

Akintobi, D. C. A.¹, Oyekale, K. O. and Owolabi, O. O.

Department of Plant Breeding & Seed Technology,
University of Agriculture, P.M.B. 2240, Abeokuta, Nigeria.

*for correspondence: dakintobi@yahoo.com

Abstract

Four improved maize varieties (SUWAN-I-SR. DMR-LSR-Y. OLOYIN TZPBSR) and a local variety (OYO 1.0cm.) obtained were crossed for the production of progenies, Seed quality evaluation was carried out through germination tests conducted in the screen house of College of Plant Science and Crop Production. University of Agriculture, Abeokuta, Ogun State during the late cropping season of October, 2009 January, 2010. The experimental design was Randomized Complete Block Design with three replications. Agronomic characters such as: plant height stem girth, number of leaves, number of nodes and leaf area were evaluated at four weeks, six weeks and eight weeks after planting. Results of the Analysis of variance showed that all the progenies had better vigour than their parents. OLOYIN x OYO LOCAL had significantly highest vigour index while OLOYIN, DMR-LSR- Y x OYO LOCAL and TZPBSR x OYO LOCAL had the highest significant percentage germination. The analysis of seedling vigour index showed that all the hybrids were significantly superior to the parental lines.

Keywords: *maize, progeny, seed quality, vigour*