

## **Research Article**

## Multivariate analysis of okra [*Abelmoschus esculentus* (L.) Moench] genotypes

■ P.K. AKOTKAR AND D.K. DE

## **SUMMARY**

The present experiment was conducted to estimate the genetic diversity among fifty one genotypes of okra collected from the NBPGR, Regional Station Akola, India in two years. On the basis of D<sup>2</sup> analysis, the genotypes could be grouped into 8 clusters in both the years. Cluster I had the highest number of genotypes (44) and (43) in 2010 and 2011, respectively followed by cluster VI (2) in 2011. Remaining clusters were monogenotypic in both the years. Plant height and fruit weight had the highest contribution towards the total genetic divergence. The highest intra-cluster distances was recorded in cluster I in 2010 and in cluster VI in 2011. The maximum inter cluster distance was observed between VII and III followed by IV and III in the year 2010 whereas, it was between cluster VIII and VI followed by VI and III in the year 2011. Among the 51 genotypes, IC-332453, Parbhani Kranti, IC-342075 and IC-433645 recorded the higher cluster mean for fruit yield per plant and other component characters in both the years. On the basis of grouping of genotypes into different clusters towards contribution of a character to the total genetic divergence, inter-cluster distance and cluster mean, the above genotypes were found promising for using in the hybridization programme.

Key Words : Cluster, Divergence, Multivariate, Okra, Transgressive segregants

How to cite this article : Akotkar, P.K. and De, D.K. (2014). Multivariate analysis of okra [*Abelmoschus esculentus* (L.) Moench] genotypes. *Internat. J. Plant Sci.*, **9** (2): 353-357.

Article chronicle : Received : 02.12.2013; Revised : 06.05.2014; Accepted : 22.05.2014

## MEMBERS OF THE RESEARCH FORUM

Author to be contacted : P.K. AKOTKAR, Anand Niketan College of Agriculture, Warora, CHANDRAPUR (M.S.) INDIA Email: pradip.akotkar@gmail.com

Address of the Co-authors: D. K. DE, Department of Plant Breeding, Faculty of Agriculture, Bidhan Chandra Krishi Vishwavidyalaya, Mohanpur, NADIA (W.B.) INDIA