## **R**esearch **P**aper

Article history :

Received : 19.09.2013 Revised : 01.11.2013 Accepted : 22.11.2013

## Members of the Research Forum

Associated Authors:

<sup>1</sup>Vegetable Research Station, Dr. Y.S.R. Horticultural University, Rajendranagar, HYDERABAD (A.P.) INDIA

<sup>2</sup>National Bureau of Plant Genetic Resource Regional Station, HYDERABAD (A.P.) INDIA

<sup>3</sup>College of Agriculture, Acharya N.G. Ranga Agricultural University, Rajendranagar, HYDERABAD (A.P.) INDIA

Author for correspondence : V. CHAITANYA

College of Horticulture, Dr. Y.S.R. Horticultural University, Rajendranagar, HYDERABAD (A.P.) INDIA Email : chaitanya.hortico@gmail. com

## Genetic divergence in dolichos bean (*Dolichos lablab* L. var. typicus) genotypes for yield and yield contributing traits

## V. CHAITANYA, R.V.S.K. REDDY<sup>1</sup>, S.R. PANDRAVADA<sup>2</sup> AND M. SUJATHA<sup>3</sup>

**ABSTRACT :** Mahalanobis  $D^2$  statistics was used to study the genetic divergence for 19 characters among 48 genotypes of Indian bean. Genotypes were grouped in to eight clusters on the basis of relative magnitude of  $D^2$  values. The highest number of genotypes (14) appeared in cluster III. The maximum inter cluster distance was observed between cluster IV and cluster VI followed by cluster IV and VIII. The minimum inter cluster distance was observed between cluster I and cluster IV. Maximum intra cluster distance was in cluster V followed by cluster III. The mean value for most of the traits was highest in cluster VIII. Among the yield contributing characters, the maximum contribution towards divergence was made by protein content followed by number of flowers per inflorescence, pod length and number of pods per plant. Hybridization between cluster IV and VI could be utilized for getting the superior recombinants or transgress segregants in segregating generations.

KEY WORDS : Dolichos bean, Genetic diversity, Hybridization

**HOW TO CITE THIS ARTICLE :** Chaitanya, V., Reddy, R.V.S.K., Pandravada, S.R. and Sujatha, M. (2013). Genetic divergence in dolichos bean (*Dolichos lablab* L. var. typicus) genotypes for yield and yield contributing traits. *Asian J. Hort.*, **8**(2): 733-736.