International Journal of Agricultural Sciences Volume **10** | Issue 2 | June, 2014 | 812-815

RESEARCH PAPER

Genetic divergence in chickpea

A.R. GAIKWAD*, N.C.DESAI¹, G.H. PAWAR **AND** A.M. LANGHI² Sorghum Improvement Project, Mahatma Phule Krishi Vidyapeeth, Rahuri, AHMEDNAGAR (M.S.) INDIA

Abstract : The genetic diversity was assessed using Mahalanobis's D² statistics wherein 40 genotypes were grouped in eight clusters. The clustering pattern of the genotypes was independent of their geographical distribution. Based on inter cluster distance, Cluster VII was the superior for the character seed yield per plant, protein content and number of pods per plant, cluster II for days to 50 per cent flowering and reaction to insect pest (heliothis), while cluster VIII for plant height and 100-seed weight and cluster VII for number of primary branches per plant and number of secondary branches per plant. Therefore, it may be concluded that the genotypes belonging to these groups can be utilized in developing diverse variability and improving seed yield in chickpea. The characters pods per plant, number of secondary branches per plant, 100-seed weight, days to 50 % flowering contributed maximum to the divergence.

Key Words : Chickpea, Genetic divergence

View Point Article : Gaikwad, A.R., Desai, N.C., Pawar, G.H. and Langhi, A.M. (2014). Genetic divergence in chickpea. Internat. J. agric. Sci., 10 (2): 812-815.

Article History : Received : 27.02.2013; Revised : 12.05.2014; Accepted : 30.05.2014

* Author for correspondence

¹Department of Agricultural Botany, Pulse Research Station, N.M. College of Agriculture, Navsari Agricultural University, NAVSARI (GUJARAT) INDIA

²Agricultural Research Station, Mahatma Phule Krishi Vigyan Kendra, Rahuri, AHMEDNAGAR (M.S.) INDIA