

Correlation and Path Coefficient Analyses in Pigeonpea (*Cajanus cajan* (L.) Millsp.) for Seed Yield and Yield Contributing Characters

R Suresh, B Govinda Rao, V Satyanarayana Rao and Y Ashoka Rani

Department of Genetics and Plant Breeding, Agricultural College, Bapatla- 522 101

ABSTRACT

An investigation on genetic divergence in pigeonpea [*Cajanus cajan* (L.) Millsp.] was carried out during *kharif* 2010-11 at Regional Agricultural Research Station, Lam, Guntur with 41 genotypes to elicit the information on character association and path analysis. Observations were recorded on thirteen characters *viz.*, plant height (cm), days to 50% flowering, days to maturity, number of primary branches per plant, number of secondary branches per plant, number of pods per plant, pod length (cm), number of seeds per pod, shelling percentage, 100 seed weight (g), seed yield per plant (g), grain protein content (%) and harvest index. The correlation study indicated that the plant height, number of secondary branches per plant, number of pods per plant, number of seeds per pod and harvest index had significant positive association with seed yield and simultaneous improvement of these characters along with seed yield is possible. Path coefficient analysis revealed that harvest index, plant height, number of primary branches per plant and 100 seed weight had positive direct effects on seed yield per plant and due weightage should be given for them for yield enhancement.

Key words : Correlation, Path Coefficient Analysis, Pigeonpea.

pp