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Correlation and path analysis for yield and yield contributing characters in pigeonpea (*Cajanus cajan* (L.) Mill sp.)

Seema K Arbad, D B Deosarkar, S S Kothimbire and S B Choulwar
Vasantrao Naik Marathwada Krushi Vidyapeeth, India

Correlation and path coefficients were studied in ten yield contributing characters of in pigeonpea (*Cajanus cajan* (L.) Mill sp.). The experimental materials consist of forty promising genotypes along with five checks i.e. BSMR 736, BSMR 853, BDN 708, ICPL 87 and Vipula were evaluated for yield and yield contributing characters. The analysis of variance revealed that there were significant differences among the genotypes for all the characters studied. Correlation analysis for yield per plant recorded highly significant and positive association with days to 50 per cent flowering, days to maturity, plant height, Number of primary branches, number of secondary branches and number of pods per plant. The association was positive but non significant with number of seeds per pod. Yield per plant also recorded significant and positive association with 100 seed weight (g), relative water content and harvest index and respectively at both the levels. In present investigation, the value of correlation was less than one in all cases which is an indication of lesser effect of environment. The path coefficient analysis revealed that the number of pods per plant exhibited highest direct effect on yield per plant followed by number of secondary branches per plant, days to 50 per cent flowering, test weight and relative water content. However negative highest direct effect with days to maturity.

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arbadseema03@gmail.com