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**Genetic Variability, Correlation and Path Analysis of Yield, and Yield
Components in Chickpea (*Cicer arietinum* L.)**

Derya ÖZVEREN YÜCEL¹, Adem Emin ANLARSAL², Celal YÜCEL³

¹Plant Protection Research Institute, Adana - TURKEY

²University of Çukurova, Agricultural Faculty Field Crops Department
01330 Adana - TURKEY

³Çukurova Agricultural Research Institute, P.O. Box 01321, Adana - TURKEY

 [Keywords](#)
 [Authors](#)



agric@tubitak.gov.tr

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Abstract: This study was conducted to determine variability, heritability, and correlations between yield and yield components in 15 kabuli chickpea (*Cicer arietinum* L.) genotypes for 2 years. Direct and indirect effects of yield components on seed yield per plant were investigated. Genotypic variance was the highest for 1000 seed weight, followed by seed number per plant. Broad-sense heritabilities ranged from 5.47% (days to flowering) to 51.66% (seed number per plant). Heritabilities for seed number, 1000 seed weight, and number of full pods were greater than those for the other traits. Positive and significant ($P < 0.05$) relationships were determined between seed yield per plant and plant height, first pod height, secondary branch, total pod, and number of full pods and seeds per plant. The path coefficient analysis based on seed yield per plant, as a dependent variable, revealed that all of the other traits, except days to flowering, first pod height, and total pod number, exhibited high positive direct effects. Number of seeds and full pods showed the highest direct influence with 47.49% and 44.73%, respectively. Therefore, this research suggests that seed and full pod numbers can be good selection criteria for improving seed yield per plant in kabuli winter chickpea.

Key Words: Chickpea, *Cicer arietinum*, genetic variability, correlation, path coefficient analysis, seed yield

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