



## Identification of Traits for Indirect Selection for Improving Yield in Interspecific Derivatives of *Cicer*

## Rupinder Pal Singh, Inderjit Singh\*, Sarvjeet Singh and J.S. Sandhu<sup>1</sup>

Department of Plant Breeding and Genetics, Punjab Agricultural University, Ludhiana-141 004, Punjab, India 
<sup>1</sup>Krishi Bhawan, Indian Council of Agricultural Research, New Delhi-110 001

\*E-mail: inderjitpau@rediffmail.com

**Abstract**: An attempt was made to identify traits for indirect selection to improve yield using correlation coefficients and path coefficients as genetic tools in a set of 64 genotypes of chickpea which included 60 derivatives of interspecific cross ICCV 96030 (*Cicer arietinum*) x Acc. No. 188 (*Cicer pinnatifidum*), their parents and two checks PBG 1 and GPF 2. Correlation studies revealed that pods per plant, biological yield per plot, seeds per pod, 100-seed weight and harvest index had positive and significant correlation with seed yield and were identified as important traits which can be selected for yield improvement. Path analysis revealed that number of pods per plant, seeds per pod, 100-seed weight and biological yield per plot recorded positive direct effects on seed yield and improvement in these traits would make an improvement in seed yield. Also, selection for higher number of primary branches, secondary branches and harvest index may indirectly lead to increase in seed yield as they exerted indirect positive effects via pods per plant and seeds per pod.

Key Words: Chickpea, Correlation Coefficient, Path Analysis.