



RESEARCH PAPER

Assessment of genetic divergence and association of horticultural traits with yields in garden pea on Shivalik hills of Uttarakhand

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Abstract : An experiment was undertaken to assess the genetic divergence, correlation co-efficient and path analysis among various horticultural traits in thirty-two genotypes of garden pea based on seventeen traits. The present investigation was revealed that all the pea germplasms significantly different for the traits phenotypic and genotypic correlation co-efficients among different characters showed that pod yield per plant had a positive and significant association with the number of branch per plant, number of pod per plant, number of cluster per plant. The path co-efficient analysis revealed that out of all traits studied, pod yield per plant had the maximum positive direct effect on the number of pods per plant followed by internode length, number of seeds per pod and number of branch per plant. All the genotypes were grouped into 5 clusters. The maximum number of genotypes was arranged in cluster-IV (10) and the other four clusters contained 22 genotypes each. Whereas highest inter-cluster distance was recorded between cluster V and II and lowest was observed between cluster IV and III. This result showed that it has the good thought of crossing between two different clusters which having high inter-cluster distance.

Key Words : Horticultural traits, Genotypic, Phenotypic, Genetic divergence, Path analysis

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