

CORRELATION AND PATH COEFFICIENT ANALYSIS IN CHILLI (*CAPSICUM ANNUM L.*) FOR FRUIT YIELD AND ITS ATTRIBUTING TRAITSPragya Singh^{1*}, Anvita Sharma¹, Akanksha Tiwari² and P.K. Jain¹¹Department of Horticulture, ²Department of Plant Breeding and Genetics, Jawaharlal Nehru Krishi Vishwa Vidyalay, Jabalpur-482004 (Madhya Pradesh) IndiaEmail: spragya455@gmail.com

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Abstract: The present investigation is carried out to study the correlation and path analysis for fruit yield and its attributing traits in 18 genotypes of chilli. Correlation and path coefficient analyses have been successfully used for plant selection for increasing yields of different crops. Association analysis studies indicated that fruit yield plant⁻¹ had significant positive correlation with fruiting span, number of fruit plant⁻¹, fruit length indicating that these characters are the primary yield determinant in Chilli. To measure the direct as well as indirect association of one variable through another on the end product, path coefficients were calculated for all the yield attributing traits. Path coefficient analysis revealed that plant height at 150 DAT, number of branches plant⁻¹, days to first flowering, days to 50% flowering, days to first picking, fruiting span, number of fruit plant⁻¹, fruit length, fruit width, average fruit weight were the most important characters contributing towards fruit yield plant⁻¹ and hence purposeful and balanced selection based on these characters would be made rewarding for improvement of chilli.

Keywords: Chilli, Correlation, Path coefficient analysis, Fruit

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